ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 22357A
140.1445.C.10x21 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: I38918546 thru I38918587

My license renewal date for the state of North Carolina is December 31, 2019.

North Carolina COA: C-0844

October 16,2019

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	140.1445.C.10x21 CP
22357A	AE	Common Supported Gable	1	1	I38918546
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:49:29 2019 Page 1
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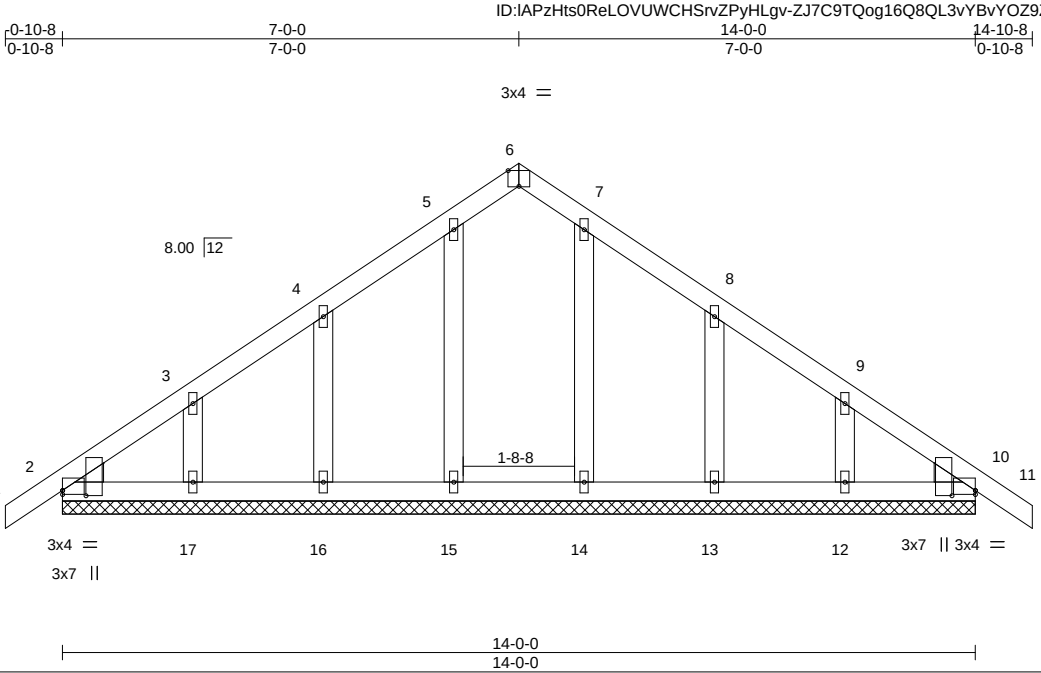

Plate Offsets (X,Y)-- [2:0-0-15,0-4-5], [2:0-0-0,0-0-12], [6:0-2-0,Edge], [10:Edge,0-0-12], [10:0-0-15,0-4-5]

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	0.05	Vert(LL)	-0.00	10	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	10	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 74 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 14-0-0.
(lb) - Max Horz 2=130(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 12, 13, 14, 17, 16, 15
Max Grav All reactions 250 lb or less at joint(s) 2, 10, 12, 13, 14, 17, 16, 15

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 2-0-0, Exterior(2) 2-0-0 to 7-0-0, Corner(3) 7-0-0 to 10-0-0, Exterior(2) 10-0-0 to 14-10-8 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 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) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 12, 13, 14, 17, 16, and 15. This connection is for uplift only and does not consider lateral forces.

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Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	AG	Common Girder	1	2	I38918547
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:49:31 2019 Page 1
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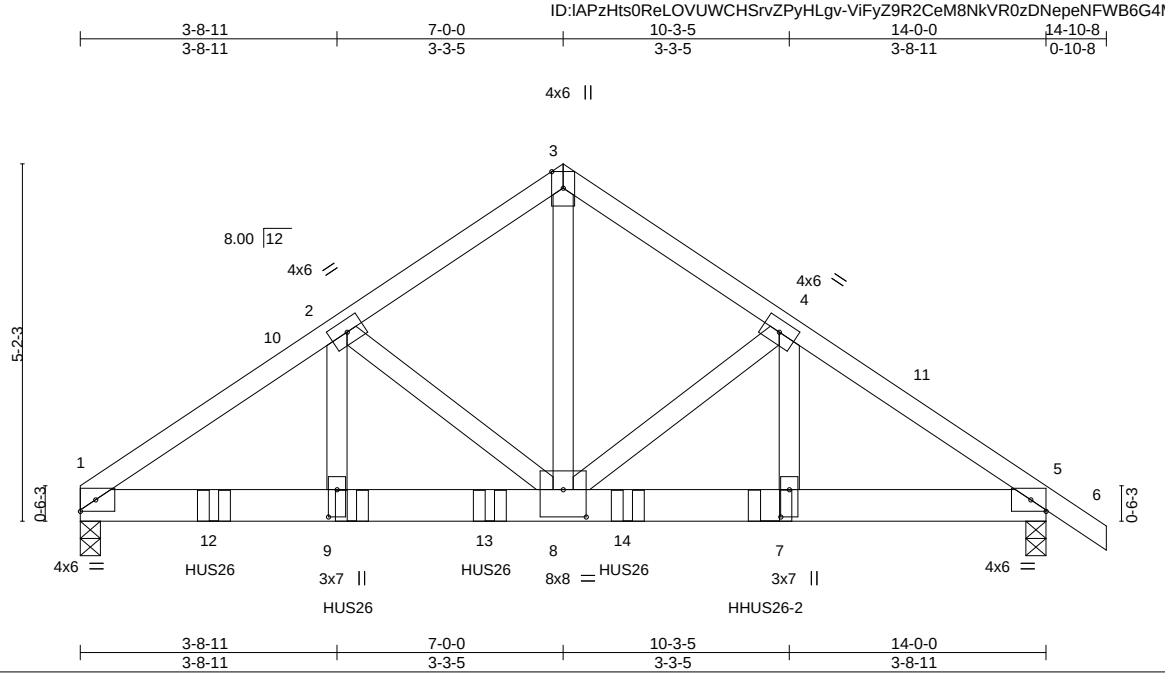

Plate Offsets (X,Y)-- [7:0-4-12,0-1-8], [8:0-4-0,0-4-12], [9:0-4-12,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	-0.07	7-8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.14	7-8	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.76	Horz(CT)	0.04	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 169 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP DSS
WEBS 2x4 SP No.3 *Except*
3-8: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-9-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=6017/0-3-8, 5=5019/0-3-8
Max Horz 1=-126(LC 10)
Max Uplift 1=-751(LC 12), 5=-1018(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-8593/1147, 2-3=-5853/982, 3-4=-5850/974, 4-5=-8072/1644
BOT CHORD 1-9=-917/6924, 8-9=-917/6924, 7-8=-1268/6477, 5-7=-1268/6477
WEBS 3-8=-1001/6208, 4-8=-2091/794, 4-7=-828/2599, 2-8=-2661/278, 2-9=-202/3238

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 0-4-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 7-0-0, Exterior(2) 7-0-0 to 10-3-6, Interior(1) 10-3-6 to 14-10-8 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
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) Two H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 5. This connection is for uplift only and does not consider lateral forces.
8) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-11-4 from the left end to 7-11-4 to connect truss(es) to back face of bottom chord.
9) Use Simpson Strong-Tie HHUS26-2 (14-10d Girder, 6-10d Truss) or equivalent at 10-0-0 from the left end to connect truss(es) to back face of bottom chord.
10) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

October 16,2019

Continued on page 2

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LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-60, 3-6=-60, 1-5=-20
   Concentrated Loads (lb)
   Vert: 7=-2520(B) 9=-1838(B) 12=-1838(B) 13=-1838(B) 14=-1844(B)

Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	C1	Piggyback	1	1	I38918548
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:49:32 2019 Page 1
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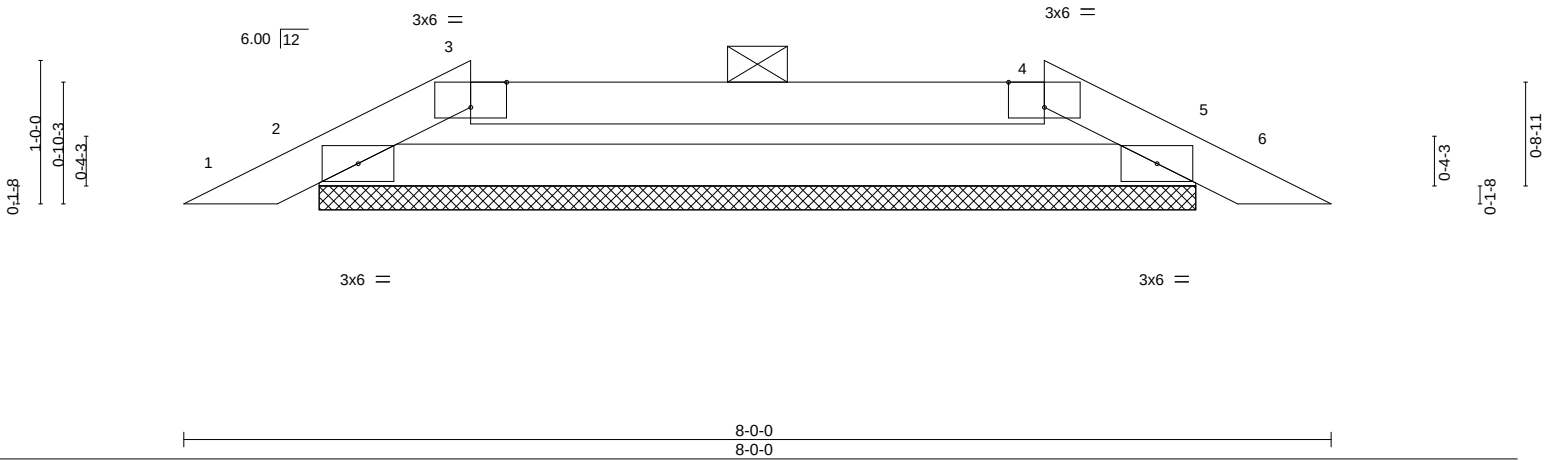
2-0-0 6-0-0 8-0-0
2-0-0 4-0-0 2-0-0

Scale: 3/4"=1'



8-0-0
8-0-0

Plate Offsets (X,Y)-- [3:0-3-0,Edge], [4:0-3-0,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	0.23	Vert(LL)	0.00	6	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	0.01	6	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-R							Weight: 22 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 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=282/6-1-6, 5=282/6-1-6
Max Horz 2=13(LC 12)
Max Uplift 2=-31(LC 9), 5=-31(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-476/265, 3-4=-439/249, 4-5=-476/265
BOT CHORD 2-5=-207/439

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=30ft; 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) Provide adequate drainage to prevent water ponding.
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) All bearings are assumed to be User Defined crushing capacity of 425 psi.
8) n/a

9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	C2	Piggyback	3	1	I38918549
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:49:33 2019 Page 1
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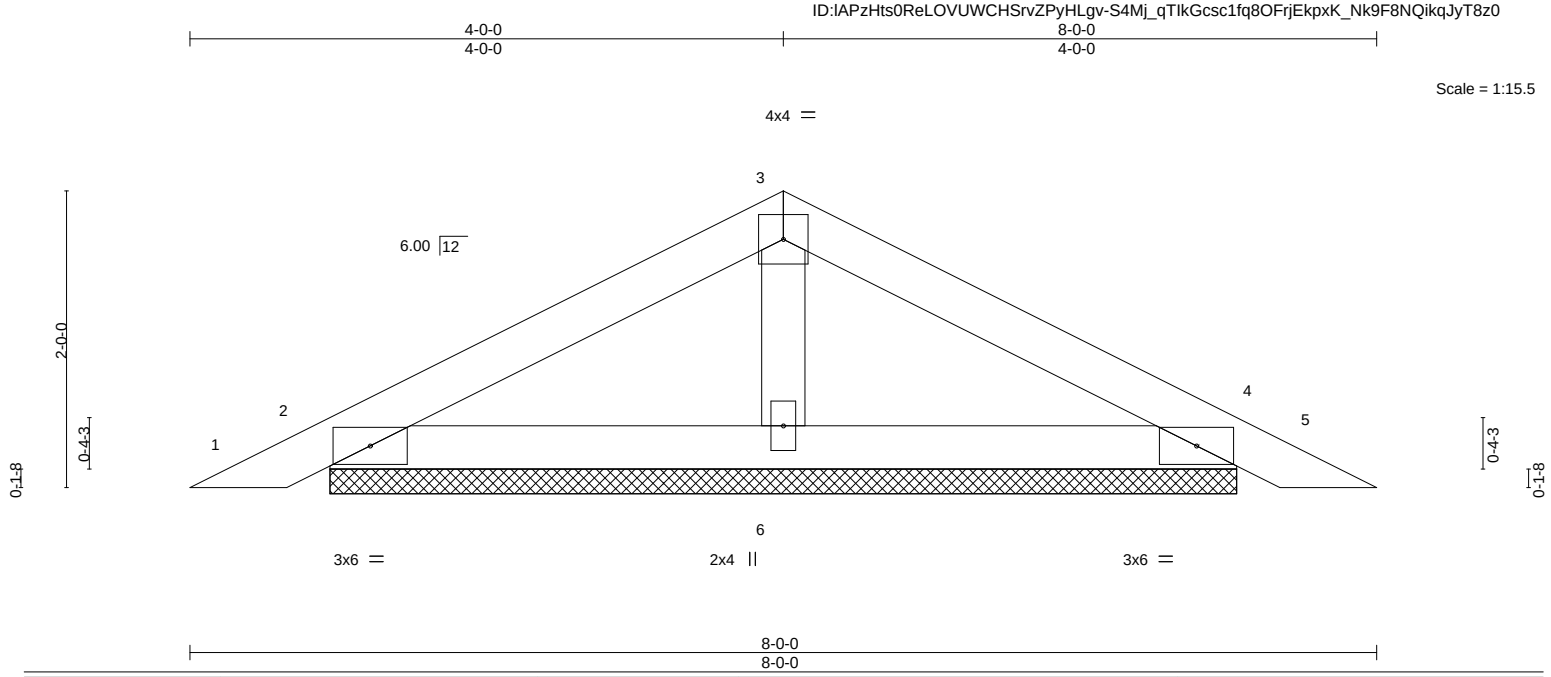

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	0.00	5	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	0.01	5	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 24 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) 2=164/6-1-6, 4=164/6-1-6, 6=234/6-1-6
Max Horz 2=31(LC 12)
Max Uplift 2=-44(LC 12), 4=-50(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=30ft; 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.
7) n/a
8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	C3	Piggyback	1	1	I38918550
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:49:34 2019 Page 1
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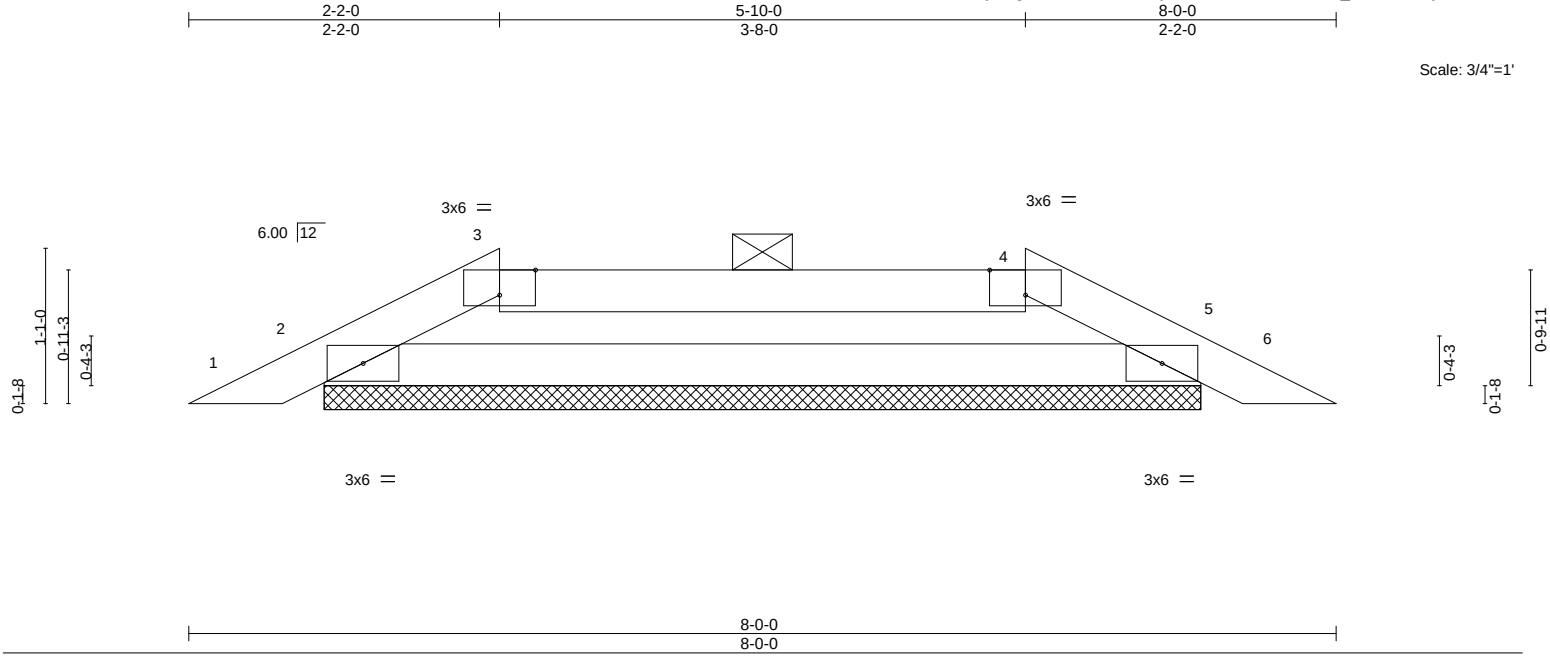

Plate Offsets (X,Y)-- [3:0-3-0,Edge], [4:0-3-0,Edge]

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	0.19	Vert(LL)	0.00	6	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	0.01	6	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-R							Weight: 22 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 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=282/6-1-6, 5=282/6-1-6
Max Horz 2=-14(LC 13)
Max Uplift 2=-28(LC 9), 5=-28(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-441/249, 3-4=-401/234, 4-5=-441/249
BOT CHORD 2-5=-187/401

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=30ft; 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) Provide adequate drainage to prevent water ponding.
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) All bearings are assumed to be User Defined crushing capacity of 425 psi.
8) n/a

9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	H1	HIP	1	1	I38918551
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:49:36 2019 Page 1
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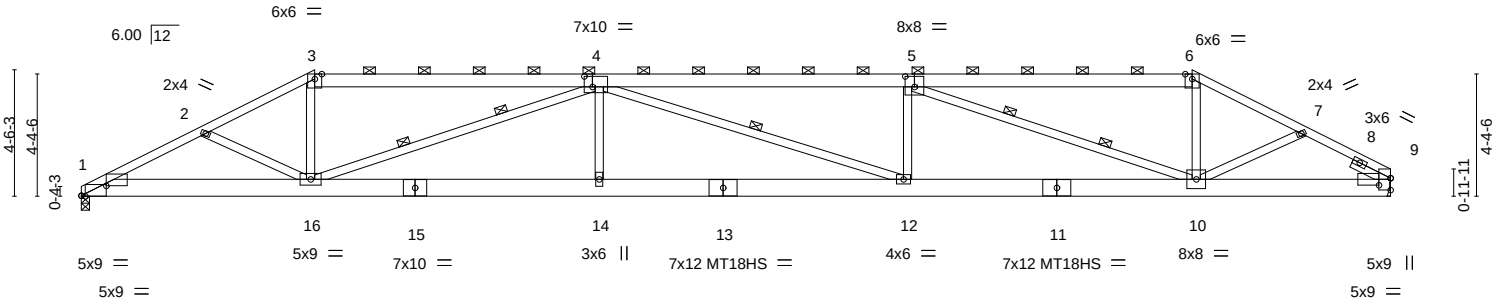
4-5-4	8-4-0	18-5-15	24-0-0	31-9-2	39-8-0	43-6-12	46-9-0
4-5-4	3-10-12	10-1-15	5-6-1	7-9-2	7-10-14	3-10-12	3-2-4

Scale = 1:82.3



8-4-0	18-5-15	24-0-0	31-9-2	39-8-0	46-9-0
8-4-0	10-1-15	5-6-1	7-9-2	7-10-14	7-1-0

Plate Offsets (X,Y)-- [1:0-1-11,Edge], [1:0-10-11,0-4-4], [4:0-3-8,0-4-8], [5:0-4-0,0-4-8], [9:0-5-0,0-3-0]

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	0.95	Vert(LL)	-0.42	12-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.85	12-14	>656	180	MT18HS	244/190
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.16	9	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 326 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.2 *Except* 1-3,6-9: 2x4 SP No.2
BOT CHORD	2x8 SP No.2
WEBS	2x4 SP No.3 *Except* 4-16,5-10: 2x4 SP DSS
SLIDER	Right 2x4 SP No.3 -H 1-6-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 1-9-15 oc purlins, except 2-0-0 oc purlins (2-2-0 max.): 3-6.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	1 Row at midpt 4-12 2 Rows at 1/3 pts 4-16, 5-10

REACTIONS. (lb/size) 1=1864/0-3-8, 9=1864/Mechanical
Max Horz 1=79(LC 12)
Max Uplift 1=-213(LC 9), 9=-222(LC 8)

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

TOP CHORD	1-2=-3804/826, 2-3=-3633/762, 3-4=-3209/715, 4-5=-5435/1159, 5-6=-2808/632, 6-7=-3163/664, 7-9=-3115/685
BOT CHORD	1-16=-701/3362, 14-16=-1055/5578, 12-14=-1055/5578, 10-12=-1024/5417, 9-10=-551/2673
WEBS	3-16=-149/1197, 4-14=0/420, 4-16=-2614/527, 5-12=0/483, 5-10=-2849/576, 6-10=-102/963, 7-10=-62/319

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=30ft; 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) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates 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) All bearings are assumed to be User Defined crushing capacity of 425 psi.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=222.
10) One H2.5A Simpson Strong-Tie 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.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 16,2019

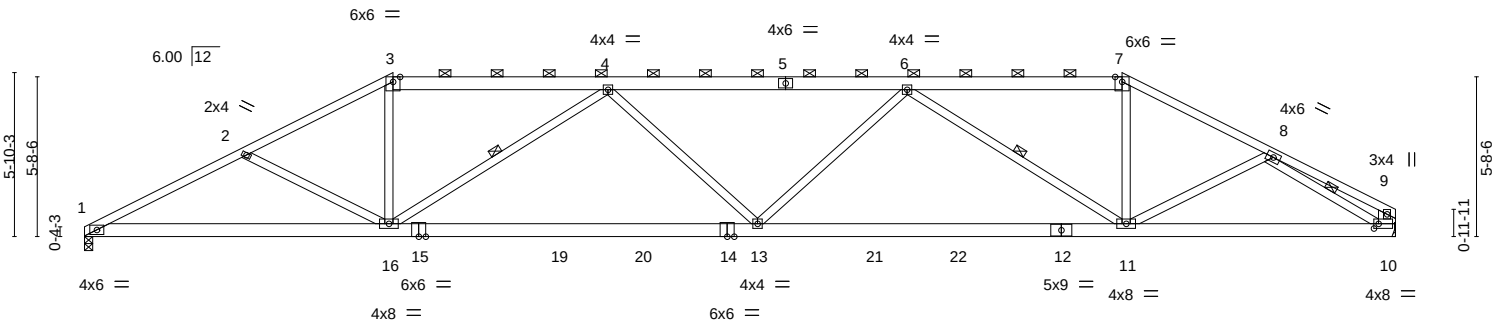
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	H2	HIP	1	1	I38918552
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:49:43 2019 Page 1
ID:lAPzHts0ReLOVUWCHSrvZPyHLgv-9?zV5FbaNKtRpaQljURB7L8NlMDS4WXcgz7G9kyT8ys

5-9-4	11-0-0	18-8-0	29-4-0	37-0-0	42-2-12	46-9-0
5-9-4	5-2-12	7-8-0	10-8-0	7-8-0	5-2-12	4-6-4

Scale = 1:82.2



5-9-4	11-0-0	24-0-0	37-0-0	46-9-0
5-9-4	5-2-12	13-0-0	13-0-0	9-9-0

Plate Offsets (X,Y)-- [10:0-2-0,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	-0.29	13-16	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.62	13-16	>902	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.14	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 293 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 *Except* 3-5,5-7: 2x6 SP No.2
BOT CHORD	2x6 SP DSS *Except* 14-15: 2x6 SP No.2
WEBS	2x4 SP No.3 *Except* 9-10: 2x8 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-7-7 oc purlins, except end verticals, and 2-0-0 oc purlins (2-8-12 max.): 3-7.
BOT CHORD	Rigid ceiling directly applied or 8-2-13 oc bracing.
WEBS	1 Row at midpt 4-16, 6-11, 8-10

REACTIONS. (lb/size) 1=1858/0-3-8, 10=1858/Mechanical
Max Horz 1=108(LC 12)
Max Uplift 1=-165(LC 9), 10=-174(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-3703/842, 2-3=-3387/728, 3-4=-2952/689, 4-6=-4090/873, 6-7=-2630/622, 7-8=-3018/653, 8-9=-458/101, 9-10=-302/93
BOT CHORD 1-16=-710/3281, 13-16=-778/4021, 11-13=-750/3888, 10-11=-542/2522
WEBS 2-16=-343/241, 3-16=-165/1171, 4-16=-1390/375, 4-13=0/313, 6-13=0/457, 6-11=-1591/391, 7-11=-131/997, 8-11=-37/310, 8-10=-2610/604

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=30ft; 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas 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) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=174.
9) One H2.5A Simpson Strong-Tie 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 16,2019

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Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	H3	ROOF SPECIAL	1	1	I38918553
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:49:45 2019 Page 1
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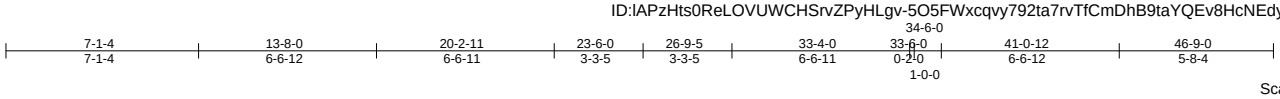
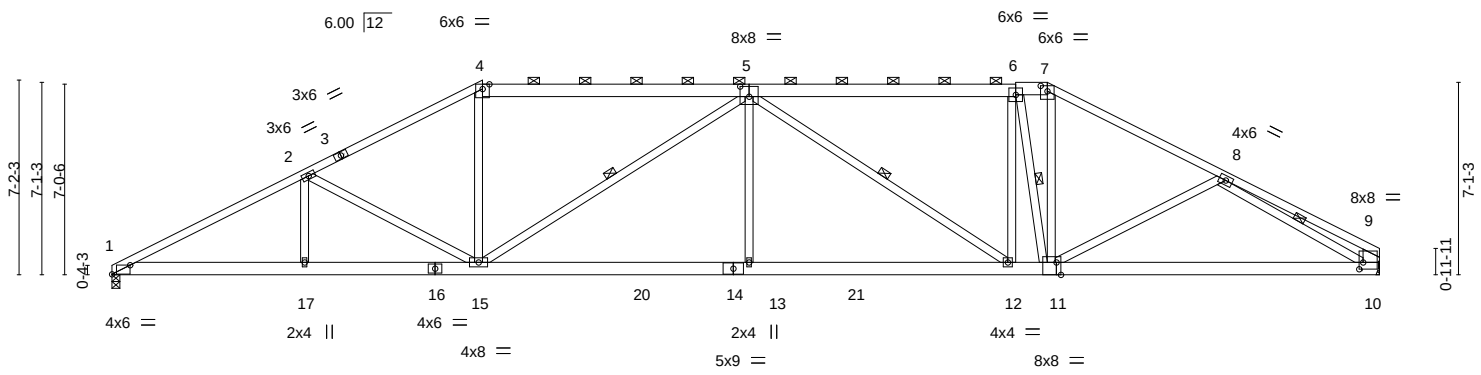


Scale = 1:85.0



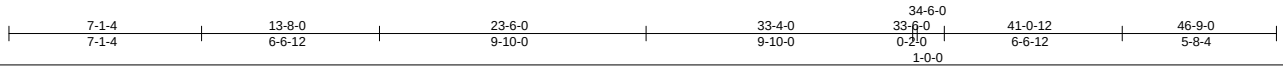


Plate Offsets (X,Y)-- [1:0-8-0,Edge], [5:0-4-0,0-4-8], [7:0-3-0,0-2-7], [9:0-3-10,0-1-13], [9:0-1-12,0-3-0], [11:0-2-0,Edge]

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	0.84	Vert(LL)	-0.24	13-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.50	13-15	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.16	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 317 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except* 4-5,6-7,5-6: 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 9-10: 2x8 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-7-5 max.): 4-7.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 5-15, 5-12, 8-10, 6-11

REACTIONS. (lb/size) 1=1858/0-3-8, 10=1858/Mechanical
Max Horz 1=130(LC 12)
Max Uplift 1=-139(LC 12), 10=-124(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-3727/827, 2-4=-3115/731, 4-5=-2701/701, 5-6=-2710/702, 6-7=-2470/638, 7-8=-2903/667, 8-9=-569/86, 9-10=-375/102
BOT CHORD 1-17=-678/3268, 15-17=-678/3268, 13-15=-591/3393, 12-13=-591/3393, 11-12=-450/2698, 10-11=-578/2599
WEBS 2-17=0/288, 2-15=-631/260, 4-15=-114/952, 5-15=-1031/233, 5-13=0/489, 5-12=-995/186, 8-10=-2547/670, 7-11=-287/1346, 6-12=-78/610, 6-11=-1212/351

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=30ft; 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas 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) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=124.
9) One H2.5A Simpson Strong-Tie 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 16,2019

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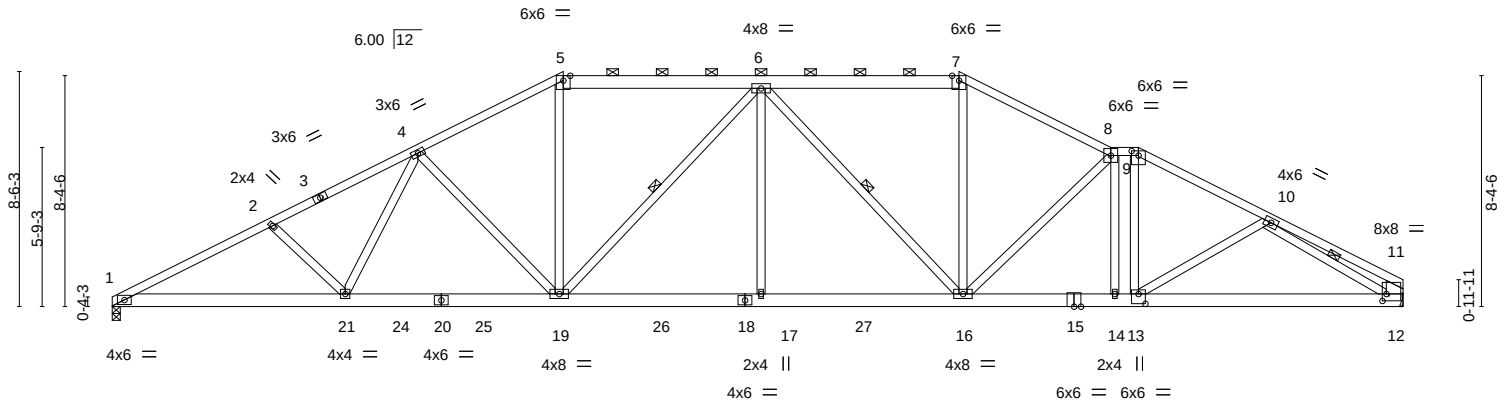
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	H4	ROOF SPECIAL	1	1	I38918554
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:49:46 2019 Page 1
ID:IAPzHts0ReLOVUWCHSrvZPyHLgv-ZafdjHdSgFF0g19KPc_ukzmuPZE3Hv12MxLwm3yT8yp

5-9-11	11-0-13	16-4-0	23-6-0	30-8-0	36-2-0	37-2-0	41-9-12	46-9-0
5-9-11	5-3-3	5-3-3	7-2-0	7-2-0	5-6-0	1-0-0	4-7-12	4-11-4

Scale = 1:83.4



8-5-4	16-4-0	23-6-0	30-8-0	36-2-0	37-2-0	46-9-0
8-5-4	7-10-12	7-2-0	7-2-0	5-6-0	1-0-0	9-7-0

Plate Offsets (X,Y)-- [9:0-3-0,0-2-0], [11:0-3-10,0-1-13], [11:0-1-12,0-3-0], [13:0-3-0,0-4-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.22	17-19	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.44	17-19	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.64	Horz(CT)	0.14	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 329 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except* 5-7: 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 11-12: 2x8 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (3-4-0 max.): 5-7, 8-9.
BOT CHORD Rigid ceiling directly applied or 8-6-10 oc bracing.
WEBS 1 Row at midpt 6-19, 6-16, 10-12

REACTIONS. (lb/size) 1=1858/0-3-8, 12=1858/Mechanical
Max Horz 1=152(LC 12)
Max Uplift 1=-165(LC 12), 12=-160(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-3729/865, 2-4=-3516/831, 4-5=-2827/733, 5-6=-2466/693, 6-7=-2439/691, 7-8=-2768/720, 8-9=-2664/678, 9-10=-3011/711, 10-11=-436/76, 11-12=-312/94
BOT CHORD 1-21=-729/3302, 19-21=-557/2873, 17-19=-451/2774, 16-17=-451/2774, 14-16=-487/2692, 13-14=-479/2664, 12-13=-576/2556
WEBS 2-21=-315/204, 4-21=-67/501, 4-19=-585/251, 5-19=-168/956, 6-19=-614/156, 6-17=0/371, 6-16=-695/145, 7-16=-141/884, 8-16=-370/162, 8-14=-1008/275, 9-13=-211/1041, 10-12=-2666/677

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=30ft; 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas 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) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=160.
9) One H2.5A Simpson Strong-Tie 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 16,2019

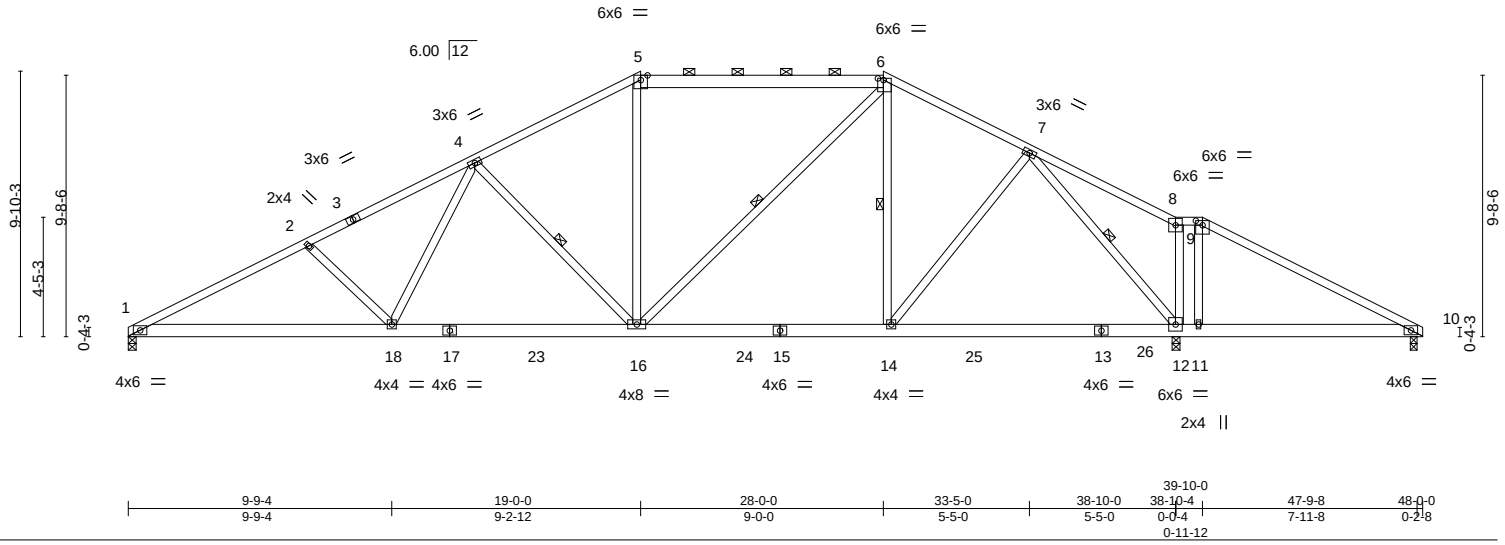
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	H5	ROOF SPECIAL	1	1	I38918555 Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:49:47 2019 Page 1
ID:IAPzHts0ReLOVUWCHSrvZPyHLgv-1nD?wde4RZNtIBjWyKV8HBJ3XzbR0JmCbb5TIVyT8yo

6-8-5	12-10-3	19-0-0	23-6-0	28-0-0	33-5-0	38-10-0	39-10-0	43-7-12	48-0-0
6-8-5	6-1-13	6-1-13	4-6-0	4-6-0	5-5-0	5-5-0	1-0-0	3-9-12	4-4-4

Scale = 1:85.4



9-9-4	19-0-0	28-0-0	33-5-0	38-10-0	39-10-0 38-10-4	47-9-8	48-0-0
9-9-4	9-2-12	9-0-0	5-5-0	5-5-0	0-0-4 0-11-12	7-11-8	0-2-8

Plate Offsets (X,Y)-- [6:0-2-8,0-0-12], [9:0-3-0,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	0.22	18-20	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.29	18-20	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.80	Horz(CT)	0.07	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 308 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except* 5-6: 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 6-16: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-9-8 oc purlins, except 2-0-0 oc purlins (4-1-9 max.): 5-6, 8-9.
BOT CHORD Rigid ceiling directly applied or 5-5-10 oc bracing.
WEBS 1 Row at midpt 4-16, 6-16, 6-14, 7-12

REACTIONS. (lb/size) 1=1521/0-3-8, 12=2122/0-3-8, 10=197/0-3-0
Max Horz 1=157(LC 16)
Max Uplift 1=-359(LC 9), 12=-490(LC 8), 10=-85(LC 13)
Max Grav 1=1521(LC 1), 12=2184(LC 2), 10=255(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2910/1850, 2-4=-2658/1803, 4-5=-1843/1294, 5-6=-1581/1205, 6-7=-1460/1031, 7-8=-84/480, 8-9=-113/366, 9-10=-223/432
BOT CHORD 1-18=-1571/2562, 16-18=-1177/2056, 14-16=-565/1260, 12-14=-410/932, 11-12=-366/289, 10-11=-357/281
WEBS 2-18=-373/261, 4-18=-486/587, 4-16=-695/541, 5-16=-347/421, 6-16=-338/598, 6-14=-264/95, 7-14=-251/638, 9-11=-374/234, 7-12=-1923/1097

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=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas 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) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1, 12, and 10. This connection is for uplift only and does not consider lateral forces.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 16,2019

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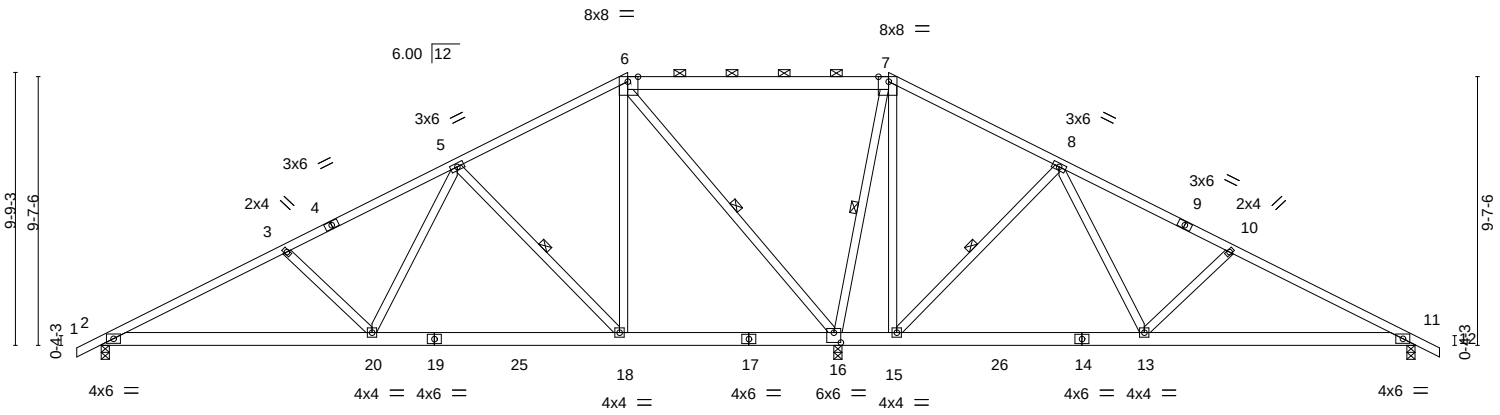
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	H8	Hip	1	1	I38918556
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:49:50 2019 Page 1
ID:lAPzHts0ReLOVUWCHSrvZPyHLgv-SMu8ZegzkUlS9eS5eS3rvpxaSAivDcKeHZJ8vqyT8yl

-0-10-8	6-7-11	12-8-13	18-10-0	23-6-0	28-2-0	34-3-3	40-4-5	47-0-0	47-10-8
0-10-8	6-7-11	6-1-3	6-1-3	4-8-0	4-8-0	6-1-3	6-1-3	6-7-11	0-10-8

Scale = 1:82.4



9-8-4	18-10-0	26-4-4	28-2-0	37-3-12	47-0-0
9-8-4	9-1-12	7-6-4	1-9-12	9-1-12	9-8-4

Plate Offsets (X,Y)-- [6:0-4-6,Edge], [7:0-4-6,Edge], [16:0-3-0,0-4-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	0.14	20-22	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.17	20-22	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.02	16	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 312 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except* 6-7: 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-7-3 oc purlins, except 2-0-0 oc purlins (10-0-0 max.): 6-7.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 5-18, 6-16, 7-16, 8-15

REACTIONS. (lb/size) 2=795/0-3-8, 16=2584/(0-3-8 + H10A Simpson Strong-Tie) (req. 0-4-1), 11=486/0-3-8
Max Horz 2=163(LC 16)
Max Uplift 2=-187(LC 9), 16=-580(LC 9), 11=-134(LC 13)
Max Grav 2=866(LC 23), 16=2584(LC 1), 11=584(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1321/716, 3-5=-1071/669, 5-6=-256/156, 6-7=-400/883, 7-8=-345/773, 8-10=-440/214, 10-11=-690/260
BOT CHORD 2-20=-534/1141, 18-20=-167/636, 16-18=-88/293, 15-16=-632/667, 13-15=-285/276, 11-13=-131/576
WEBS 3-20=-369/258, 5-20=-488/591, 5-18=-707/551, 6-18=-557/754, 6-16=-1416/915, 7-16=-1283/811, 7-15=-434/529, 8-15=-721/561, 8-13=-498/605, 10-13=-369/258

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=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas 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) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 16. This connection is for uplift only and does not consider lateral forces.
8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 11. This connection is for uplift only and does not consider lateral forces.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 16,2019

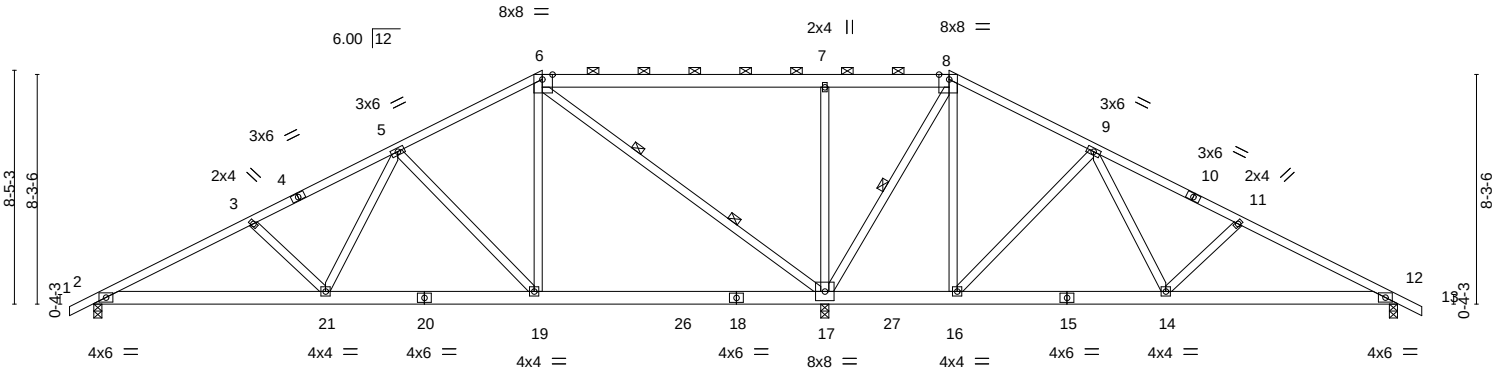
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	H9	Hip	1	1	I38918557
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:49:51 2019 Page 1
ID:lAPzHts0ReLOVUWCHSrvZPyHLgv-wYSWm_hbVotJmo1HBAa4R1Tlaa2_y6aoWD3hSGyT8yk

-0-10-8	5-9-0	10-11-8	16-2-0	23-6-0	26-4-4	30-10-0	36-0-8	41-3-0	47-0-0	47-10-8
0-10-8	5-9-0	5-2-8	5-2-8	7-4-0	2-10-4	4-5-12	5-2-8	5-2-8	5-9-0	0-10-8

Scale = 1:83.1



8-4-4	16-2-0	21-3-2	26-4-4	30-10-0	38-7-12	47-0-0
8-4-4	7-9-12	5-1-2	5-1-2	4-5-12	7-9-12	8-4-4

Plate Offsets (X,Y)-- [6:0-4-6,Edge], [8:0-4-6,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	0.72	Vert(LL)	0.10	21-23	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.15	17-19	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.81	Horz(CT)	0.02	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 315 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 *Except* 6-8: 2x6 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.3 *Except* 6-17: 2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-7-8 oc purlins, except 2-0-0 oc purlins (10-0-0 max.): 6-8.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 8-17 2 Rows at 1/3 pts 6-17

REACTIONS. (lb/size) 2=820/0-3-8, 17=2533/(0-3-8 + H10A Simpson Strong-Tie) (req. 0-4-0), 12=512/0-3-8
Max Horz 2=-141(LC 13)
Max Uplift 2=-200(LC 9), 17=-677(LC 9), 12=-131(LC 13)
Max Grav 2=879(LC 23), 17=2533(LC 1), 12=586(LC 24)

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

TOP CHORD	2-3=-1409/799, 3-5=-1196/759, 5-6=-523/341, 6-7=-425/875, 7-8=-424/872, 8-9=-159/466, 9-11=-544/317, 11-12=-754/355
BOT CHORD	2-21=-619/1227, 19-21=-292/802, 17-19=-101/448, 16-17=-376/458, 12-14=-227/640
WEBS	3-21=-318/223, 5-21=-401/476, 5-19=-586/455, 6-19=-526/665, 6-17=-1451/958, 7-17=-573/264, 8-17=-1010/678, 8-16=-433/522, 9-16=-633/487, 9-14=-424/520, 11-14=-310/218

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=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas 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) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 17. This connection is for uplift only and does not consider lateral forces.
8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 12. This connection is for uplift only and does not consider lateral forces.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 16,2019

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818 Soundside Road
Edenton, NC 27932

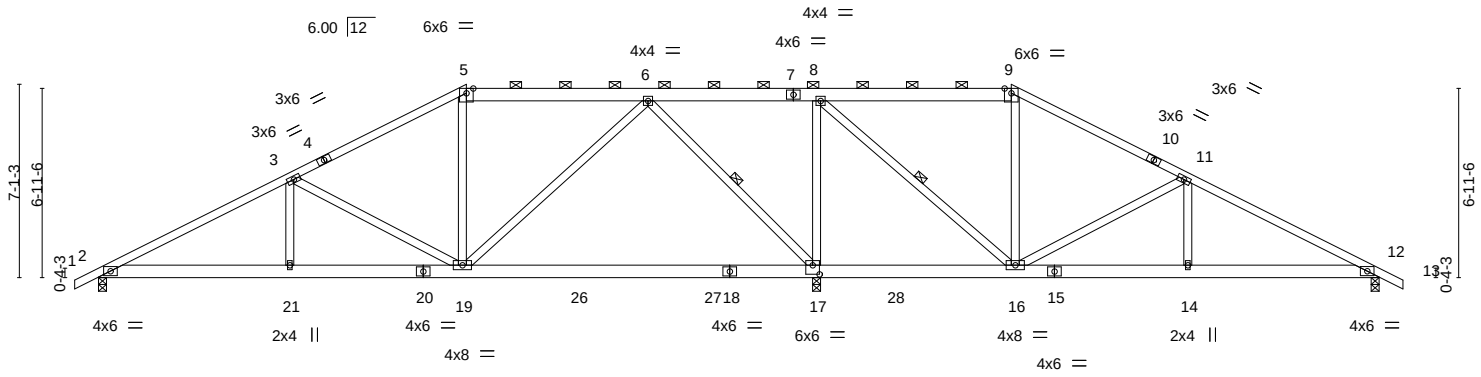
Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	H10	Hip	1	1	I38918558
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:49:38 2019 Page 1

ID:IAPzHts0ReLOVUWCHSrvZPyHLgv-o2Ac1YXRZoE9joXnxxr0QHRa0LbEPCKtXhPVUXyT8yx

-0-10-8	7-0-4	13-6-0	20-2-0	26-4-4	26-10-0	33-6-0	39-11-12	47-0-0	47-10-8
0-10-8	7-0-4	6-5-12	6-8-0	6-2-4	0-5-12	6-8-0	6-5-12	7-0-4	0-10-8

Scale = 1:84.6



7-0-4	13-6-0	20-2-0	26-4-4	33-6-0	39-11-12	47-0-0
7-0-4	6-5-12	6-8-0	6-2-4	7-1-12	6-5-12	7-0-4

Plate Offsets (X,Y)-- [17:0-3-0,0-4-0]

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	0.52	Vert(LL)	-0.20	17-19	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.36	17-19	>883	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.94	Horz(CT)	0.02	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 302 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 *Except* 5-7,7-9: 2x6 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-3-12 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-9.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 6-17, 8-16

REACTIONS. (lb/size) 17=2391/(0-3-8 + H10A Simpson Strong-Tie) (req. 0-3-12), 12=592/0-3-8, 2=882/0-3-8
Max Horz 2=119(LC 16)
Max Uplift 17=-735(LC 9), 12=-146(LC 13), 2=-227(LC 9)
Max Grav 17=2391(LC 1), 12=643(LC 24), 2=917(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1489/893, 3-5=-890/577, 5-6=-718/560, 6-8=-398/826, 11-12=-889/491
BOT CHORD 2-21=-683/1269, 19-21=-683/1269, 16-17=-826/702, 14-16=-330/733, 12-14=-330/733
WEBS 3-19=-636/489, 6-19=-559/785, 6-17=-1304/790, 8-17=-1198/687, 8-16=-729/1142, 9-16=-352/129, 11-16=-696/551, 11-14=-210/329

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=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas 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) H10A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 17. This connection is for uplift only and does not consider lateral forces.
8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 12 and 2. This connection is for uplift only and does not consider lateral forces.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 16,2019

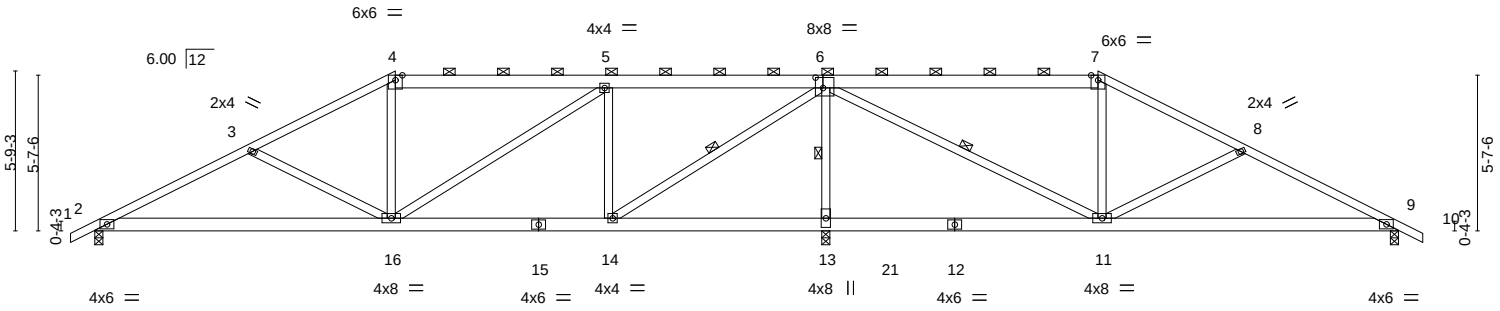
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	H11	Hip	1	1	I38918559
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:49:39 2019 Page 1
ID:lAPzHts0ReLOVUWCHSrvZPyHLgv-GEk_FuY3K6N0Ky6_UeMFyV_kmlxx8kd1lL920zyT8yw

-0-10-8	5-8-4	10-10-0	17-2-0	18-6-4	23-6-0	26-4-4	29-10-0	36-2-0	41-3-12	47-0-0	47-10-8
0-10-8	5-8-4	5-1-12	6-4-0	1-4-4	4-11-12	2-10-4	3-5-12	6-4-0	5-1-12	5-8-4	0-10-8

Scale = 1:83.1



5-8-4	10-10-0	18-6-4	26-4-4	36-2-0	41-3-12	47-0-0
5-8-4	5-1-12	7-8-4	7-10-0	9-9-12	5-1-12	5-8-4

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

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	0.58	Vert(LL)	0.18	16-18	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.24	16-18	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.02	9	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 296 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 *Except* 4-6,6-7: 2x6 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-3-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-7.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 6-14, 6-13, 6-11

REACTIONS. (lb/size) 2=962/0-3-8, 13=2210/0-3-8, 9=693/0-3-8
Max Horz 2=-96(LC 13)
Max Uplift 2=-266(LC 9), 13=-762(LC 9), 9=-180(LC 8)
Max Grav 2=978(LC 23), 13=2210(LC 1), 9=720(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1599/979, 3-4=-1264/845, 4-5=-1069/790, 5-6=-713/531, 6-7=-555/453, 7-8=-680/464, 8-9=-1015/598
BOT CHORD 2-16=-789/1404, 14-16=-285/713, 13-14=-578/497, 11-13=-619/521, 9-11=-453/882
WEBS 3-16=-379/275, 4-16=-209/294, 5-16=-307/450, 5-14=-711/383, 6-14=-933/1483, 6-13=-2013/1178, 6-11=-812/1252, 8-11=-381/278

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=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas 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) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 9. This connection is for uplift only and does not consider lateral forces.
8) Two H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 13. This connection is for uplift only and does not consider lateral forces.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 16,2019

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

Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	H12	Hip	1	1	I38918560
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:49:41 2019 Page 1

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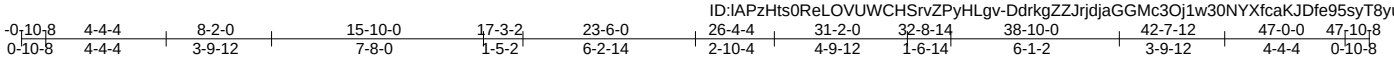

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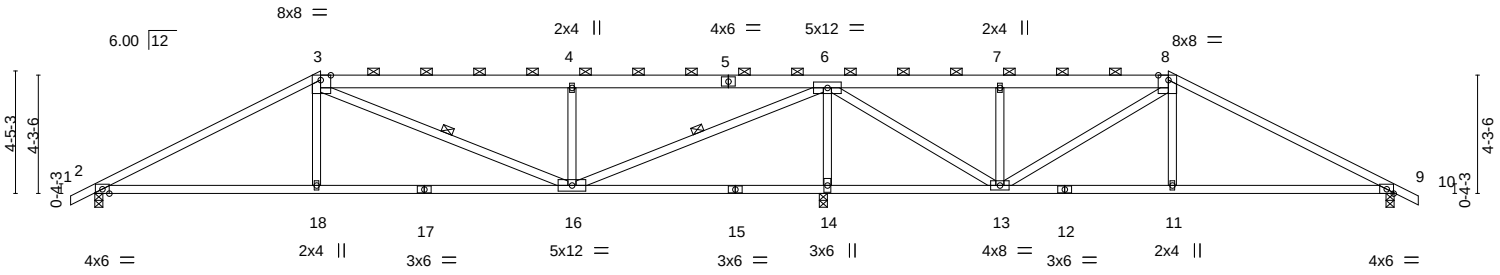


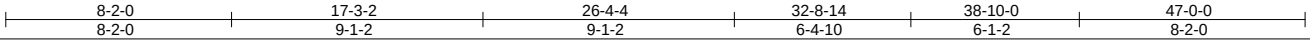


Plate Offsets (X,Y)-- [3:0-4-6,Edge], [8:0-4-6,Edge]

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	0.83	Vert(LL)	0.22	11-24	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.28	16-18	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.03	9	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 248 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1 *Except* 3-5,5-8: 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 8-13: 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (5-10-6 max.): 3-8.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 3-16, 6-16

REACTIONS. (lb/size) 2=994/0-3-8, 14=2152/0-3-8, 9=719/0-3-8
Max Horz 2=-74(LC 13)
Max Uplift 2=-294(LC 9), 14=-812(LC 9), 9=-194(LC 8)
Max Grav 2=999(LC 23), 14=2152(LC 1), 9=726(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1595/1005, 3-4=-1270/892, 4-6=-1265/888, 6-7=-401/351, 7-8=-405/354, 8-9=-974/614
BOT CHORD 2-18=-776/1348, 16-18=-768/1340, 14-16=-665/476, 13-14=-665/476, 11-13=-423/783, 9-11=-431/791
WEBS 3-18=-227/371, 4-16=-611/276, 6-16=-1272/2072, 6-14=-1972/1141, 8-13=-473/312, 8-11=-209/329, 7-13=-342/159, 6-13=-750/1229

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=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas 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) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 9. This connection is for uplift only and does not consider lateral forces.
8) Two H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14. This connection is for uplift only and does not consider lateral forces.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 16,2019

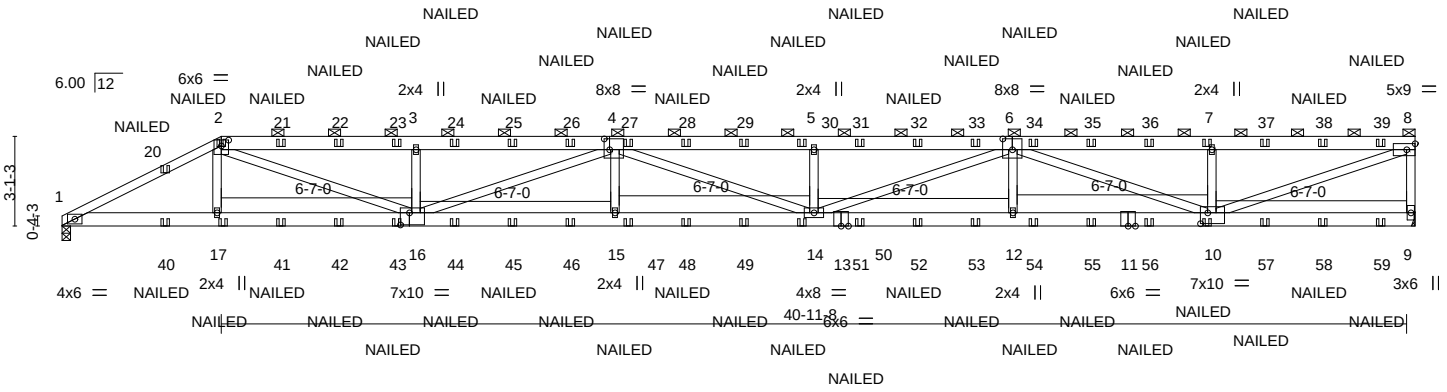
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	HG1	HALF HIP GIRDER	1	2	I38918561
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:50:00 2019 Page 1
ID:lAPzHts0ReLOVUWCHSrvZPyHLgv-9HVwf3oENZ01MBD0DZEBJwLL4C_qZB66a6kgGFyT8yb

5-6-0	12-2-12	19-1-4	25-11-12	32-10-4	39-8-12	46-9-0
5-6-0	6-8-12	6-10-8	6-10-8	6-10-8	6-10-8	7-0-4

Scale = 1:79.6



5-6-0	12-2-12	19-1-4	25-11-12	32-10-4	39-8-12	46-9-0
5-6-0	6-8-12	6-10-8	6-10-8	6-10-8	6-10-8	7-0-4

Plate Offsets (X,Y)-- [2:0-3-0,0-2-7], [4:0-2-4,0-4-8], [6:0-4-0,0-4-8], [10:0-3-0,0-4-8], [16:0-3-12,0-5-0]

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	0.48	Vert(LL)	0.74	14-15	>759	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-1.13	14-15	>494	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.79	Horz(CT)	0.16	9	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 599 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2 *Except*
1-2: 2x4 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
13-16: 2x6 SP DSS
WEBS 2x4 SP No.3 *Except*
2-16,4-16,4-14,6-14,6-10,8-10: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-1-12 oc purlins, except end verticals, and 2-0-0 oc purlins (4-3-7 max.): 2-8.
BOT CHORD Rigid ceiling directly applied or 8-9-6 oc bracing.

REACTIONS. (lb/size) 1=2489/0-3-8, 9=2540/Mechanical
Max Horz 1=105(LC 35)
Max Uplift 1=-738(LC 9), 9=-892(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-5277/1780, 2-3=-8712/3109, 3-4=-8709/3106, 4-5=-11073/3954, 5-6=-11073/3954, 6-7=-5734/2050, 7-8=-5734/2050, 8-9=-2425/943
BOT CHORD 1-17=-1633/4665, 16-17=-1636/4648, 15-16=-3898/10913, 14-15=-3898/10913, 12-14=-3360/9394, 10-12=-3359/9395
WEBS 2-17=0/442, 2-16=-1611/4420, 3-16=-642/429, 4-16=-2375/854, 4-15=0/397, 5-14=-537/380, 6-14=-636/1800, 6-12=0/388, 6-10=-3920/1402, 7-10=-583/417, 8-10=-2158/6036

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, 2x6 - 2 rows staggered 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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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
5) Provide adequate drainage to prevent water ponding.
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.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=892.
11) Two H2.5A Simpson Strong-Tie 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.

October 16,2019

Continued on page 2

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NOTES-

12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) "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: 1-2=-60, 2-8=-60, 1-9=-20
   Concentrated Loads (lb)
   Vert: 2=-41(B) 17=-17(B) 7=-41(B) 10=-17(B) 20=-38(B) 21=-41(B) 22=-41(B) 23=-41(B) 24=-41(B) 25=-41(B) 26=-41(B) 27=-41(B) 28=-41(B) 29=-41(B) 30=-41(B) 31=-41(B) 32=-41(B) 33=-41(B) 34=-41(B) 35=-41(B) 36=-41(B) 37=-41(B) 38=-41(B) 39=-41(B) 40=-42(B) 41=-17(B) 42=-17(B) 43=-17(B) 44=-17(B) 45=-17(B) 46=-17(B) 47=-17(B) 48=-17(B) 49=-17(B) 50=-17(B) 51=-17(B) 52=-17(B) 53=-17(B) 54=-17(B) 55=-17(B) 56=-17(B) 57=-17(B) 58=-17(B) 59=-17(B)

Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	HG2	Hip Girder	1	1	I38918562
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:50:05 2019 Page 1

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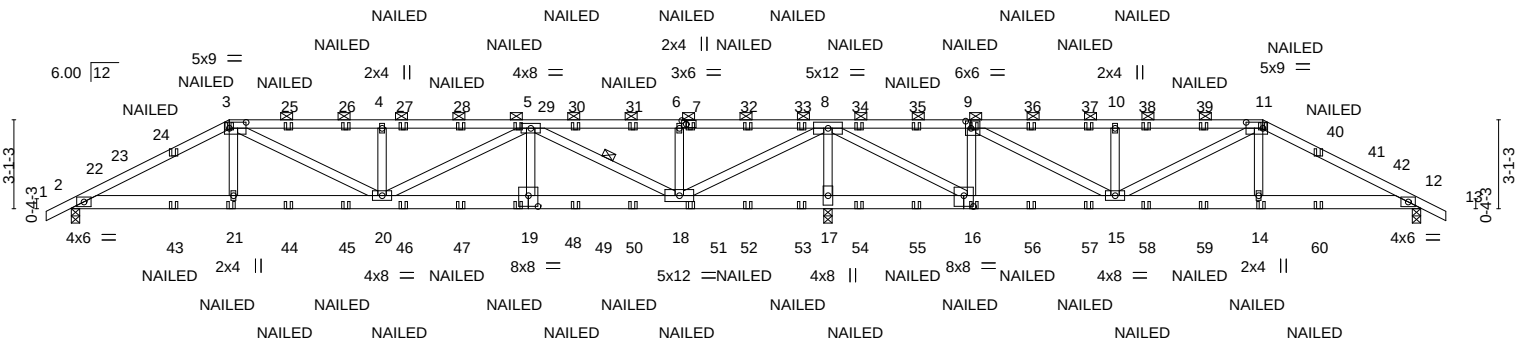
-0-10-8	5-6-0	10-8-2	15-10-4	21-3-14	26-0-14	26-4-4	31-2-8	36-3-4	41-6-0	47-0-0	47-10-8
0-10-8	5-6-0	5-2-2	5-2-2	5-5-10	4-9-0	0-3-6	4-10-4	5-0-12	5-2-12	5-6-0	0-10-8

Scale = 1:80.3



5-6-0	10-8-2	15-10-4	21-3-14	26-4-4	31-2-8	36-3-4	41-6-0	47-0-0
5-6-0	5-2-2	5-2-2	5-5-10	5-0-6	4-10-4	5-0-12	5-2-12	5-6-0

Plate Offsets (X,Y)-- [3:0-7-0,0-2-8], [7:0-1-14,0-1-8], [9:0-2-4,0-3-0], [11:0-7-0,0-2-8], [16:0-4-0,0-4-8], [19:0-4-0,0-4-8]

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	0.66	Vert(LL)	0.15	19-20	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.24	19-20	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.96	Horz(CT)	0.03	17	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 *Except* 3-20,5-20,5-18,8-18: 2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-5-2 oc purlins, except 2-0-0 oc purlins (3-2-12 max.): 3-11.
BOT CHORD	Rigid ceiling directly applied or 4-6-3 oc bracing.
WEBS	1 Row at midpt 5-18

REACTIONS. (lb/size) 2=1180/0-3-8, 17=3150/0-3-8 (req. 0-3-11), 12=795/0-3-8
Max Horz 2=53(LC 35)
Max Uplift 2=-291(LC 12), 17=-1067(LC 9), 12=-189(LC 13)
Max Grav 2=1182(LC 23), 17=3150(LC 1), 12=798(LC 24)

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

TOP CHORD	2-3=-2078/618, 3-4=-2344/810, 4-5=-2344/810, 8-9=-91/335, 9-10=-879/327, 10-11=-879/327, 11-12=-1228/341
BOT CHORD	2-21=-513/1780, 20-21=-508/1792, 19-20=-616/1842, 18-19=-618/1837, 17-18=-2361/821, 16-17=-2361/821, 15-16=-342/180, 14-15=-224/1033, 12-14=-228/1022
WEBS	3-21=0/349, 3-20=-315/664, 4-20=-444/311, 5-20=-172/571, 5-19=0/313, 5-18=-1844/618, 6-18=-408/287, 8-18=-982/2884, 8-17=-2890/1113, 8-16=-766/2321, 9-16=-1029/472, 9-15=-433/1359, 10-15=-438/304, 11-14=0/338

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=30ft; 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 5-6-0, Exterior(2) 5-6-0 to 9-8-15, Interior(1) 9-8-15 to 41-6-0, Exterior(2) 41-6-0 to 45-8-15, Interior(1) 45-8-15 to 47-10-8 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) WARNING: Required bearing size at joint(s) 17 greater than input bearing size.
7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 12. This connection is for uplift only and does not consider lateral forces.
8) Two H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 17. This connection is for uplift only and does not consider lateral forces.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

NORTH CAROLINA PROFESSIONAL SEAL 044925 ENGINEER SCOTT M. SEVIER

October 16,2019

Continued on page 2

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LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
      Vert: 1-3=-60, 3-11=-60, 11-13=-60, 2-12=-20
   Concentrated Loads (lb)
      Vert: 3=-41(F) 7=-41(F) 11=-41(F) 21=-17(F) 16=-17(F) 9=-41(F) 14=-17(F) 24=-38(F) 25=-41(F) 26=-41(F) 27=-41(F) 28=-41(F) 29=-41(F) 30=-41(F) 31=-41(F) 32=-41(F) 33=-41(F) 34=-41(F) 35=-41(F) 36=-41(F) 37=-41(F) 38=-41(F) 39=-41(F) 40=-38(F) 43=-42(F) 44=-17(F) 45=-17(F) 46=-17(F) 47=-17(F) 48=-17(F) 49=-17(F) 50=-17(F) 51=-17(F) 52=-17(F) 53=-17(F) 54=-17(F) 55=-17(F) 56=-17(F) 57=-17(F) 58=-17(F) 59=-17(F) 60=-42(F)

Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	J1	Jack-Open	40	1	I38918563
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:50:10 2019 Page 1
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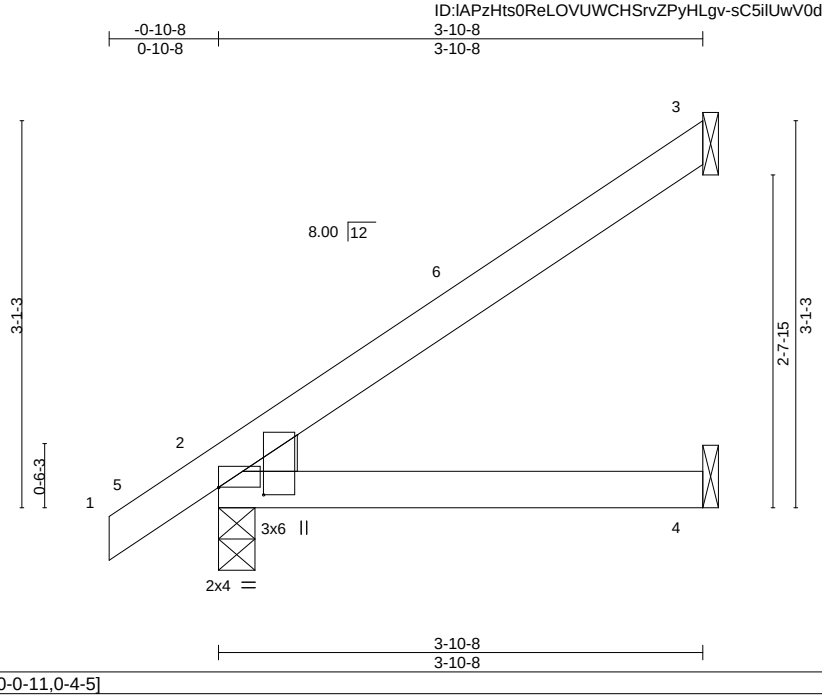

Plate Offsets (X,Y)-- [2:0-0-0,0-0-0], [2:0-0-11,0-4-5]

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	0.24	Vert(LL)	-0.01	2-4	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.02	2-4	>999	180		
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: 15 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-10-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 3=101/Mechanical, 2=216/0-3-8, 4=37/Mechanical
Max Horz 2=119(LC 12)
Max Uplift 3=-85(LC 12), 2=-13(LC 12)
Max Grav 3=113(LC 19), 2=216(LC 1), 4=73(LC 3)

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

NOTES-
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-9-12 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) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
6) One H2.5A Simpson Strong-Tie 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.

October 16,2019

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Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	J2	Jack-Open Girder	3	1	I38918564
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:50:14 2019 Page 1
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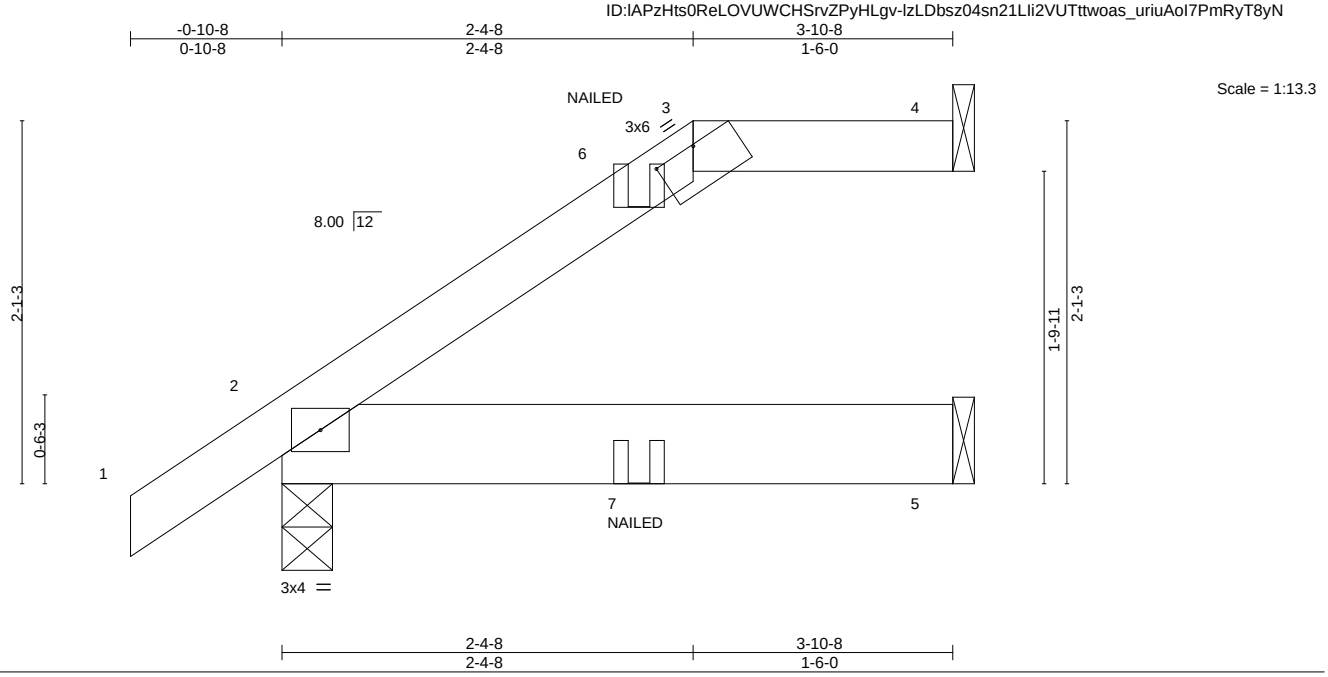

Plate Offsets (X,Y)-- [3:0-3-0,0-0-2]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	-0.00	2-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	-0.01	2-5	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.02	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 17 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-10-8 oc purlins, except
2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 4=98/Mechanical, 2=237/0-3-8, 5=62/Mechanical
Max Horz 2=82(LC 12)
Max Uplift 4=-45(LC 9), 2=-37(LC 12)
Max Grav 4=98(LC 1), 2=237(LC 1), 5=88(LC 3)

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=30ft; 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
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) 4.
8) One MTS12 Simpson Strong-Tie 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.
9) One H2.5A Simpson Strong-Tie 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.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-4=-60, 2-5=-20
Concentrated Loads (lb)
Vert: 6=-25(F) 7=-17(F)

October 16,2019

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Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	J3	Jack-Open	2	1	I38918565
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:50:15 2019 Page 1
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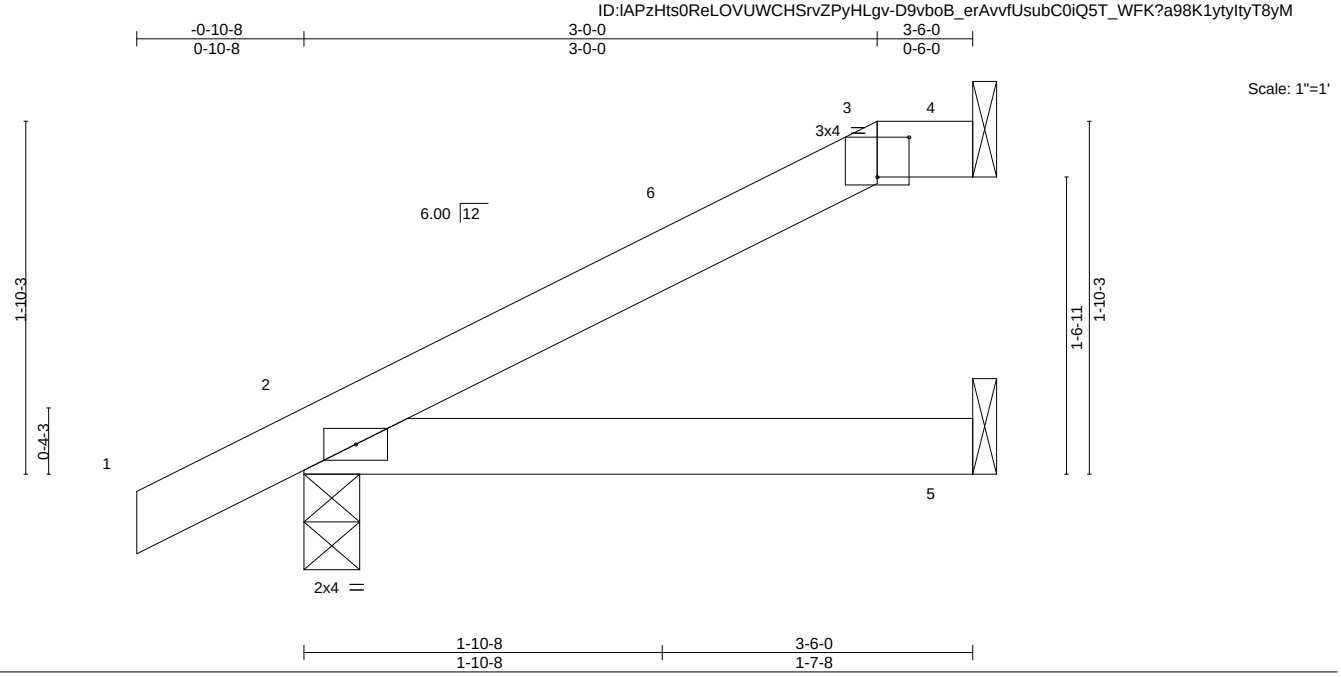

Plate Offsets (X,Y)-- [3:0-2-0,0-2-8]

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	0.15	Vert(LL)	-0.01	2-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.01	2-5	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 13 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 3-6-0 oc purlins, except 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 4=85/Mechanical, 2=202/0-3-8, 5=37/Mechanical
Max Horz 2=73(LC 12)
Max Uplift 4=-39(LC 12), 2=-35(LC 12)
Max Grav 4=85(LC 1), 2=202(LC 1), 5=61(LC 3)

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=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-0-0, Exterior(2) 3-0-0 to 3-5-4 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
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) 4.
8) One MTS12 Simpson Strong-Tie 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.
9) One H2.5A Simpson Strong-Tie 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.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 16,2019

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

Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	J3A	Jack-Open	1	1	I38918566
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:50:18 2019 Page 1
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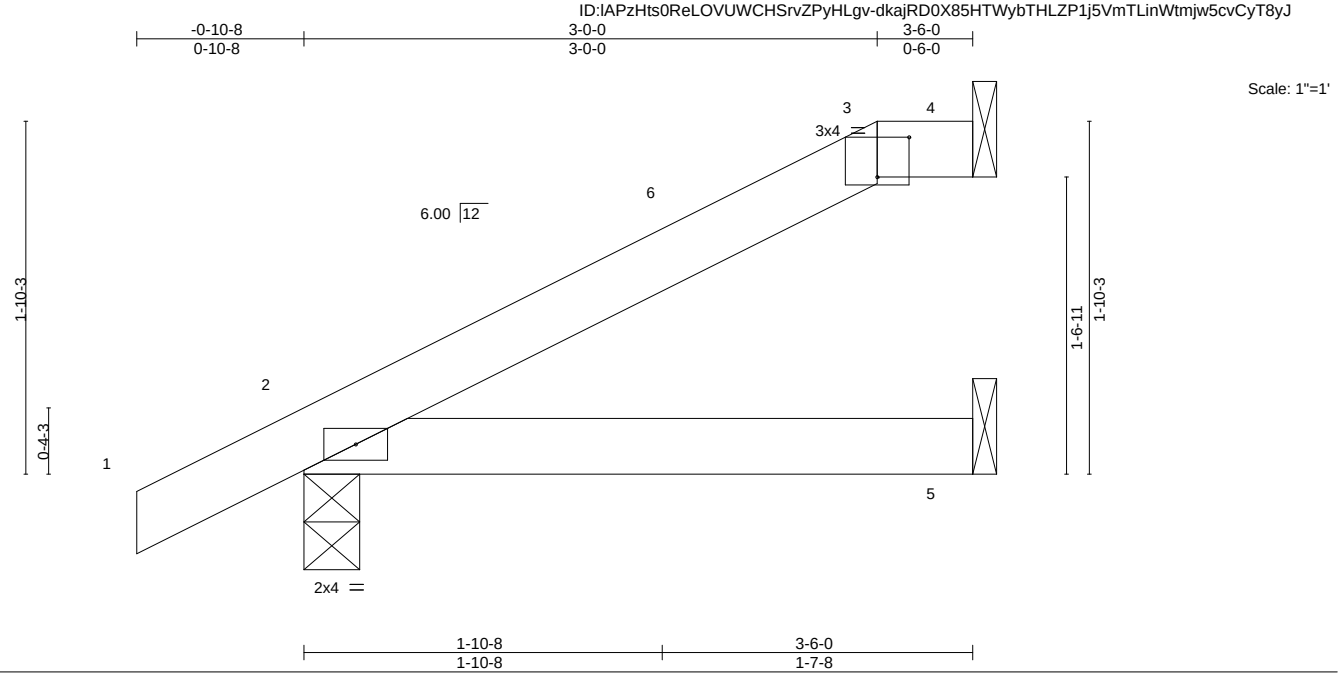

Plate Offsets (X,Y)-- [3:0-2-0,0-2-8]

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	0.15	Vert(LL)	-0.01	2-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.01	2-5	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 13 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 3-6-0 oc purlins, except 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 4=85/Mechanical, 2=202/0-3-8, 5=37/Mechanical
Max Horz 2=73(LC 12)
Max Uplift 4=-39(LC 12), 2=-35(LC 12)
Max Grav 4=85(LC 1), 2=202(LC 1), 5=61(LC 3)

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=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-0-0, Exterior(2) 3-0-0 to 3-5-4 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
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) 4.
8) One MTS12 Simpson Strong-Tie 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.
9) One H2.5A Simpson Strong-Tie 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.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 16,2019

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Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	P	Hip	1	1	I38918567
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:50:20 2019 Page 1
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0-10-8 5-9-0 10-6-0 15-3-0 21-0-0 21-10-8
0-10-8 5-9-0 4-9-0 4-9-0 5-9-0 0-10-8

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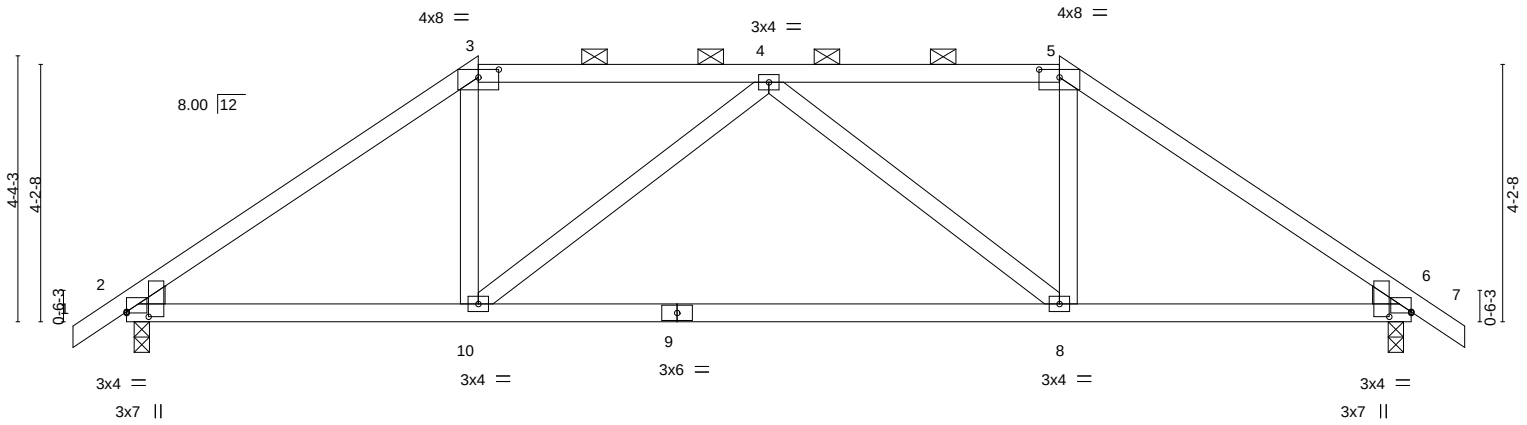

0-1-8 5-9-0 15-3-0 20-10-8 21-0-0
0-1-8 5-7-8 9-6-0 5-7-8 0-1-8

Plate Offsets (X,Y)-- [2:0-0-15,0-4-5], [2:0-0-0,0-0-4], [3:0-4-0,0-1-9], [5:0-4-0,0-1-9], [6:Edge,0-0-4], [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	0.30	Vert(LL)	-0.21	8-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.42	8-10	>595	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 100 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 4-11-1 oc purlins, except
2-0-0 oc purlins (5-10-7 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=893/0-3-0, 6=892/0-3-0
Max Horz 2=108(LC 11)
Max Uplift 2=-74(LC 12), 6=-74(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1207/209, 3-4=-924/223, 4-5=-924/223, 5-6=-1207/209
BOT CHORD 2-10=-87/935, 8-10=-152/1126, 6-8=-67/935
WEBS 3-10=0/406, 4-10=-327/176, 4-8=-327/176, 5-8=0/406

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=30ft; 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas 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) 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.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 16,2019

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Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	P1	HIP	1	1	I38918568
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:50:21 2019 Page 1
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0-10-8 4-3-0 10-6-0 16-9-0 21-0-0 21-10-8
0-10-8 4-3-0 6-3-0 6-3-0 4-3-0 0-10-8

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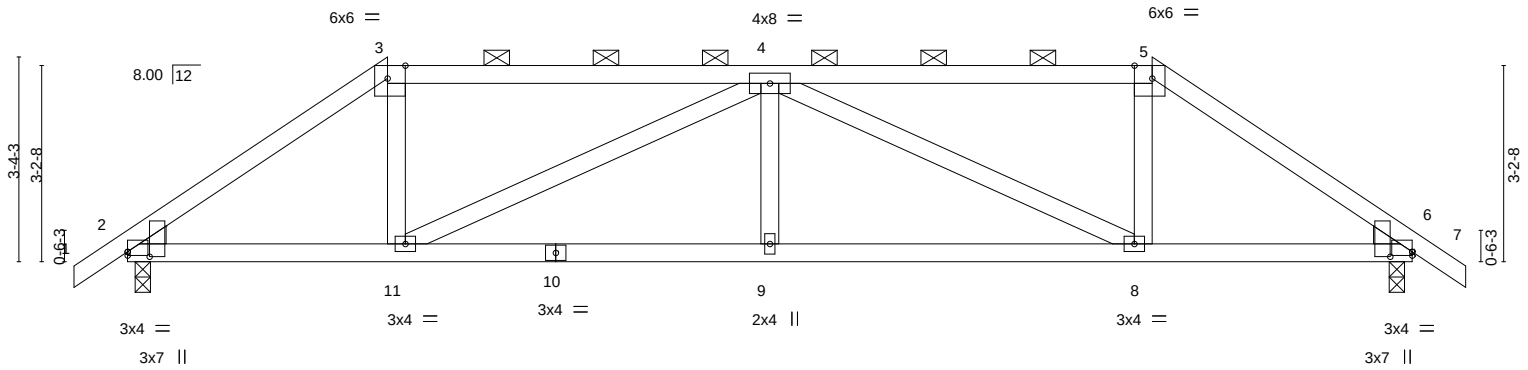

0-1-8 4-3-0 10-6-0 16-9-0 20-10-8 21-0-0
0-1-8 4-1-8 6-3-0 6-3-0 4-1-8 0-1-8

Plate Offsets (X,Y)-- [2:0-0-15,0-4-5], [2:0-0-0,0-0-12], [3:0-3-8,Edge], [5:0-3-8,Edge], [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	0.54	Vert(LL)	0.11	9-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.13	9-11	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.04	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 101 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 5-2-7 oc purlins, except 2-0-0 oc purlins (5-2-3 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 5-4-9 oc bracing.

REACTIONS. (lb/size) 2=893/0-3-0, 6=893/0-3-0
Max Horz 2=-83(LC 10)
Max Uplift 2=-264(LC 9), 6=-264(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1239/931, 3-4=-1009/832, 4-5=-1009/832, 5-6=-1239/931
BOT CHORD 2-11=-692/989, 9-11=-1153/1607, 8-9=-1153/1607, 6-8=-695/989
WEBS 3-11=-387/406, 4-11=-711/490, 4-9=-216/259, 4-8=-711/490, 5-8=-387/406

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=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas 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) 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.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 16,2019

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	P2	Hip Girder	1	1	I38918569
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:50:24 2019 Page 1
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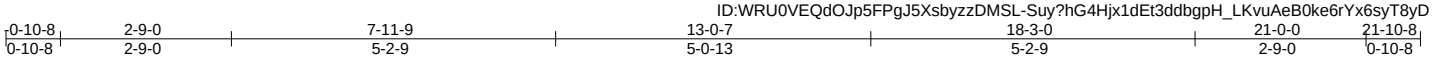

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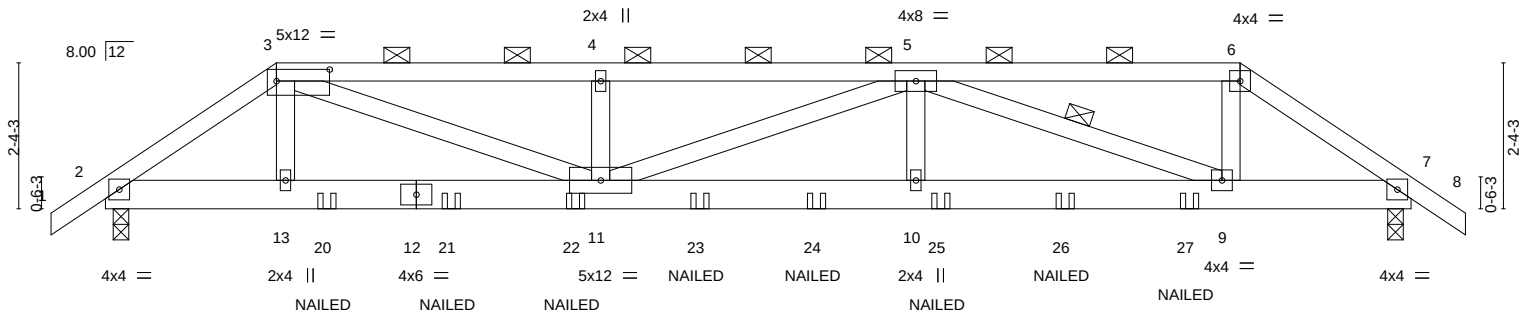

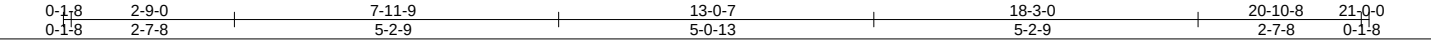

Plate Offsets (X,Y)-- [3:0-10-4,0-2-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	1.00	Vert(LL)	0.23	10-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.35	10-11	>713	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.87	Horz(CT)	0.06	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 118 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 3-9-10 oc purlins, except
2-0-0 oc purlins (2-0-13 max.): 3-6.
BOT CHORD Rigid ceiling directly applied or 5-5-8 oc bracing.
WEBS 1 Row at midpt 5-9

REACTIONS. (lb/size) 2=1429/0-3-0, 7=1429/0-3-0
Max Horz 2=-60(LC 33)
Max Uplift 2=-465(LC 9), 7=-465(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2279/1101, 3-4=-3828/1839, 4-5=-3828/1839, 5-6=-1904/957, 6-7=-2246/1083
BOT CHORD 2-13=-843/1855, 11-13=-856/1877, 10-11=-1781/3882, 9-10=-1781/3882, 7-9=-834/1828
WEBS 3-13=-179/310, 3-11=-958/2108, 4-11=-313/147, 5-10=-217/465, 5-9=-2143/981, 6-9=-509/1027

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=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas 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) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 7. This connection is for uplift only and does not consider lateral forces.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-6=-60, 6-8=-60, 14-17=-20
Concentrated Loads (lb)
Vert: 20=-134(B) 21=-134(B) 22=-134(B) 23=-134(B) 24=-134(B) 25=-134(B) 26=-134(B) 27=-134(B)

October 16,2019

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818 Soundside Road
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Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	PJ1	Monopitch	8	1	I38918570
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:50:26 2019 Page 1
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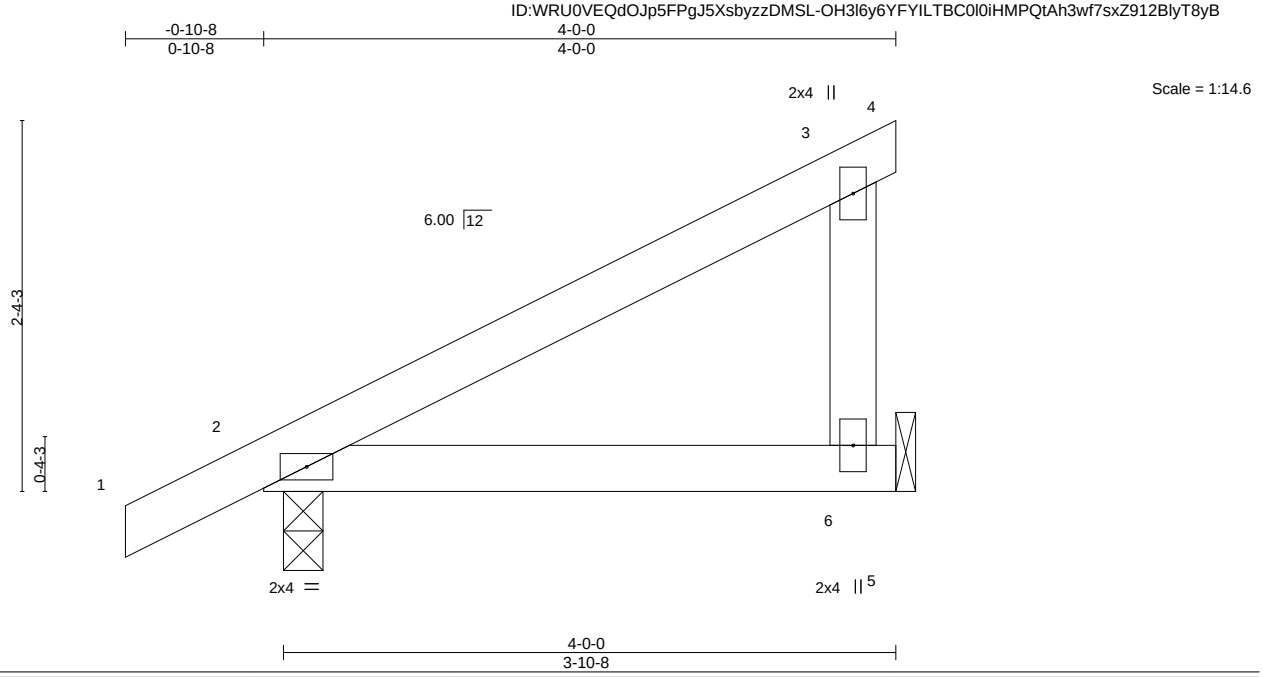

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	0.02	6-9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.02	6-9	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MP							Weight: 17 lb	FT = 20%

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

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

REACTIONS. (lb/size) 6=154/Mechanical, 2=207/0-3-0
Max Horz 2=91(LC 12)
Max Uplift 6=-48(LC 12), 2=-27(LC 12)

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

NOTES-
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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
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) All bearings are assumed to be User Defined crushing capacity of 425 psi.
5) Refer to girder(s) for truss to truss connections.
6) One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6. This connection is for uplift only and does not consider lateral forces.
7) One H2.5A Simpson Strong-Tie 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.

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Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	PJ2	Jack-Open Girder	2	1	I38918571
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:50:28 2019 Page 1
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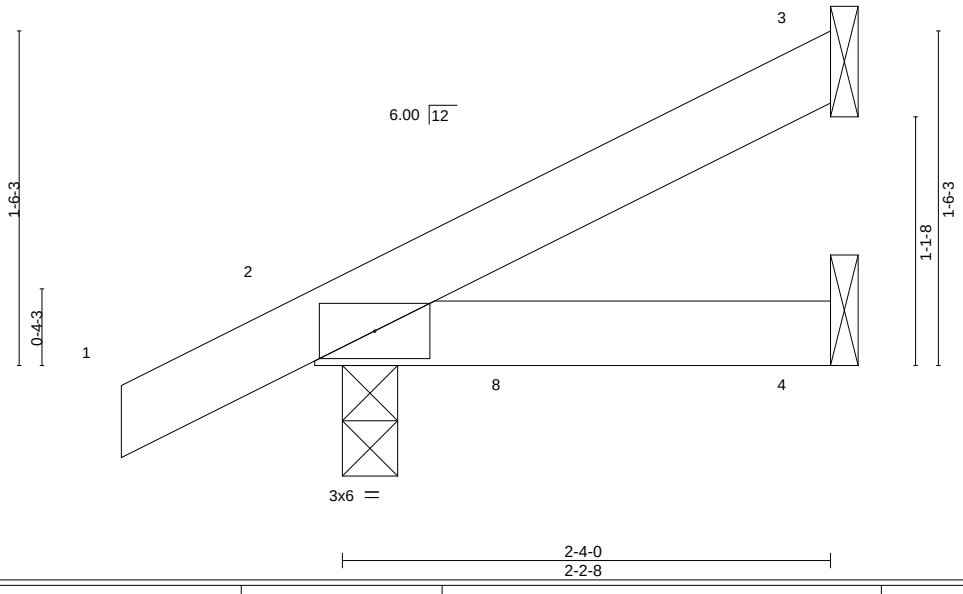
-0-10-8 2-4-0
0-10-8 2-4-0

Scale = 1:10.4



2-4-0
2-2-8

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	0.07	Vert(LL)	-0.00	7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.00	4-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MP							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 2-4-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 3=59/Mechanical, 4=45/Mechanical, 2=172/0-3-0
Max Horz 2=58(LC 12)
Max Uplift 3=-37(LC 12), 4=-19(LC 12), 2=-65(LC 12)
Max Grav 3=60(LC 33), 4=52(LC 3), 2=172(LC 1)

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

NOTES-
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) 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
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) All bearings are assumed to be User Defined crushing capacity of 425 psi.
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) 3, 4.
7) One H2.5A Simpson Strong-Tie 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.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 39 lb down and 35 lb up at 2-3-4 on top chord, and 33 lb down and 48 lb up at 0-11-12, and 11 lb down and 18 lb up at 2-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
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) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 4-5=-20
Concentrated Loads (lb)
Vert: 3=-1(B) 4=-8(B) 8=-33(B)

NORTH CAROLINA PROFESSIONAL SEAL 044925 ENGINEER SCOTT M. SEVIER

October 16,2019

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	PJ3	Jack-Open	2	1	I38918572
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:50:29 2019 Page 1
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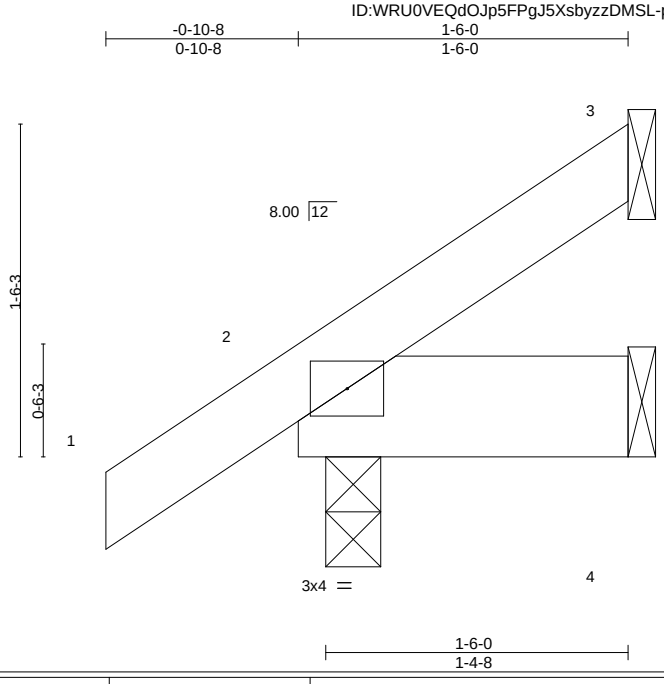

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	-0.00	7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MP							Weight: 8 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-6-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 3=27/Mechanical, 4=17/Mechanical, 2=127/0-3-0
Max Horz 2=58(LC 12)
Max Uplift 3=-20(LC 12), 4=-9(LC 9), 2=-22(LC 12)
Max Grav 3=29(LC 19), 4=28(LC 3), 2=127(LC 1)

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

NOTES-
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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
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) All bearings are assumed to be User Defined crushing capacity of 425 psi.
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) 3, 4.
7) One H2.5A Simpson Strong-Tie 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.

October 16,2019

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Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	PJ4	Half Hip	2	1	I38918573
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:50:30 2019 Page 1
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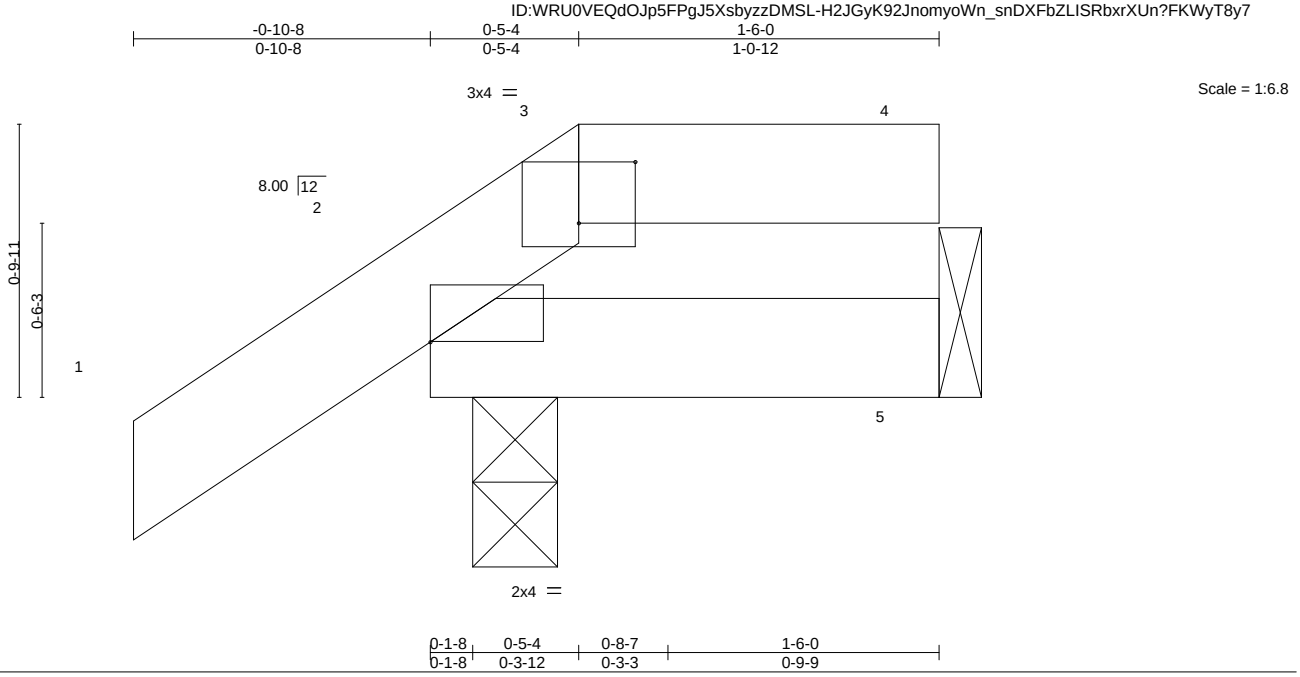

Plate Offsets (X,Y)-- [2:0-0-0,0-0-0], [3:0-2-0,0-2-3]

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	0.11	Vert(LL)	-0.00	8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.00	5-8	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MP							Weight: 6 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 1-6-0 oc purlins, except 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=127/0-3-0, 5=45/Mechanical
Max Horz 2=32(LC 12)
Max Uplift 2=-27(LC 9), 5=-33(LC 9)
Max Grav 2=127(LC 1), 5=53(LC 24)

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=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas 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) Refer to girder(s) for truss to truss connections.
8) One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 5. This connection is for uplift only and does not consider lateral forces.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 16,2019

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Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP	
22357A	T5	PIGGYBACK BASE	1	1	Job Reference (optional)	I38918574

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:50:31 2019 Page 1
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6-10-5	13-2-3	19-6-0	27-6-0	34-6-0	38-10-4	41-6-0	42-6-0	48-0-0	48-10-8
6-10-5	6-3-13	6-3-13	8-0-0	7-0-0	4-4-4	2-7-12	1-0-0	5-6-0	0-10-8

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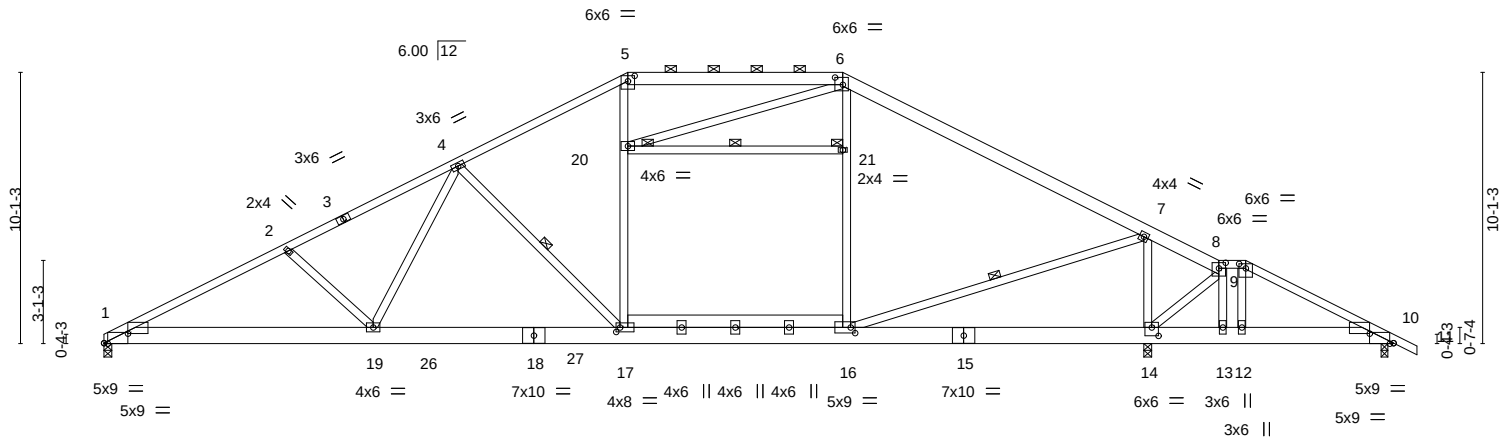

10-0-4	19-6-0	27-6-0	34-6-0	38-10-4	41-6-0	42-6-0	47-9-8	48-0-0
10-0-4	9-5-12	8-0-0	7-0-0	4-4-4	2-7-12	1-0-0	5-3-8	0-2-8

Plate Offsets (X,Y)-- [1:0-10-11,0-4-4], [1:0-1-11,Edge], [5:0-3-0,0-2-7], [6:0-3-8,0-3-4], [8:0-3-0,0-2-8], [9:0-3-0,0-2-0], [10:0-10-11,0-4-4], [10:0-1-11,Edge], [14:0-3-0,0-3-12], [16:0-2-0,0-2-8], [17:0-1-12,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	0.34	17-19	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.56	17-19	>836	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.06	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 381 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 *Except* 5-6,6-8: 2x6 SP No.2
BOT CHORD	2x8 SP No.2 *Except* 16-17: 2x6 SP No.2
WEBS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-11-4 oc purlins, except 2-0-0 oc purlins (5-0-6 max.): 5-6, 8-9.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-2-8 oc bracing: 1-19 6-11-15 oc bracing: 17-19.
WEBS	1 Row at midpt 4-17, 7-16, 20-21
JOINTS	1 Brace at Jt(s): 20, 21

REACTIONS. (lb/size) 1=1613/0-3-8, 14=1576/0-3-8, 10=692/0-3-0
Max Horz 1=-178(LC 13)
Max Uplift 1=-392(LC 9), 14=-461(LC 8), 10=-173(LC 9)
Max Grav 1=1613(LC 1), 14=1661(LC 24), 10=692(LC 1)

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

TOP CHORD	1-2=-3141/1998, 2-4=-2881/1956, 4-5=-1926/1356, 5-6=-1649/1255, 6-7=-1961/1286, 7-8=-1019/529, 8-9=-1027/595, 9-10=-1144/619
BOT CHORD	1-19=-1673/2748, 17-19=-1255/2205, 16-17=-811/1622, 14-16=-377/944, 13-14=-454/1040, 12-13=-456/1027, 10-12=-450/1006
WEBS	2-19=-345/240, 4-19=-565/724, 4-17=-844/631, 17-20=-463/539, 5-20=-444/516, 16-21=-238/364, 6-21=-240/366, 7-16=-449/903, 7-14=-1451/876, 9-12=-130/386

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=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas 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) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1, 14, and 10. This connection is for uplift only and does not consider lateral forces.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 16,2019

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Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP	
22357A	T6	ROOF TRUSS	1	1	Job Reference (optional)	I38918575

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:50:33 2019 Page 1
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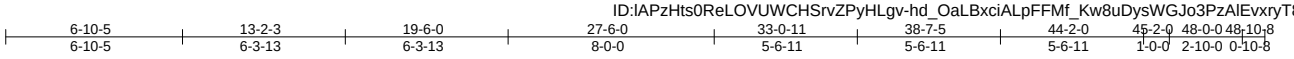

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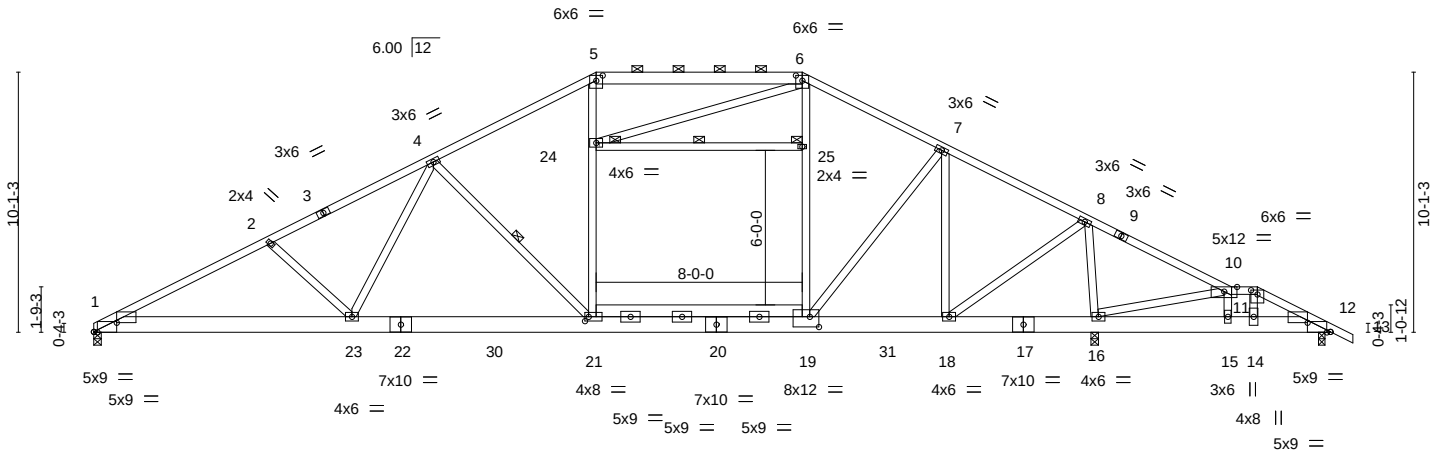

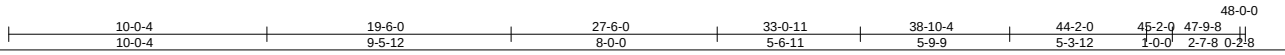

Plate Offsets (X,Y)-- [1:0-10-11,0-4-4], [1:0-1-11,Edge], [5:0-3-0,0-2-7], [6:0-3-0,0-2-7], [11:0-3-0,0-2-0], [12:0-10-11,0-4-4], [12:0-1-11,Edge], [19:0-4-4,0-4-12], [21:0-1-12,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	0.35	21-23	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.63	21-23	>733	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.97	Horz(CT)	0.06	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS		Attic	-0.15	19-21	658	360	Weight: 381 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except* 5-6: 2x6 SP No.2
BOT CHORD 2x8 SP DSS *Except* 20-22: 2x8 SP No.2, 19-21: 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-9-2 oc purlins, except 2-0-0 oc purlins (4-3-14 max.): 5-6, 10-11.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 4-21, 24-25
JOINTS 1 Brace at Jt(s): 24, 25
This truss requires both edges of the bottom chord be sheathed in the room area.

REACTIONS. (lb/size) 1=1703/0-3-8, 16=1915/0-3-8, 12=567/0-3-0
Max Horz 1=-179(LC 13)
Max Uplift 1=-221(LC 9), 16=-262(LC 8), 12=-116(LC 9)
Max Grav 1=1796(LC 2), 16=2038(LC 27), 12=567(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-3627/1736, 2-4=-3414/1694, 4-5=-2464/1092, 5-6=-2133/1027, 6-7=-2401/1071, 7-8=-1866/835, 8-10=-785/264, 10-11=-890/499, 11-12=-954/515
BOT CHORD 1-23=-1438/3191, 21-23=-1020/2676, 19-21=-576/2114, 18-19=-471/1609, 16-18=-128/759, 15-16=-400/850, 14-15=-418/890, 12-14=-392/845
WEBS 2-23=-339/238, 4-23=-568/739, 4-21=-852/631, 21-24=-401/744, 5-24=-294/746, 19-25=-336/634, 6-25=-250/679, 7-19=-154/815, 7-18=-1116/392, 8-18=-426/1280, 8-16=-1635/698, 10-16=-405/325, 10-15=-370/162, 11-14=-234/404

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=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas 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) Ceiling dead load (5.0 psf) on member(s). 24-25; Wall dead load (5.0psf) on member(s).21-24, 19-25
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 19-21
8) All bearings are assumed to be User Defined crushing capacity of 425 psi.
9) Two H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 16. This connection is for uplift only and does not consider lateral forces.
10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 12. This connection is for uplift only and does not consider lateral forces.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

October 16,2019

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	T7	ROOF TRUSS	2	1	I38918576
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:50:34 2019 Page 1
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-0-10-8 6-10-5 13-2-3 19-6-0 27-6-0 33-9-13 40-1-11 47-0-0 47-10-8
0-10-8 6-10-5 6-3-13 6-3-13 8-0-0 6-3-13 6-3-13 6-10-5 0-10-8

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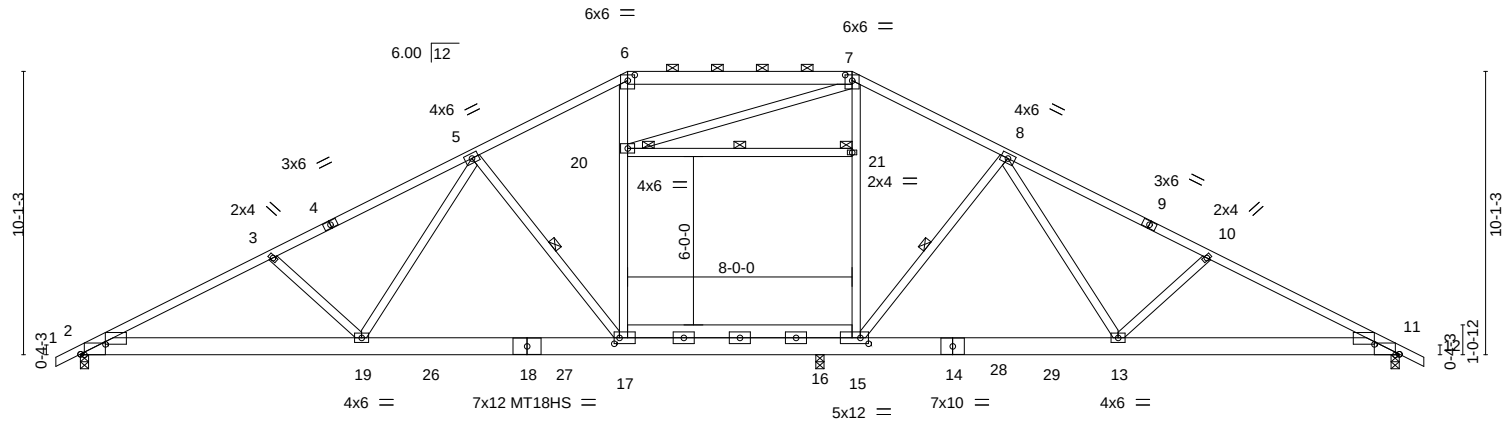

10-0-4 19-6-0 26-4-4 27-6-0 36-11-12 47-0-0
10-0-4 9-5-12 6-10-4 1-1-12 9-5-12 10-0-4

Plate Offsets (X,Y)-- [2:0-10-11,0-4-4], [2:0-1-11,Edge], [6:0-3-0,0-2-7], [7:0-3-0,0-2-7], [11:0-10-11,0-4-4], [11:0-1-11,Edge], [15:0-3-8,0-2-8], [17:0-2-4,0-2-8]

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	0.67	Vert(LL)	-0.37	17-19	>853	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.71	17-19	>440	180	MT18HS	244/190
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-MS		Attic	-0.31	16-17	538	360	Weight: 362 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
6-7: 2x6 SP No.2
BOT CHORD 2x8 SP No.2 *Except*
14-18: 2x8 SP DSS, 15-17: 2x6 SP No.2
WEBS 2x4 SP No.3 *Except*
6-17,7-15,20-21: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-8-6 oc purlins, except 2-0-0 oc purlins (4-11-11 max.): 6-7.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 5-17, 8-15, 20-21
JOINTS 1 Brace at Jt(s): 20, 21
This truss requires both edges of the bottom chord be sheathed in the room area.

REACTIONS. (lb/size) 2=1496/0-3-8, 11=1337/0-3-8, 16=1330/0-3-8
Max Horz 2=-170(LC 13)
Max Uplift 2=-169(LC 12), 11=-39(LC 13), 16=-99(LC 13)
Max Grav 2=1583(LC 26), 11=1352(LC 2), 16=1557(LC 27)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3062/463, 3-5=-2837/418, 5-6=-1794/275, 6-7=-1573/293, 7-8=-1671/266, 8-10=-2181/354, 10-11=-2402/400
BOT CHORD 2-19=-338/2689, 17-19=-133/2038, 16-17=0/1542, 15-16=0/1570, 13-15=-26/1688, 11-13=-251/2117
WEBS 3-19=-380/262, 5-19=-127/866, 5-17=-863/333, 17-20=-64/508, 6-20=0/489, 15-21=-187/340, 7-21=-81/385, 8-15=-638/297, 8-13=-106/505, 10-13=-404/265

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=30ft; 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) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) All plates are 5x9 MT20 unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Ceiling dead load (5.0 psf) on member(s). 20-21; Wall dead load (5.0psf) on member(s).17-20, 15-21
9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 16-17, 15-16
10) All bearings are assumed to be User Defined crushing capacity of 425 psi.
11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 11, and 16. This connection is for uplift only and does not consider lateral forces.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

October 16,2019

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

Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	T7A	ROOF TRUSS	1	1	I38918577
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:50:36 2019 Page 1

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-0-10-8	6-10-5	13-2-3	19-6-0	27-6-0	33-9-13	40-1-11	47-0-0
0-10-8	6-10-5	6-3-13	6-3-13	8-0-0	6-3-13	6-3-13	6-10-5

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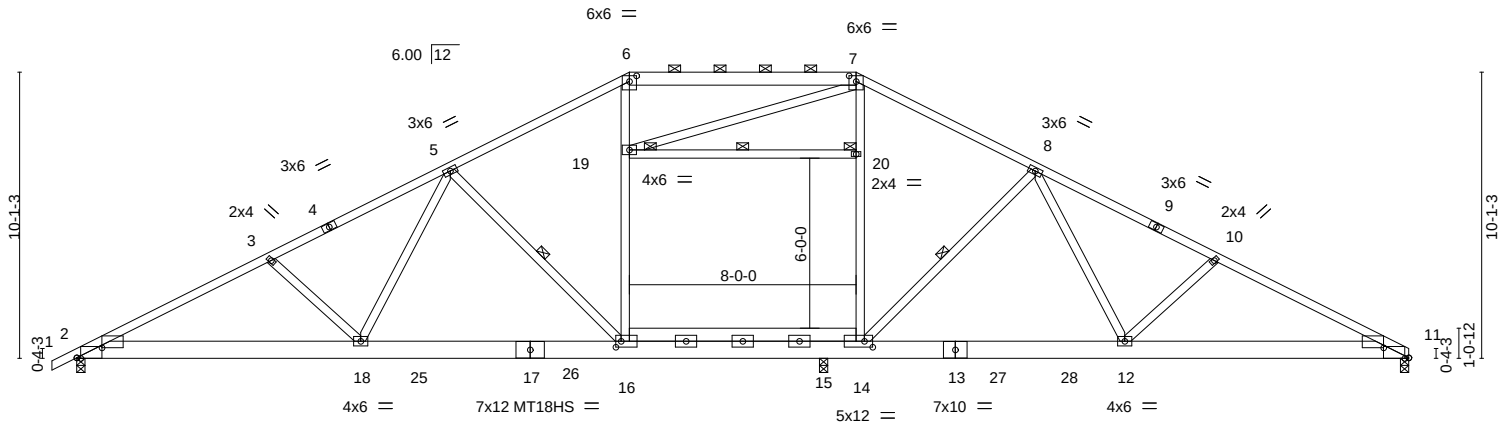

10-0-4	19-6-0	26-4-4	27-6-0	36-11-12	47-0-0
10-0-4	9-5-12	6-10-4	1-1-12	9-5-12	10-0-4

Plate Offsets (X,Y)-- [2:0-10-11,0-4-4], [2:0-1-11,Edge], [6:0-3-0,0-2-7], [7:0-3-0,0-2-7], [11:0-10-11,0-4-4], [11:0-1-11,Edge], [14:0-3-8,0-2-8], [16:0-2-4,0-2-8]

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	0.56	Vert(LL)	-0.36	16-18	>866	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.71	16-18	>444	180	MT18HS	244/190
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.67	Horz(CT)	0.06	11	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS		Attic	-0.31	15-16	538	360	Weight: 359 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2 *Except*
6-7: 2x6 SP No.2

BOT CHORD 2x8 SP No.2 *Except*
14-16: 2x6 SP No.2, 13-17: 2x8 SP DSS

WEBS 2x4 SP No.3 *Except*
6-16,7-14: 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-1-1 oc purlins, except 2-0-0 oc purlins (5-0-7 max.): 6-7.

BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

WEBS 1 Row at midpt 5-16, 8-14, 19-20

JOINTS 1 Brace at Jt(s): 19, 20

This truss requires both edges of the bottom chord be sheathed in the room area.

REACTIONS. (lb/size) 2=1500/0-3-8, 11=1279/0-3-8, 15=1323/0-3-8
Max Horz 2=178(LC 12)
Max Uplift 2=-170(LC 12), 11=-15(LC 13), 15=-103(LC 13)
Max Grav 2=1580(LC 26), 11=1299(LC 2), 15=1546(LC 27)

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

TOP CHORD 2-3=-3047/453, 3-5=-2833/412, 5-6=-1793/264, 6-7=-1570/294, 7-8=-1671/256, 8-10=-2184/354, 10-11=-2407/396

BOT CHORD 2-18=-338/2671, 16-18=-164/2118, 15-16=0/1536, 14-15=0/1551, 12-14=-68/1733, 11-12=-263/2107

WEBS 3-18=-340/235, 5-18=-106/816, 5-16=-894/333, 16-19=-44/471, 6-19=0/466, 14-20=-215/337, 7-20=-110/382, 8-14=-661/296, 8-12=-90/470, 10-12=-367/239

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=30ft; 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) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) All plates are 5x9 MT20 unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Ceiling dead load (5.0 psf) on member(s). 19-20; Wall dead load (5.0psf) on member(s).16-19, 14-20
9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 15-16, 14-15
10) All bearings are assumed to be User Defined crushing capacity of 425 psi.
11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 11, and 15. This connection is for uplift only and does not consider lateral forces.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

October 16,2019

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

Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	V1	Valley	1	1	I38918578
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:50:37 2019 Page 1
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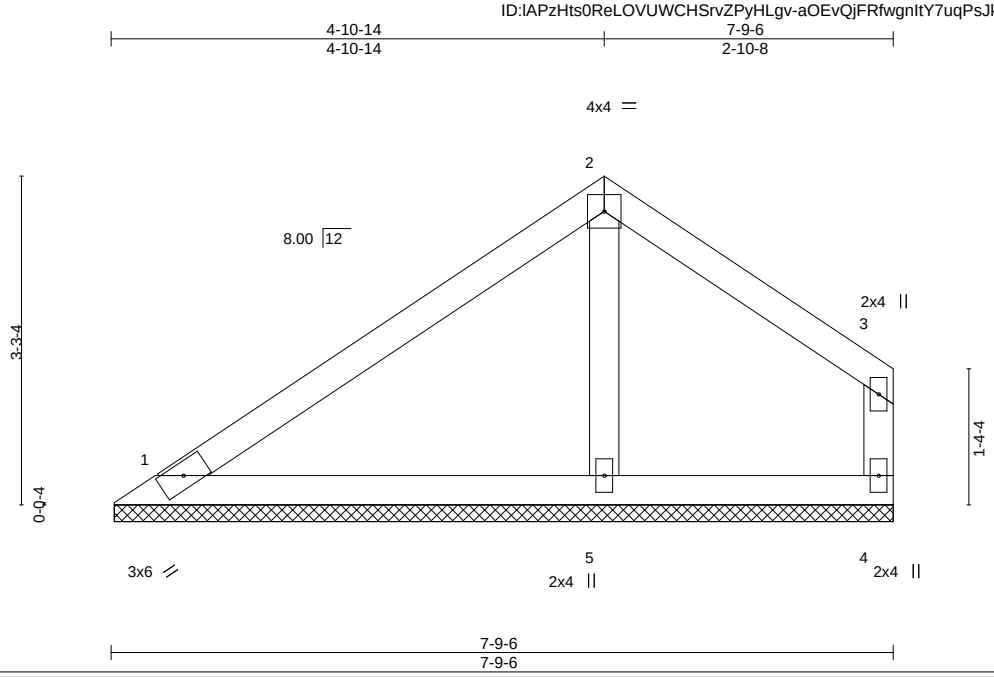

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 30 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 7-9-6 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=169/7-9-0, 4=95/7-9-0, 5=308/7-9-0
Max Horz 1=74(LC 12)
Max Uplift 1=-26(LC 12), 4=-52(LC 13), 5=-14(LC 12)
Max Grav 1=169(LC 1), 4=102(LC 20), 5=310(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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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.

October 16,2019

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

Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	V2	Valley	1	1	I38918579
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:50:38 2019 Page 1
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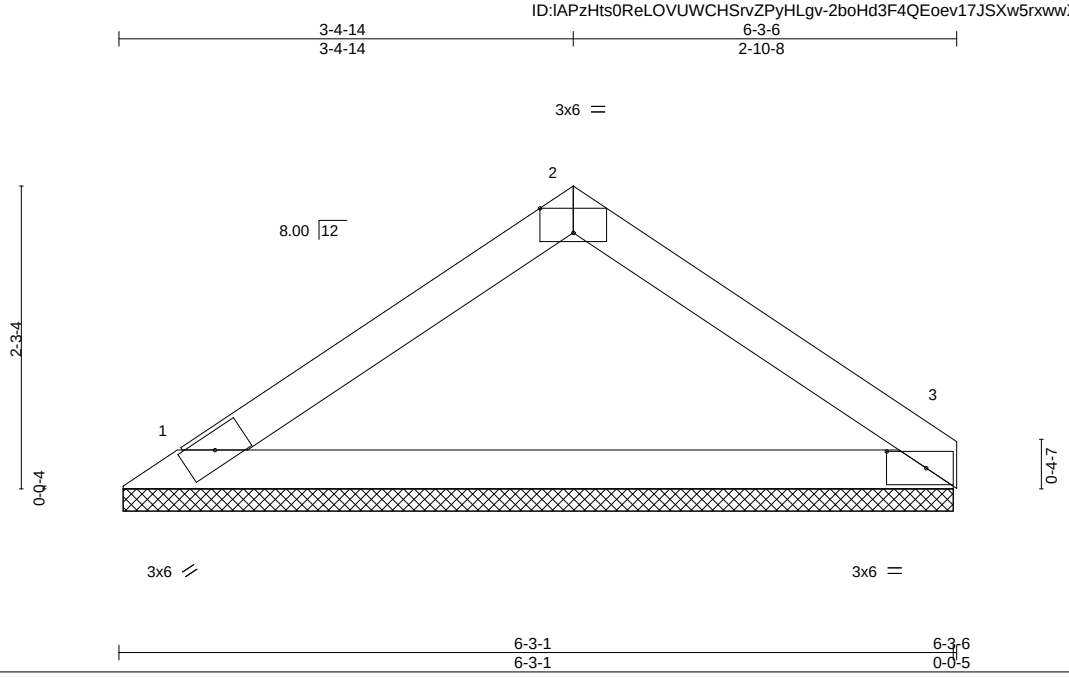

Plate Offsets (X,Y)-- [2:0-3-0,Edge], [3:0-3-9,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.43	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: 20 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 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=231/6-2-11, 3=231/6-2-11
Max Horz 1=48(LC 9)
Max Uplift 1=-25(LC 12), 3=-24(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=30ft; 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.

October 16,2019

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	V3	Valley	1	1	I38918580
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:50:40 2019 Page 1
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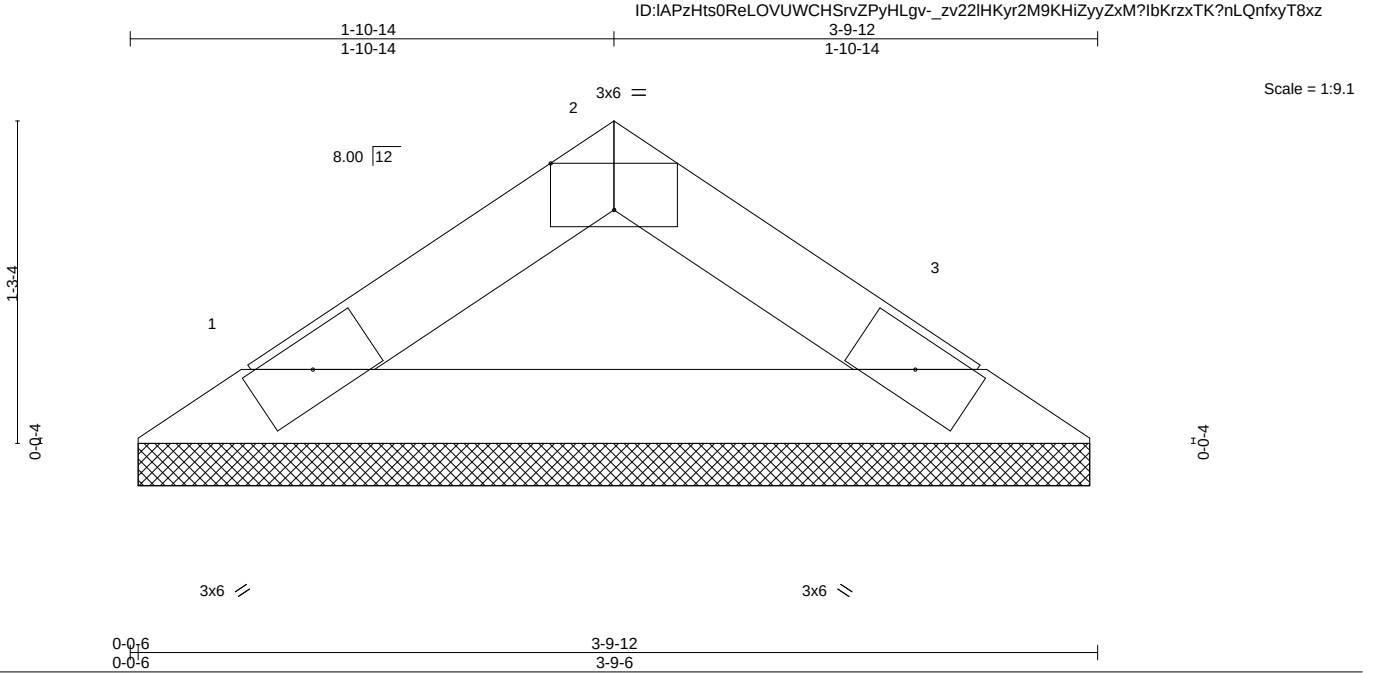

Plate Offsets (X,Y)-- [2:0-3-0,Edge]

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	0.06	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	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 11 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 3-9-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=114/3-9-0, 3=114/3-9-0
Max Horz 1=-23(LC 8)
Max Uplift 1=-12(LC 12), 3=-12(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=30ft; 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.

October 16,2019

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

Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	VP1	GABLE	1	1	I38918581
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:50:41 2019 Page 1
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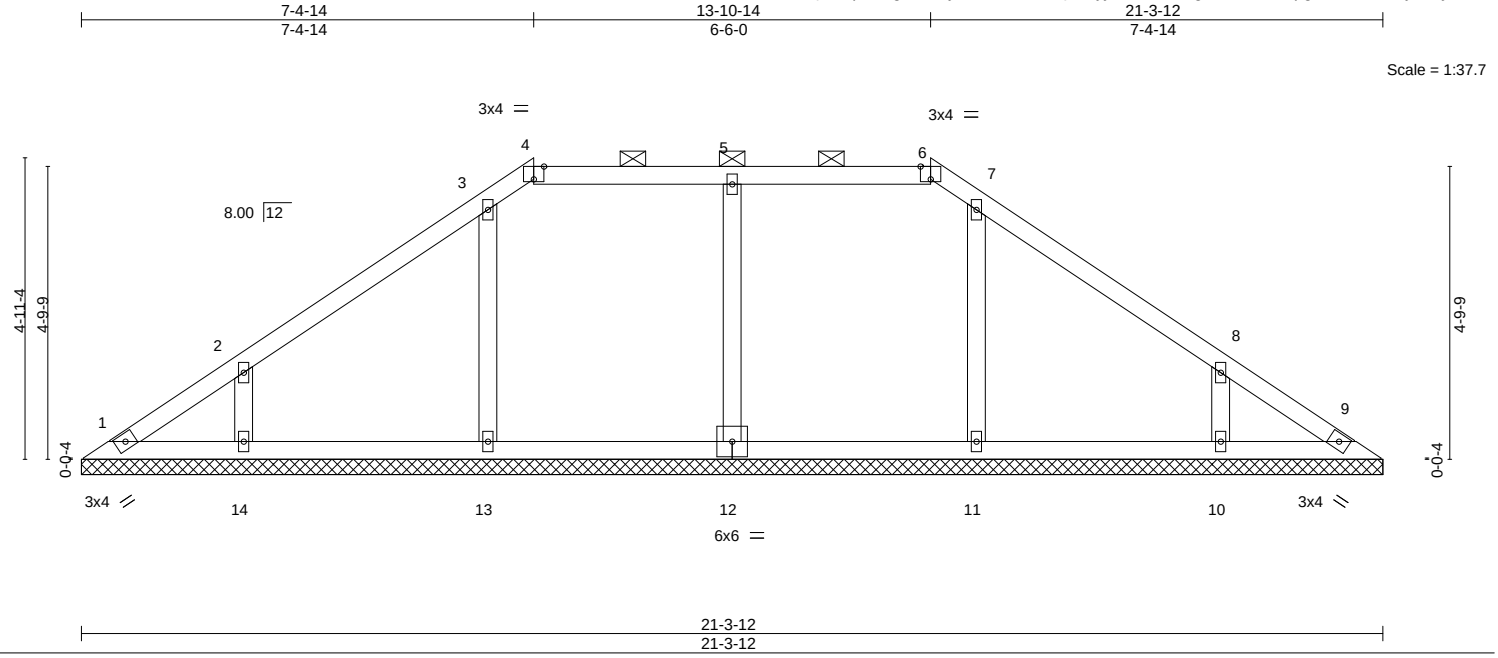

Plate Offsets (X,Y)-- [4:0-2-0,Edge], [6:0-2-0,Edge]

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	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	9	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 88 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 21-3-12.
(lb) - Max Horz 1=112(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 12, 13, 11 except 14=-124(LC 12), 10=-126(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 9 except 12=412(LC 25), 13=364(LC 19), 14=298(LC 19), 11=352(LC 20), 10=300(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=30ft; 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) Provide adequate drainage to prevent water ponding.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) All bearings are assumed to be User Defined crushing capacity of 425 psi.
9) n/a

10) n/a

11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 16,2019

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	VP2	GABLE	1	1	I38918582
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:50:43 2019 Page 1
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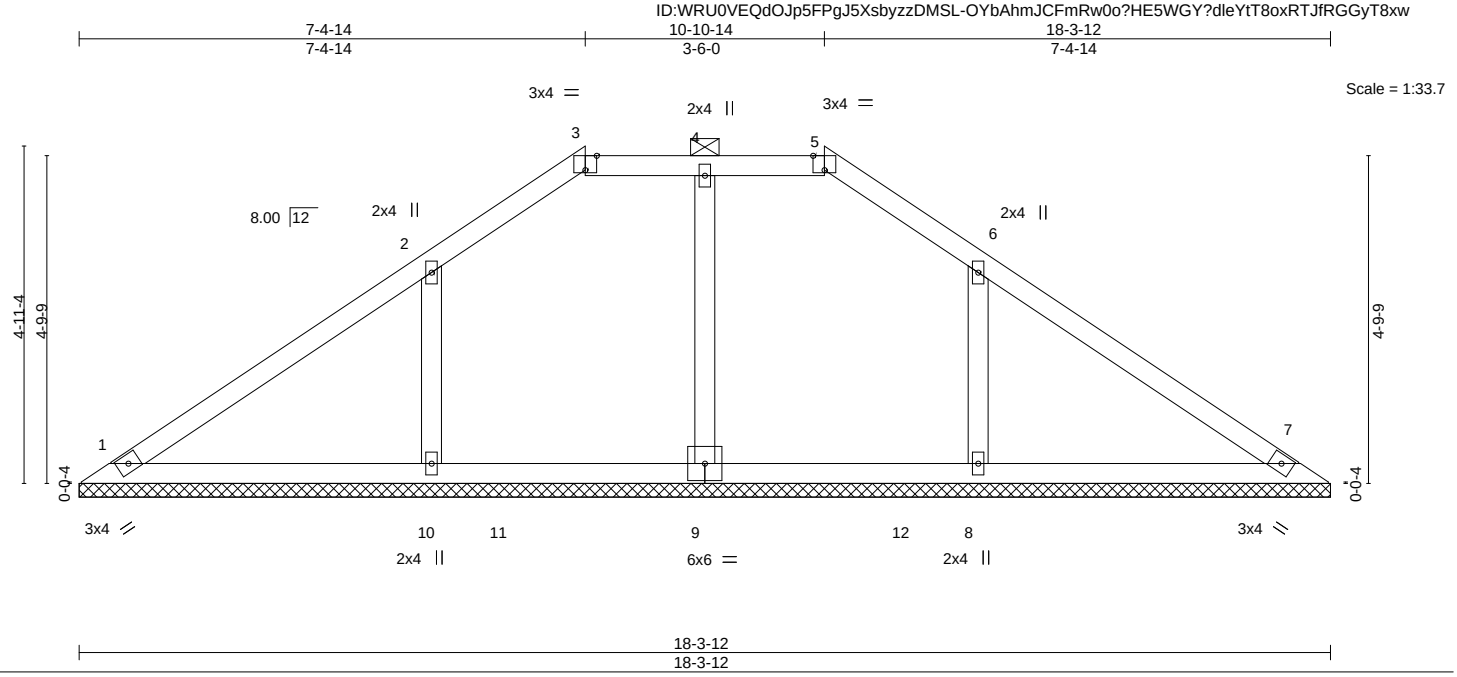

Plate Offsets (X,Y)-- [3:0-2-0,Edge], [5:0-2-0,Edge]

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	0.26	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	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: 72 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, except 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 18-3-12.
(lb) - Max Horz 1=112(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 9 except 10=-145(LC 12), 8=-143(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 9=324(LC 2), 10=446(LC 19), 8=443(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-10=-306/194, 6-8=-303/192

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=30ft; 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) Provide adequate drainage to prevent water ponding.
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, with BCDL = 10.0psf.
7) All bearings are assumed to be User Defined crushing capacity of 425 psi.
8) n/a

9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 16,2019

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	VP3	GABLE	1	1	I38918583
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:50:45 2019 Page 1
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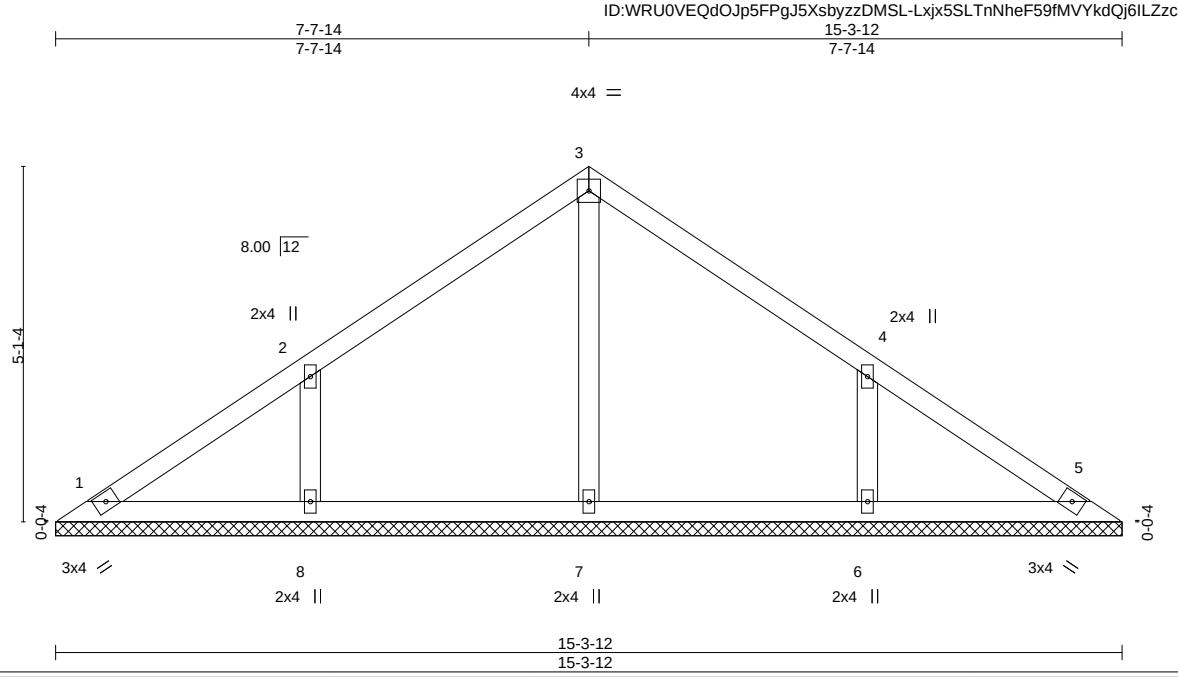

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 61 lb	FT = 20%

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

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

REACTIONS. All bearings 15-3-12.
(lb) - Max Horz 1=-118(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-141(LC 12), 6=-141(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=255(LC 1), 8=359(LC 19), 6=359(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-276/184, 4-6=-276/184

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=30ft; 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.
7) n/a
8) n/a

October 16,2019

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TRENCO
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Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	VP4	GABLE	1	1	I38918584
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:50:47 2019 Page 1
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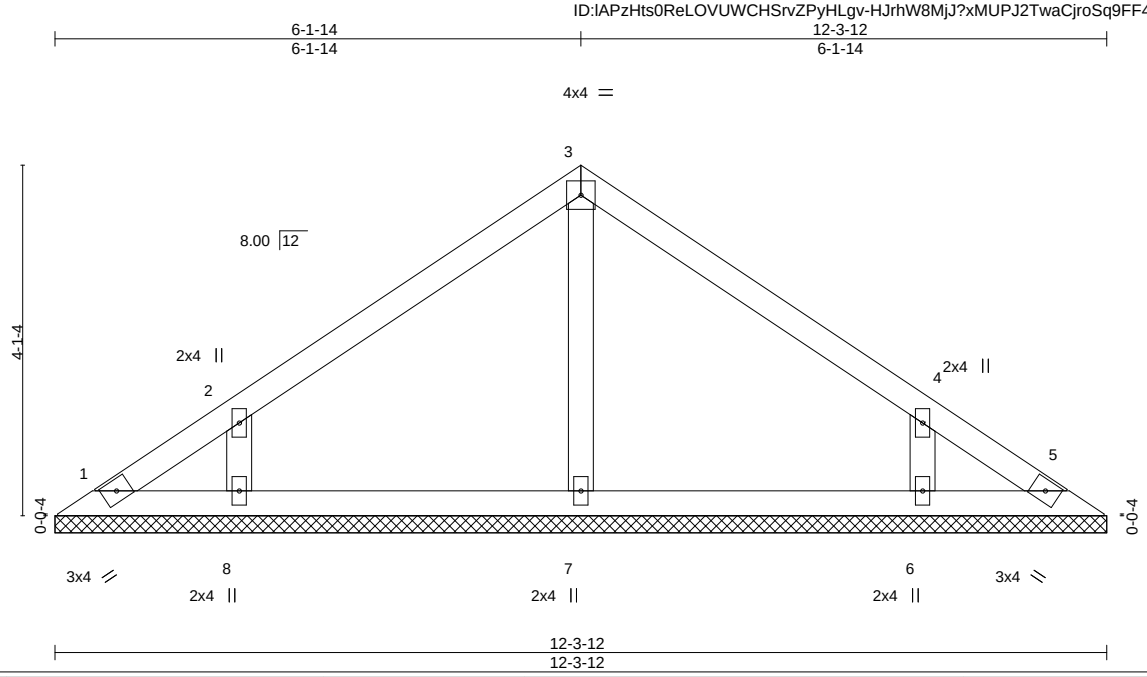

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 46 lb	FT = 20%

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

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

REACTIONS. All bearings 12-3-12.
(lb) - Max Horz 1=-94(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-126(LC 12), 6=-126(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=266(LC 1), 8=311(LC 19), 6=311(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=30ft; 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.

October 16,2019

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TRENCO
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Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	VP5	GABLE	1	1	I38918585
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:50:49 2019 Page 1
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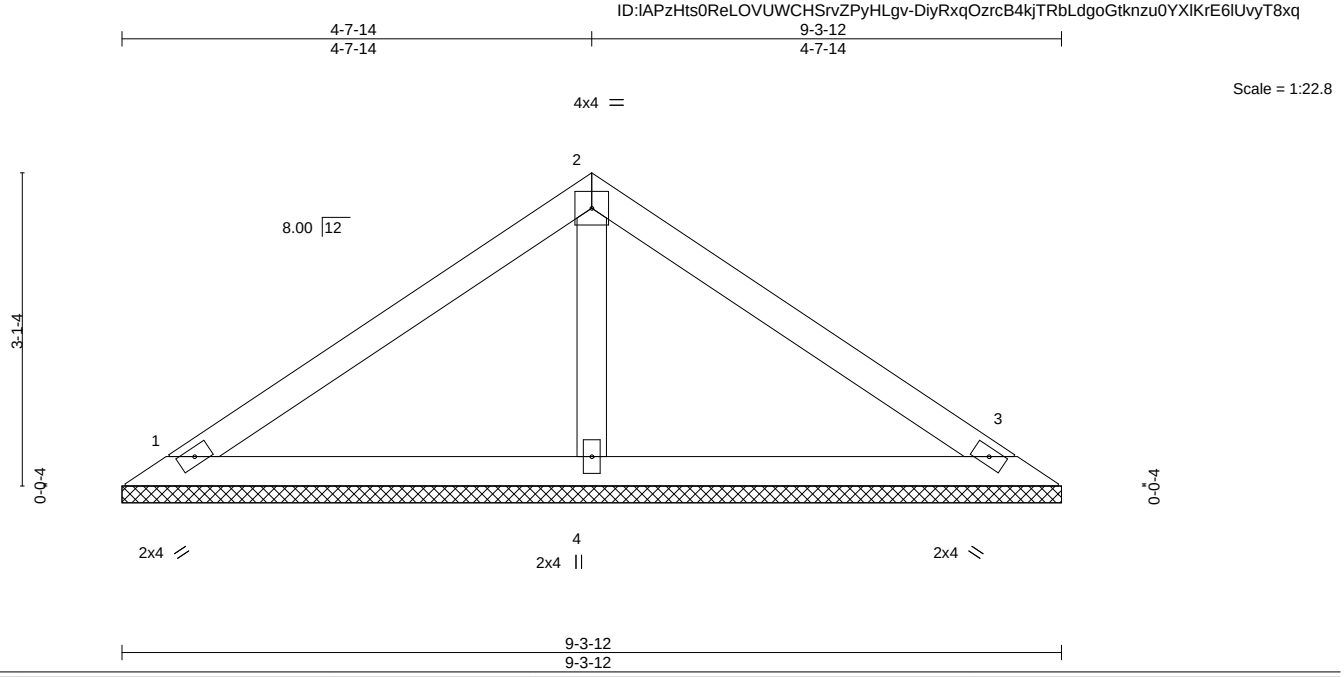

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 32 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=163/9-3-12, 3=163/9-3-12, 4=342/9-3-12
Max Horz 1=69(LC 11)
Max Uplift 1=-30(LC 12), 3=-39(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=30ft; 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.

October 16,2019

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818 Soundside Road
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Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	VP6	Valley	1	1	I38918586
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:50:50 2019 Page 1
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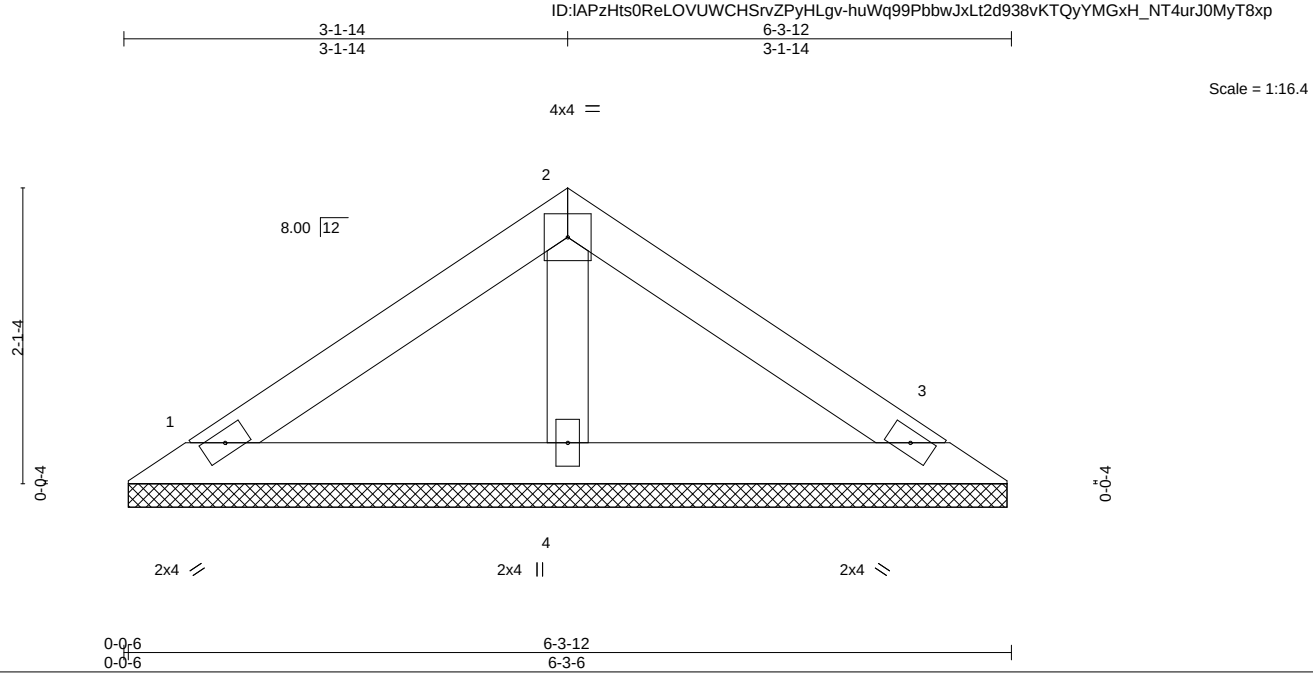

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 21 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.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=115/6-3-0, 3=115/6-3-0, 4=199/6-3-0
Max Horz 1=44(LC 9)
Max Uplift 1=-25(LC 12), 3=-31(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=30ft; 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.

October 16,2019

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TRENCO
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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	140.1445.C.10x21 CP
22357A	VP7	Valley	1	1	I38918587
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.320 s Oct 9 2019 MiTek Industries, Inc. Tue Oct 15 13:50:54 2019 Page 1
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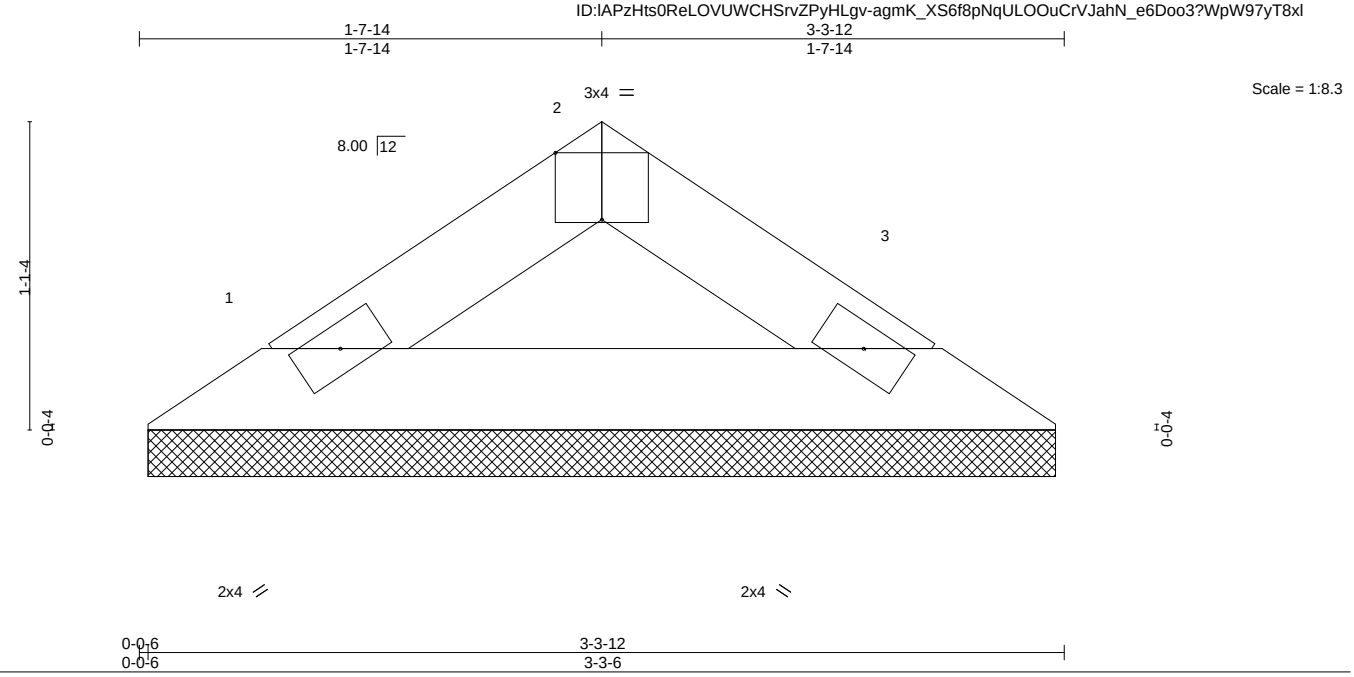

Plate Offsets (X,Y)-- [2:0-2-0,Edge]

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	0.04	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	0.00	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.3
BOT CHORD 2x4 SP No.3

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

REACTIONS. (lb/size) 1=94/3-3-0, 3=94/3-3-0
Max Horz 1=19(LC 11)
Max Uplift 1=-10(LC 12), 3=-10(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=30ft; 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.

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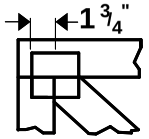
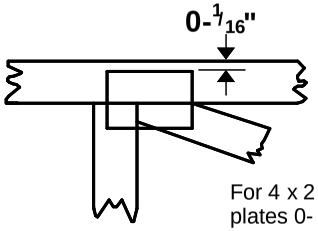
Symbols

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.

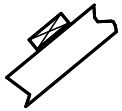
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

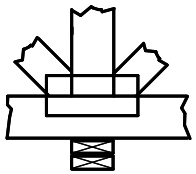
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

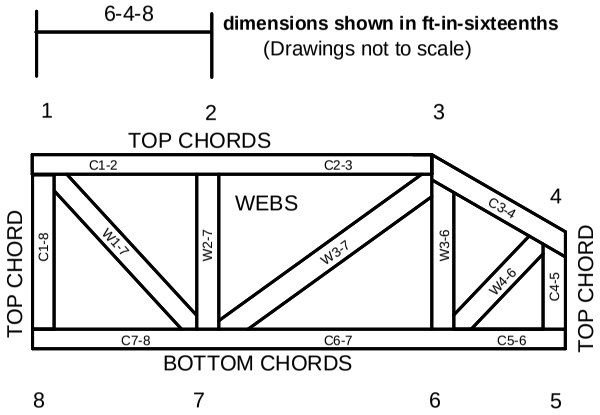


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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®

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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.