

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: Master_Craftsman
Mattamy; Redwood

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: I48764253 thru I48764273

My license renewal date for the state of North Carolina is December 31, 2021.

North Carolina COA: C-0844



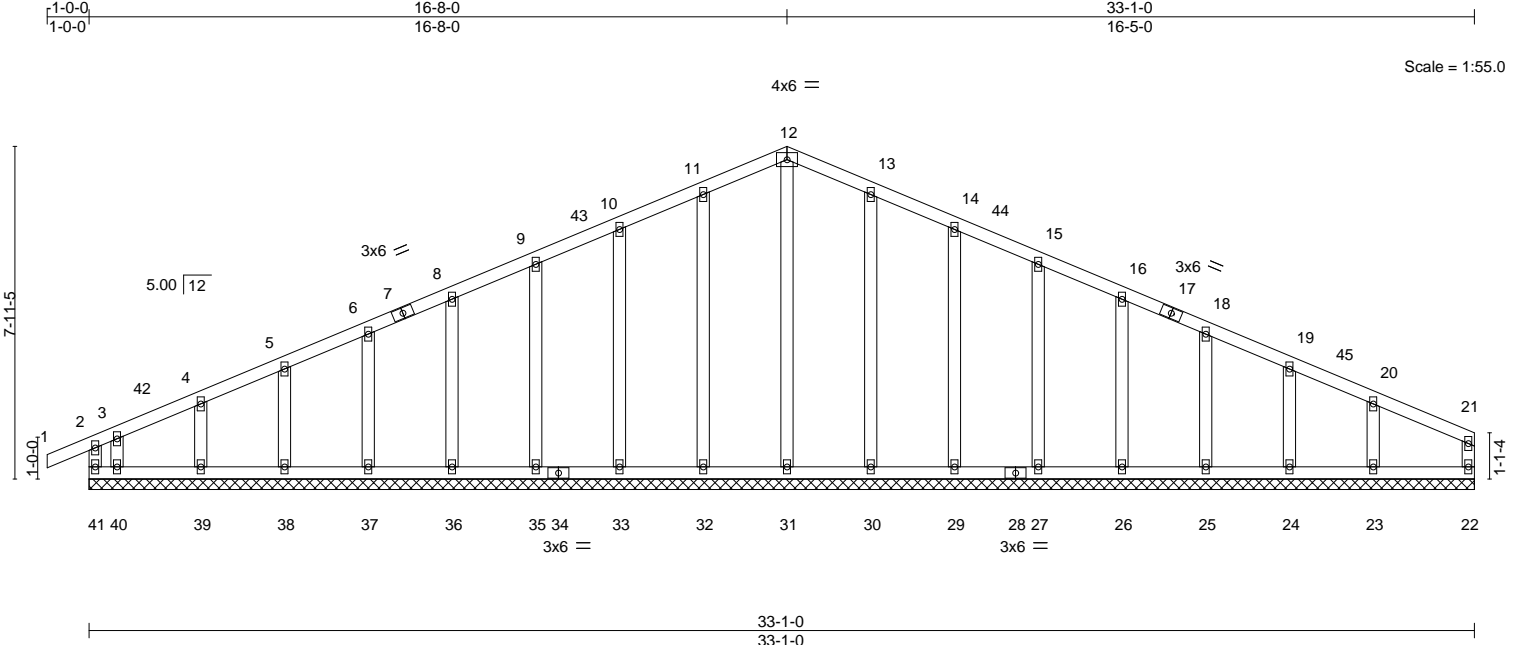
November 11,2021

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	Truss	Truss Type	Qty	Ply	Mattamy; Redwood	148764253
MASTER_CRAFTSMAN	A01G	GABLE	1	1		

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Nov 11 08:57:30 2021 Page 1
 ID:x1XjwWBLqE?VCRreTaQN3tymvXu-?aKeU24HzhYSYrHUFG8dW5QOkPK1cqYKMU5MByKlqZ



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)	-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 0.13	Horz(CT)	0.00	22	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-R					Weight: 203 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.3	
OTHERS 2x4 SP No.3	

REACTIONS. All bearings 33-1-0.
 (lb) - Max Horz 41=76(LC 12)
 Max Uplift All uplift 100 lb or less at joint(s) 41, 32, 33, 35, 36, 37, 38, 39, 30, 29, 27, 26, 25, 24, 23 except 40=-128(LC 12)
 Max Grav All reactions 250 lb or less at joint(s) 41, 22, 31, 32, 33, 35, 36, 37, 38, 39, 40, 30, 29, 27, 26, 25, 24, 23

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 Exterior(2) -1-0-0 to 2-4-0, Interior(1) 2-4-0 to 16-8-0, Exterior(2) 16-8-0 to 21-4-9, Interior(1) 21-4-9 to 32-11-4 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
- 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) 41, 32, 33, 35, 36, 37, 38, 39, 30, 29, 27, 26, 25, 24, 23 except (jt=lb) 40=128.

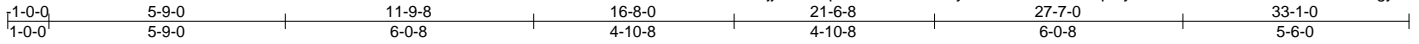


November 11, 2021

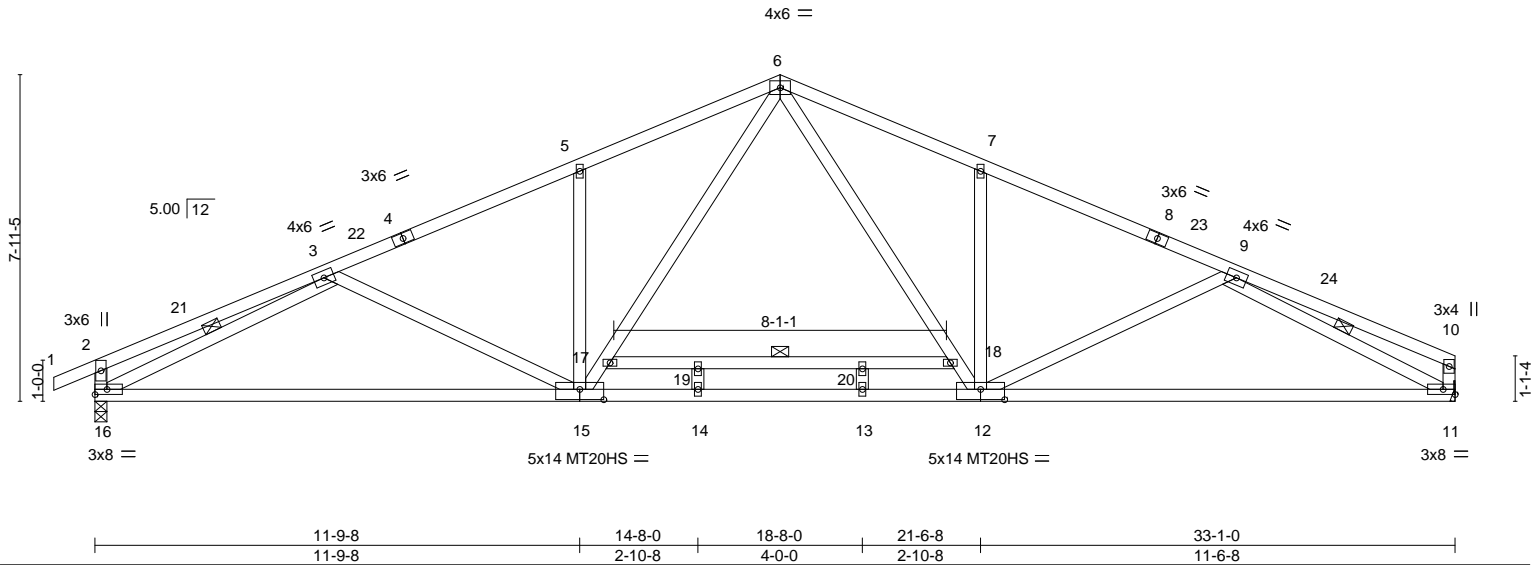
Job	Truss	Truss Type	Qty	Ply	Mattamy; Redwood	148764254
MASTER_CRAFTSMAN	A02	COMMON	7	1		

Builders FirstSource, Apex, NC 27523

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8.430 s Aug 16 2021 MITek Industries, Inc. Thu Nov 11 11:25:01 2021 Page 1



Scale = 1:56.0



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.85	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.75	Vert(LL) -0.34 13-14 >999 360	MT20HS	187/143
BCLL 0.0 *	Lumber DOL 1.15	WB 0.65	Vert(CT) -0.66 15-16 >593 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS	Horz(CT) 0.07 11 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.06 14 >999 240		
				Weight: 200 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-8-9 oc purlins, except end verticals.
BOT CHORD 2x4 SP SS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 17-18: 2x4 SP No.2	WEBS 1 Row at midpt 3-16, 9-11, 17-18

REACTIONS. (size) 16=0-3-8, 11=Mechanical
 Max Horz 16=76(LC 12)
 Max Grav 16=1382(LC 1), 11=1310(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-16=-395/93, 2-21=-469/0, 3-21=-441/10, 3-22=-2087/74, 4-22=-2052/80, 4-5=-2030/99,
 5-6=-2083/171, 6-7=-2065/168, 7-8=-2011/104, 8-23=-2035/84, 9-23=-2070/79,
 9-24=-330/0, 10-24=-355/0, 10-11=-254/42
 BOT CHORD 15-16=-99/1953, 14-15=0/1413, 13-14=0/1413, 12-13=0/1413, 11-12=-97/1896
 WEBS 3-16=-1839/140, 5-15=-360/128, 15-17=-40/822, 6-17=-43/834, 6-18=-45/805,
 12-18=-41/793, 7-12=-357/128, 9-11=-1912/156

- 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 Exterior(2) 1-0-0 to 2-3-11, Interior(1) 2-3-11 to 16-8-0, Exterior(2) 16-8-0 to 21-6-8, Interior(1) 21-6-8 to 32-11-4 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
 - All plates are MT20 plates unless otherwise indicated.
 - All plates are 2x4 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.
 - All bearings are assumed to be User Defined crushing capacity of 565 psi.
 - Refer to girder(s) for truss to truss connections.
 - 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

LOAD CASE(S)

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-2=-60, 2-6=-60, 6-10=-60, 11-16=-20



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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

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

Job	Truss	Truss Type	Qty	Ply	Mattamy; Redwood	148764254
MASTER_CRAFTSMAN	A02	COMMON	7	1	Job Reference (optional)	

Builders FirstSource, Apex, NC 27523

8.430 s Aug 16 2021 MITek Industries, Inc. Thu Nov 11 11:25:01 2021 Page 2
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LOAD CASE(S)

- 2) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-2=-50, 2-6=-50, 6-10=-50, 11-16=-20, 17-18=-30
- 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, 11-16=-40, 17-18=-40
- 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=42, 2-21=22, 6-21=12, 6-7=22, 7-10=12, 11-16=-12
 Horz: 2-16=13, 1-2=-54, 2-21=-34, 6-21=-24, 6-7=34, 7-10=24, 10-11=25
- 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, 2-5=12, 5-6=22, 6-24=12, 10-24=22, 11-16=-12
 Horz: 2-16=-25, 1-2=-20, 2-5=-24, 5-6=-34, 6-24=24, 10-24=34, 10-11=-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=-13, 2-6=-32, 6-10=-32, 11-16=-20
 Horz: 2-16=-16, 1-2=-7, 2-6=12, 6-10=-12, 10-11=-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=-27, 2-6=-32, 6-10=-32, 11-16=-20
 Horz: 2-16=22, 1-2=7, 2-6=12, 6-10=-12, 10-11=16
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=20, 2-6=10, 6-10=8, 11-16=-12
 Horz: 2-16=13, 1-2=-32, 2-6=-22, 6-10=20, 10-11=16
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=4, 2-6=8, 6-10=10, 11-16=-12
 Horz: 2-16=-16, 1-2=-16, 2-6=-20, 6-10=22, 10-11=-13
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=-2, 2-6=-7, 6-10=-8, 11-16=-20
 Horz: 2-16=21, 1-2=-18, 2-6=-13, 6-10=12, 10-11=7
- 11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
 Uniform Loads (plf)
 Vert: 1-2=-4, 2-6=8, 6-10=7, 11-16=-20
 Horz: 2-16=-7, 1-2=-16, 2-6=-12, 6-10=13, 10-11=-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, 2-22=19, 6-22=9, 6-10=2, 11-16=-12
 Horz: 2-16=11, 1-2=-26, 2-22=-31, 6-22=-21, 6-10=14, 10-11=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, 6-23=9, 10-23=19, 11-16=-12
 Horz: 2-16=-12, 1-2=-9, 2-6=-14, 6-23=21, 10-23=31, 10-11=-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, 11-16=-12
 Horz: 2-16=5, 1-2=-17, 2-6=-21, 6-10=14, 10-11=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, 11-16=-12
 Horz: 2-16=-12, 1-2=-9, 2-6=-14, 6-10=21, 10-11=-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, 2-22=2, 6-22=-7, 6-10=-15, 11-16=-20
 Horz: 2-16=19, 1-2=-26, 2-22=-22, 6-22=-13, 6-10=5, 10-11=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, 6-23=-7, 10-23=2, 11-16=-20
 Horz: 2-16=-3, 1-2=-9, 2-6=-5, 6-23=13, 10-23=22, 10-11=-19
- 18) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
 Uniform Loads (plf)
 Vert: 1-2=-20, 2-6=-20, 6-10=-20, 11-16=-20, 17-18=-40
- 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=-37, 2-6=-40, 6-10=-41, 11-16=-20, 17-18=-30
 Horz: 2-16=16, 1-2=-13, 2-6=-10, 6-10=9, 10-11=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
 Uniform Loads (plf)
 Vert: 1-2=-38, 2-6=-41, 6-10=-40, 11-16=-20, 17-18=-30
 Horz: 2-16=-6, 1-2=-12, 2-6=-9, 6-10=10, 10-11=-16

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.

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



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 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Mattamy; Redwood	I48764254
MASTER_CRAFTSMAN	A02	COMMON	7	1	Job Reference (optional)	

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8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Nov 11 11:25:01 2021 Page 3
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LOAD CASE(S)

- 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, 2-22=-34, 6-22=-41, 6-10=-46, 11-16=-20, 17-18=-30
 Horz: 2-16=15, 1-2=-20, 2-22=-16, 6-22=-9, 6-10=4, 10-11=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, 6-23=-41, 10-23=-34, 11-16=-20, 17-18=-30
 Horz: 2-16=-2, 1-2=-7, 2-6=-4, 6-23=9, 10-23=16, 10-11=-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, 11-16=-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, 11-16=-20
- 25) 3rd Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-2=-50, 2-6=-50, 6-10=-20, 11-16=-20, 17-18=-30
- 26) 4th Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-2=-20, 2-6=-20, 6-10=-50, 11-16=-20, 17-18=-30

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



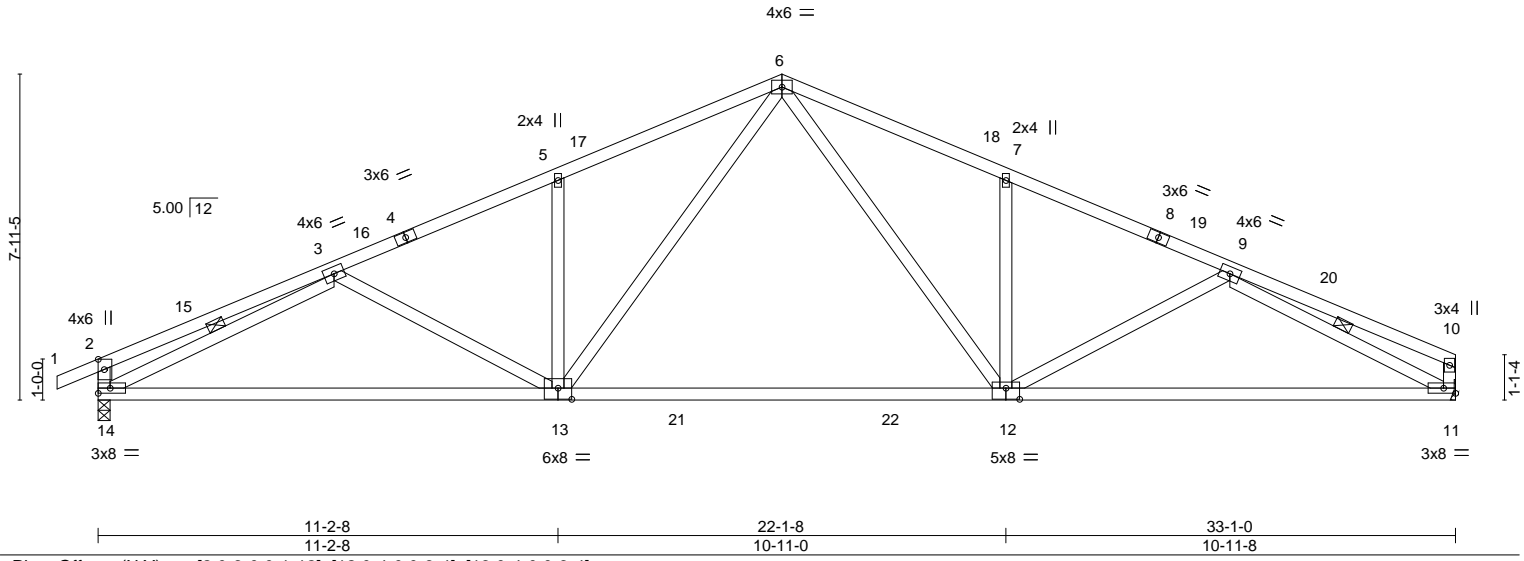
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Job	Truss	Truss Type	Qty	Ply	Mattamy; Redwood	148764255
MASTER_CRAFTSMAN	A02A	COMMON	2	1		

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Scale = 1:56.2



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.73	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.90	Vert(LL) -0.56 12-13 >706 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.51	Vert(CT) -0.77 12-13 >512 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.08 11 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.07 12-13 >999 240	Weight: 184 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-9-1 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 9-11, 3-14

REACTIONS. (size) 14=0-3-8, 11=Mechanical
 Max Horz 14=76(LC 16)
 Max Grav 14=1382(LC 1), 11=1310(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-14=-403/103, 2-3=-468/29, 3-5=-2070/95, 5-6=-2078/167, 6-7=-2056/164,
 7-9=-2050/100, 9-10=-337/11, 10-11=-258/51
 BOT CHORD 13-14=-88/1954, 12-13=0/1404, 11-12=-88/1897
 WEBS 6-12=-33/783, 7-12=-352/123, 9-11=-1902/129, 6-13=-33/813, 5-13=-355/123,
 3-14=-1812/109

NOTES-

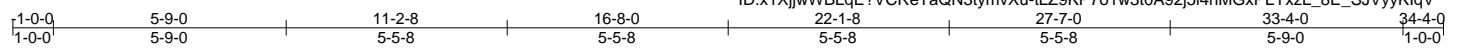
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-4-0, Interior(1) 2-4-0 to 16-8-0, Exterior(2) 16-8-0 to 21-4-9, Interior(1) 21-4-9 to 32-11-4 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
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Refer to girder(s) for truss to truss connections.



November 11, 2021

Job	Truss	Truss Type	Qty	Ply	Mattamy; Redwood	148764256
MASTER_CRAFTSMAN	A03	COMMON	8	1		

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Nov 11 08:57:34 2021 Page 1
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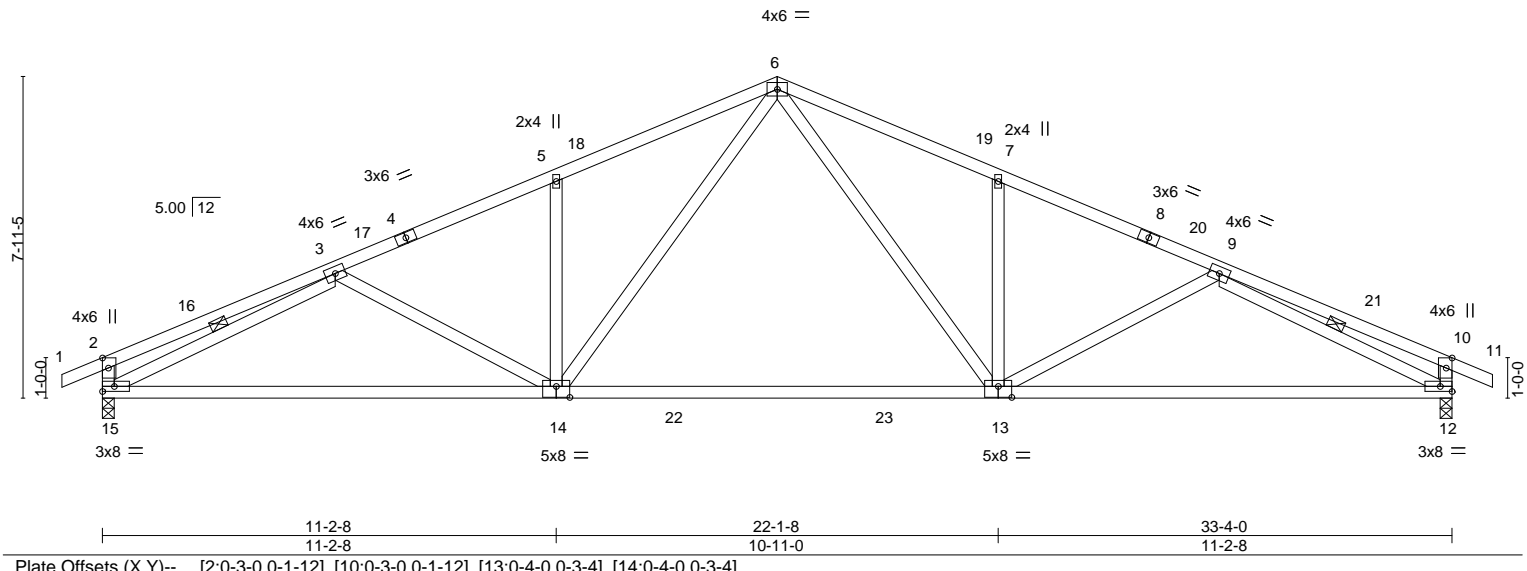


Plate Offsets (X,Y)-- [2:0-3-0,0-1-12], [10:0-3-0,0-1-12], [13:0-4-0,0-3-4], [14:0-4-0,0-3-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.73	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.90	Vert(LL) -0.56 13-14 >707 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.50	Vert(CT) -0.77 13-14 >516 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.08 12 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.07 13-14 >999 240	Weight: 187 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-8-13 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 9-12, 3-15

REACTIONS. (size) 15=0-3-8, 12=0-3-8
 Max Horz 15=71(LC 12)
 Max Grav 15=1390(LC 1), 12=1390(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-15=-404/103, 2-3=-469/29, 3-5=-2090/93, 5-6=-2097/164, 6-7=-2097/164,
 7-9=-2090/93, 9-10=-469/28, 10-12=-404/103
 BOT CHORD 14-15=-61/1969, 13-14=0/1423, 12-13=-48/1969
 WEBS 6-13=-33/811, 7-13=-356/123, 9-12=-1828/110, 6-14=-33/811, 5-14=-356/124,
 3-15=-1828/110

- 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 2-4-0, Interior(1) 2-4-0 to 16-8-0, Exterior(2) 16-8-0 to 21-4-9, Interior(1) 21-4-9 to 34-4-0 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, with BCDL = 10.0psf.



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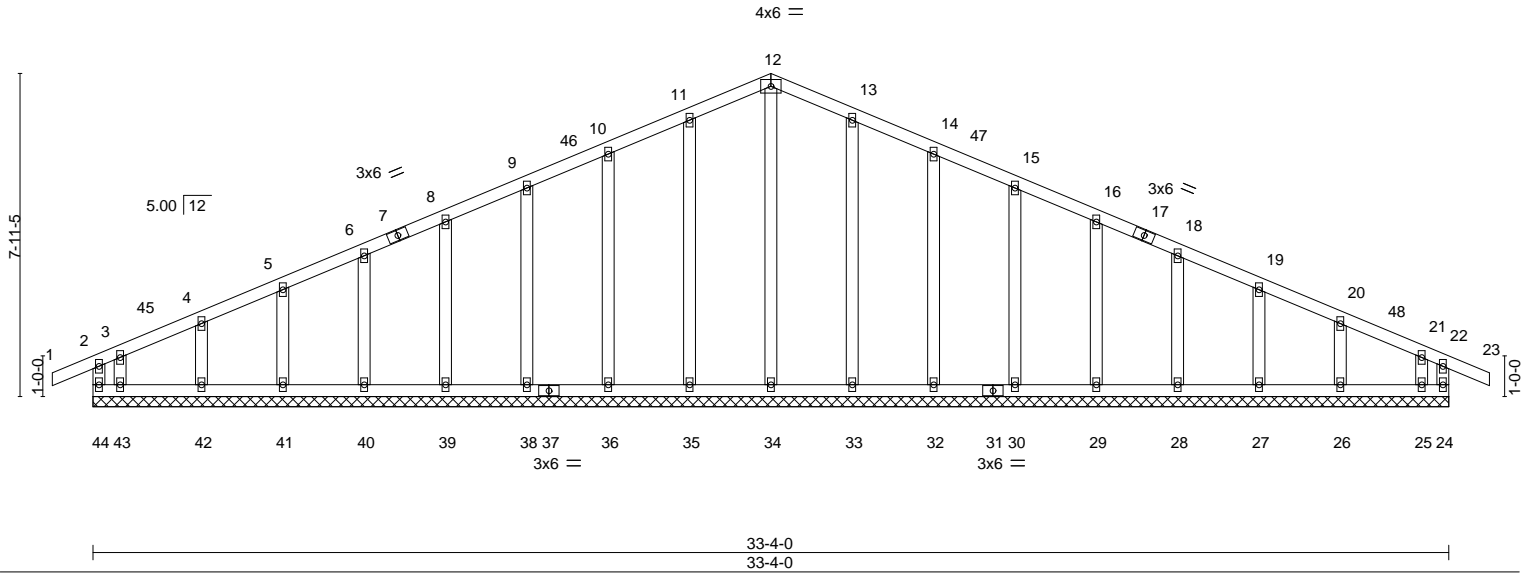
ENGINEERING BY
TRENCO
 A MiTek Affiliate
 818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Mattamy; Redwood	148764257
MASTER_CRAFTSMAN	A03G	GABLE	1	1		

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Nov 11 08:57:36 2021 Page 1

ID:x1XjjwWBLqE?VCReTaQN3tymvXu-qkhvk582ZXJbGUJRrWnYtnLRx9SmRKHQIHxQZryKlqT 33-4-0 34-4-0 16-8-0 16-8-0 1-0-0 1-0-0

Scale = 1:56.6



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	-0.00	23	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.00	23	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.13	Horz(CT)	0.00	24	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-R					Weight: 206 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

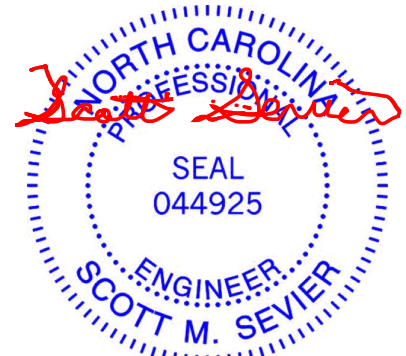
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings 33-4-0.
 (lb) - Max Horz 44=71(LC 12)
 Max Uplift All uplift 100 lb or less at joint(s) 44, 24, 35, 36, 38, 39, 40, 41, 42, 33, 32, 30, 29, 28, 27, 26, 25 except 43=-122(LC 12)
 Max Grav All reactions 250 lb or less at joint(s) 44, 24, 34, 35, 36, 38, 39, 40, 41, 42, 43, 33, 32, 30, 29, 28, 27, 26, 25

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 Exterior(2) -1-0-0 to 2-4-0, Interior(1) 2-4-0 to 16-8-0, Exterior(2) 16-8-0 to 21-4-9, Interior(1) 21-4-9 to 34-4-0 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
- 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) 44, 24, 35, 36, 38, 39, 40, 41, 42, 33, 32, 30, 29, 28, 27, 26, 25 except (jt=lb) 43=122.



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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



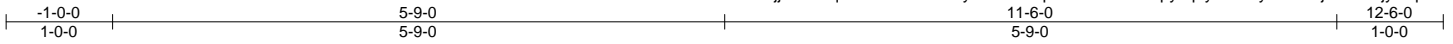
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Mattamy; Redwood	148764258
MASTER_CRAFTSMAN	B01G	GABLE	1	1		
Job Reference (optional)						

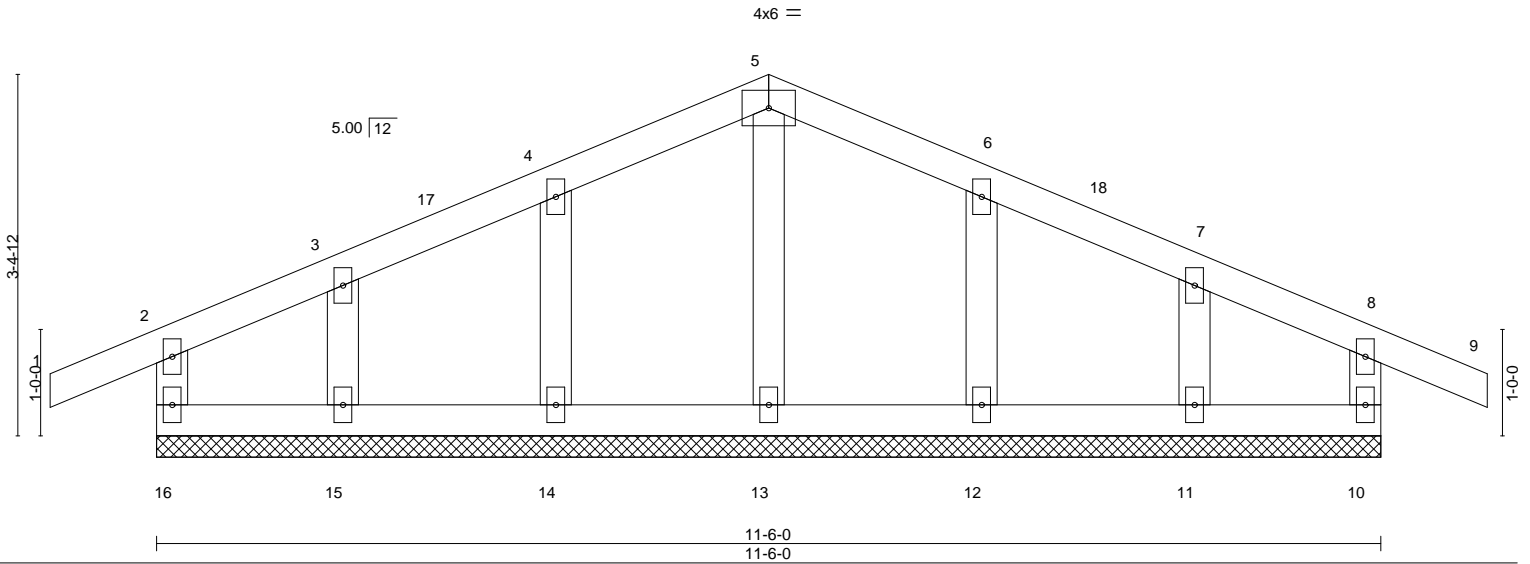
Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Nov 11 08:57:38 2021 Page 1

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Scale = 1:21.6



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.10	Vert(LL)	-0.00	9	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	9	n/r		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.04	Horz(CT)	0.00	10	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-R						
								Weight: 54 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 11-6-0.
(lb) - Max Horz 16=18(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 15, 12, 11
Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

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 1-9-0, Exterior(2) 1-9-0 to 5-9-0, Corner(3) 5-9-0 to 8-9-0, Exterior(2) 8-9-0 to 12-6-0 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) 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) 16, 10, 14, 15, 12, 11.



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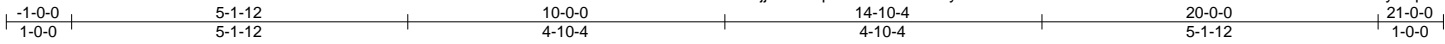
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, 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



Job	Truss	Truss Type	Qty	Ply	Mattamy; Redwood	148764259
MASTER_CRAFTSMAN	C02	COMMON	3	1		

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ID:x1XjjwWBLqE?VCRReTaQN3tymvXu-EJN2N7AwsShA7x10WeLFUPzrYMEleavtOF94AAyKlqQ



Scale = 1:35.3

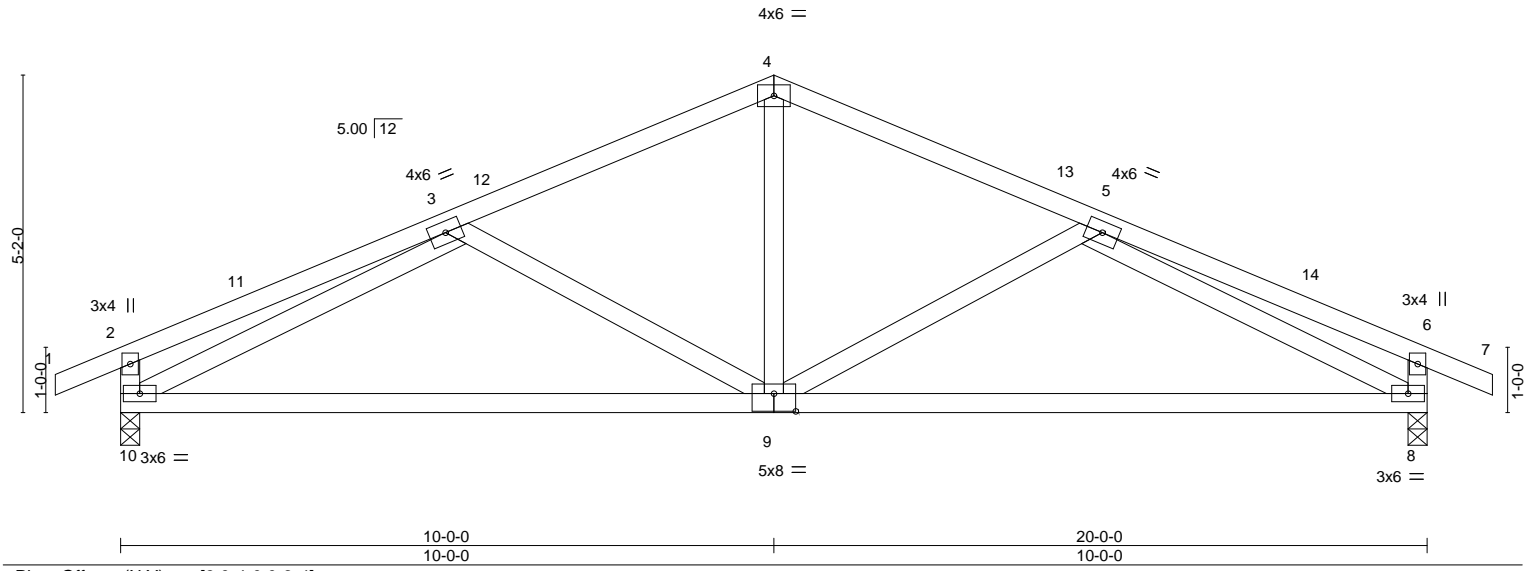


Plate Offsets (X,Y)-- [9:0-4-0,0-3-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.51	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.99	Vert(LL) -0.19 9-10 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.59	Vert(CT) -0.38 9-10 >617 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.03 8 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.02 9 >999 240	Weight: 106 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-9-9 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 2x4 SP No.3	

REACTIONS. (size) 10=0-3-8, 8=0-3-8
 Max Horz 10=46(LC 13)
 Max Uplift 10=11(LC 12), 8=11(LC 13)
 Max Grav 10=857(LC 1), 8=857(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-10=-314/96, 2-3=-306/28, 3-4=-976/72, 4-5=-976/72, 5-6=-306/28, 6-8=-314/96
 BOT CHORD 9-10=-61/1027, 8-9=-36/1027
 WEBS 4-9=0/474, 5-8=-919/100, 3-10=-919/100

- 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 Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 10-0-0, Exterior(2) 10-0-0 to 14-2-15, Interior(1) 14-2-15 to 21-0-0 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
 - 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) 10, 8.



November 11, 2021

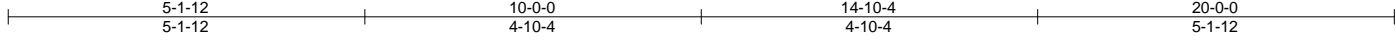
<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. 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>818 Soundside Road Edenton, NC 27932</p>
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Job	Truss	Truss Type	Qty	Ply	Mattamy; Redwood	148764260
MASTER_CRAFTSMAN	C02-2PL	COMMON	1	2	Job Reference (optional)	

Builders FirstSource (Apex, NC), Apex, NC - 27523,

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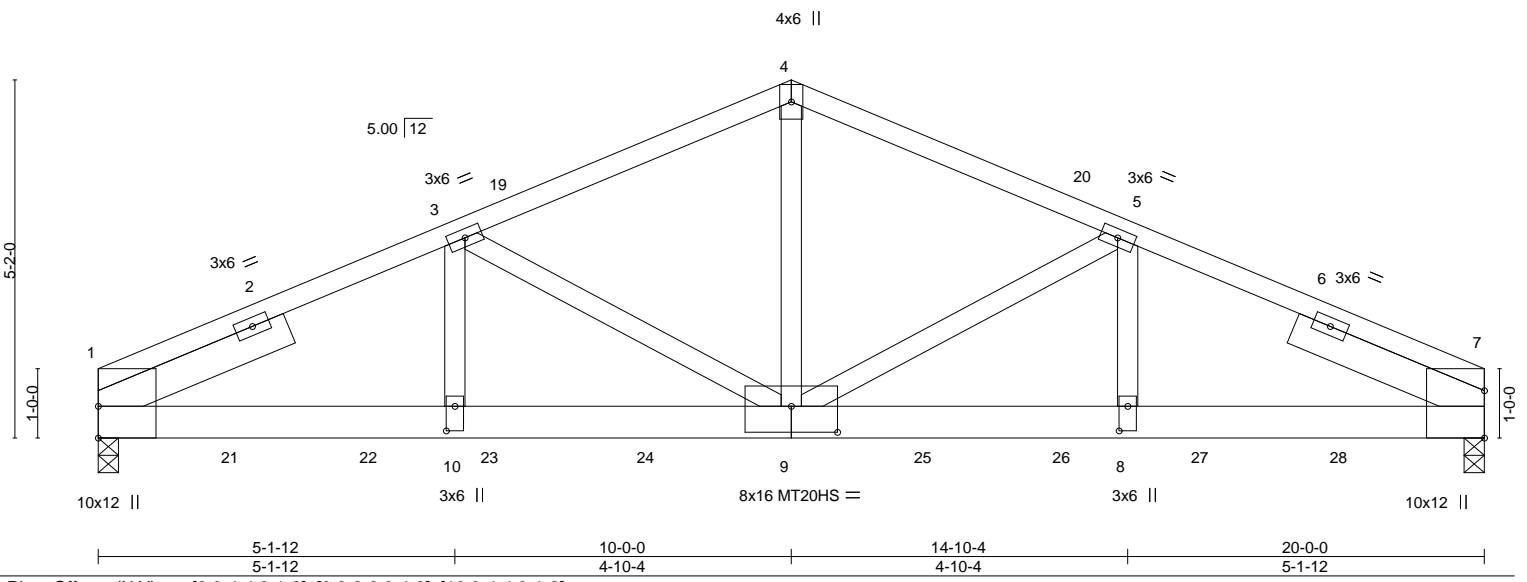


Plate Offsets (X, Y)--	[8:0-4-4,0-1-8], [9:0-8-0,0-4-8], [10:0-4-4,0-1-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.92	Vert(LL)	-0.16	8-9	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.90	Vert(CT)	-0.32	8-9	>752	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.74	Horz(CT)	0.08	7	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.01	10	>999		
								Weight: 245 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP SS
BOT CHORD 2x6 SP DSS
WEBS 2x4 SP No.2
SLIDER Left 2x6 SP No.2 2-11-12, Right 2x6 SP No.2 2-11-12

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-8-10 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8 (req. 0-3-15), 7=0-3-8 (req. 0-3-14)
Max Horz 1=56(LC 12)
Max Grav 1=6655(LC 1), 7=6559(LC 1)

SUPPLEMENTARY BEARING PLATES, SPECIAL ANCHORAGE, OR OTHER MEANS TO ALLOW FOR THE MINIMUM REQUIRED SUPPORT WIDTH (SUCH AS COLUMN CAPS, BEARING BLOCKS, ETC.) ARE THE RESPONSIBILITY OF THE TRUSS MANUFACTURER OR THE BUILDING DESIGNER.

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-10838/0, 3-4=-8582/0, 4-5=-8582/0, 5-7=-10815/0
BOT CHORD 1-10=0/9827, 9-10=0/9827, 8-9=0/9803, 7-8=0/9803
WEBS 4-9=0/6051, 5-9=-2215/0, 5-8=0/2211, 3-9=-2244/0, 3-10=0/2223

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 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=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - WARNING: Required bearing size at joint(s) 1, 7 greater than input bearing size.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1290 lb down at 1-11-4, 1290 lb down at 3-11-4, 1290 lb down at 5-8-4, 1290 lb down at 7-11-4, 1290 lb down at 9-11-4, 1290 lb down at 11-11-4, 1290 lb down at 13-11-4, and 1290 lb down at 15-11-4, and 1290 lb down at 17-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-60, 4-7=-60, 11-15=-20



November 11, 2021

Continued on page 2

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

Job MASTER_CRAFTSMAN	Truss C02-2PL	Truss Type COMMON	Qty 1	Ply 2	Mattamy; Redwood Job Reference (optional)	148764260
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Nov 11 08:57:40 2021 Page 2
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LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 9=-1290(B) 21=-1290(B) 22=-1290(B) 23=-1290(B) 24=-1290(B) 25=-1290(B) 26=-1290(B) 27=-1290(B) 28=-1290(B)

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Mattamy; Redwood	148764261
MASTER_CRAFTSMAN	C02G	KINGPOST	1	1		

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Nov 11 08:57:41 2021 Page 1

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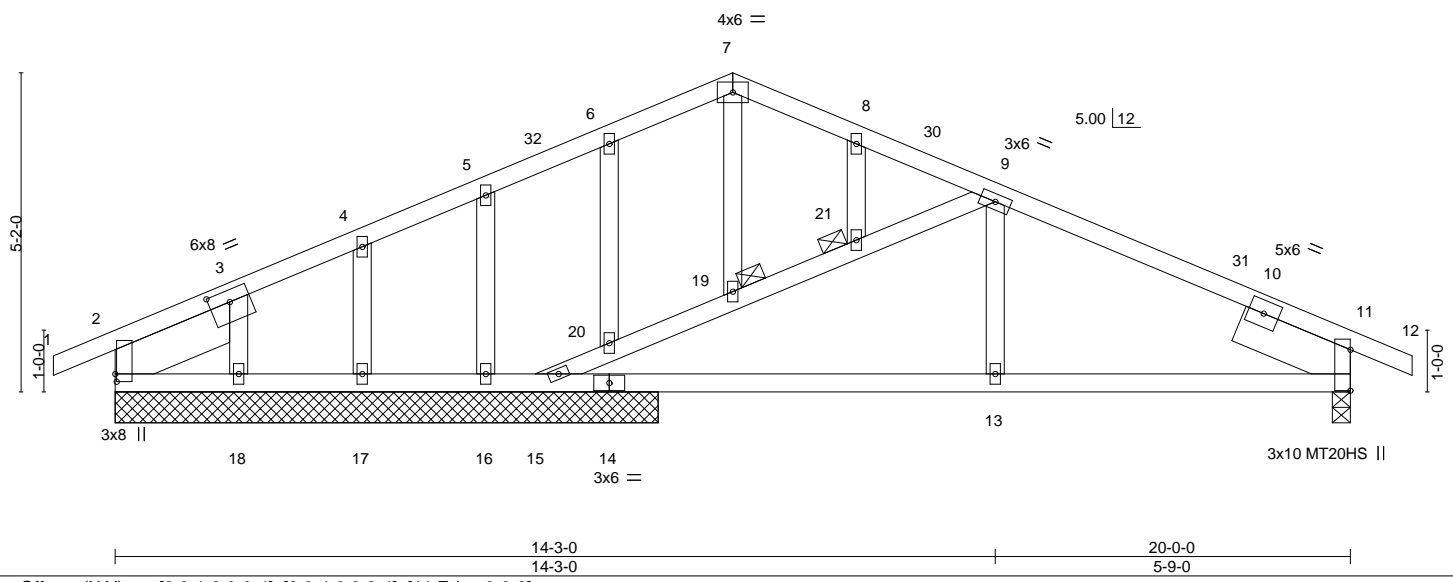


Plate Offsets (X, Y)--	[2:0-1-8,0-0-4], [3:0-4-0,0-2-4], [11:Edge,0-0-0]
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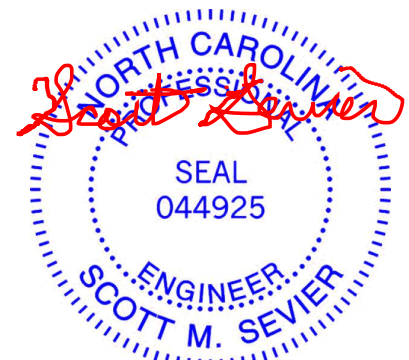
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.40	Vert(LL)	-0.06	13-15	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.54	Vert(CT)	-0.12	13-15	>999	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.23	Horz(CT)	-0.02	2	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.01	13-24	>999		
								Weight: 116 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-9-11 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	JOINTS 1 Brace at Jt(s): 19, 21
SLIDER Left 2x8 SP DSS 2-1-15, Right 2x8 SP DSS 1-11-12	

REACTIONS. All bearings 8-9-8 except (jt=length) 11=0-3-8.
 (lb) - Max Horz 11=61(LC 12)
 Max Uplift All uplift 100 lb or less at joint(s) 11, 17, 18 except 16=-166(LC 3)
 Max Grav All reactions 250 lb or less at joint(s) 16, 17, 18 except 11=653(LC 1), 15=613(LC 3), 2=352(LC 1), 2=352(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 7-8=-302/102, 8-9=-338/89, 9-11=-814/69, 3-4=-320/46, 4-5=-307/66, 5-6=-331/90, 6-7=-309/108
 BOT CHORD 2-18=0/272, 17-18=0/272, 16-17=0/272, 15-16=0/272, 13-15=-63/701, 11-13=-63/701
 WEBS 15-20=-492/71, 19-20=-482/68, 19-21=-499/74, 9-21=-479/69

- 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 Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 10-0-0, Exterior(2) 10-0-0 to 13-0-0, Interior(1) 13-0-0 to 21-0-0 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
 - All plates are MT20 plates unless otherwise indicated.
 - All plates are 2x4 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 17, 18 except (jt=lb) 16=166.



November 11, 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	Truss	Truss Type	Qty	Ply	Mattamy; Redwood	148764262
MASTER_CRAFTSMAN	CP01	KINGPOST	4	1		
Builders FirstSource (Apex, NC), Apex, NC - 27523,						Job Reference (optional)

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Nov 11 08:57:42 2021 Page 1
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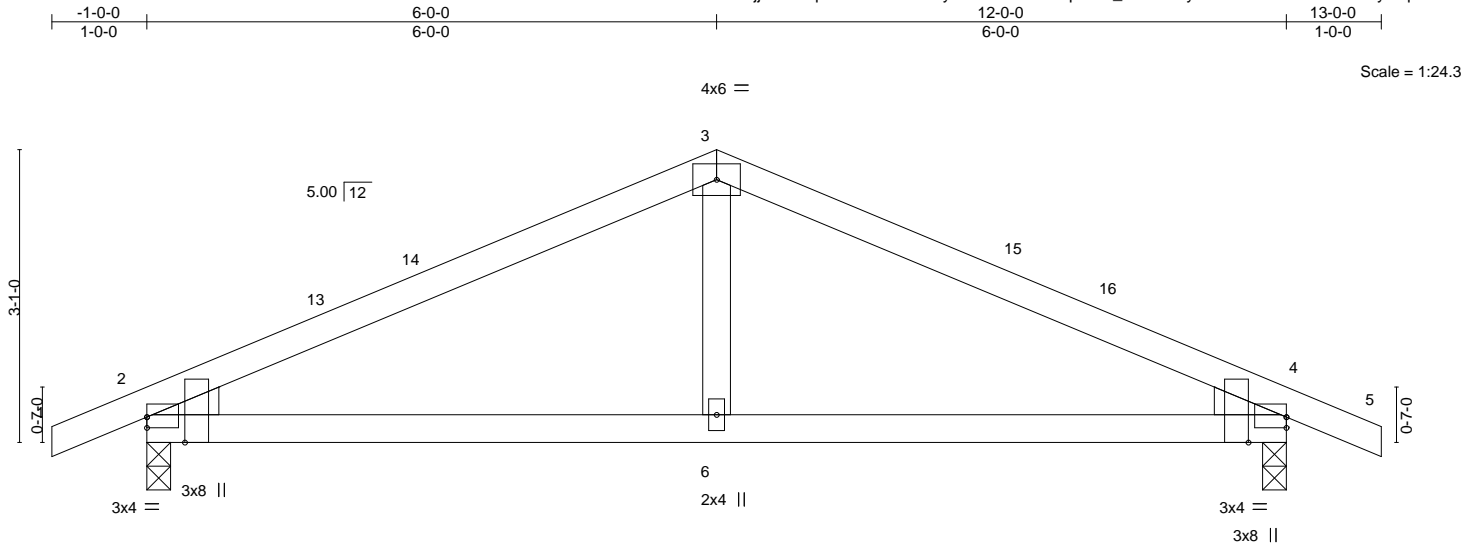


Plate Offsets (X,Y)--	[2:0-0-0,0-1-6], [2:0-3-3,Edge], [4:0-0-0,0-1-6], [4:0-3-3,Edge]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.39	Vert(LL)	-0.04	6-9	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.35	Vert(CT)	-0.07	6-9	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.10	Horz(CT)	0.01	2	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.03	6-9	>999	Weight: 47 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.3
 WEDGE
 Left: 2x4 SP No.3 , Right: 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=0-3-0
 Max Horz 2=39(LC 12)
 Max Uplift 2=-32(LC 12), 4=-32(LC 13)
 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=-686/77, 3-4=-686/77
 BOT CHORD 2-6=-1/578, 4-6=-1/578
 WEBS 3-6=0/251

- 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 Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 6-0-0, Exterior(2) 6-0-0 to 9-0-0, Interior(1) 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
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.



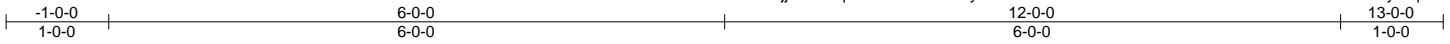
November 11, 2021

Job	Truss	Truss Type	Qty	Ply	Mattamy; Redwood	148764263
MASTER_CRAFTSMAN	CP01G	GABLE	1	1		

Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Nov 11 08:57:43 2021 Page 1

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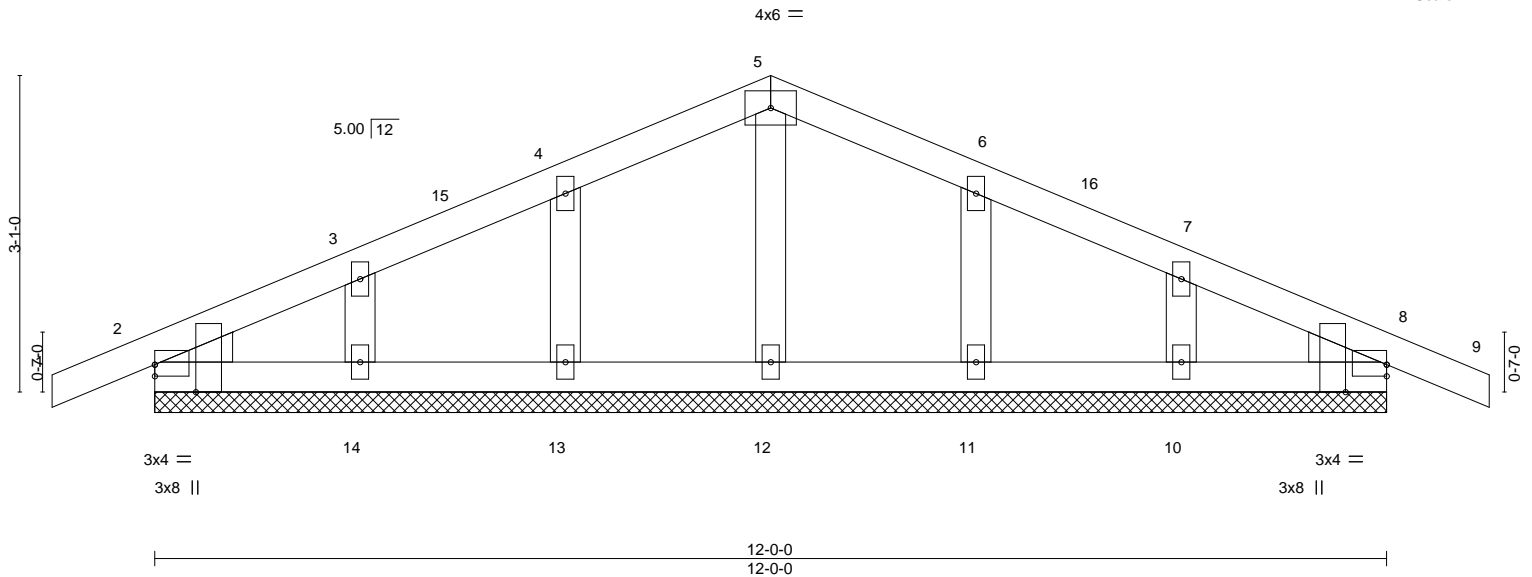


Plate Offsets (X, Y)-- [2:0-0-0,0-1-6], [2:0-3-3,Edge], [8:0-0-0,0-1-6], [8:0-3-3,Edge]

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 0.06	Vert(LL)	-0.00	9	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	9	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	8	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S						
								Weight: 54 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

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

REACTIONS. All bearings 12-0-0.
(lb) - Max Horz 2=39(LC 16)
Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 13, 14, 11, 10
Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

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

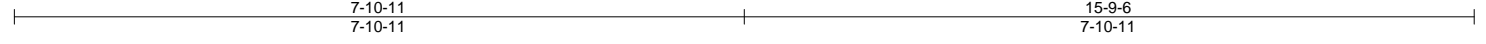
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 6-0-0, Exterior(2) 6-0-0 to 9-0-0, Interior(1) 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
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8, 13, 14, 11, 10.



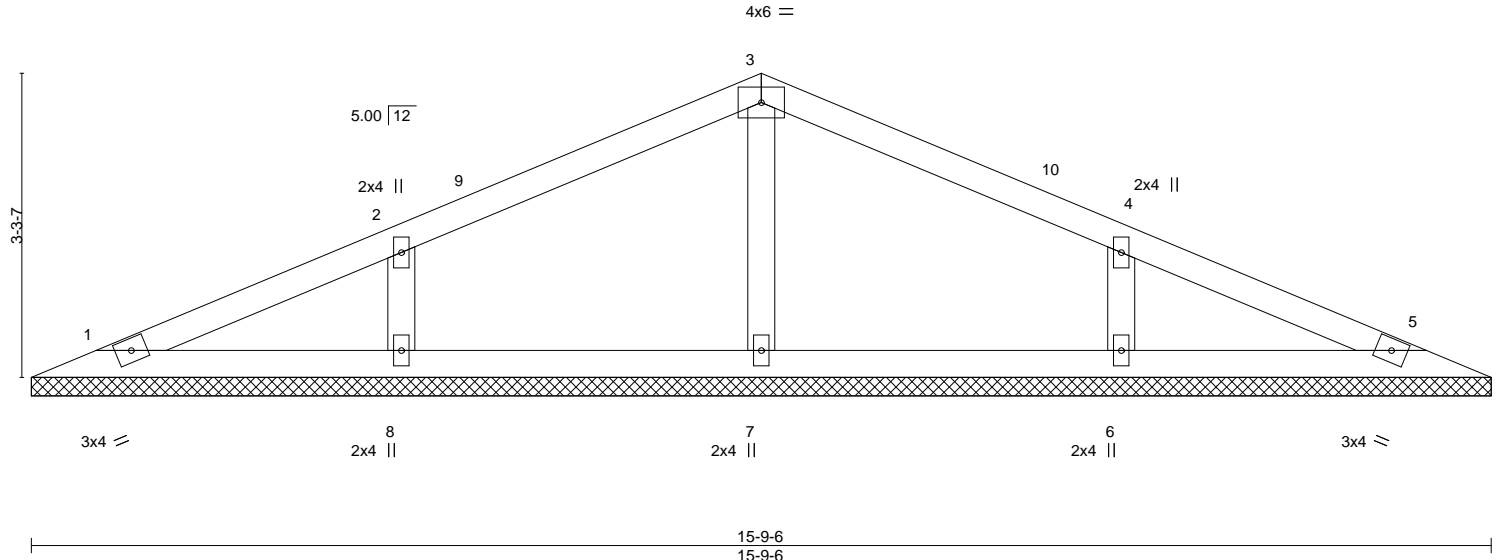
November 11, 2021

Job	Truss	Truss Type	Qty	Ply	Mattamy; Redwood	148764264
MASTER_CRAFTSMAN	CV01	VALLEY	1	1		

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Nov 11 08:57:44 2021 Page 1
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Scale = 1:24.9



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 54 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 15-9-6.
 (lb) - Max Horz 1=40(LC 13)
 Max Uplift All uplift 100 lb or less at joint(s) 5, 6, 8
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=272(LC 1), 6=339(LC 24), 8=339(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 4-6=-256/101, 2-8=-256/101

- 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) 0-8-12 to 4-0-0, Interior(1) 4-0-0 to 7-10-11, Exterior(2) 7-10-11 to 10-10-11, Interior(1) 10-10-11 to 15-0-10 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Gable requires continuous bottom chord bearing.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6, 8.



November 11, 2021

Job	Truss	Truss Type	Qty	Ply	Mattamy; Redwood	148764265
MASTER_CRAFTSMAN	CV02	VALLEY	1	1		

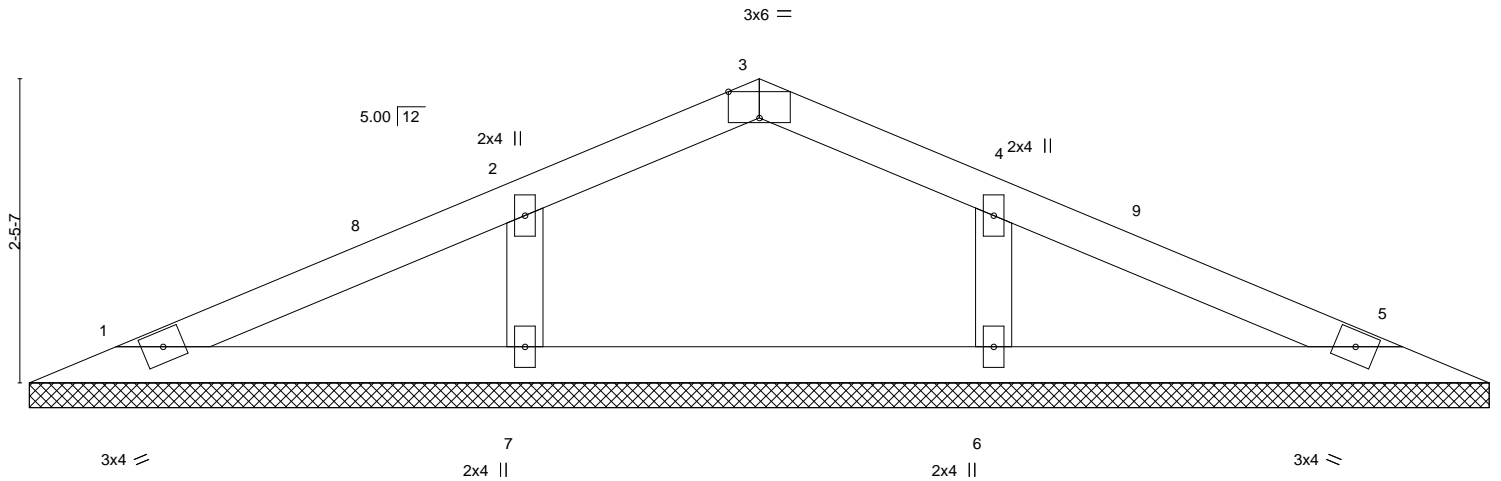
Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Nov 11 08:57:45 2021 Page 1

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11-9-6
5-10-11

Scale = 1:18.6



11-9-6
11-9-6

Plate Offsets (X,Y)--	[3:0-3:0,Edge]						
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 20.0	Plate Grip DOL	1.15	TC 0.12	Vert(LL)	n/a	-	n/a 999
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	n/a	-	n/a 999
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	5	n/a n/a
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S				
							PLATES MT20
							GRIP 244/190
							Weight: 38 lb FT = 20%

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

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

REACTIONS. All bearings 11-9-6.
(lb) - Max Horz 1=29(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 5, 6, 7
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=287(LC 1), 7=287(LC 1)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph 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) 0-8-12 to 4-0-0, Interior(1) 4-0-0 to 5-10-11, Exterior(2) 5-10-11 to 8-10-11, Interior(1) 8-10-11 to 11-0-10 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6, 7.



November 11, 2021

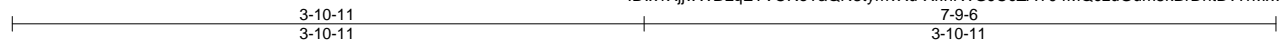
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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

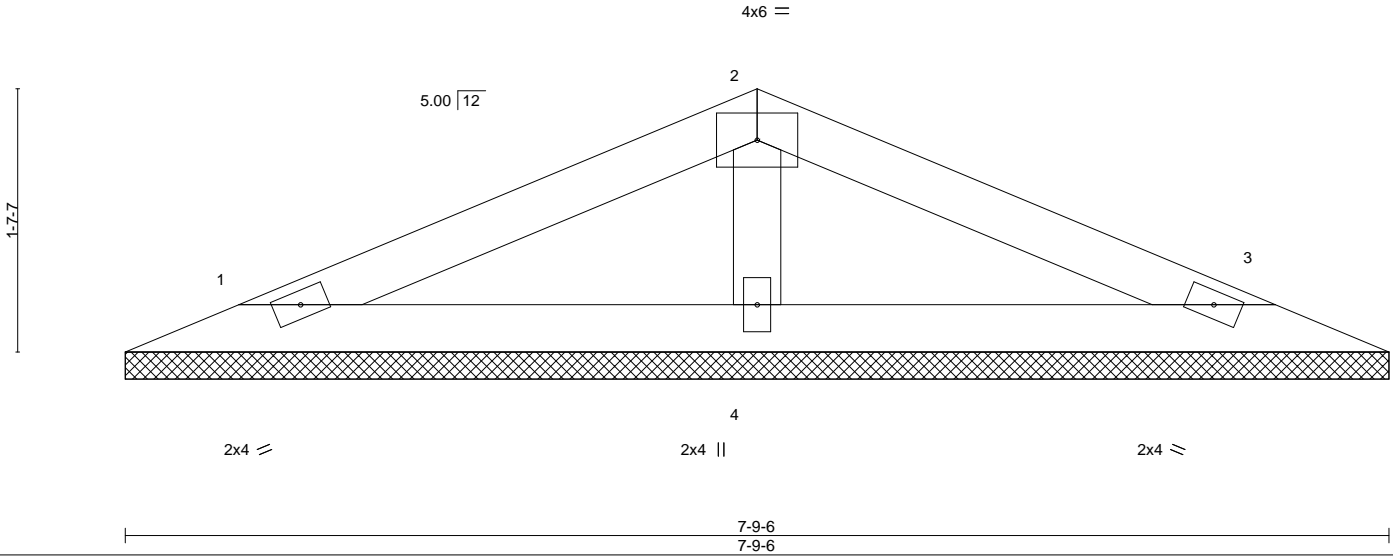


818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Mattamy; Redwood	148764266
MASTER_CRAFTSMAN	CV03	VALLEY	1	1		
Builders FirstSource (Apex, NC), Apex, NC - 27523,						8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Nov 11 08:57:46 2021 Page 1
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						Job Reference (optional)



Scale = 1:14.2



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.13	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.10	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.04	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S						
	Code IRC2015/TPI2014						Weight: 23 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. (size) 1=7-9-6, 3=7-9-6, 4=7-9-6
 Max Horz 1=-18(LC 13)
 Max Uplift 1=-12(LC 12), 3=-15(LC 13)
 Max Grav 1=114(LC 23), 3=114(LC 24), 4=283(LC 1)

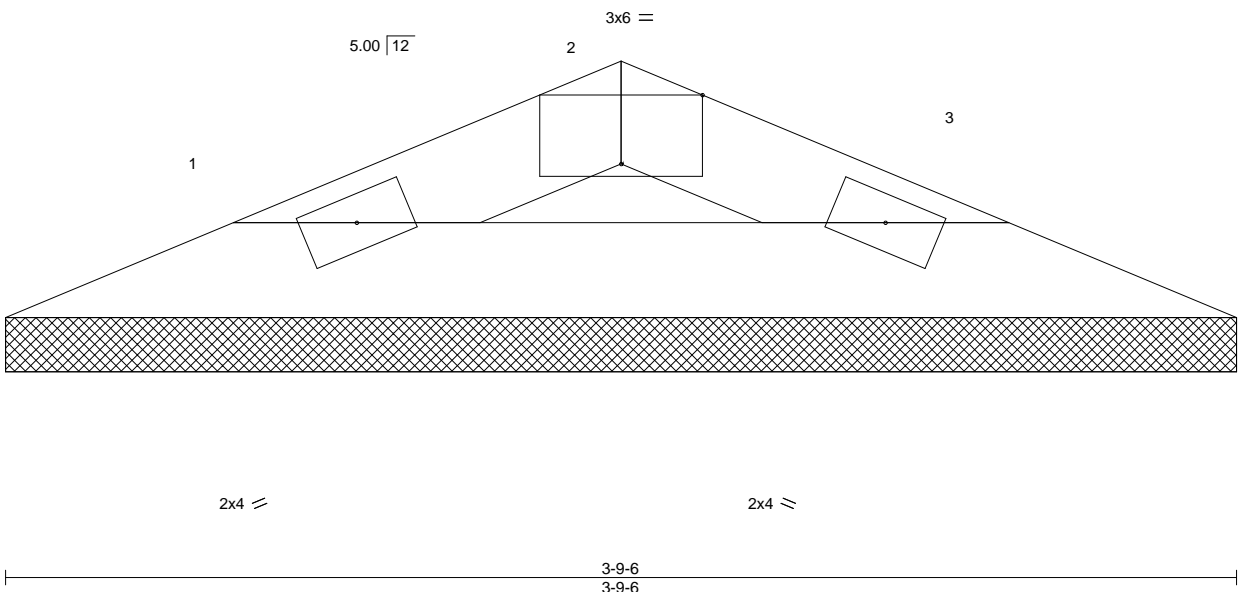
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- 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 Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Gable requires continuous bottom chord bearing.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



Job	Truss	Truss Type	Qty	Ply	Mattamy; Redwood	148764267
MASTER_CRAFTSMAN	CV04	VALLEY	1	1		

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Nov 11 08:57:47 2021 Page 1
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Scale = 1:7.1

Plate Offsets (X,Y)--	[2:0-3-0,Edge]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.02	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.06	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2015/TPI2014			Weight: 9 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-9-6 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-9-6, 3=3-9-6
 Max Horz 1=6(LC 17)
 Max Uplift 1=3(LC 12), 3=3(LC 13)
 Max Grav 1=93(LC 1), 3=93(LC 1)

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

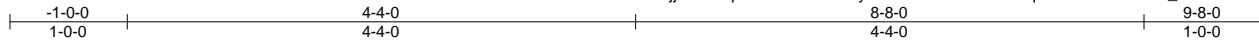
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and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



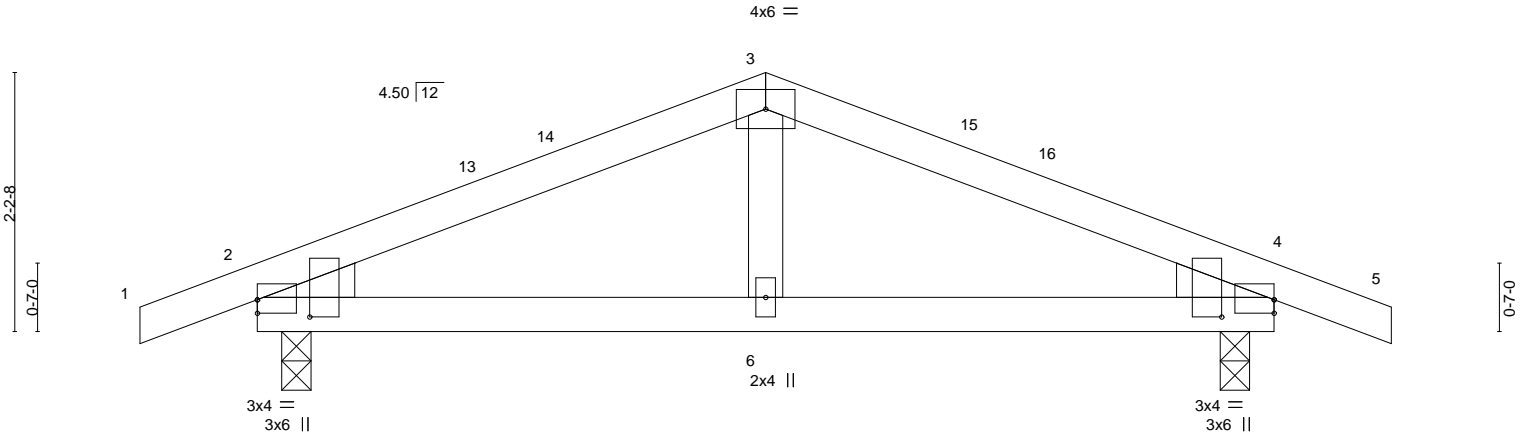
November 11, 2021

Job	Truss	Truss Type	Qty	Ply	Mattamy; Redwood	148764268
MASTER_CRAFTSMAN	D01	COMMON	2	1		

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Nov 11 08:57:48 2021 Page 1
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Scale = 1:19.6



0-2-8	4-4-0	8-5-8	8-8-0
0-2-8	4-1-8	4-1-8	0-2-8

Plate Offsets (X,Y)--	[2:0-0-0,0-1-6], [2:0-1-12,0-5-6], [4:0-0-0,0-1-6], [4:0-1-12,0-5-6]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.16	Vert(LL) -0.01 6-12 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.18	Vert(CT) -0.02 6-12 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.06	Horz(CT) 0.00 4 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS	Wind(LL) 0.01 6-9 >999 240	Weight: 35 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.3
 WEDGE
 Left: 2x4 SP No.3, Right: 2x4 SP No.2

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=0-3-0
 Max Horz 2=-32(LC 13)
 Max Uplift 2=-40(LC 8), 4=-40(LC 9)
 Max Grav 2=407(LC 1), 4=407(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-485/87, 3-4=-485/87
 BOT CHORD 2-6=-19/420, 4-6=-19/420

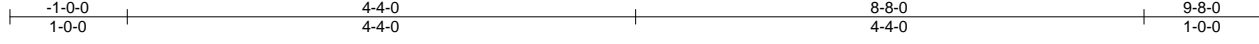
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 4-4-0, Exterior(2) 4-4-0 to 8-8-0, Interior(1) 8-8-0 to 9-8-0 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.



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Job	Truss	Truss Type	Qty	Ply	Mattamy; Redwood	148764269
MASTER_CRAFTSMAN	D01G	GABLE	1	1		

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Nov 11 08:57:49 2021 Page 1
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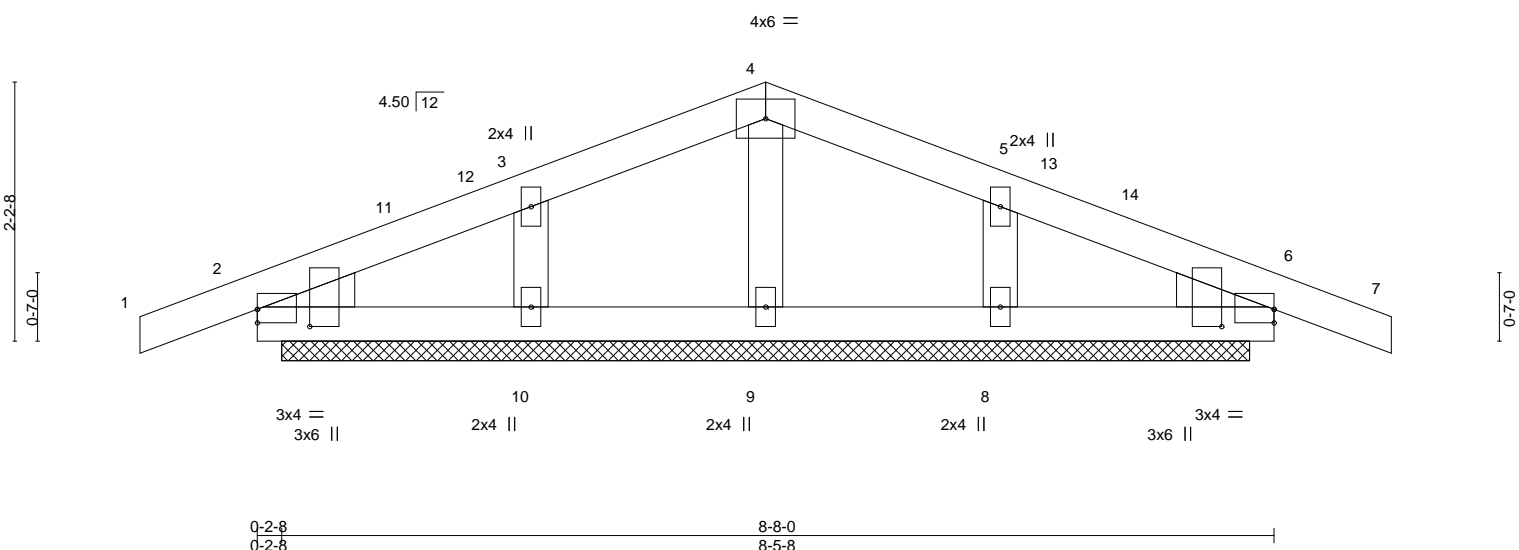


Plate Offsets (X, Y)--	[2:0-0-0,0-1-6], [2:0-1-12,0-5-6], [6:0-0-0,0-1-6], [6:0-1-12,0-5-6]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.07	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.04	Vert(LL) -0.00 6 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.04	Vert(CT) -0.00 7 n/r 120		
BCDL 10.0	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.00 6 n/a n/a		
	Code IRC2015/TPI2014			Weight: 38 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 OTHERS 2x4 SP No.3
 WEDGE
 Left: 2x4 SP No.3 , Right: 2x4 SP No.3

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

REACTIONS. All bearings 8-3-0.
 (lb) - Max Horz 2=27(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, 10, 8

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) -1-0-0 to 2-0-0, Exterior(2) 2-0-0 to 4-4-0, Corner(3) 4-4-0 to 7-4-0, Exterior(2) 7-4-0 to 9-8-0 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
 - 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.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6, 10, 8.
 - Non Standard bearing condition. Review required.



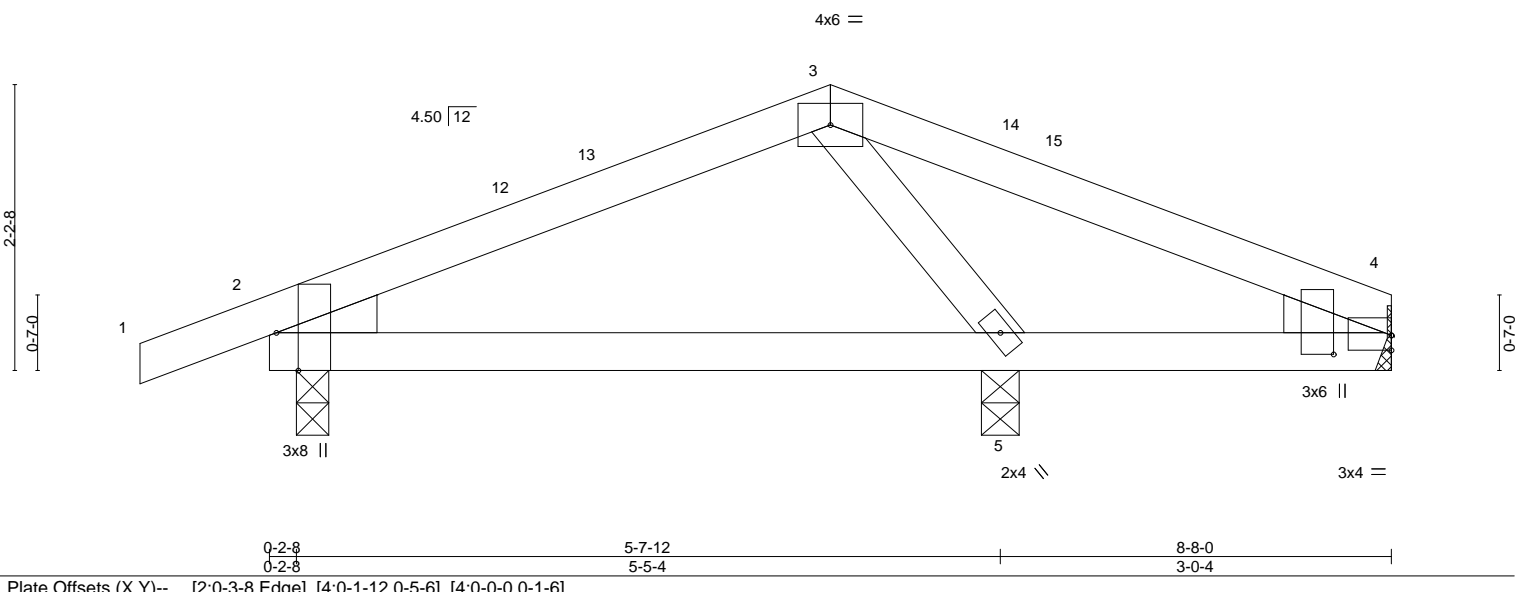
November 11, 2021

Job	Truss	Truss Type	Qty	Ply	Mattamy; Redwood	148764270
MASTER_CRAFTSMAN	D02	COMMON	3	1		

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Nov 11 08:57:50 2021 Page 1
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Scale = 1:17.8



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.21	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.23	Vert(LL) -0.02 5-11 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.02	Vert(CT) -0.04 5-11 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.01 2 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.01 5-11 >999 240	Weight: 34 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.3
 WEDGE
 Left: 2x4 SP No.3 , Right: 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) 5=0-3-8, 4=Mechanical, 2=0-3-0
 Max Horz 2=35(LC 12)
 Max Uplift 4=-31(LC 13), 2=-48(LC 8)
 Max Grav 5=230(LC 1), 4=190(LC 1), 2=333(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-276/110

- 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 4-4-0, Exterior(2) 4-4-0 to 8-8-0 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) Refer to girder(s) for truss to truss connections.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.



November 11, 2021

Job MASTER_CRAFTSMAN	Truss E01	Truss Type MONO TRUSS	Qty 3	Ply 1	Mattamy; Redwood Job Reference (optional)	148764271
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Nov 11 08:57:51 2021 Page 1

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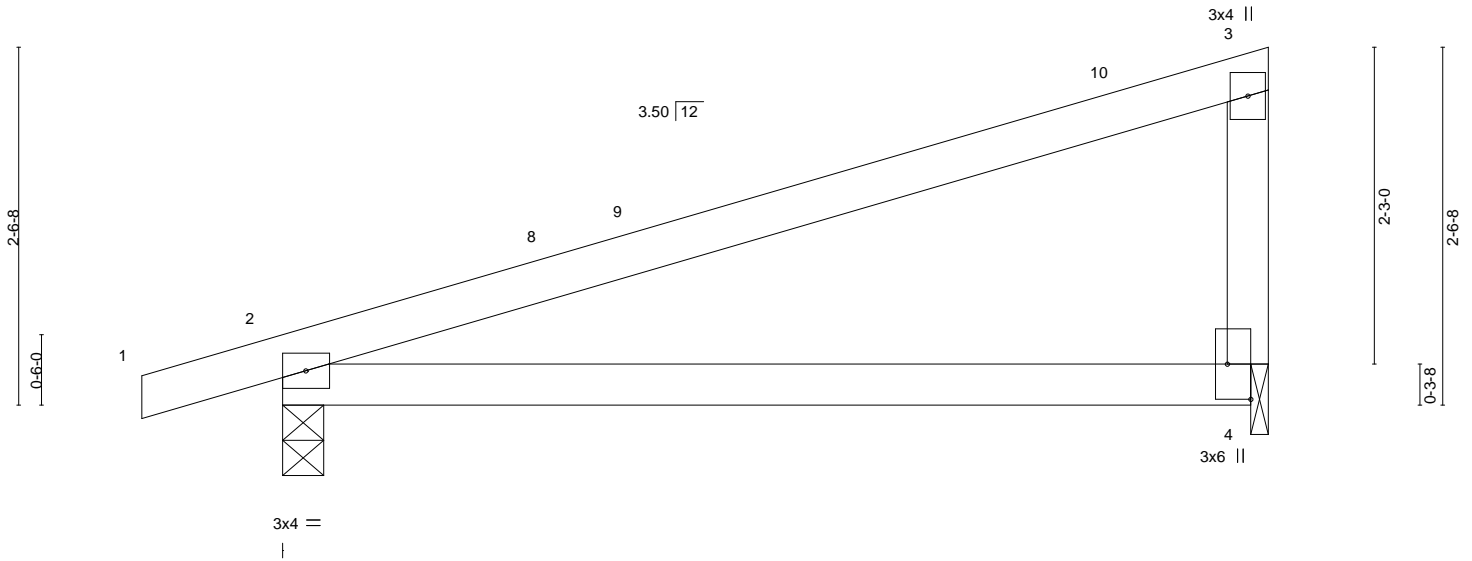


Plate Offsets (X,Y)--	[2:0-0-1,0-0-0], [4:Edge,0-2-0]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.59	Vert(LL) -0.06 4-7 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.42	Vert(CT) -0.15 4-7 >536 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.02 2 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS	Wind(LL) 0.05 4-7 >999 240	Weight: 26 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.3	

REACTIONS. (size) 2=0-3-8, 4=0-1-8
 Max Horz 2=75(LC 11)
 Max Uplift 2=-49(LC 8), 4=-26(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-

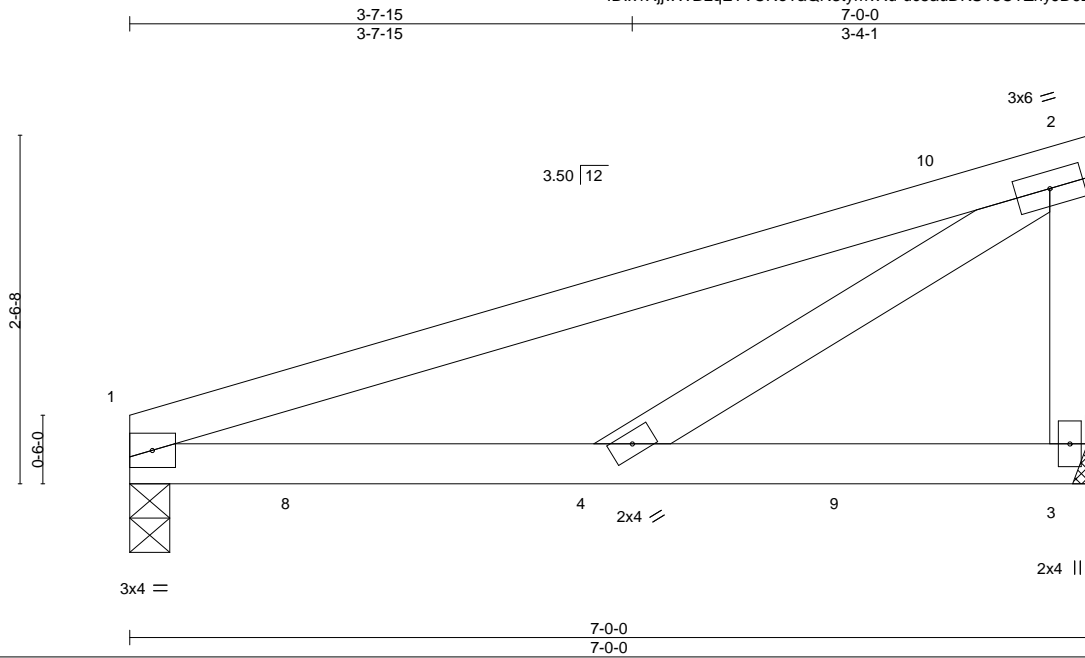
- 1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 6-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and 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.



November 11, 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	Truss	Truss Type	Qty	Ply	Mattamy; Redwood	148764272
MASTER_CRAFTSMAN	E01-1PL	MONO TRUSS	1	1		
Builders FirstSource (Apex, NC), Apex, NC - 27523,						8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Nov 11 08:57:51 2021 Page 1
						ID:x1XjjwWBLqE?VCRReTaQN3tymvXu-uc5auDKS18CTZnyJD9Z3zxTsCCPAS5ee973ibTyKlqE
						Job Reference (optional)



Scale = 1:16.8

Plate Offsets (X,Y)--	[1:0-0-1,0-0-0]				
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 0.66	Vert(LL) -0.03 4-7 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.69	Vert(CT) -0.04 4-7 >999 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.22	Horz(CT) 0.01 1 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS	Wind(LL) 0.02 4-7 >999 240	Weight: 30 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-8-11 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	

REACTIONS. (size) 1=0-3-8, 3=Mechanical
 Max Horz 1=70(LC 7)
 Max Uplift 1=-89(LC 4), 3=-95(LC 4)
 Max Grav 1=554(LC 1), 3=537(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-909/144, 2-3=-427/97
 BOT CHORD 1-4=-124/817
 WEBS 2-4=-142/889

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; cantilever left and right exposed ; end vertical left and right exposed; 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) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 181 lb down and 54 lb up at 1-3-4, and 181 lb down and 54 lb up at 3-3-4, and 181 lb down and 54 lb up at 5-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 7) 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) Standard
 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 3-5=-20, 1-2=-60
 Concentrated Loads (lb)
 Vert: 4=-181(B) 8=-181(B) 9=-181(B)



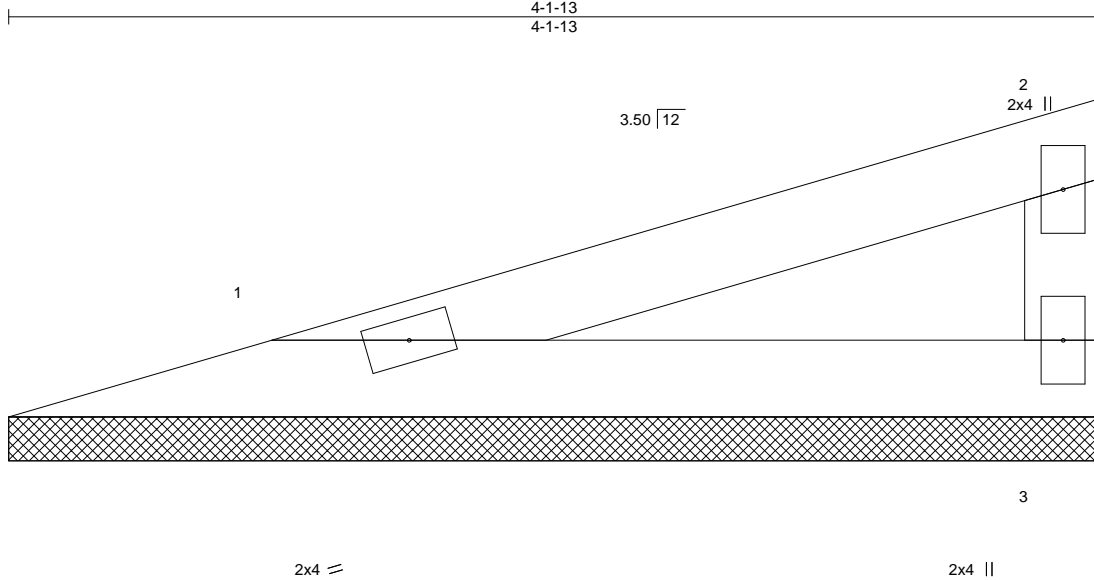
November 11, 2021

Job MASTER_CRAFTSMAN	Truss EV01	Truss Type VALLEY	Qty 1	Ply 1	Mattamy; Redwood	148764273
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Builders FirstSource (Apex, NC), Apex, NC - 27523,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Nov 11 08:57:52 2021 Page 1

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Scale = 1:8.8

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 0.16	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.10	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: 12 lb	FT = 20%

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

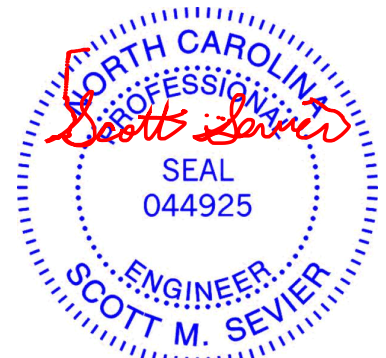
BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-1-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-1-13, 3=4-1-13
Max Horz 1=29(LC 9)
Max Uplift 1=8(LC 8), 3=12(LC 12)
Max Grav 1=119(LC 1), 3=119(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) 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) Gable requires continuous bottom chord bearing.
- 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) 1, 3.



November 11, 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

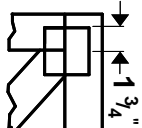
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



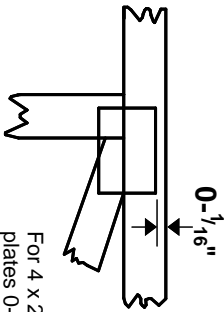
818 Soundside Road
Edenton, NC 27932

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

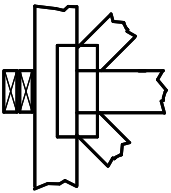
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



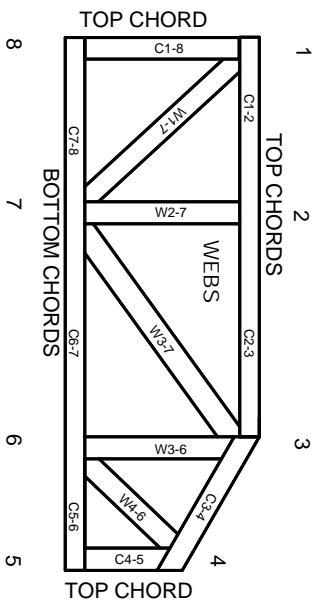
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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