ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 150_1773_A
150.1773.A 10 x 10 CP

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by 84 Components - #2383.

Pages or sheets covered by this seal: I40052302 thru I40052322

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

North Carolina COA: C-0844

January 29,2020

Sevier, Scott

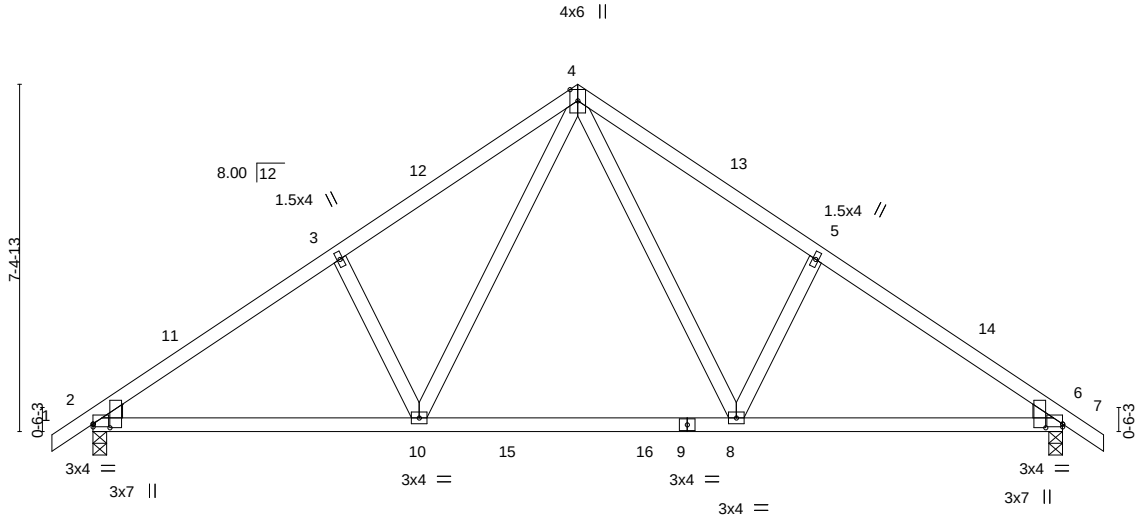
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

Job	Truss	Truss Type	Qty	Ply	150.1773.A 10 x 10 CP
150_1773_A	A1	Common	5	1	I40052302
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.330 s Jan 22 2020 MiTek Industries, Inc. Tue Jan 28 12:14:15 2020 Page 1
ID:T2HHh_eRkk3PuZ_4LKeviAyAi_G-7w4PbK9s4iQPS6PANiVIG1Y5jUulP6XCayumGszqqQ6

-0-10-8 5-3-3 10-4-0 15-4-13 20-8-0 21-6-8
0-10-8 5-3-3 5-0-13 5-0-13 5-3-3 0-10-8

Scale = 1:49.1



6-11-7 13-8-9 20-8-0
6-11-7 6-9-2 6-11-7

Plate Offsets (X,Y)-- [2:0-0-0,0-0-12], [2:0-0-15,0-4-5], [6:Edge,0-0-12], [6:0-0-15,0-4-5]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	-0.09	8-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.13	2-10	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 106 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 5-1-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=876/0-3-8, 6=876/0-3-8
Max Horz 2=185(LC 11)
Max Uplift 2=-108(LC 12), 6=-108(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1154/143, 3-4=-1016/201, 4-5=-1016/202, 5-6=-1154/143
BOT CHORD 2-10=-141/974, 8-10=0/637, 6-8=-36/875
WEBS 4-8=-120/502, 5-8=-283/211, 4-10=-120/502, 3-10=-283/211

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-4-0, Exterior(2) 10-4-0 to 13-4-0, Interior(1) 13-4-0 to 21-6-8 zone;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) All bearings are assumed to be User Defined crushing capacity of 425 psi.
6) One H2.5A Simpson Strong-Tie 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.

January 29,2020

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

Job	Truss	Truss Type	Qty	Ply	150.1773.A 10 x 10 CP
150_1773_A	AE	GABLE	1	1	I40052303
					Job Reference (optional)

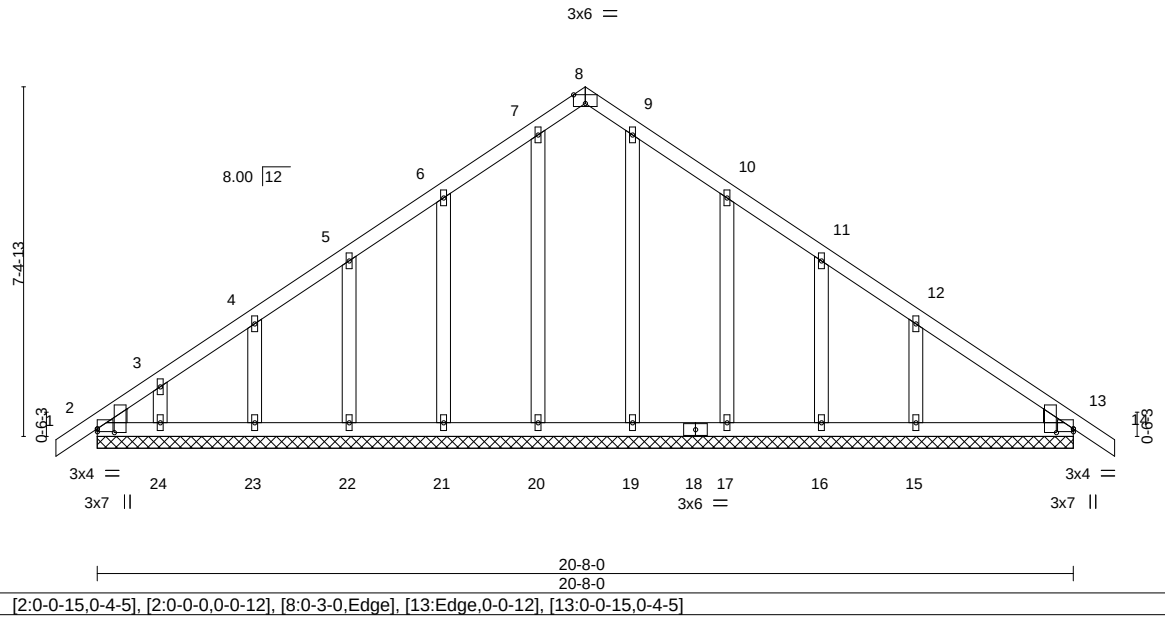
84 Components (Dunn), Dunn, NC - 28334, 8.330 s Jan 22 2020 MiTek Industries, Inc. Tue Jan 28 12:14:16 2020 Page 1

ID:T2HHh_eRkk3PuZ_4LKeviAyAi_G-c7enpg9Vr?YG4G_NxP1XpE5K9tKQ8a6LpceJoIzqqQ5

-0-10-8 10-4-0 20-8-0 21-6-8

0-10-8 10-4-0 10-4-0 0-10-8

Scale = 1:48.8



20-8-0

20-8-0

Plate Offsets (X,Y)-- [2:0-0-15,0-4-5], [2:0-0-0,0-0-12], [8:0-3-0,Edge], [13:Edge,0-0-12], [13:0-0-15,0-4-5]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	0.00	14	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	0.01	14	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.01	13	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 124 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 20-8-0.

(lb) - Max Horz 2=-185(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 24, 23, 22, 21, 20, 17, 16 except 15=-114(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 24, 23, 22, 21, 20, 19, 17, 16, 13 except 15=279(LC 20)

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

NOTES-

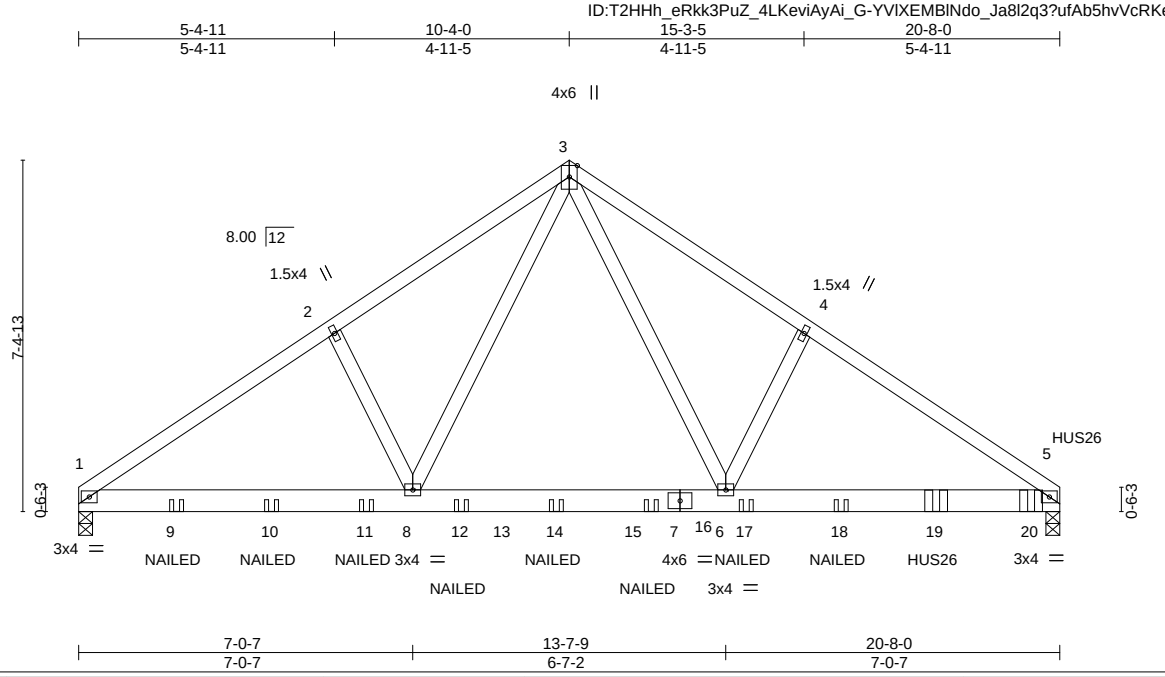
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 2-1-8, Exterior(2) 2-1-8 to 10-4-0, Corner(3) 10-4-0 to 13-4-0, Exterior(2) 13-4-0 to 21-6-8 zone;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 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) All bearings are assumed to be User Defined crushing capacity of 425 psi.

January 29,2020

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

Job	Truss	Truss Type	Qty	Ply	150.1773.A 10 x 10 CP
150_1773_A	AG	Common Girder	1	2	I40052304
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.330 s Jan 22 2020 MiTek Industries, Inc. Tue Jan 28 12:14:18 2020 Page 1
ID:T2HHh_eRkk3PuZ_4LKeviAyAi_G-YVlXEMBlNdo_Ja8l2q3?ufAb5hvVcRKeGw7QsAzqqQ3



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	0.34	Vert(LL)	-0.08	5-6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.15	5-6	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.30	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 237 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP DSS
WEBS 2x4 SP No.3

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

REACTIONS. (lb/size) 1=1527/0-3-8, 5=2935/0-3-8
Max Horz 1=-173(LC 30)
Max Uplift 1=-293(LC 8), 5=-607(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2132/420, 2-3=-2010/487, 3-4=-2348/562, 4-5=-2468/494
BOT CHORD 1-8=-382/1695, 6-8=-188/1250, 5-6=-338/1981
WEBS 3-6=-393/1473, 4-6=-298/215, 3-8=-249/817, 2-8=-297/224

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 0-6-0 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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; 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) All bearings are assumed to be User Defined crushing capacity of 425 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=607.
9) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1. This connection is for uplift only and does not consider lateral forces.
10) Use USP HUS26 (With 14-16d nails into Girder & 6-16d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 18-0-12 from the left end to 20-0-12 to connect truss(es) to back face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.
12) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-5=-60, 1-5=-20

January 29,2020

Continued on page 2

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

LOAD CASE(S) Standard

Concentrated Loads (lb)

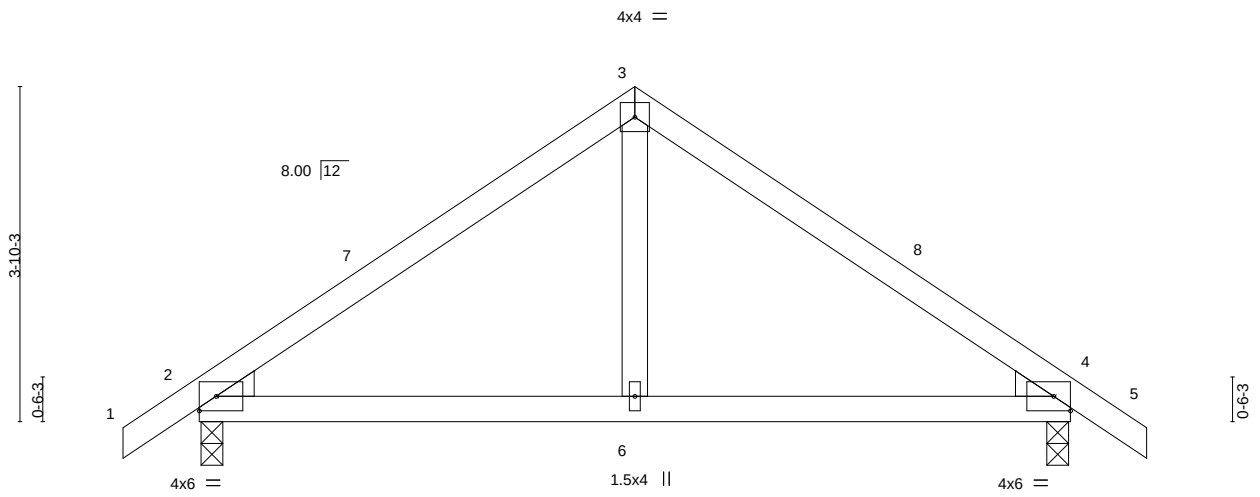
Vert: 9=-130(B) 10=-130(B) 11=-130(B) 12=-130(B) 14=-130(B) 16=-130(B) 17=-130(B) 18=-130(B) 19=-894(B) 20=-899(B)

Job	Truss	Truss Type	Qty	Ply	150.1773.A 10 x 10 CP
150_1773_A	P1	COMMON	4	1	I40052305
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.330 s Jan 22 2020 MiTek Industries, Inc. Tue Jan 28 12:14:19 2020 Page 1
ID:T2HHh_eRkk3PuZ_4LKeviAyAi_G-0iJvRiCN8wwrxkjxcYaEQtjnE5GhLxwnVaszPdzqqQ2

-0-10-8 5-0-0 10-0-0 10-10-8
0-10-8 5-0-0 5-0-0 0-10-8

Scale = 1:26.4



0-0-4 5-0-0 9-11-12 10-0-0
0-0-4 4-11-12 4-11-12 0-0-4

Plate Offsets (X,Y)-- [2:0-1-3,0-0-12], [2:0-5-13,0-1-9], [4:0-1-3,0-0-12], [4:0-5-13,0-1-9]

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	0.32	Vert(LL)	0.03	4-6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.03	4-6	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 43 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. (lb/size) 2=450/0-3-0, 4=450/0-3-0
Max Horz 2=-97(LC 10)
Max Uplift 2=-62(LC 12), 4=-62(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-460/339, 3-4=-460/338
BOT CHORD 2-6=-182/304, 4-6=-182/304

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-0-0, Exterior(2) 5-0-0 to 8-0-0, Interior(1) 8-0-0 to 10-10-8 zone; porch 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) All bearings are assumed to be User Defined crushing capacity of 425 psi.
6) One H2.5A Simpson Strong-Tie 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.

January 29,2020

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

Job	Truss	Truss Type	Qty	Ply	150.1773.A 10 x 10 CP
150_1773_A	PE	COMMON SUPPORTED GAB	1	1	I40052306
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.330 s Jan 22 2020 MiTek Industries, Inc. Tue Jan 28 12:14:19 2020 Page 1
ID:T2HHh_eRkk3PuZ_4LKeviAyAi_G-0iJvRiCN8wwrxkjxcYaEQtjqq5LMLyknVaszPdzqqQ2

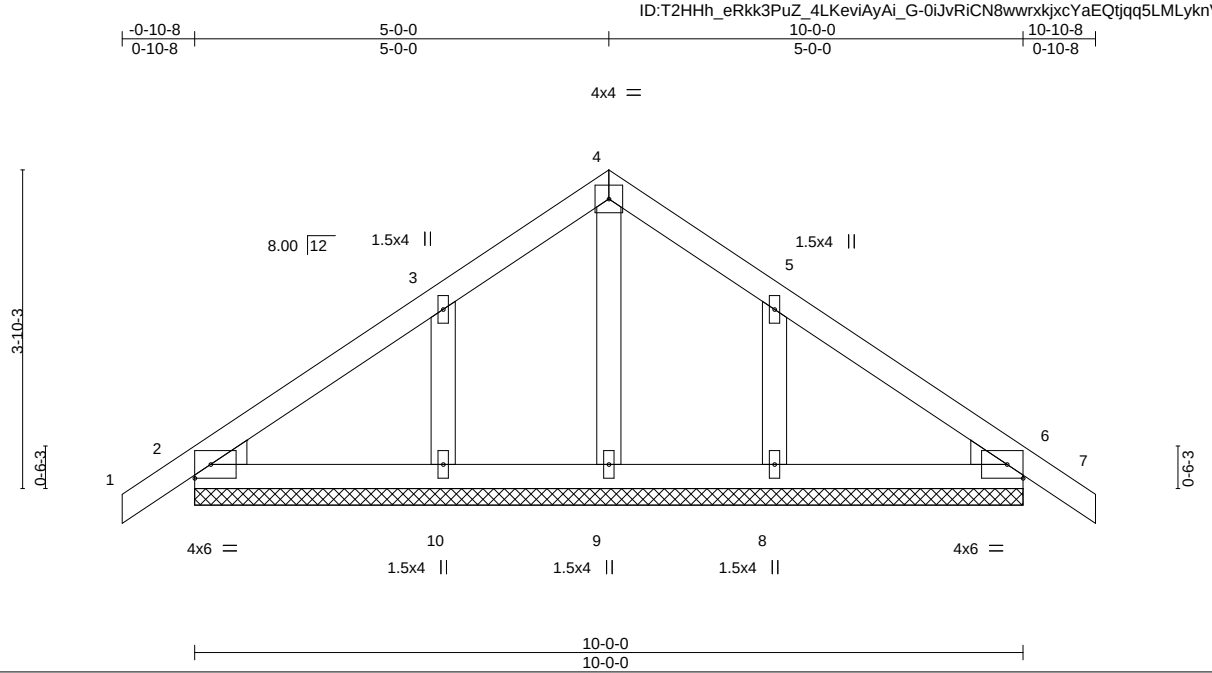


Plate Offsets (X,Y)-- [2:0-1-3,0-0-12], [2:0-5-13,0-1-9], [6:0-1-3,0-0-12], [6:0-5-13,0-1-9]

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	0.09	Vert(LL)	0.00	7	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00	7	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 48 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 10-0-0.
(lb) - Max Horz 2=-97(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 10=-102(LC 12), 8=-100(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9 except 10=261(LC 19), 8=259(LC 20)

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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 2-1-8, Exterior(2) 2-1-8 to 5-0-0, Corner(3) 5-0-0 to 8-0-0, Exterior(2) 8-0-0 to 10-10-8 zone; porch 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) All bearings are assumed to be User Defined crushing capacity of 425 psi.

January 29,2020

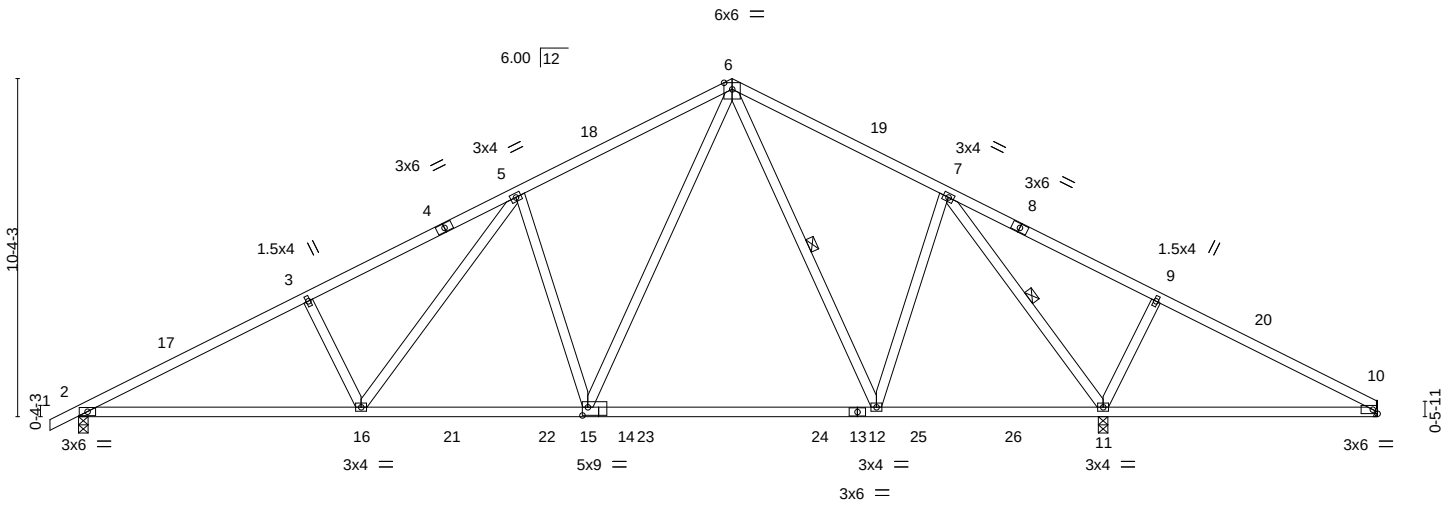
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	150.1773.A 10 x 10 CP	I40052307
150_1773_A	T1	Common	8	1	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334, 8.330 s Jan 22 2020 MiTek Industries, Inc. Tue Jan 28 12:14:20 2020 Page 1
ID:T2HHh_eRkk3PuZ_4LKeviAyAi_G-UutIf2C?vE2iYtH8AF5Tz4GrLVVF4FwxkEcXx3zqqQ1

-0-10-8	7-0-5	13-6-3	20-0-0	26-5-13	32-11-11	39-9-0
0-10-8	7-0-5	6-5-13	6-5-13	6-5-13	6-5-13	6-9-5

Scale = 1:70.5



8-7-12	15-7-0	24-5-0	31-4-4	39-9-0
8-7-12	6-11-4	8-10-0	6-11-4	8-4-12

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

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	0.74	Vert(LL)	-0.22	12-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.41	12-15	>922	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.06	11	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 214 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 2-5-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 6-12, 7-11

REACTIONS. (lb/size) 2=1239/0-3-8, 11=1922/0-3-8, 10=64/Mechanical
Max Horz 2=181(LC 16)
Max Uplift 2=-178(LC 12), 11=-200(LC 13), 10=-67(LC 25)
Max Grav 2=1239(LC 1), 11=1937(LC 2), 10=150(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2095/290, 3-5=-1941/330, 5-6=-1393/293, 6-7=-869/230, 7-9=-51/618, 9-10=-92/465
BOT CHORD 2-16=-344/1828, 15-16=-171/1376, 12-15=-4/832, 11-12=0/552, 10-11=-347/101
WEBS 3-16=-361/221, 5-16=-134/612, 5-15=-664/291, 6-15=-199/936, 6-12=-339/101, 7-12=0/575, 7-11=-1762/192, 9-11=-403/229

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-1-3, Interior(1) 3-1-3 to 20-0-0, Exterior(2) 20-0-0 to 23-11-11, Interior(1) 23-11-11 to 39-8-4 zone;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) All bearings are assumed to be User Defined crushing capacity of 425 psi.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10 except (jt=lb) 11=200.
8) One RT7A USP 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.

January 29,2020

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

Job	Truss	Truss Type	Qty	Ply	150.1773.A 10 x 10 CP
150_1773_A	T1A	Common	2	1	I40052308
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.330 s Jan 22 2020 MiTek Industries, Inc. Tue Jan 28 12:14:21 2020 Page 1
ID:T2HHh_eRkk3PuZ_4LKeviAyAi_G-y4RgsNDdgYAZA1sKjzciWIo2EuqxphK4yuL4TVzqqQ0

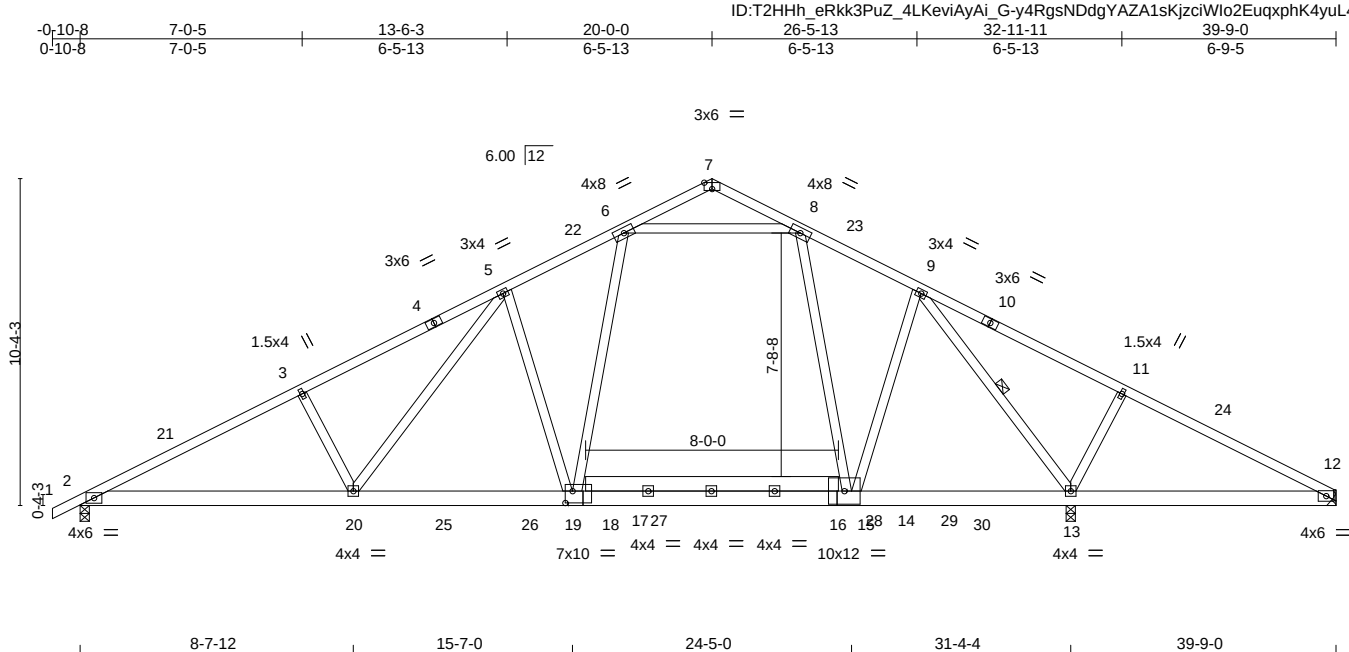


Plate Offsets (X,Y)-- [7:0-3-0,Edge], [18:0-0-0,0-2-12], [18:0-2-12,0-4-8]

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	0.61	Vert(LL)	-0.30	19-20	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.55	19-20	>677	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.06	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 266 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-10-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 9-13

REACTIONS. (lb/size) 2=1465/0-3-8, 13=839/0-3-8, 12=914/Mechanical
Max Horz 2=182(LC 16)
Max Uplift 2=-244(LC 12), 13=-322(LC 13), 12=-196(LC 12)
Max Grav 2=1465(LC 1), 13=1124(LC 24), 12=914(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2680/446, 3-5=-2529/483, 5-6=-1875/396, 7-8=-263/91, 8-9=-1740/411, 9-11=-1563/499, 11-12=-1616/463
BOT CHORD 2-20=-483/2379, 19-20=-286/1843, 14-19=-183/1519, 13-14=-234/1556, 12-13=-358/1416
WEBS 3-20=-363/224, 5-20=-168/752, 5-19=-727/279, 6-19=-119/758, 8-14=-89/478, 9-13=-784/227, 11-13=-387/239, 6-8=-1316/328

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-1-6, Interior(1) 3-1-6 to 20-0-0, Exterior(2) 20-0-0 to 23-11-14, Interior(1) 23-11-14 to 39-7-4 zone;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) All bearings are assumed to be User Defined crushing capacity of 425 psi.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=196.
8) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 13. This connection is for uplift only and does not consider lateral forces.

January 29,2020

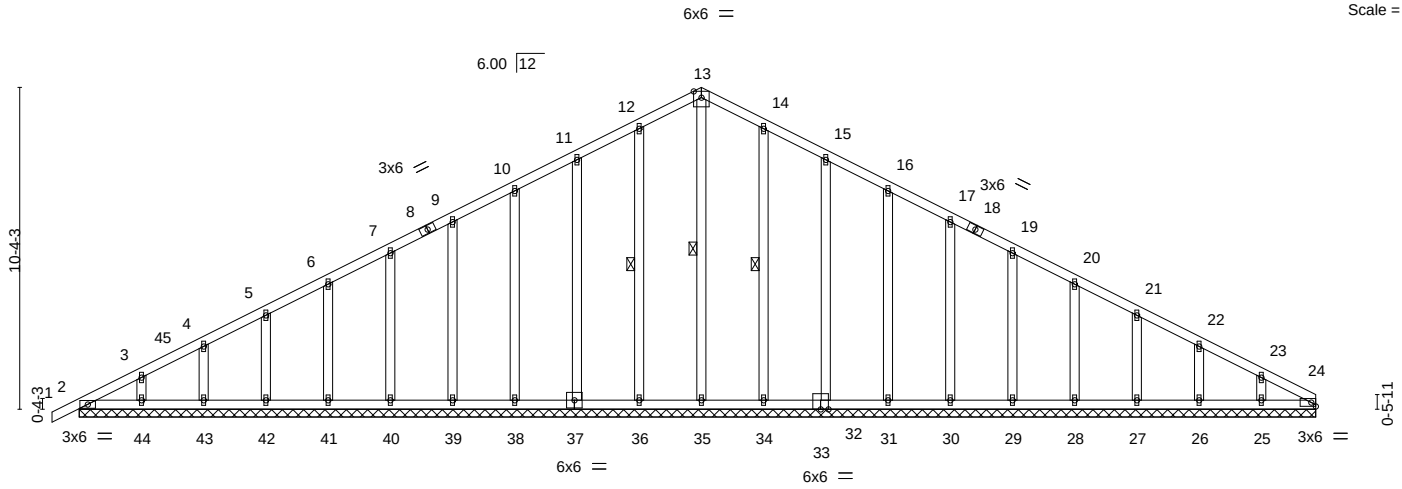
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	150.1773.A 10 x 10 CP
150_1773_A	T1E	Common Supported Gable	1	1	I40052309
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.330 s Jan 22 2020 MiTek Industries, Inc. Tue Jan 28 12:14:23 2020 Page 1
ID:T2HHh_eRkk3PuZ_4LKeviAyAi_G-uTZQH3FuC9RHPL0jrNfAbjuWsikkHk_NQCqBYOzqqQ_

-0-10-8 20-0-0 39-9-0
0-10-8 20-0-0 19-9-0

Scale = 1:74.1



39-9-0
39-9-0

Plate Offsets (X,Y)-- [32:0-1-12,0-0-0], [33:0-0-0,0-1-12]

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	0.09	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.01	24	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 270 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 13-35, 12-36, 14-34

REACTIONS. All bearings 39-9-0.
(lb) - Max Horz 2=181(LC 16)
Max Uplift All uplift 100 lb or less at joint(s) 2, 36, 37, 38, 39, 40, 41, 42, 43, 44, 34, 32, 31, 30, 29, 28, 27, 26, 25
Max Grav All reactions 250 lb or less at joint(s) 2, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 34, 32, 31, 30, 29, 28, 27, 26, 25, 24

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 11-12=-100/290, 12-13=-116/331, 13-14=-116/332, 14-15=-100/291

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 3-1-3, Exterior(2) 3-1-3 to 20-0-0, Corner(3) 20-0-0 to 24-0-0, Exterior(2) 24-0-0 to 39-9-0 zone;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 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) All bearings are assumed to be User Defined crushing capacity of 425 psi.

January 29,2020

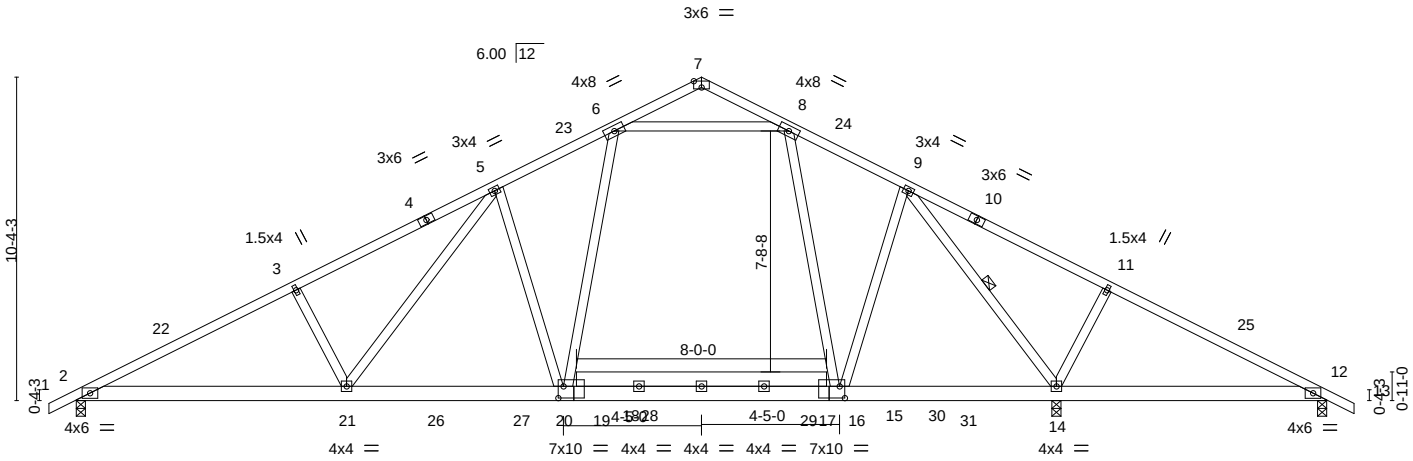
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	150.1773.A 10 x 10 CP	I40052310
150_1773_A	T2	ROOF TRUSS	3	1	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334, 8.330 s Jan 22 2020 MiTek Industries, Inc. Tue Jan 28 12:14:24 2020 Page 1
ID:T2HHh_eRkk3PuZ_4LKeviAyAi_G-Nf6oUPGWyTZ81VbvP5AP7wQZL6rK025Xfsak3qzqqPz

-0-10-8	7-0-5	13-6-3	20-0-0	26-5-13	32-11-11	40-0-0	40-10-8
0-10-8	7-0-5	6-5-13	6-5-13	6-5-13	6-5-13	7-0-5	0-10-8

Scale = 1:73.7



8-7-12	15-7-0	24-5-0	31-4-4	40-0-0
8-7-12	6-11-4	8-10-0	6-11-4	8-7-12

Plate Offsets (X,Y)-- [7:0-3-0,Edge], [15:0-2-0,0-4-8], [16:0-0-0,0-2-12], [19:0-0-0,0-2-12], [19:0-2-0,0-4-8]

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	0.62	Vert(LL)	-0.30	20-21	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.56	20-21	>669	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.06	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 269 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-10-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 9-14

REACTIONS. (lb/size) 2=1466/0-3-8, 14=860/0-3-8, 12=974/0-3-8
Max Horz 2=-174(LC 13)
Max Uplift 2=-243(LC 12), 14=-317(LC 13), 12=-194(LC 12)
Max Grav 2=1466(LC 1), 14=1131(LC 25), 12=974(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2684/446, 3-5=-2533/483, 5-6=-1873/395, 7-8=-263/92, 8-9=-1736/410, 9-11=-1569/497, 11-12=-1623/461
BOT CHORD 2-21=-475/2387, 20-21=-278/1848, 15-20=-172/1515, 14-15=-225/1559, 12-14=-351/1432
WEBS 3-21=-363/224, 5-21=-170/759, 5-20=-732/279, 6-20=-119/758, 8-15=-88/474, 9-14=-763/227, 11-14=-395/230, 6-8=-1314/326

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-1-8, Interior(1) 3-1-8 to 20-0-0, Exterior(2) 20-0-0 to 24-0-0, Interior(1) 24-0-0 to 40-10-8 zone; porch 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) All bearings are assumed to be User Defined crushing capacity of 425 psi.
6) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 14, and 12. This connection is for uplift only and does not consider lateral forces.
7) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

January 29,2020

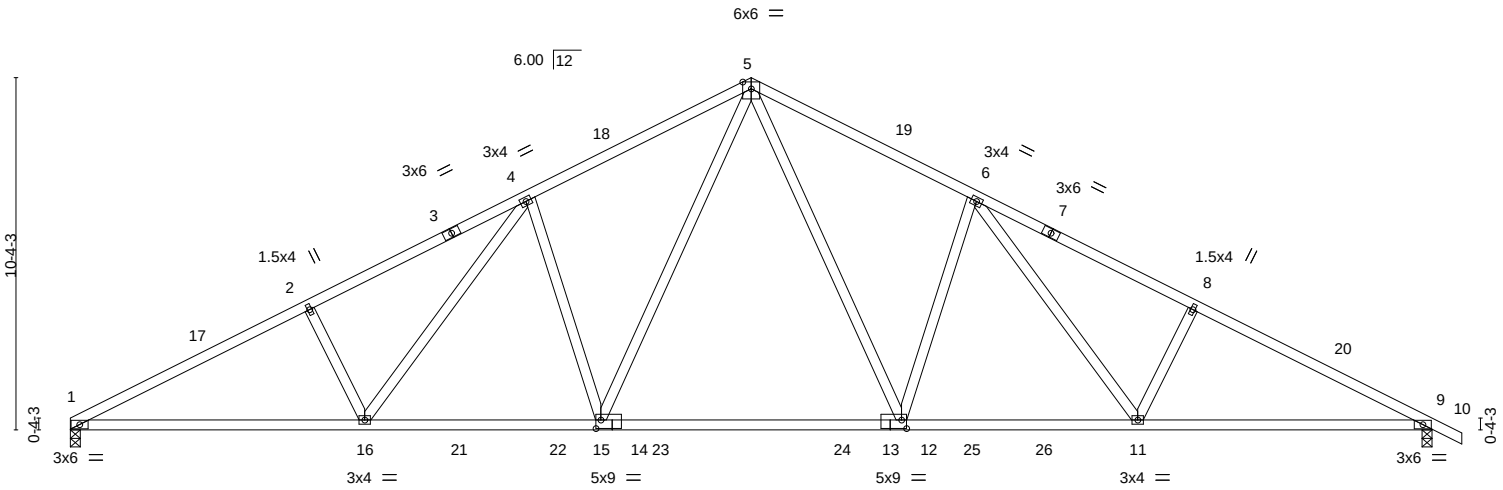
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	150.1773.A 10 x 10 CP
150_1773_A	T3	Common	6	1	I40052311
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.330 s Jan 22 2020 MiTek Industries, Inc. Tue Jan 28 12:14:25 2020 Page 1
ID:T2HHh_eRkk3PuZ_4LKeviAyAi_G-rsgBilG8jmh_ffA5yoheg8zeGWA5lWhgtWJIbHzqqPy

7-0-5	13-6-3	20-0-0	26-5-13	32-11-11	40-0-0	40-10-8
7-0-5	6-5-13	6-5-13	6-5-13	6-5-13	7-0-5	0-10-8

Scale = 1:67.7



8-7-12	15-7-0	24-5-0	31-4-4	40-0-0
8-7-12	6-11-4	8-10-0	6-11-4	8-7-12

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

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	0.99	Vert(LL)	-0.33	12-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	1.00	Vert(CT)	-0.63	12-15	>758	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.14	9	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 214 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 1-4-12 oc bracing.

REACTIONS. (lb/size) 1=1588/0-3-8, 9=1650/0-3-8
Max Horz 1=-181(LC 13)
Max Uplift 1=-187(LC 12), 9=-209(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2995/369, 2-4=-2847/408, 4-5=-2307/396, 5-6=-2306/390, 6-8=-2841/398, 8-9=-2989/357
BOT CHORD 1-16=-402/2609, 15-16=-225/2161, 12-15=-59/1622, 11-12=-116/2160, 9-11=-223/2600
WEBS 5-12=-198/930, 6-12=-658/290, 6-11=-133/600, 8-11=-352/220, 5-15=-199/931, 4-15=-660/290, 4-16=-136/608, 2-16=-359/226

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 4-1-12, Interior(1) 4-1-12 to 20-0-0, Exterior(2) 20-0-0 to 24-0-0, Interior(1) 24-0-0 to 40-10-8 zone;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) All bearings are assumed to be User Defined crushing capacity of 425 psi.
6) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 9. This connection is for uplift only and does not consider lateral forces.

January 29,2020

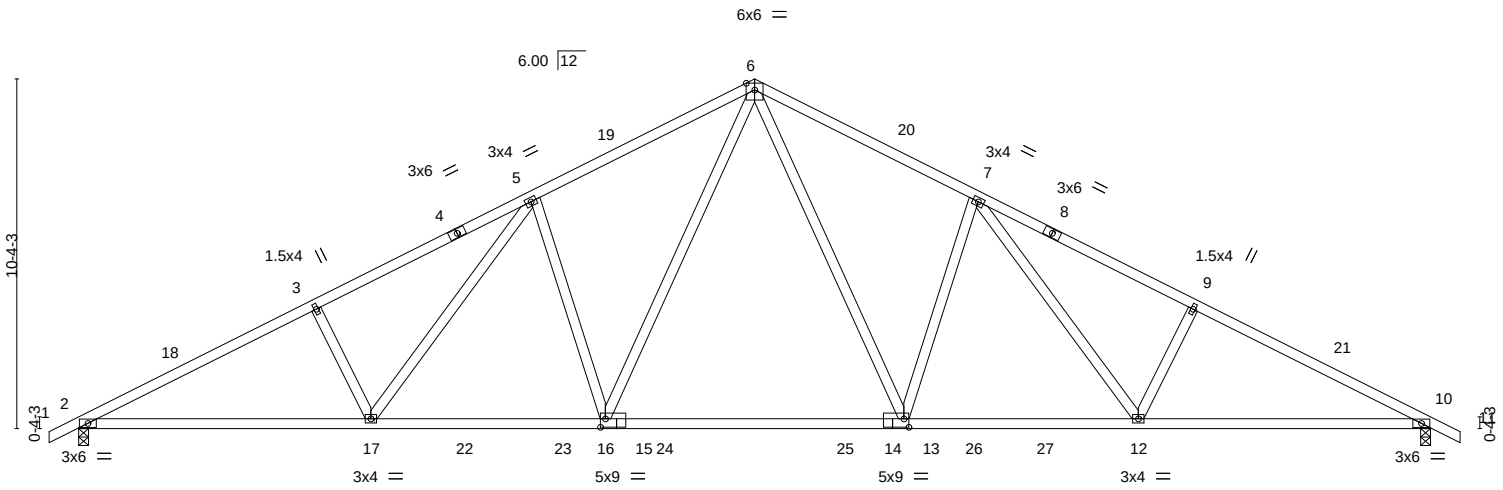
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	150.1773.A 10 x 10 CP
150_1773_A	T4	COMMON	5	1	I40052312
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.330 s Jan 22 2020 MiTek Industries, Inc. Tue Jan 28 12:14:26 2020 Page 1
ID:T2HHh_eRkk3PuZ_4LKeviAyAi_G-J2EZv5HmU4prGolIWWCtDLWp?vWKUyyp6A3r8jzqqPx

-0-10-8 7-0-5 13-6-3 20-0-0 26-5-13 32-11-11 40-0-0 40-10-8
0-10-8 7-0-5 6-5-13 6-5-13 6-5-13 6-5-13 7-0-5 0-10-8

Scale = 1:68.2



8-7-12 15-7-0 24-5-0 31-4-4 40-0-0
8-7-12 6-11-4 8-10-0 6-11-4 8-7-12

Plate Offsets (X,Y)-- [13:0-1-12,0-3-0], [14:0-0-0,0-1-12], [15:0-0-0,0-1-12], [15:0-1-12,0-3-0]

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	0.99	Vert(LL)	-0.33	13-16	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	1.00	Vert(CT)	-0.64	13-16	>749	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.14	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 216 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.
BOT CHORD Rigid ceiling directly applied or 1-4-12 oc bracing.

REACTIONS. (lb/size) 2=1650/0-3-8, 10=1650/0-3-8
Max Horz 2=-174(LC 13)
Max Uplift 2=-209(LC 12), 10=-209(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2987/357, 3-5=-2840/397, 5-6=-2305/389, 6-7=-2305/389, 7-9=-2840/397, 9-10=-2987/357
BOT CHORD 2-17=-397/2599, 16-17=-225/2159, 13-16=-58/1620, 12-13=-112/2159, 10-12=-223/2599
WEBS 6-13=-198/930, 7-13=-658/290, 7-12=-133/600, 9-12=-352/220, 6-16=-198/930, 5-16=-658/290, 5-17=-133/600, 3-17=-352/220

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-1-8, Interior(1) 3-1-8 to 20-0-0, Exterior(2) 20-0-0 to 24-0-0, Interior(1) 24-0-0 to 40-10-8 zone;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) All bearings are assumed to be User Defined crushing capacity of 425 psi.
6) One RT7A USP 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.

January 29,2020

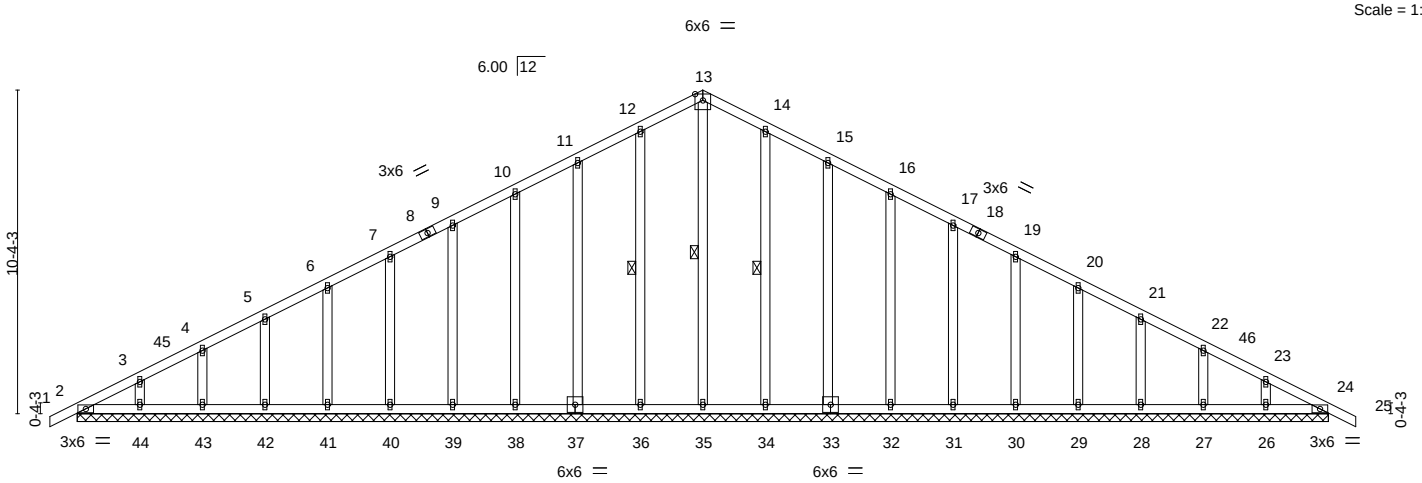
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	150.1773.A 10 x 10 CP
150_1773_A	T4E	Common Supported Gable	1	1	I40052313
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.330 s Jan 22 2020 MiTek Industries, Inc. Tue Jan 28 12:14:28 2020 Page 1
ID:T2HHh_eRkk3PuZ_4LKeviAyAi_G-FRMJKnJ00h3ZW6vgexELImbNZjRvy_D6ZUYyCbzqqPv

-0-10-8 20-0-0 40-0-0 40-10-8
0-10-8 20-0-0 20-0-0 0-10-8

Scale = 1:73.7



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	24	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	24	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.01	24	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 272 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 13-35, 12-36, 14-34

REACTIONS. All bearings 40-0-0.
(lb) - Max Horz 2=174(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 2, 36, 37, 38, 39, 40, 41, 42, 43, 44, 34, 33, 32, 31, 30, 29, 28, 27, 26
Max Grav All reactions 250 lb or less at joint(s) 2, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 34, 33, 32, 31, 30, 29, 28, 27, 26, 24

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 11-12=-102/297, 12-13=-118/338, 13-14=-118/341, 14-15=-102/299

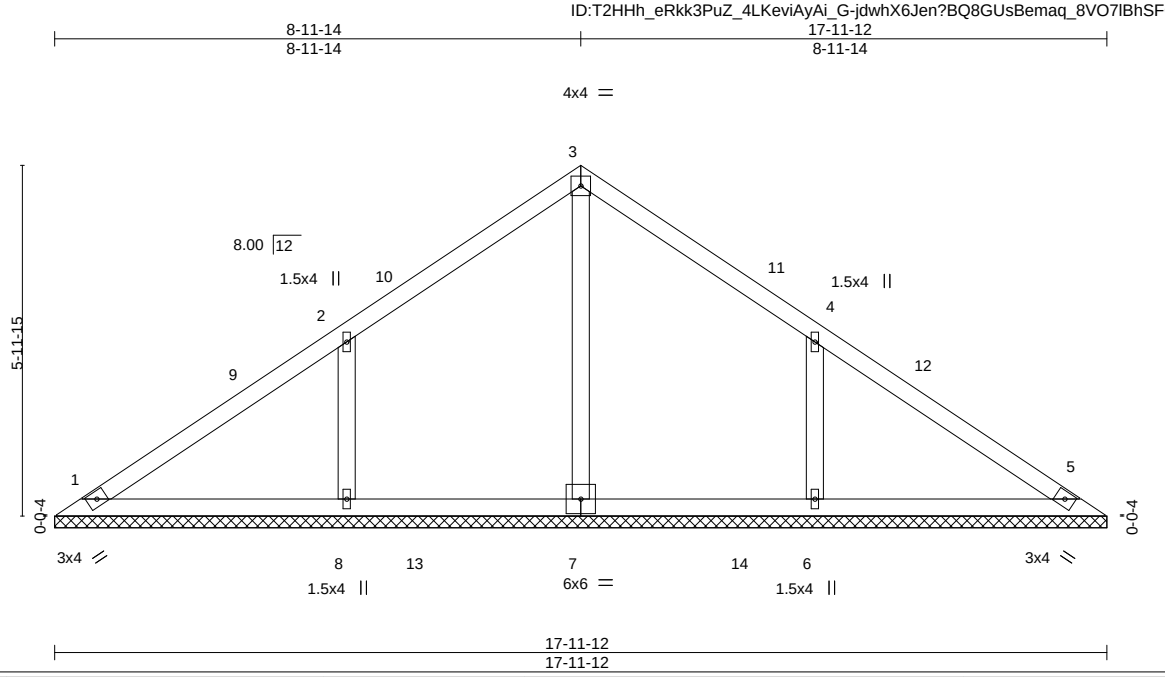
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 3-1-8, Exterior(2) 3-1-8 to 20-0-0, Corner(3) 20-0-0 to 24-0-0, Exterior(2) 24-0-0 to 40-10-8 zone;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 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) All bearings are assumed to be User Defined crushing capacity of 425 psi.

January 29,2020

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

Job	Truss	Truss Type	Qty	Ply	150.1773.A 10 x 10 CP
150_1773_A	V1	GABLE	1	1	I40052314
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.330 s Jan 22 2020 MiTek Industries, Inc. Tue Jan 28 12:14:29 2020 Page 1
ID:T2HHh_eRkk3PuZ_4LKeviAyAi_G-jdwhX6Jen?BQ8GUsBemaq_8VO7IBhSFGo8HVk2zqqPu



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)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 73 lb	FT = 20%

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

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

REACTIONS. All bearings 17-11-12.
(lb) - Max Horz 1=-140(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-168(LC 12), 6=-168(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=343(LC 22), 8=460(LC 19), 6=460(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-328/217, 4-6=-327/217

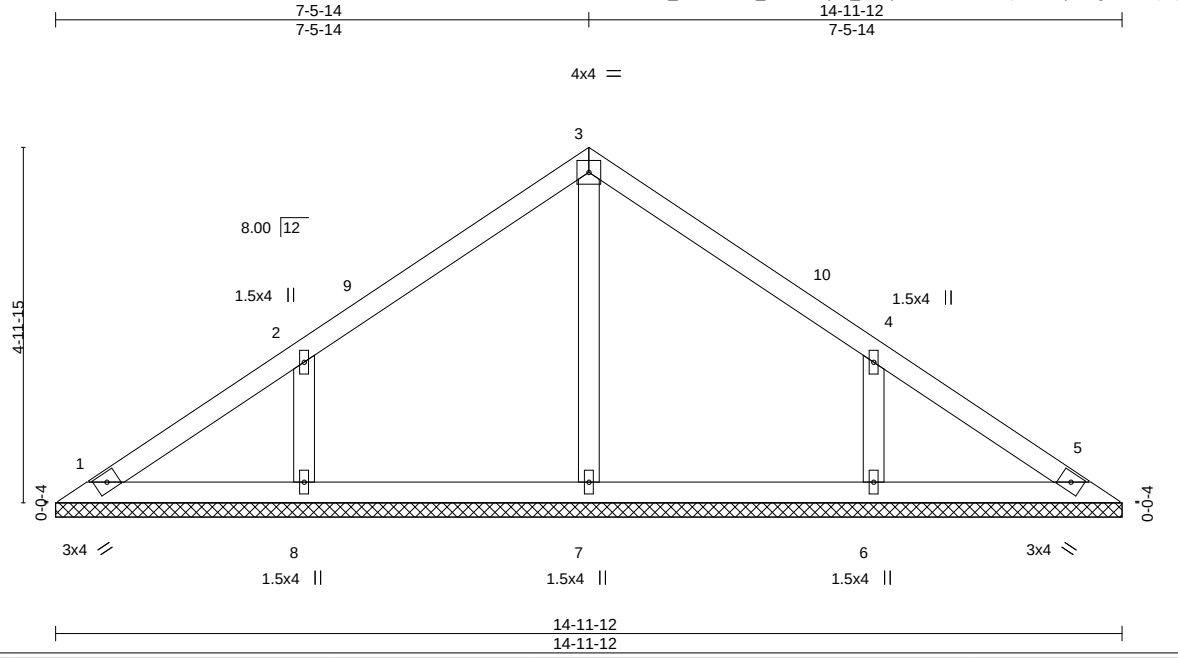
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 8-11-14, Exterior(2) 8-11-14 to 11-11-14, Interior(1) 11-11-14 to 17-6-0 zone;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, with BCDL = 10.0psf.
6) All bearings are assumed to be User Defined crushing capacity of 425 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1.

January 29,2020

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

Job	Truss	Truss Type	Qty	Ply	150.1773.A 10 x 10 CP
150_1773_A	V2	GABLE	1	1	I40052315
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.330 s Jan 22 2020 MiTek Industries, Inc. Tue Jan 28 12:14:30 2020 Page 1
ID:T2HHh_eRkk3PuZ_4LKeviAyAi_G-BpU4lSKHYJJHlQ23lMHpNBgicX6AQvqP1o13HUzqqPt



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	0.11	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 59 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 14-11-12.
(lb) - Max Horz 1=-116(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-138(LC 12), 6=-138(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=258(LC 1), 8=351(LC 19), 6=351(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-271/181, 4-6=-270/181

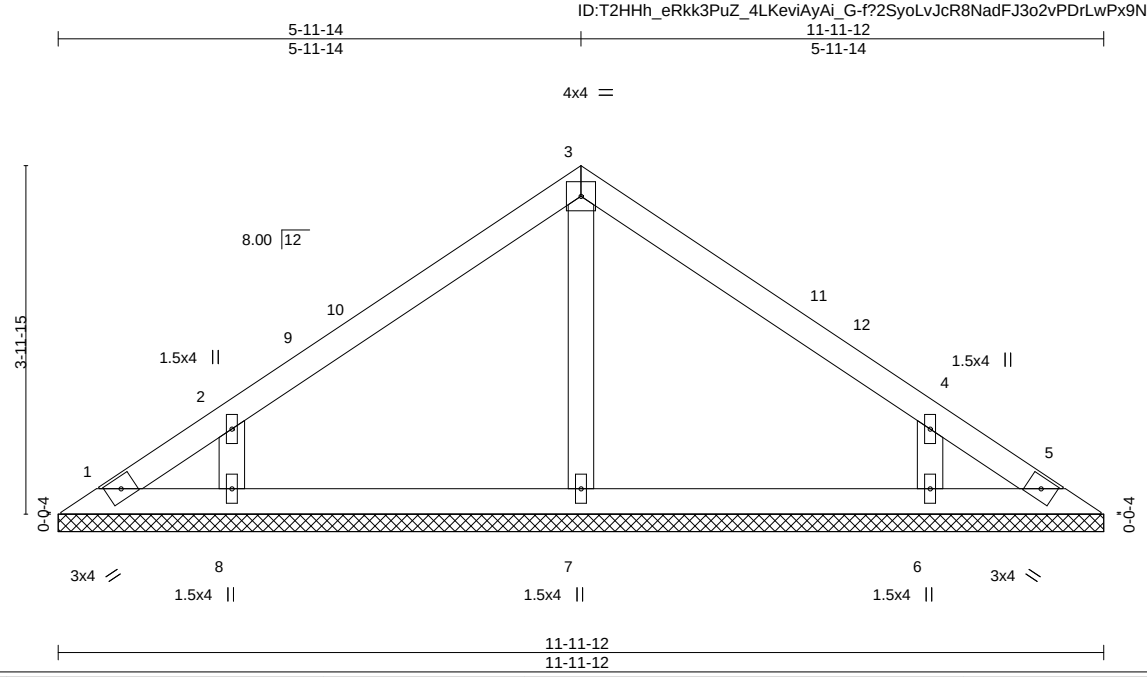
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-5-12 to 3-5-14, Interior(1) 3-5-14 to 7-5-14, Exterior(2) 7-5-14 to 10-5-14, Interior(1) 10-5-14 to 14-6-0 zone;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) All bearings are assumed to be User Defined crushing capacity of 425 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1.

January 29,2020

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

Job	Truss	Truss Type	Qty	Ply	150.1773.A 10 x 10 CP
150_1773_A	V3	GABLE	1	1	I40052316
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.330 s Jan 22 2020 MiTek Industries, Inc. Tue Jan 28 12:14:31 2020 Page 1
ID:T2HHh_eRkk3PuZ_4LKeviAyAi_G-f?2SyoLvJcR8NadFJ3o2vPDrLwPx9NRYGSmcpwzqqPs



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	0.31	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 45 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.3
BOT CHORD 2x4 SP No.3
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 11-11-12.
(lb) - Max Horz 1=91(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-127(LC 12), 6=-127(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=268(LC 1), 8=312(LC 19), 6=311(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-251/171, 4-6=-251/171

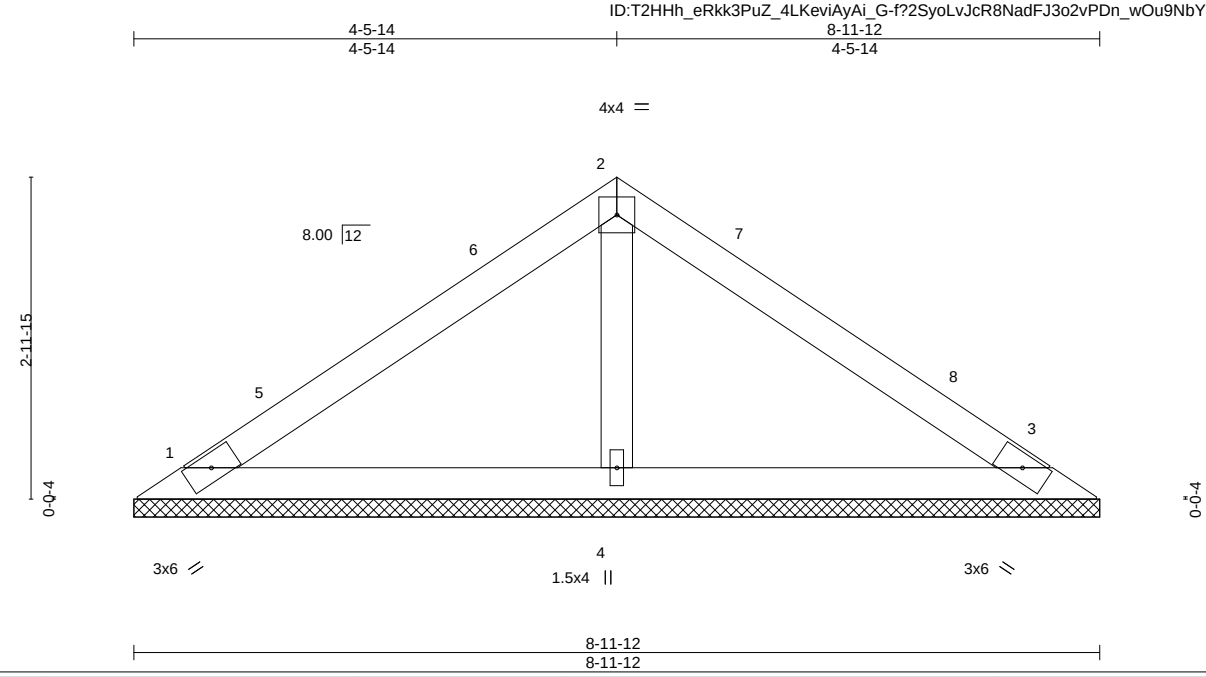
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 5-11-14, Exterior(2) 5-11-14 to 8-11-14, Interior(1) 8-11-14 to 11-6-0 zone;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) All bearings are assumed to be User Defined crushing capacity of 425 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5.

January 29,2020

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

Job	Truss	Truss Type	Qty	Ply	150.1773.A 10 x 10 CP
150_1773_A	V4	GABLE	1	1	I40052317
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.330 s Jan 22 2020 MiTek Industries, Inc. Tue Jan 28 12:14:31 2020 Page 1
ID:T2HHh_eRkk3PuZ_4LKeviAyAi_G-f?2SyoLvJcR8NadFJ3o2vPDn_wOu9NbYGSmcpwzqqPs



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	0.53	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 31 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.3
BOT CHORD 2x4 SP No.3
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. (lb/size) 1=172/8-11-12, 3=172/8-11-12, 4=298/8-11-12
Max Horz 1=-66(LC 8)
Max Uplift 1=-38(LC 12), 3=-47(LC 13)

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

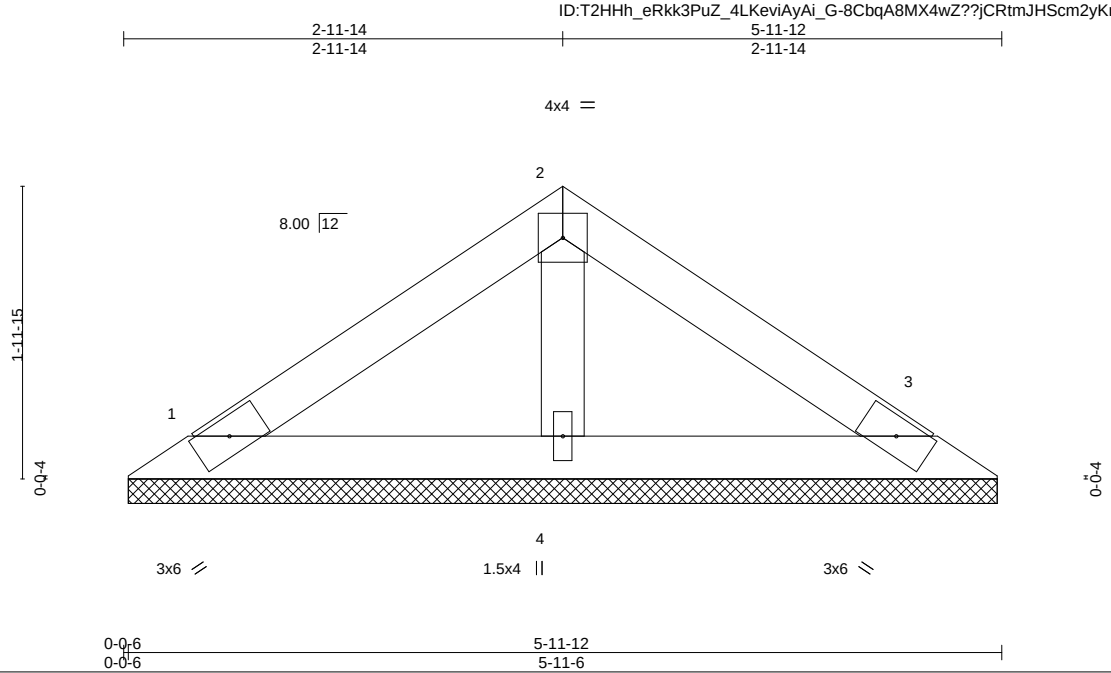
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 4-5-14, Exterior(2) 4-5-14 to 7-5-14, Interior(1) 7-5-14 to 8-6-0 zone;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) All bearings are assumed to be User Defined crushing capacity of 425 psi.

January 29,2020

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

Job	Truss	Truss Type	Qty	Ply	150.1773.A 10 x 10 CP
150_1773_A	V5	Valley	1	1	I40052318
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.330 s Jan 22 2020 MiTek Industries, Inc. Tue Jan 28 12:14:32 2020 Page 1
ID:T2HHh_eRkk3PuZ_4LKeviAyAi_G-8CbqA8MX4wZ??jCRtmJHScm2yKnjuq8iU6WALNzqqPr



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 20 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-11-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=107/5-11-0, 3=107/5-11-0, 4=186/5-11-0
Max Horz 1=41(LC 9)
Max Uplift 1=-24(LC 12), 3=-29(LC 13)

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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;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) All bearings are assumed to be User Defined crushing capacity of 425 psi.

January 29,2020

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

Job	Truss	Truss Type	Qty	Ply	150.1773.A 10 x 10 CP
150_1773_A	V6	Valley	1	1	I40052319
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.330 s Jan 22 2020 MiTek Industries, Inc. Tue Jan 28 12:14:33 2020 Page 1
ID:T2HHh_eRkk3PuZ_4LKeviAyAi_G-cO9CNUN9rEhsctneQUqW?qIEGk7QdHnrjmFjtpzqqPq

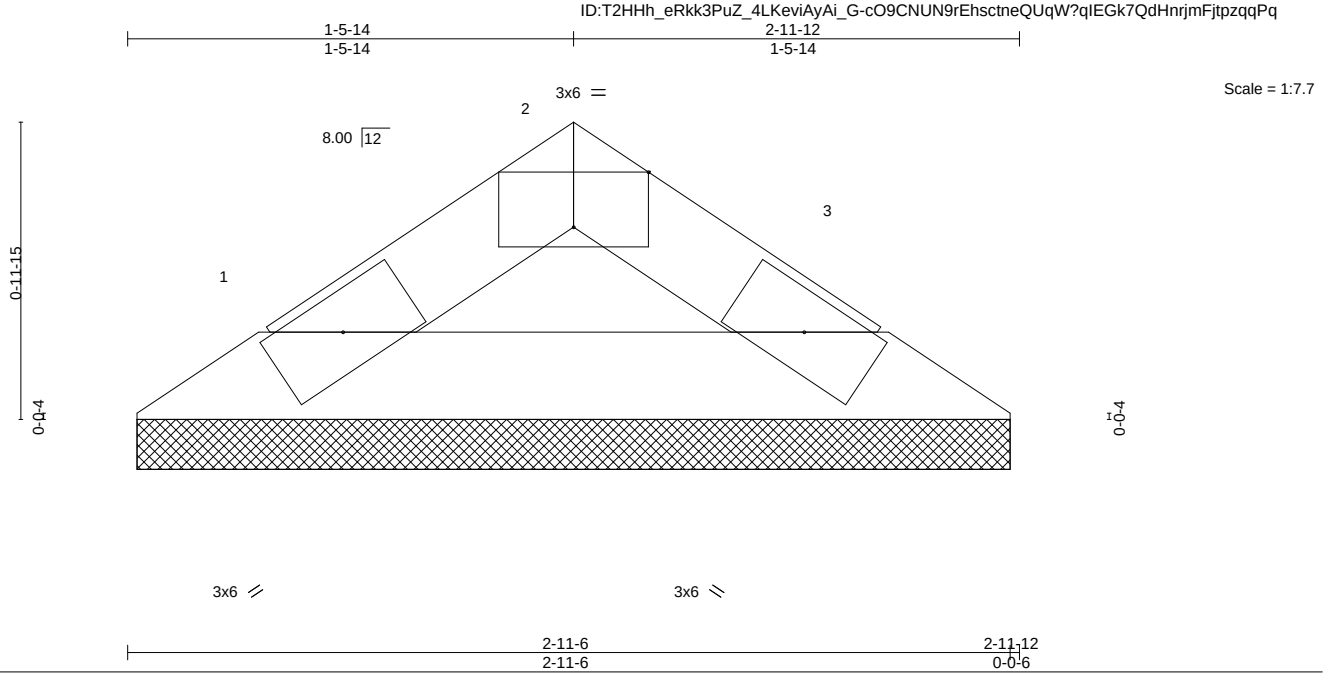


Plate Offsets (X,Y)-- [2:0-3-0,Edge]

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	0.03	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	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 8 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-11-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=81/2-11-0, 3=81/2-11-0
Max Horz 1=-17(LC 8)
Max Uplift 1=-9(LC 12), 3=-9(LC 13)

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

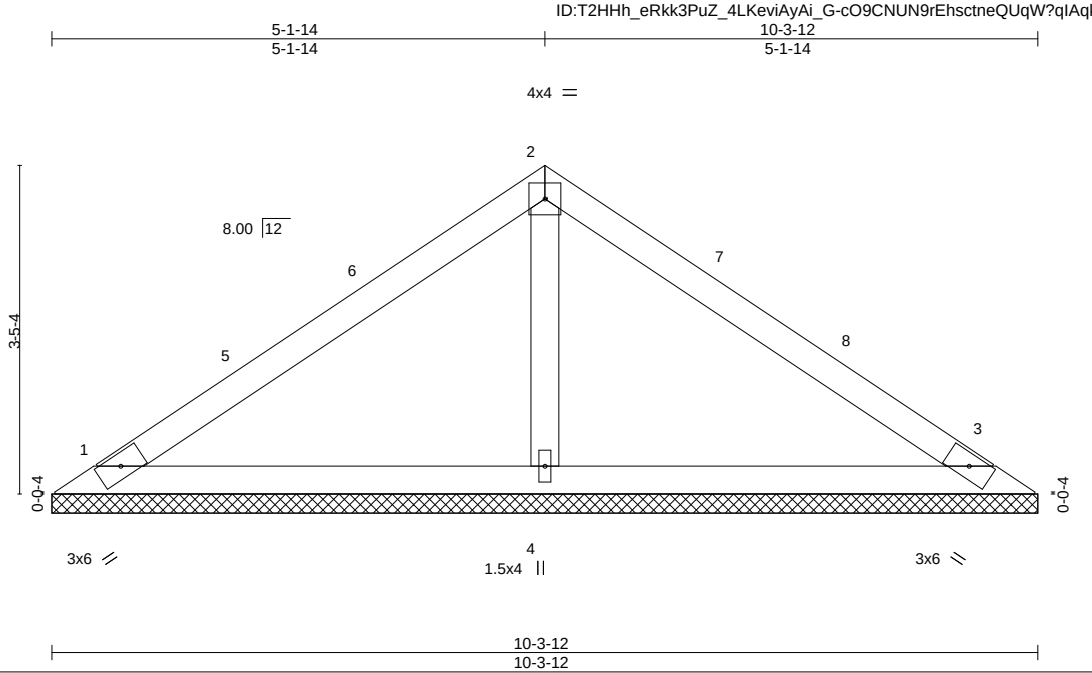
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions 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) All bearings are assumed to be User Defined crushing capacity of 425 psi.

January 29,2020

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

Job	Truss	Truss Type	Qty	Ply	150.1773.A 10 x 10 CP
150_1773_A	VP1	GABLE	1	1	I40052320
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.330 s Jan 22 2020 MiTek Industries, Inc. Tue Jan 28 12:14:34 2020 Page 1
ID:T2HHh_eRkk3PuZ_4LKeviAyAi_G-cO9CNUN9rEhsctneQUqW?qIAqk5DdHprjmFjtozqqPq



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	0.31	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	3	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.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. (lb/size) 1=184/10-3-12, 3=184/10-3-12, 4=380/10-3-12
Max Horz 1=77(LC 11)
Max Uplift 1=-34(LC 12), 3=-44(LC 13), 4=-12(LC 12)

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

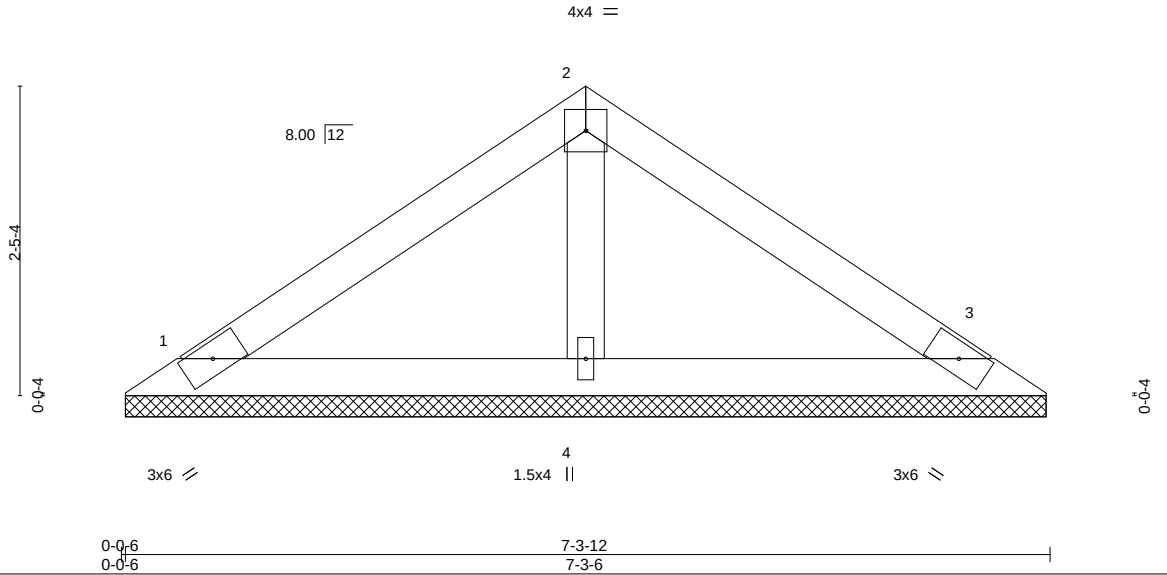
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 5-1-14, Exterior(2) 5-1-14 to 8-1-14, Interior(1) 8-1-14 to 9-10-0 zone;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) All bearings are assumed to be User Defined crushing capacity of 425 psi.

January 29,2020

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

Job	Truss	Truss Type	Qty	Ply	150.1773.A 10 x 10 CP
150_1773_A	VP2	Valley	1	1	I40052321
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.330 s Jan 22 2020 MiTek Industries, Inc. Tue Jan 28 12:14:34 2020 Page 1
ID:T2HHh_eRkk3PuZ_4LKeviAyAi_G-4ajabqNncXpjE1Mq_BLIX1rLU8SBMkW?yQ?GQFzqqPp



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	0.32	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 25 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.3
BOT CHORD 2x4 SP No.3
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. (lb/size) 1=136/7-3-0, 3=136/7-3-0, 4=236/7-3-0
Max Horz 1=-52(LC 10)
Max Uplift 1=-30(LC 12), 3=-37(LC 13)

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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;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) All bearings are assumed to be User Defined crushing capacity of 425 psi.

January 29,2020

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

Job	Truss	Truss Type	Qty	Ply	150.1773.A 10 x 10 CP
150_1773_A	VP3	Valley	1	1	I40052322
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.330 s Jan 22 2020 MiTek Industries, Inc. Tue Jan 28 12:14:35 2020 Page 1
ID:T2HHh_eRkk3PuZ_4LKeviAyAi_G-YnHzoAOPNrxasBx0Yvs_4FNZxYnX5BH8B4kqyhzqqPo

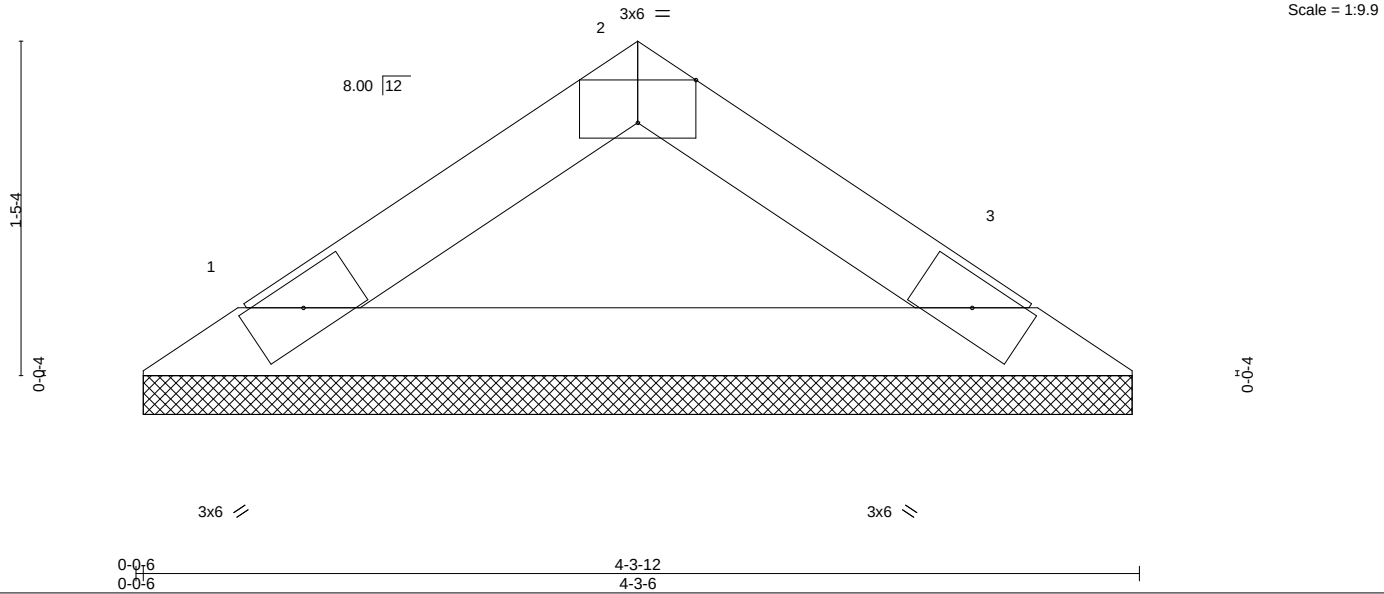


Plate Offsets (X,Y)-- [2:0-3-0,Edge]

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	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.23	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.3
BOT CHORD 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-3-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=134/4-3-0, 3=134/4-3-0
Max Horz 1=-28(LC 8)
Max Uplift 1=-14(LC 12), 3=-14(LC 13)

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

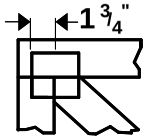
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions 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) All bearings are assumed to be User Defined crushing capacity of 425 psi.

January 29,2020

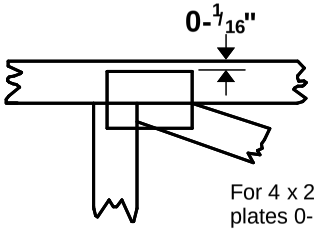
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

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.

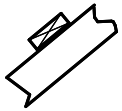
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

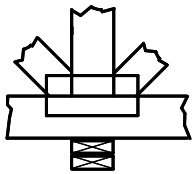
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

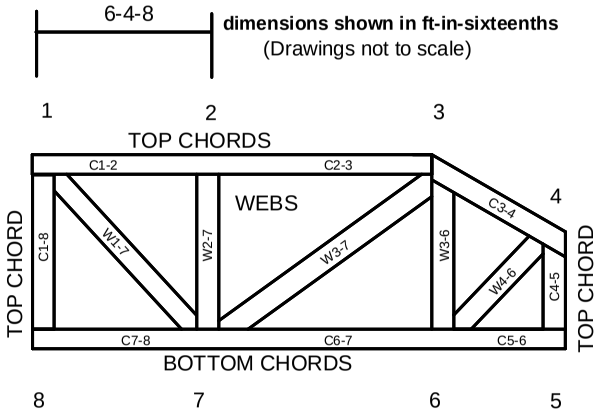


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/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 BY TRENCO
A MiTek Affiliate

MiTek Engineering Reference Sheet: MII-7473 rev. 10/03/2015

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/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.