ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: Master_RT
John Dove/Aubrey/A

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: I50874067 thru I50874086

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

North Carolina COA: C-0844

March 21,2022

Gilbert, Eric

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	John Dove/Aubrey/A
MASTER_RT	A01	FINK	2	1	I50874067
					Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Dec 6 2021 MiTek Industries, Inc. Fri Mar 18 16:02:17 2022 Page 1
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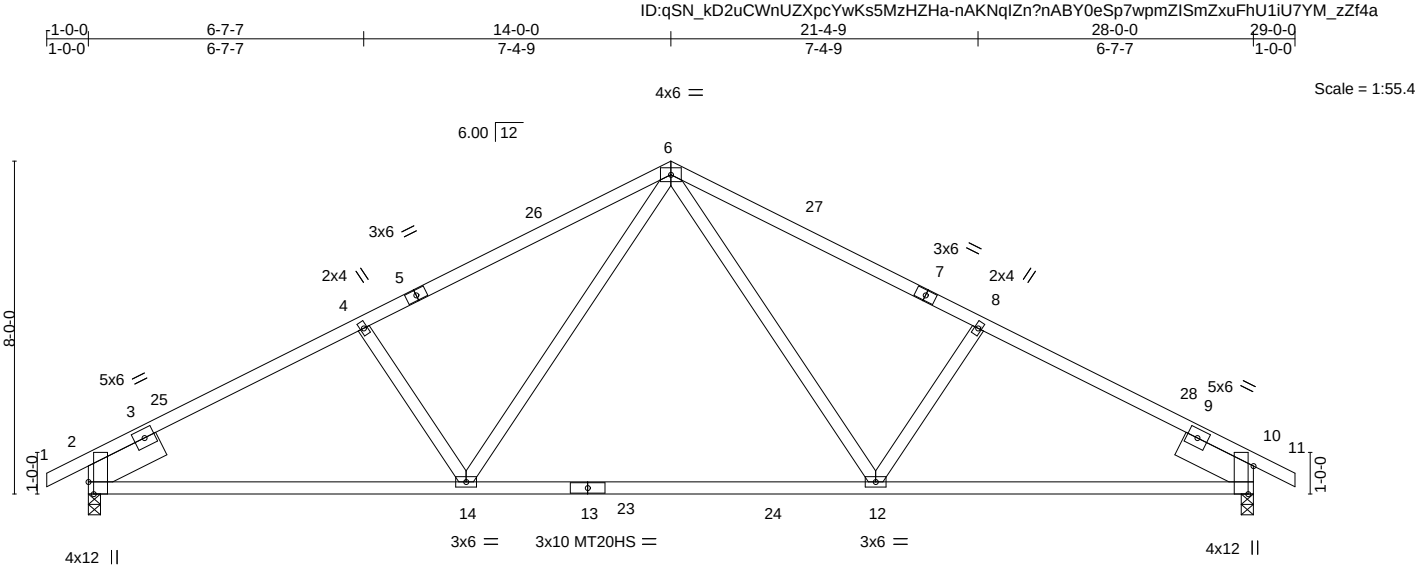

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [10:0-8-1,Edge]

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	0.90	Vert(LL)	-0.45	12-14	>747	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.73	12-14	>460	180	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.10	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS		Wind(LL)	0.10	12-14	>999	240	Weight: 144 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.2 *Except*
10-13: 2x4 SP No.1
WEBS 2x4 SP No.2
SLIDER Left 2x8 SP DSS 1-11-12, Right 2x8 SP DSS 1-11-12

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

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=-100(LC 13)
Max Uplift 2=-49(LC 12), 10=-49(LC 13)
Max Grav 2=1180(LC 1), 10=1180(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1702/90, 4-6=-1534/118, 6-8=-1535/117, 8-10=-1704/89
BOT CHORD 2-14=-100/1444, 12-14=0/1023, 10-12=-8/1446
WEBS 4-14=-328/179, 6-14=-46/546, 6-12=-45/551, 8-12=-330/180

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 14-0-0, Exterior(2) 14-0-0 to 17-0-0, Interior(1) 17-0-0 to 29-0-0 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) 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, with BCDL = 10.0psf.
6) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 10. This connection is for uplift only and does not consider lateral forces.

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Job	Truss	Truss Type	Qty	Ply	John Dove/Aubrey/A
MASTER_RT	A01G	GABLE	1	1	I50874068
					Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Dec 6 2021 MiTek Industries, Inc. Fri Mar 18 16:02:30 2022 Page 1
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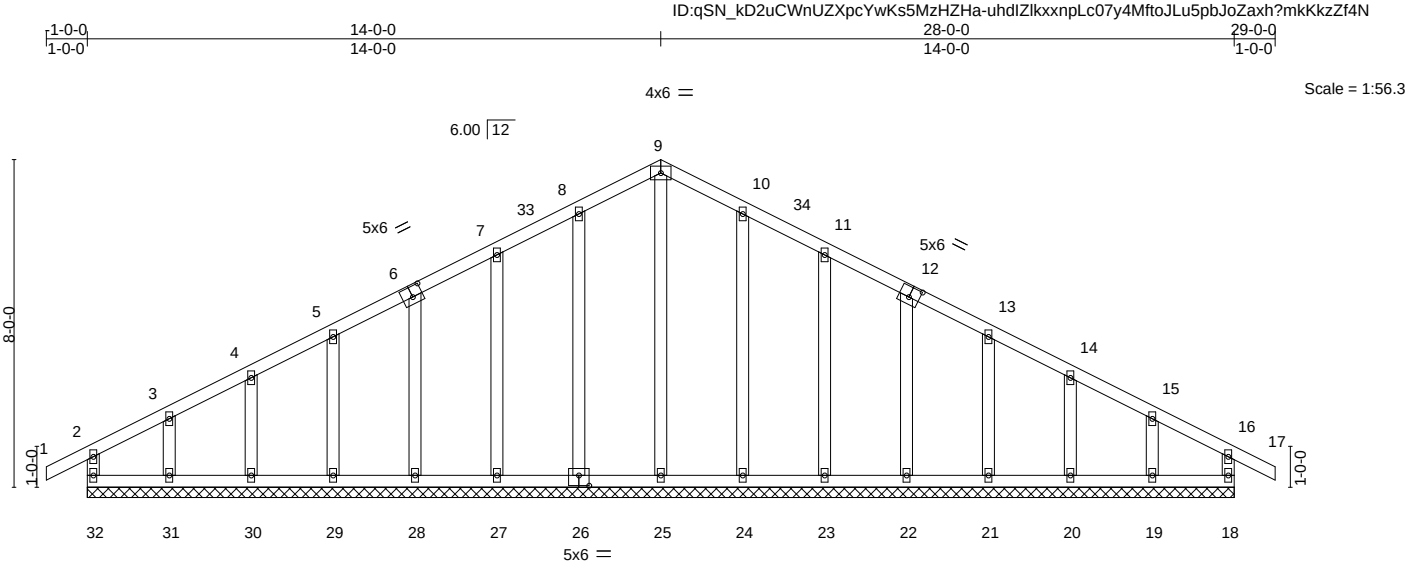

Plate Offsets (X,Y)-- [6:0-3-0,0-3-0], [12:0-3-0,0-3-0], [26:0-3-0,0-3-0]

LOADING (psf)		SPACING-	1-11-4	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	17	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00	17	n/r	120		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.14	Horz(CT)	0.00	18	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-R							Weight: 175 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.2

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 28-0-0.
(lb) - Max Horz 32=-92(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 32, 18, 26, 27, 28, 29, 30, 31, 24, 23, 22, 21, 20, 19
Max Grav All reactions 250 lb or less at joint(s) 32, 18, 25, 26, 27, 28, 29, 30, 31, 24, 23, 22, 21, 20, 19

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

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph 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 14-0-0, Corner(3) 14-0-0 to 17-0-0, Exterior(2) 17-0-0 to 29-0-0 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) 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) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 32, 18, 26, 27, 28, 29, 30, 31, 24, 23, 22, 21, 20, and 19. This connection is for uplift only and does not consider lateral forces.

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Job	Truss	Truss Type	Qty	Ply	John Dove/Aubrey/A	I50874069
MASTER_RT	A02	FINK	7	1	Job Reference (optional)	

Builders FirstSource, Apex, NC 27523 — 8.530 s Dec 6 2021 MiTek Industries, Inc. Mon Mar 21 08:34:33 2022 Page 1

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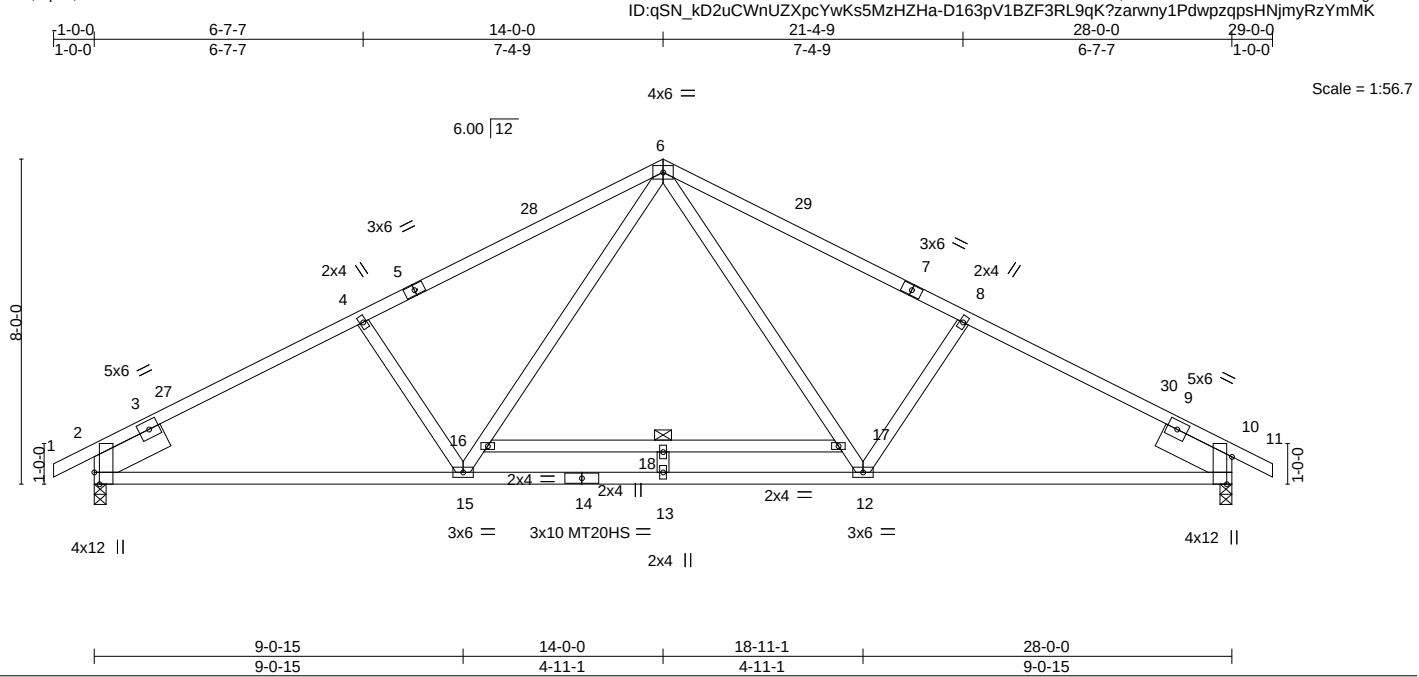

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [10:0-8-1,Edge]

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	0.92	Vert(LL)	-0.50	13	>669	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.70	13	>481	180	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.83	Horz(CT)	0.10	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS		Wind(LL)	0.08	13	>999	240	Weight: 158 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.1 *Except*
	1-5,7-11: 2x4 SP SS
BOT CHORD	2x4 SP No.1
WEBS	2x4 SP No.2 *Except*
	16-17: 2x4 SP No.1
SLIDER	Left 2x8 SP DSS 1-11-12, Right 2x8 SP DSS 1-11-12

BRACING-

TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 16-17

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=-100(LC 13)
Max Uplift 2=-49(LC 12), 10=-49(LC 13)
Max Grav 2=1180(LC 1), 10=1180(LC 1)

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

TOP CHORD	3-27=-1773/65, 4-27=-1760/92, 4-5=-1636/84, 5-28=-1558/101, 6-28=-1536/120, 6-29=-1536/120, 7-29=-1558/101, 7-8=-1636/84, 8-30=-1760/92, 9-30=-1773/65
BOT CHORD	2-15=-103/1509, 14-15=0/1136, 13-14=0/1136, 12-13=0/1136, 10-12=-10/1508
WEBS	4-15=-335/179, 15-16=-56/590, 6-16=-47/704, 6-17=-47/704, 12-17=-55/590, 8-12=-335/180

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 14-0-0, Exterior(2) 14-0-0 to 17-0-0, Interior(1) 17-0-0 to 29-0-0 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) 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.
6) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 10. This connection is for uplift only and does not consider lateral forces.
7) 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.
8) 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)

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

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LOAD CASE(S)

Uniform Loads (plf)
Vert: 19-23=-20, 1-6=-60, 6-11=-60

2) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 15-19=-20, 12-15=-50(F=-30), 12-23=-20, 1-6=-50, 6-11=-50

3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 15-19=-40, 12-15=-80(F=-40), 12-23=-40, 1-6=-20, 6-11=-20

4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 19-23=-12, 1-2=42, 2-27=22, 6-27=12, 6-29=22, 10-29=12, 10-11=8
Horz: 1-2=-54, 2-27=-34, 6-27=-24, 6-29=34, 10-29=24, 10-11=20

5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 19-23=-12, 1-2=8, 2-28=12, 6-28=22, 6-30=12, 10-30=22, 10-11=42
Horz: 1-2=-20, 2-28=-24, 6-28=-34, 6-30=24, 10-30=34, 10-11=54

6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 19-23=-20, 1-2=-13, 2-6=-32, 6-10=-32, 10-11=-27
Horz: 1-2=-7, 2-6=12, 6-10=-12, 10-11=-7

7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 19-23=-20, 1-2=-27, 2-6=-32, 6-10=-32, 10-11=-13
Horz: 1-2=7, 2-6=12, 6-10=-12, 10-11=7

8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 19-23=-12, 1-2=7, 2-6=-3, 6-10=7, 10-11=2
Horz: 1-2=-19, 2-6=-9, 6-10=19, 10-11=14

9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 19-23=-12, 1-2=2, 2-6=7, 6-10=-3, 10-11=7
Horz: 1-2=-14, 2-6=-19, 6-10=9, 10-11=19

10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 19-23=-20, 1-2=-15, 2-6=-20, 6-10=-10, 10-11=-6
Horz: 1-2=-5, 2-6=-0, 6-10=10, 10-11=14

11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 19-23=-20, 1-2=-6, 2-6=-10, 6-10=-20, 10-11=-15
Horz: 1-2=-14, 2-6=-10, 6-10=0, 10-11=5

12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 19-23=-12, 1-2=14, 2-6=19, 6-10=5, 10-11=1
Horz: 1-2=-26, 2-6=-31, 6-10=17, 10-11=13

13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 19-23=-12, 1-2=1, 2-6=5, 6-10=19, 10-11=14
Horz: 1-2=-13, 2-6=-17, 6-10=31, 10-11=26

14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 19-23=-12, 1-2=5, 2-6=9, 6-10=2, 10-11=-3
Horz: 1-2=-17, 2-6=-21, 6-10=14, 10-11=9

15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 19-23=-12, 1-2=-3, 2-6=2, 6-10=9, 10-11=5
Horz: 1-2=-9, 2-6=-14, 6-10=21, 10-11=17

16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 19-23=-20, 1-2=6, 2-6=2, 6-10=-11, 10-11=-7
Horz: 1-2=-26, 2-6=-22, 6-10=9, 10-11=13

17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 19-23=-20, 1-2=-7, 2-6=-11, 6-10=2, 10-11=6
Horz: 1-2=-13, 2-6=-9, 6-10=22, 10-11=26

18) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
Uniform Loads (plf)
Vert: 15-19=-20, 12-15=-60(F=-40), 12-23=-20, 1-6=-20, 6-11=-20

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: 15-19=-20, 12-15=-50(F=-30), 12-23=-20, 1-2=-46, 2-6=-50, 6-10=-43, 10-11=-39
Horz: 1-2=-4, 2-6=-0, 6-10=7, 10-11=11

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

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LOAD CASE(S)

Uniform Loads (plf)
Vert: 15-19=-20, 12-15=-50(F=-30), 12-23=-20, 1-2=-39, 2-6=-43, 6-10=-50, 10-11=-46
Horz: 1-2=-11, 2-6=-7, 6-10=0, 10-11=4

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: 15-19=-20, 12-15=-50(F=-30), 12-23=-20, 1-2=-30, 2-6=-34, 6-10=-44, 10-11=-40
Horz: 1-2=-20, 2-6=-16, 6-10=6, 10-11=10

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: 15-19=-20, 12-15=-50(F=-30), 12-23=-20, 1-2=-40, 2-6=-44, 6-10=-34, 10-11=-30
Horz: 1-2=-10, 2-6=-6, 6-10=16, 10-11=20

23) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 19-23=-20, 1-6=-60, 6-11=-20

24) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 19-23=-20, 1-6=-20, 6-11=-60

25) 3rd Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 15-19=-20, 12-15=-50(F=-30), 12-23=-20, 1-6=-50, 6-11=-20

26) 4th Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 15-19=-20, 12-15=-50(F=-30), 12-23=-20, 1-6=-20, 6-11=-50

Job	Truss	Truss Type	Qty	Ply	John Dove/Aubrey/A
MASTER_RT	A03	FINK	10	1	I50874070
					Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Dec 6 2021 MiTek Industries, Inc. Fri Mar 18 16:02:46 2022 Page 1
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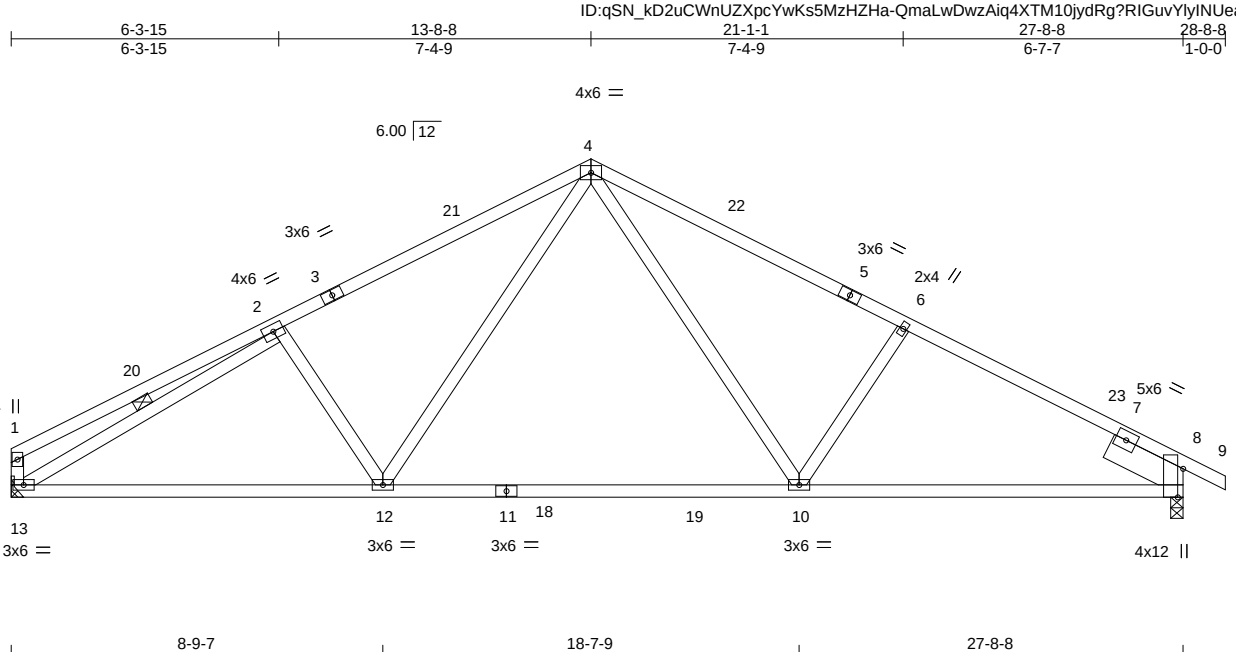

Plate Offsets (X,Y)-- [8:0-8-1,Edge]

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	0.85	Vert(LL)	-0.38	10-12	>862	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.60	10-12	>549	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.10	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS		Wind(LL)	0.07	10-12	>999	240	Weight: 146 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.1 *Except* 1-3: 2x4 SP No.2
BOT CHORD	2x4 SP No.1
WEBS	2x4 SP No.2
SLIDER	Right 2x8 SP DSS 1-11-12

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 2-13

REACTIONS. (size) 8=0-3-8, 13=Mechanical
Max Horz 13=-103(LC 17)
Max Uplift 8=-50(LC 13), 13=-33(LC 12)
Max Grav 8=1164(LC 1), 13=1101(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-269/61, 2-4=-1507/122, 4-6=-1501/117, 6-8=-1671/90
BOT CHORD 12-13=-99/1384, 10-12=0/994, 8-10=-10/1418
WEBS 2-12=-280/184, 4-12=-40/545, 4-10=-47/545, 6-10=-336/179, 2-13=-1437/37

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) 0-5-4 to 3-5-4, Interior(1) 3-5-4 to 14-0-0, Exterior(2) 14-0-0 to 17-0-0, Interior(1) 17-0-0 to 29-0-0 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, with BCDL = 10.0psf.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13.
7) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8. This connection is for uplift only and does not consider lateral forces.

March 21,2022

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

Job	Truss	Truss Type	Qty	Ply	John Dove/Aubrey/A
MASTER_RT	A03G	GABLE	1	1	I50874071
					Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Dec 6 2021 MiTek Industries, Inc. Fri Mar 18 16:02:53 2022 Page 1
ID:qSN_kD2uCWnUZXpcYwKs5MzHZHa-j6W_Oc?MXri5tYONwhaGD9opE4Sbhz8K_4rSeuzZf40

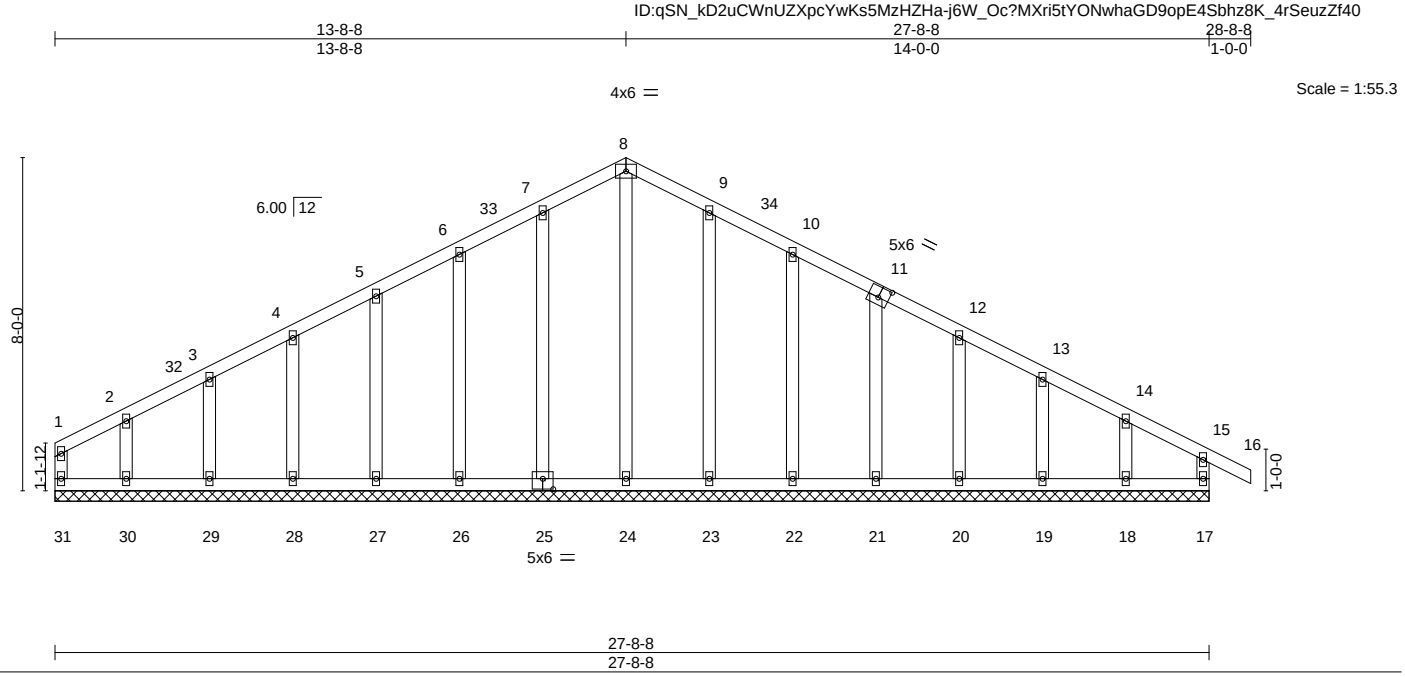

Plate Offsets (X,Y)-- [11:0-3-0,0-3-0], [25:0-3-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	-0.00	16	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.01	16	n/r	120		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.15	Horz(CT)	0.00	17	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-R							Weight: 173 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.2

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, Except: 10-0-0 oc bracing: 20-21,19-20,18-19,17-18.

REACTIONS. All bearings 27-8-8.
(lb) - Max Horz 31=-101(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 31, 17, 25, 26, 27, 28, 29, 30, 23, 22, 21, 20, 19, 18
Max Grav All reactions 250 lb or less at joint(s) 31, 17, 24, 25, 26, 27, 28, 29, 30, 23, 22, 21, 20, 19, 18

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 7-8=-87/251

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) 0-1-12 to 3-1-12, Exterior(2) 3-1-12 to 13-8-8, Corner(3) 13-8-8 to 16-8-8, Exterior(2) 16-8-8 to 28-8-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 31, 17, 25, 26, 27, 28, 29, 30, 23, 22, 21, 20, 19, and 18. This connection is for uplift only and does not consider lateral forces.

March 21,2022

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

Job	Truss	Truss Type	Qty	Ply	John Dove/Aubrey/A
MASTER_RT	B01	FINK	1	1	I50874072
					Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Dec 6 2021 MiTek Industries, Inc. Fri Mar 18 16:03:00 2022 Page 1
ID:qSN_kD2uCWnUZXpcYwKs5MzHZHa-0SRes?5lt?a5CdQjqfCv0dauavioq9vMbg2KN_zZf3v

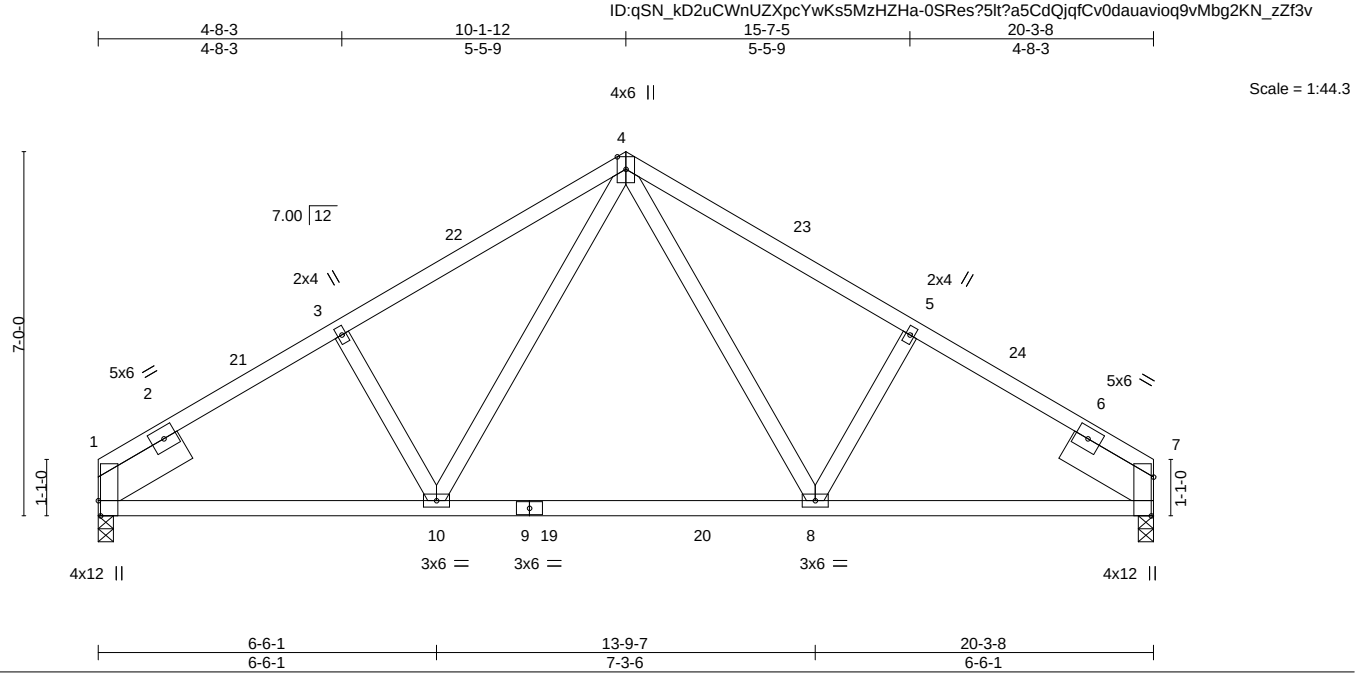

Plate Offsets (X,Y)-- [1:0-3-8,Edge], [7:0-8-15,Edge]

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	0.61	Vert(LL)	-0.15	8-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.26	8-10	>932	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.05	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS		Wind(LL)	0.04	8-10	>999	240	Weight: 111 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
SLIDER Left 2x8 SP DSS 1-11-12, Right 2x8 SP DSS 1-11-12

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

REACTIONS. (size) 1=0-3-8, 7=0-3-8
Max Horz 1=117(LC 9)
Max Uplift 1=-21(LC 12), 7=-21(LC 13)
Max Grav 1=812(LC 1), 7=812(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1061/134, 3-4=-966/99, 4-5=-966/99, 5-7=-1061/134
BOT CHORD 1-10=-77/911, 8-10=0/641, 7-8=-4/852
WEBS 4-10=-47/380, 4-8=-47/380

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) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 10-1-12, Exterior(2) 10-1-12 to 13-1-12, Interior(1) 13-1-12 to 20-3-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 7. This connection is for uplift only and does not consider lateral forces.

March 21,2022

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

Job	Truss	Truss Type	Qty	Ply	John Dove/Aubrey/A
MASTER_RT	B01G	KINGPOST	1	1	I50874073
					Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Dec 6 2021 MiTek Industries, Inc. Fri Mar 18 16:03:05 2022 Page 1
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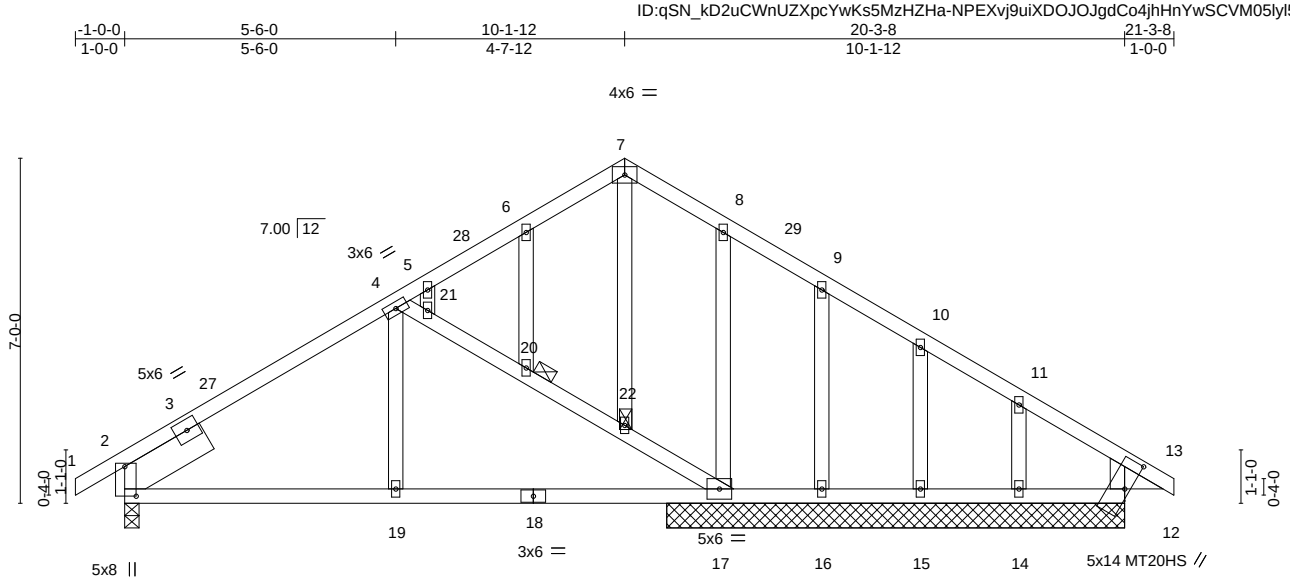

Plate Offsets (X,Y)-- [2:0-7-3,0-2-12], [12:0-7-0,0-1-4]

LOADING (psf)		SPACING-	1-11-4	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	-0.04	17-19	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.07	17-19	>999	180	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.29	Horz(CT)	-0.01	2	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS		Wind(LL)	0.01	19-25	>999	240	Weight: 130 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
SLIDER	Left 2x8 SP DSS 1-11-12, Right 2x8 SP DSS 0-10-13

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
JOINTS	1 Brace at Jt(s): 20, 22

REACTIONS. All bearings 9-3-8 except (jt=length) 2=0-3-8.
(lb) - Max Horz 2=125(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 16, 15
Max Grav All reactions 250 lb or less at joint(s) 16, 15 except 2=510(LC 23), 17=712(LC 1), 14=450(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-480/61
BOT CHORD 2-19=-58/403, 17-19=-58/403
WEBS 4-21=-489/96, 20-21=-439/78, 20-22=-472/98, 17-22=-507/80, 8-17=-293/4, 11-14=-254/45

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 10-1-12, Exterior(2) 10-1-12 to 13-1-12, Interior(1) 13-1-12 to 21-3-7 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 2x4 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.
7) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 16, and 15. This connection is for uplift only and does not consider lateral forces.

March 21,2022

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

Job	Truss	Truss Type	Qty	Ply	John Dove/Aubrey/A
MASTER_RT	B02GR	FINK	1	2	I50874074
					Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Dec 6 2021 MiTek Industries, Inc. Fri Mar 18 16:03:12 2022 Page 1
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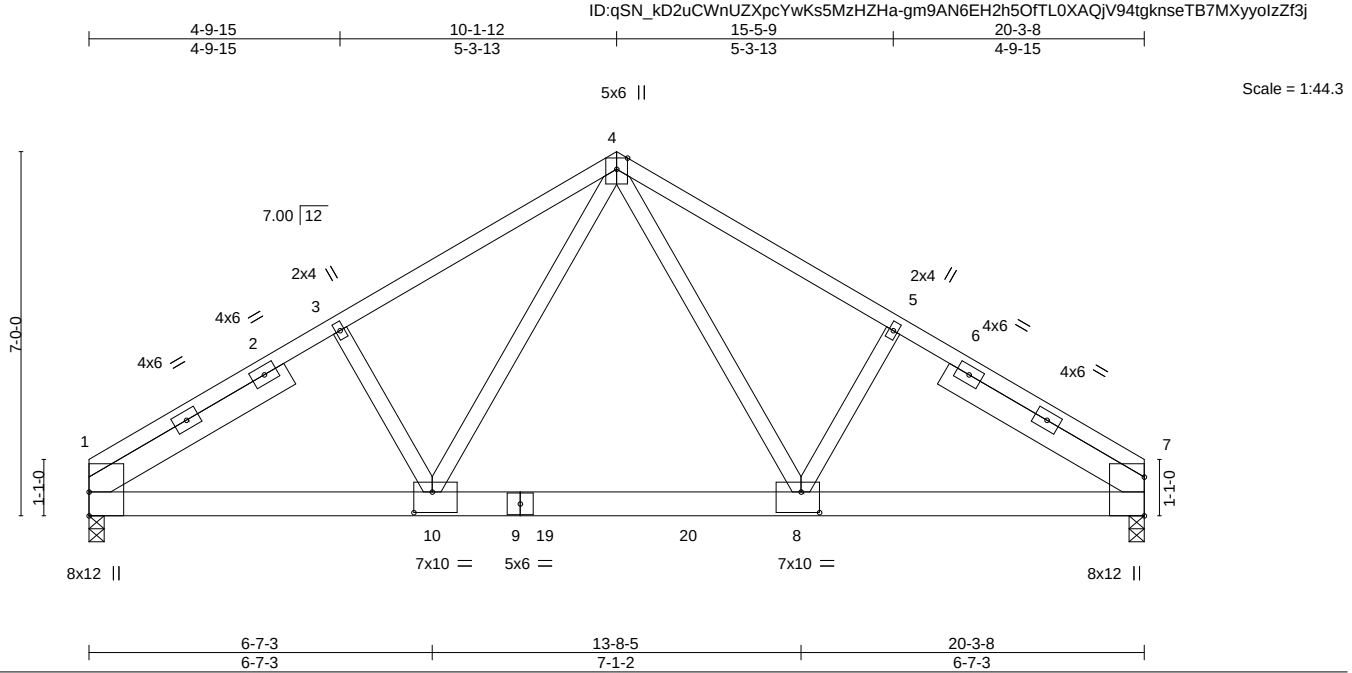

Plate Offsets (X,Y)-- [8:0-4-4,0-4-12], [10:0-4-4,0-4-12]

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	0.85	Vert(LL)	-0.16	8-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.32	8-10	>762	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.51	Horz(CT)	0.05	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS		Wind(LL)	0.12	8-10	>999	240	Weight: 271 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP DSS
WEBS 2x4 SP No.2
SLIDER Left 2x6 SP No.2 4-5-12, Right 2x6 SP No.2 4-5-12

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

REACTIONS. (size) 1=0-3-8 (req. 0-3-12), 7=0-3-8 (req. 0-3-12)
Max Horz 1=117(LC 5)
Max Uplift 1=-497(LC 8), 7=-497(LC 9)
Max Grav 1=6402(LC 1), 7=6402(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-7812/634, 3-4=-7753/671, 4-5=-7753/671, 5-7=-7812/634
BOT CHORD 1-10=-560/6589, 8-10=-331/4698, 7-8=-481/6589
WEBS 3-10=-33/336, 4-10=-374/4188, 4-8=-374/4188, 5-8=-33/336

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=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
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.
7) WARNING: Required bearing size at joint(s) 1, 7 greater than input bearing size.
8) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 7. This connection is for uplift only and does not consider lateral forces.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 11-15=-571(F=-551), 1-4=-60, 4-7=-60

March 21,2022

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

Job	Truss	Truss Type	Qty	Ply	John Dove/Aubrey/A
MASTER_RT	C01	KINGPOST	2	1	I50874075
					Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Dec 6 2021 MiTek Industries, Inc. Fri Mar 18 16:03:13 2022 Page 1
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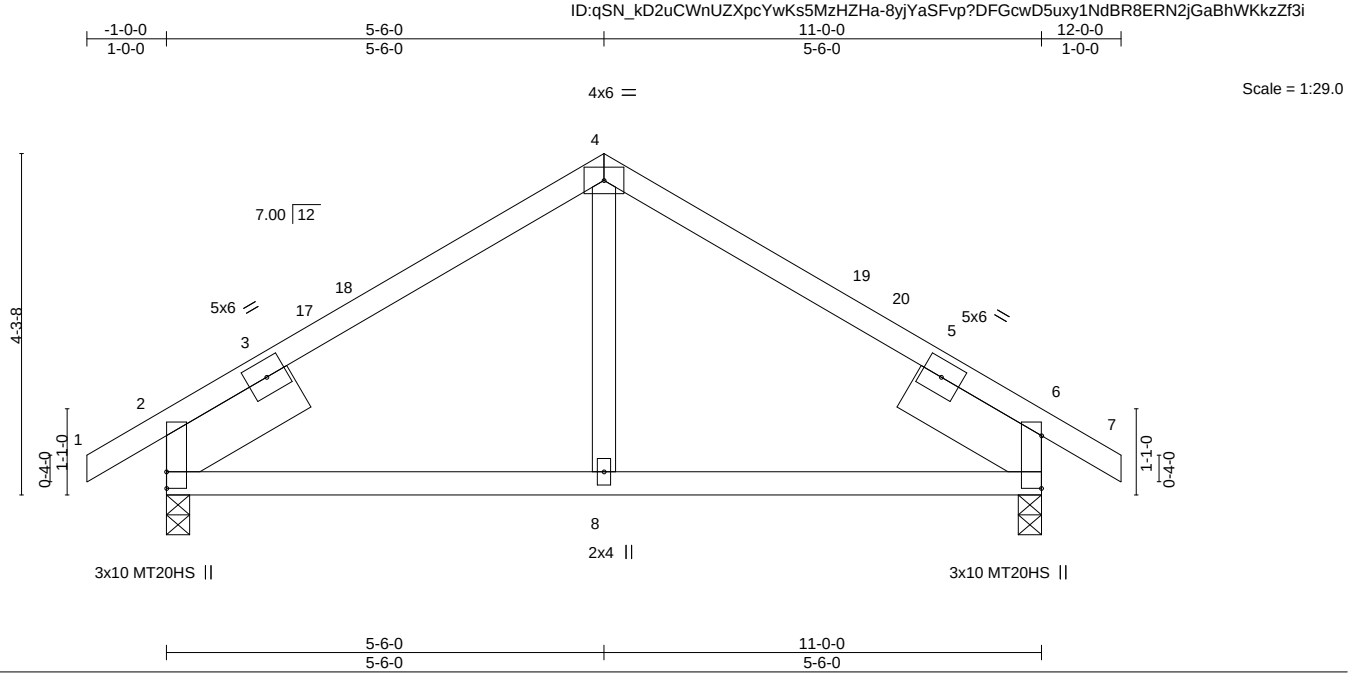

Plate Offsets (X,Y)-- [2:Edge,0-0-0], [6:Edge,0-0-0]

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	0.28	Vert(LL)	-0.02	8-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.03	8-15	>999	180	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.02	2	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS		Wind(LL)	0.02	8-11	>999	240	Weight: 57 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
SLIDER Left 2x8 SP DSS 1-11-12, Right 2x8 SP DSS 1-11-12

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

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=-75(LC 10)
Max Uplift 2=-24(LC 12), 6=-24(LC 13)
Max Grav 2=500(LC 1), 6=500(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-442/65, 4-6=-442/65
BOT CHORD 2-8=0/329, 6-8=0/329

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 5-6-0, Exterior(2) 5-6-0 to 8-6-0, Interior(1) 8-6-0 to 11-11-15 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.
6) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.

March 21,2022

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

Job	Truss	Truss Type	Qty	Ply	John Dove/Aubrey/A
MASTER_RT	C01G	GABLE	1	1	I50874076
					Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Dec 6 2021 MiTek Industries, Inc. Fri Mar 18 16:03:15 2022 Page 1
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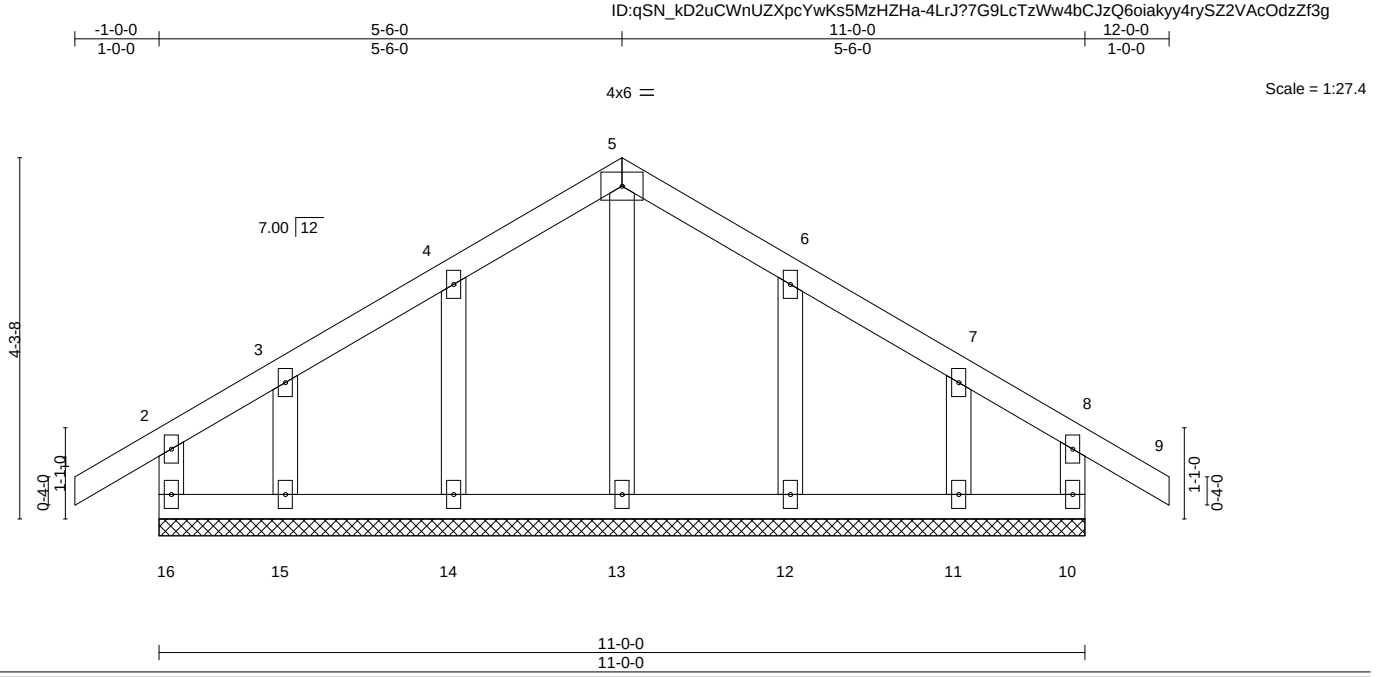

LOADING (psf)		SPACING-	1-11-4	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	-0.00	9	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	9	n/r	120		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.03	Horz(CT)	-0.00	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 58 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.2

BRACING-

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

REACTIONS. All bearings 11-0-0.
(lb) - Max Horz 16=-96(LC 10)
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) -0-11-15 to 2-0-1, Exterior(2) 2-0-1 to 5-6-0, Corner(3) 5-6-0 to 8-6-0, Exterior(2) 8-6-0 to 11-11-15 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) 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) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 16, 10, 14, 15, 12, and 11. This connection is for uplift only and does not consider lateral forces.

March 21,2022

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

Job	Truss	Truss Type	Qty	Ply	John Dove/Aubrey/A
MASTER_RT	D01	SCISSORS	5	1	I50874077
					Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Dec 6 2021 MiTek Industries, Inc. Fri Mar 18 16:03:16 2022 Page 1
ID:v12wZTlxeM5EFyS9uG8F5NzHZEh-YXOhDTHo6wbq74eom0Uff?FirMCCaNdjG9wAx3zZf3f

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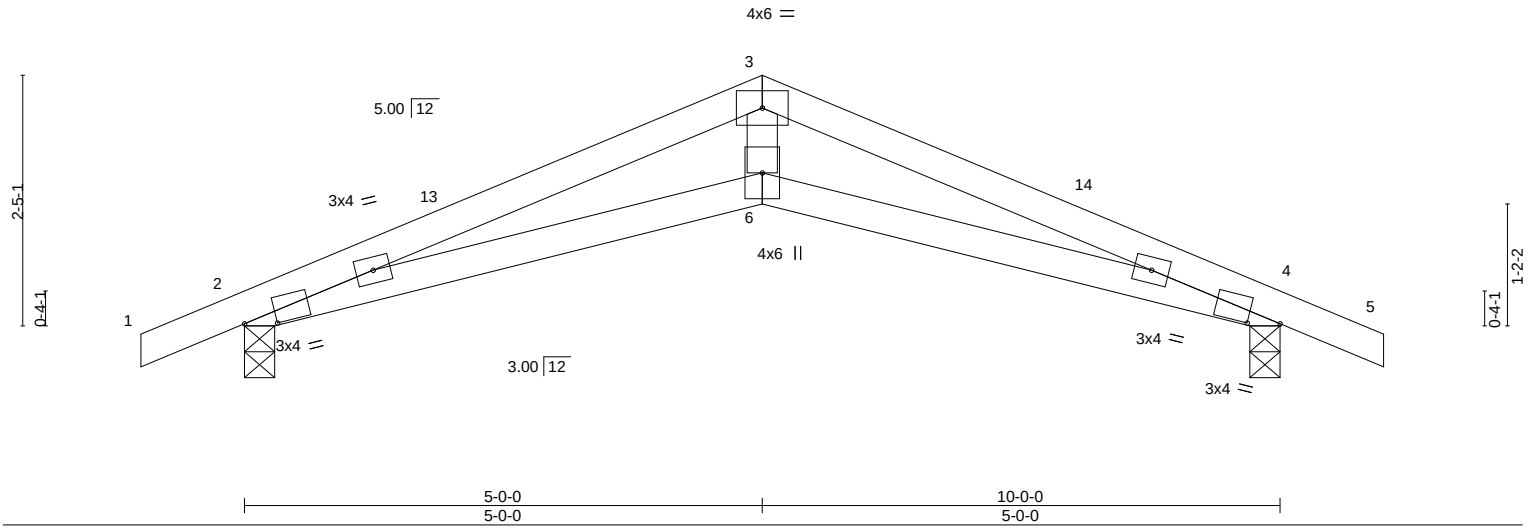

Plate Offsets (X,Y)-- [2:0-3-12,0-0-13], [4:0-3-12,0-0-13]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	-0.04	6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.09	6-9	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.05	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.03	6-9	>999	240	Weight: 36 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-0-4 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=-33(LC 13)
Max Uplift 2=-29(LC 12), 4=-29(LC 13)
Max Grav 2=460(LC 1), 4=460(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1229/93, 3-4=-1229/83
BOT CHORD 2-6=-27/1155, 4-6=-28/1155
WEBS 3-6=0/669

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 5-0-0, Exterior(2) 5-0-0 to 8-0-0, Interior(1) 8-0-0 to 11-0-0 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) Bearing at joint(s) 2, 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.

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Job	Truss	Truss Type	Qty	Ply	John Dove/Aubrey/A
MASTER_RT	D01G	GABLE	5	1	I50874078
					Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Dec 6 2021 MiTek Industries, Inc. Fri Mar 18 16:03:17 2022 Page 1
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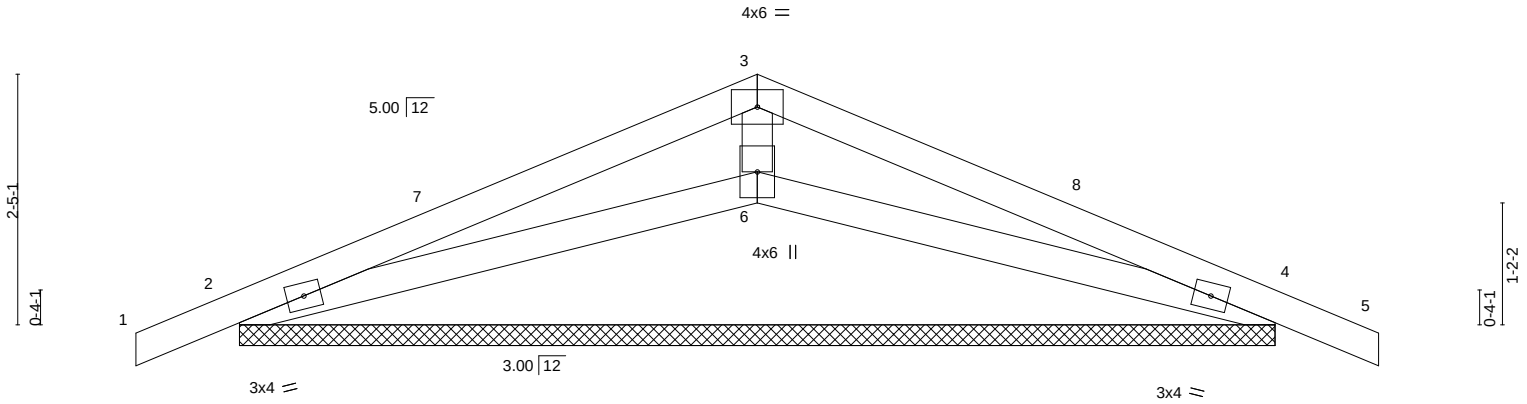

5-0-0 5-0-0 | 10-0-0 5-0-0

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	0.33	Vert(LL)	0.02	5	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	0.03	5	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 36 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 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=10-0-0, 6=10-0-0, 4=10-0-0
Max Horz 2=-33(LC 17)
Max Uplift 2=-34(LC 12), 4=-45(LC 13)
Max Grav 2=247(LC 23), 6=438(LC 1), 4=247(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-6=-304/157

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 5-0-0, Corner(3) 5-0-0 to 8-0-0, Exterior(2) 8-0-0 to 11-0-0 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) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.
9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 6.

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Job	Truss	Truss Type	Qty	Ply	John Dove/Aubrey/A
MASTER_RT	P01	MONO TRUSS	9	1	I50874079
					Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Dec 6 2021 MiTek Industries, Inc. Fri Mar 18 16:03:18 2022 Page 1
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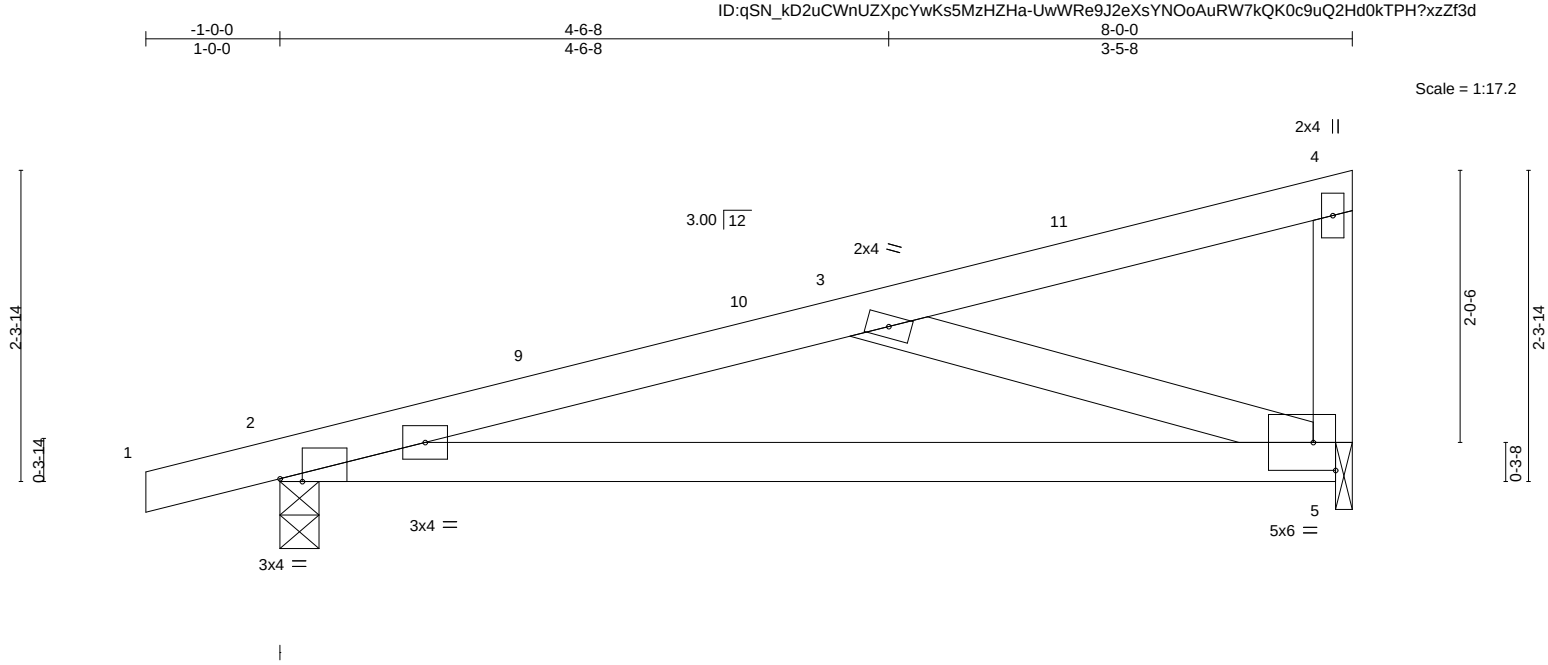

Plate Offsets (X,Y)-- [2:0-2-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	-0.07	5-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.16	5-8	>603	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS		Wind(LL)	0.02	5-8	>999	240	Weight: 33 lb	FT = 20%

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

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. (size) 2=0-3-8, 5=0-1-8
Max Horz 2=68(LC 11)
Max Uplift 2=-54(LC 8), 5=-28(LC 8)
Max Grav 2=378(LC 1), 5=310(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-589/83
BOT CHORD 2-5=-161/570
WEBS 3-5=-557/151

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 7-10-4 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) 5 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) 5.
6) STC24 MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
7) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.

March 21,2022

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Job	Truss	Truss Type	Qty	Ply	John Dove/Aubrey/A
MASTER_RT	P01G	GABLE	1	1	I50874080
					Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Dec 6 2021 MiTek Industries, Inc. Fri Mar 18 16:03:19 2022 Page 1
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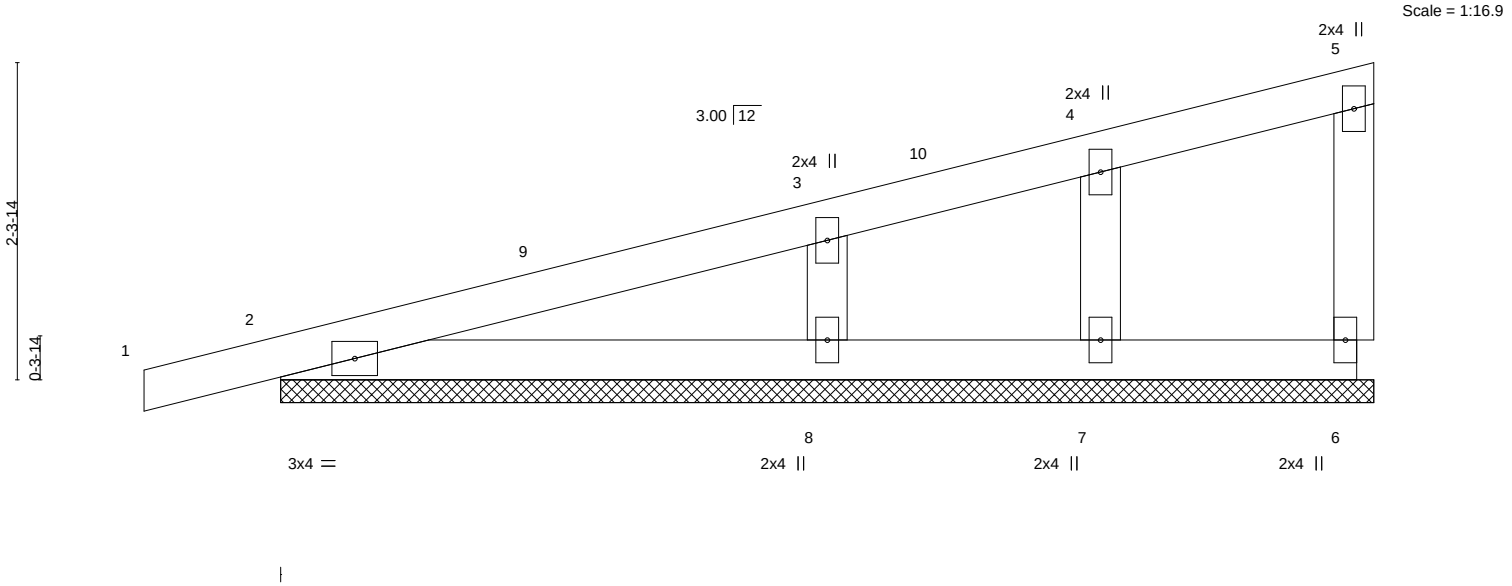

LOADING (psf)		SPACING-	1-11-4	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.03	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 31 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.2

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 8-0-0.
(lb) - Max Horz 2=66(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=301(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) -1-0-0 to 2-0-0, Exterior(2) 2-0-0 to 7-10-4 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 2-0-0 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) 2.
8) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6, 7, and 8. This connection is for uplift only and does not consider lateral forces.

March 21,2022

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	John Dove/Aubrey/A
MASTER_RT	P02	JACK	5	1	I50874081
					Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Dec 6 2021 MiTek Industries, Inc. Fri Mar 18 16:03:20 2022 Page 1
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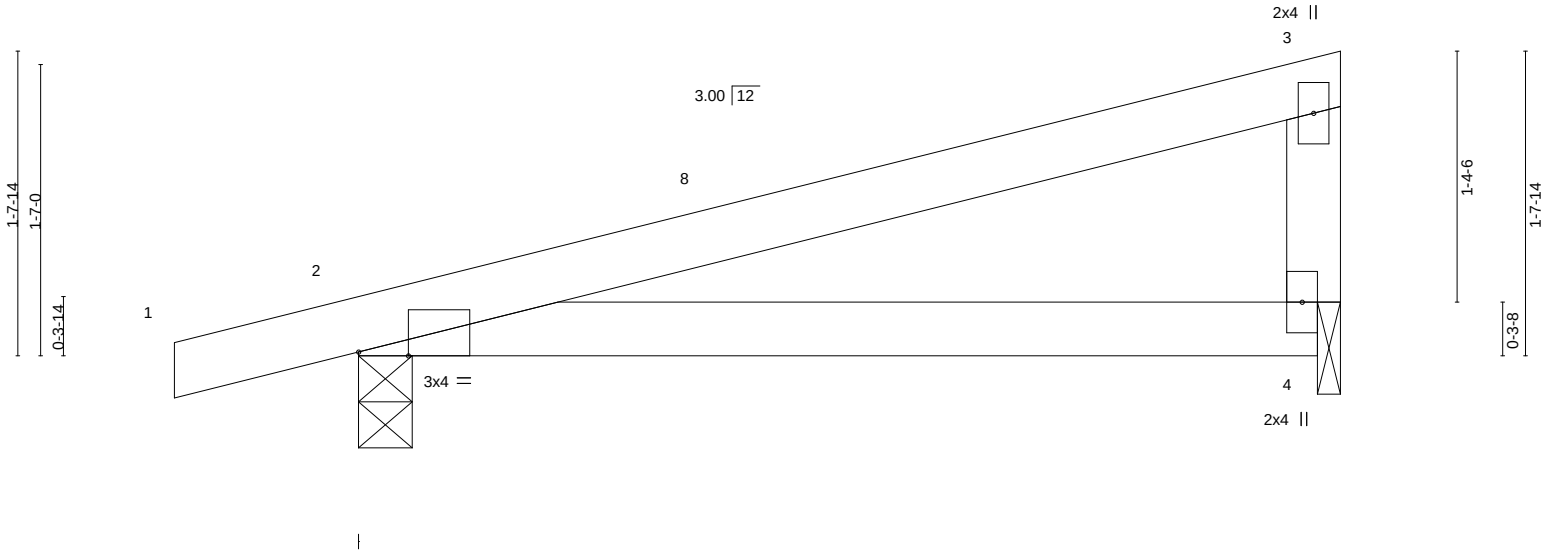

Plate Offsets (X,Y)-- [2:0-3-4,Edge]

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	0.42	Vert(LL)	-0.03	4-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.07	4-7	>842	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MP		Wind(LL)	0.03	4-7	>999	240	Weight: 19 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-4-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 4=0-1-8
Max Horz 2=51(LC 9)
Max Uplift 2=-47(LC 8), 4=-20(LC 12)
Max Grav 2=273(LC 1), 4=202(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 5-2-4 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) STC24 MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
7) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 4. This connection is for uplift only and does not consider lateral forces.

March 21,2022

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	John Dove/Aubrey/A
MASTER_RT	V01	VALLEY	1	1	I50874082
					Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Dec 6 2021 MiTek Industries, Inc. Fri Mar 18 16:03:21 2022 Page 1
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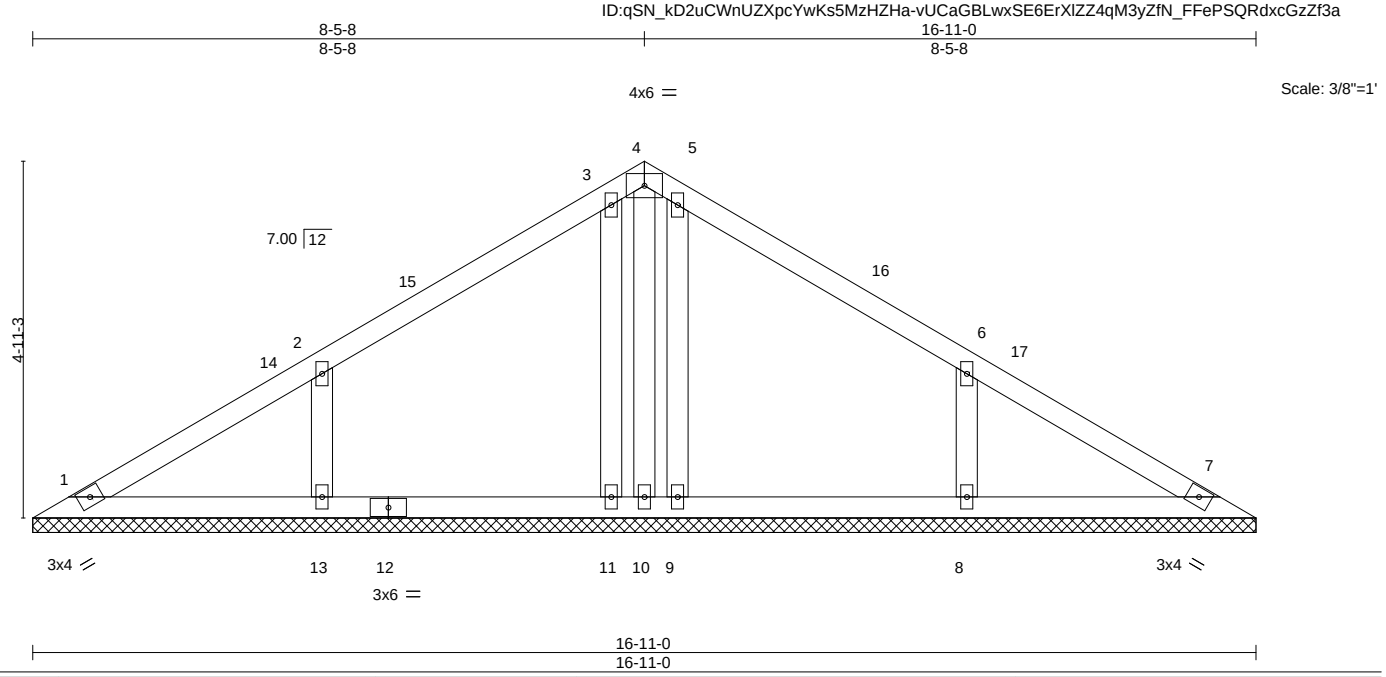

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 77 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 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 6-0-0 oc bracing.

REACTIONS. All bearings 16-11-0.
(lb) - Max Horz 1=91(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 8, 13, 11 except 10=-305(LC 3)
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 8=348(LC 20), 9=314(LC 24), 13=348(LC 19), 11=314(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 6-8=-259/122, 2-13=-259/122

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) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 8-5-8, Exterior(2) 8-5-8 to 11-5-8, Interior(1) 11-5-8 to 16-4-9 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 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
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) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 10, 8, 13, and 11. This connection is for uplift only and does not consider lateral forces.

March 21,2022

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	John Dove/Aubrey/A
MASTER_RT	V02	VALLEY	1	1	I50874083
					Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Dec 6 2021 MiTek Industries, Inc. Fri Mar 18 16:03:23 2022 Page 1
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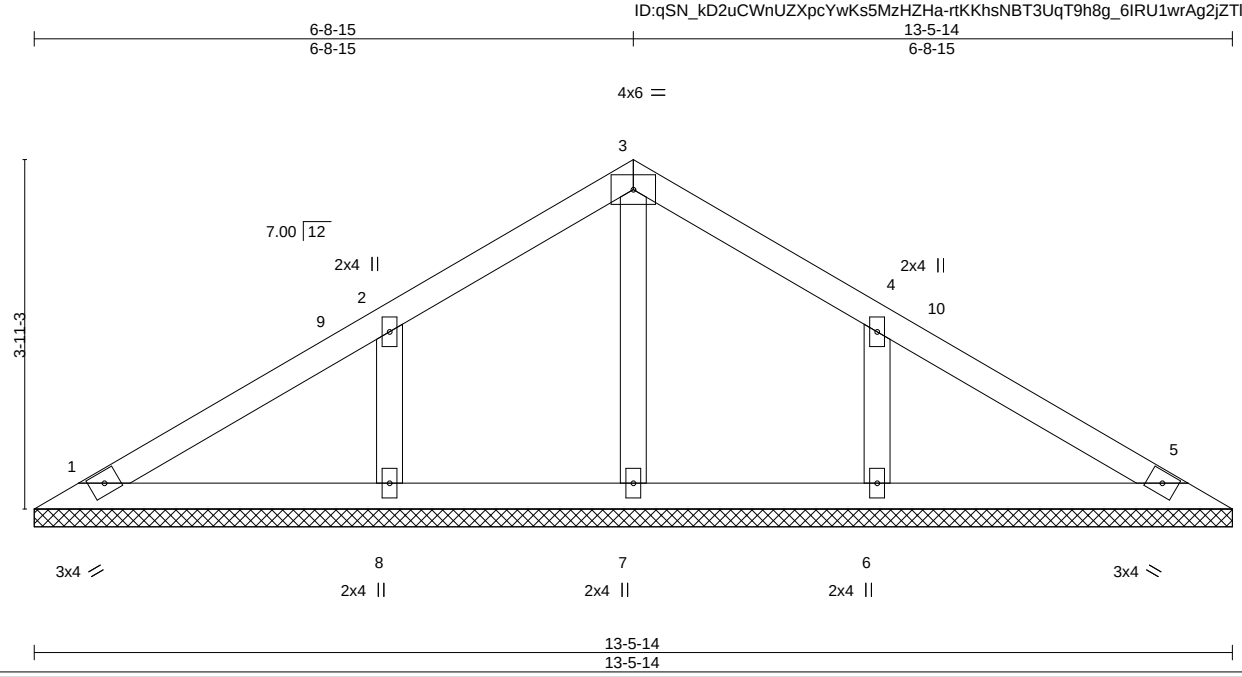

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 52 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 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. All bearings 13-5-14.
(lb) - Max Horz 1=-71(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 6, 8
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 6=309(LC 20), 8=309(LC 19)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph 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) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 6-8-15, Exterior(2) 6-8-15 to 9-5-14, Interior(1) 9-5-14 to 12-11-6 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.
7) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6 and 8. This connection is for uplift only and does not consider lateral forces.

March 21,2022

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

Job	Truss	Truss Type	Qty	Ply	John Dove/Aubrey/A
MASTER_RT	V03	VALLEY	1	1	I50874084
					Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Dec 6 2021 MiTek Industries, Inc. Fri Mar 18 16:03:24 2022 Page 1
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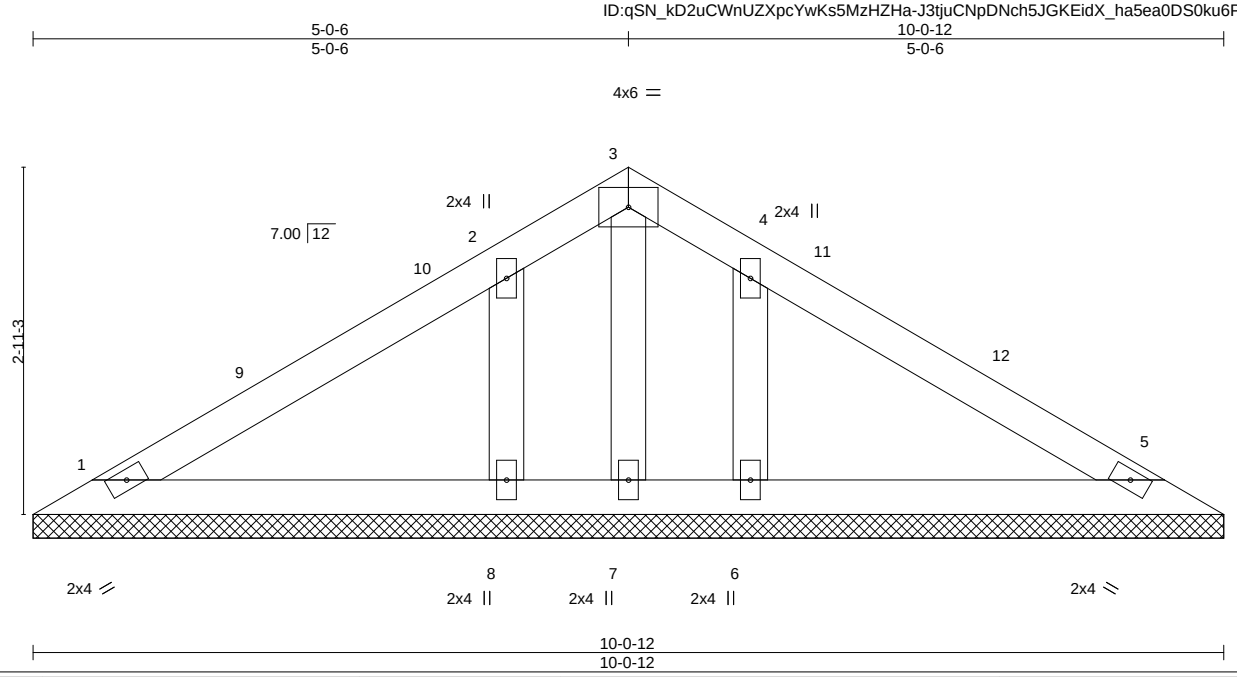


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 39 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 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 6-0-0 oc bracing.

REACTIONS. All bearings 10-0-12.
(lb) - Max Horz 1=-52(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 5, 6, 8 except 7=-127(LC 1)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 6=320(LC 20), 8=320(LC 19)

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

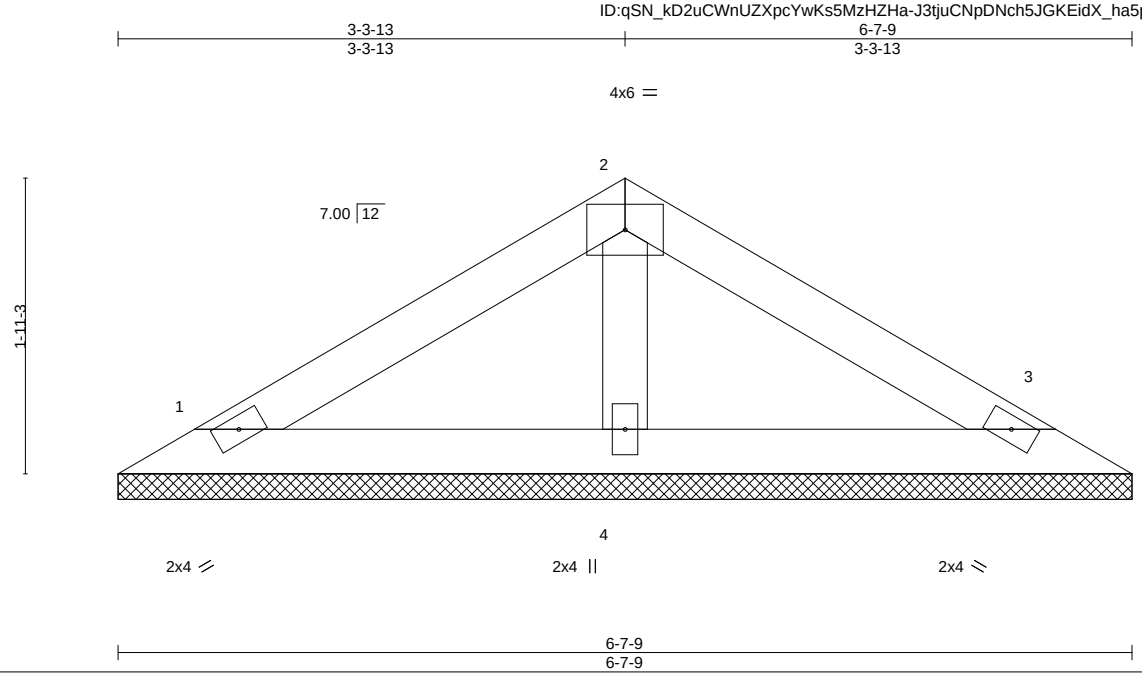
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 5-0-6, Exterior(2) 5-0-6 to 8-0-6, Interior(1) 8-0-6 to 9-6-4 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) 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.
7) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 7, 6, and 8. This connection is for uplift only and does not consider lateral forces.

March 21,2022

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

Job	Truss	Truss Type	Qty	Ply	John Dove/Aubrey/A
MASTER_RT	V04	VALLEY	1	1	I50874085
					Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Dec 6 2021 MiTek Industries, Inc. Fri Mar 18 16:03:24 2022 Page 1
ID:qSN_kD2uCWnUZXpcYwKs5MzHZHa-J3tjuCNpDNch5JGKEidX_ha5pa0US0vu6PsbDbzZf3X



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	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 21 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 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) 1=6-7-9, 3=6-7-9, 4=6-7-9
Max Horz 1=32(LC 9)
Max Uplift 1=-14(LC 12), 3=-19(LC 13)
Max Grav 1=115(LC 1), 3=115(LC 1), 4=214(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.

March 21,2022

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

Job	Truss	Truss Type	Qty	Ply	John Dove/Aubrey/A
MASTER_RT	V05	VALLEY	1	1	I50874086
					Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523, 8.530 s Dec 6 2021 MiTek Industries, Inc. Fri Mar 18 16:03:25 2022 Page 1
ID:qSN_kD2uCWnUZXpcYwKs5MzHZHa-nGR56YOR_hkYiTqWoP8mWv6IT_N7BTQ2L3b8l1zZf3W

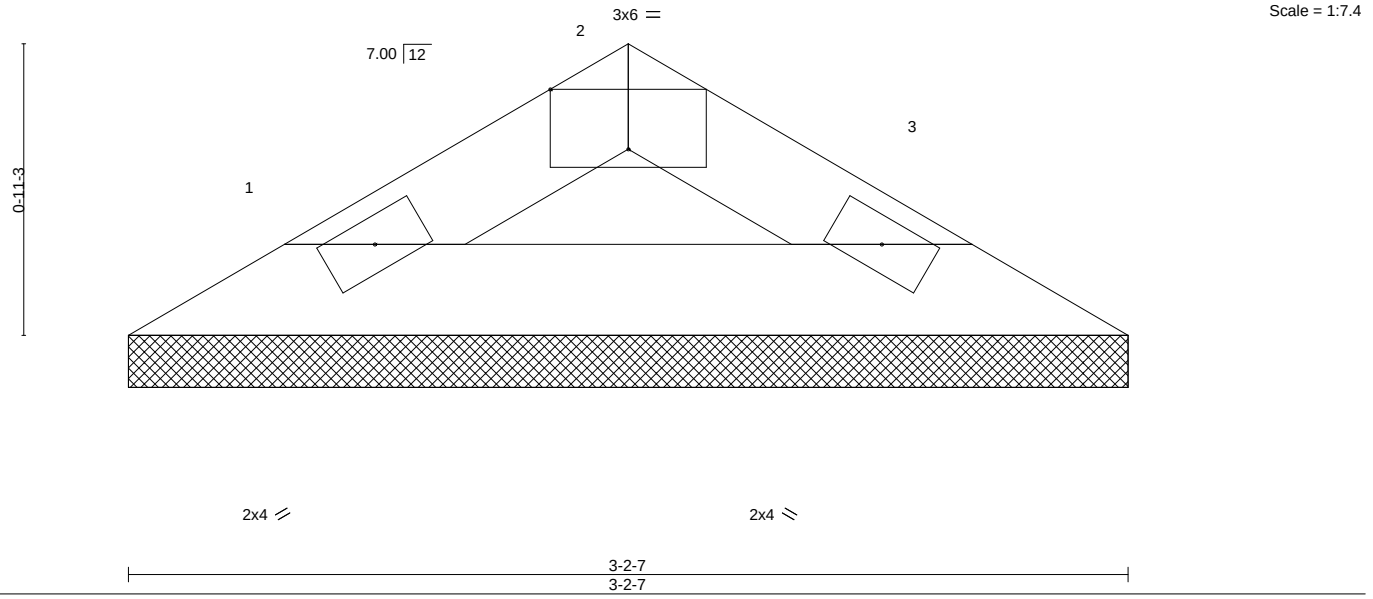


Plate Offsets (X,Y)-- [2:0-3-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	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: 9 lb	FT = 20%

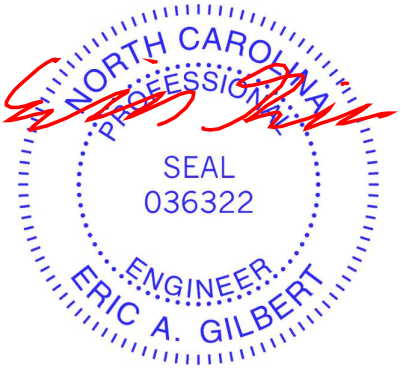
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-2-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-2-7, 3=3-2-7
Max Horz 1=12(LC 9)
Max Uplift 1=-2(LC 12), 3=-2(LC 13)
Max Grav 1=85(LC 1), 3=85(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.



March 21,2022

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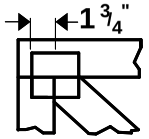
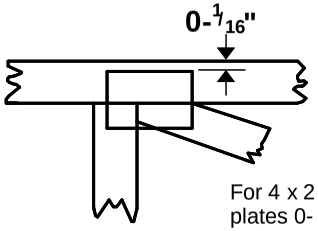
Edenton, NC 27932

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.

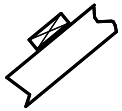
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

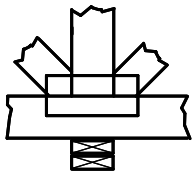
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

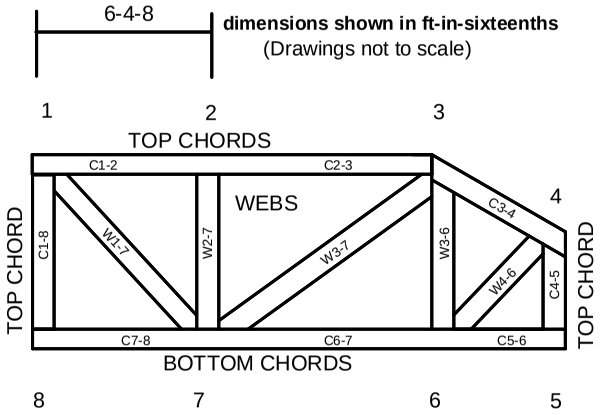


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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