ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 20900A
238.2338.D.10x10cvp

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: I37233079 thru I37233121

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

North Carolina COA: C-0844

May 29,2019

Sevier, Scott

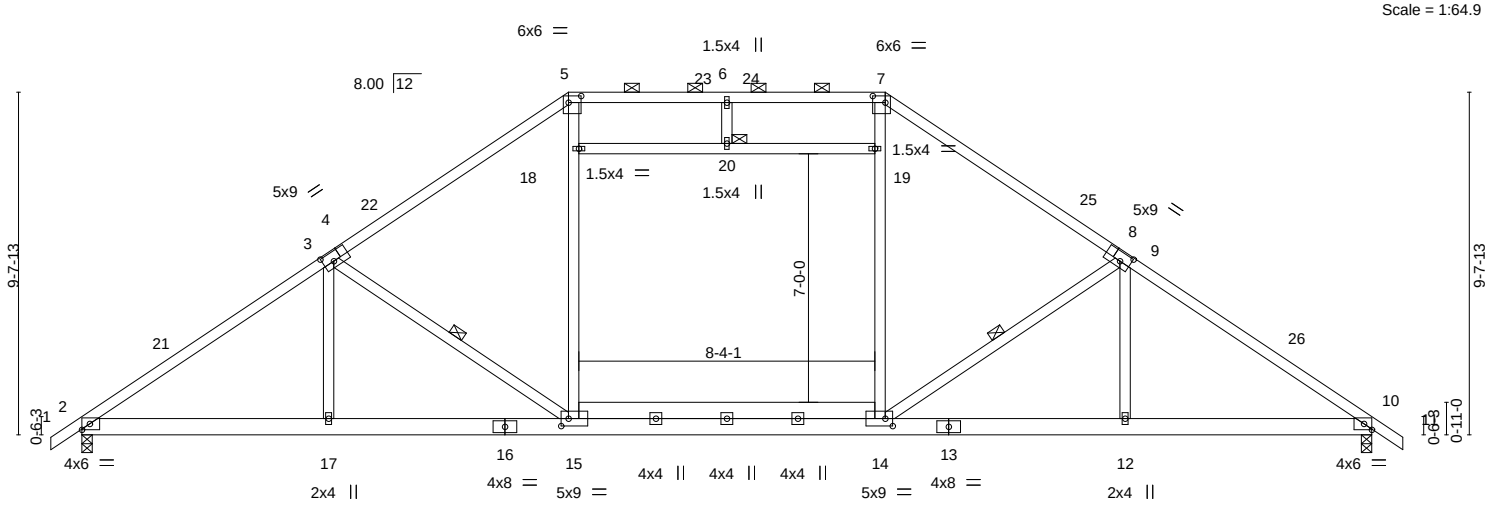
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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	238.2338.D.10x10cvp	I37233079
20900A	A	ROOF TRUSS	2	1	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:09:32 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-N5NuyUFwbeTxD8x9sLs0BwdY6NFp5YQHJZeWebzBvLX

-0-10-8	6-11-6	13-8-8	18-2-0	22-7-9	29-4-10	36-4-0	37-2-8
0-10-8	6-11-6	6-9-1	4-5-9	4-5-9	6-9-1	6-11-6	0-10-8

Scale = 1:64.9



6-11-6	13-8-8	22-7-9	29-4-10	36-4-0
6-11-6	6-9-1	8-11-1	6-9-1	6-11-6

Plate Offsets (X,Y)-- [4:0-0-0,0-1-12], [4:0-3-8,0-3-0], [5:0-4-4,0-2-4], [7:0-4-4,0-2-4], [8:0-0-0,0-1-12], [8:0-3-8,0-3-0], [14:0-2-8,0-2-8], [15:0-2-8,0-2-8]

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	0.76	Vert(LL)	-0.27	15-17	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.36	15-17	>999	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-S		Attic	-0.20	14-15	528	360	Weight: 248 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except*
18-19: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-2-7 oc purlins, except 2-0-0 oc purlins (3-2-15 max.): 5-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-15, 9-14
JOINTS 1 Brace at Jt(s): 20

REACTIONS. (lb/size) 2=1546/0-3-8, 10=1546/0-3-8
Max Horz 2=241(LC 11)
Max Uplift 2=-123(LC 12), 10=-123(LC 13)
Max Grav 2=1615(LC 2), 10=1615(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2464/245, 3-5=-2051/280, 5-6=-1692/276, 6-7=-1692/276, 7-9=-2051/280, 9-10=-2463/245
BOT CHORD 2-17=-178/2055, 15-17=-178/2055, 14-15=0/1625, 12-14=-103/1946, 10-12=-103/1946
WEBS 3-17=-8/306, 3-15=-580/292, 15-18=-18/703, 5-18=-6/755, 14-19=-18/703, 7-19=-6/755, 9-14=-579/292, 9-12=-9/306

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 2-9-2, Interior(1) 2-9-2 to 13-8-8, Exterior(2) 13-8-8 to 18-10-2, Interior(1) 18-10-2 to 22-7-9, Exterior(2) 22-7-9 to 27-9-3, Interior(1) 27-9-3 to 37-2-8 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) Ceiling dead load (5.0 psf) on member(s). 18-20, 19-20
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 14-15
8) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 10. This connection is for uplift only and does not consider lateral forces.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

May 29,2019

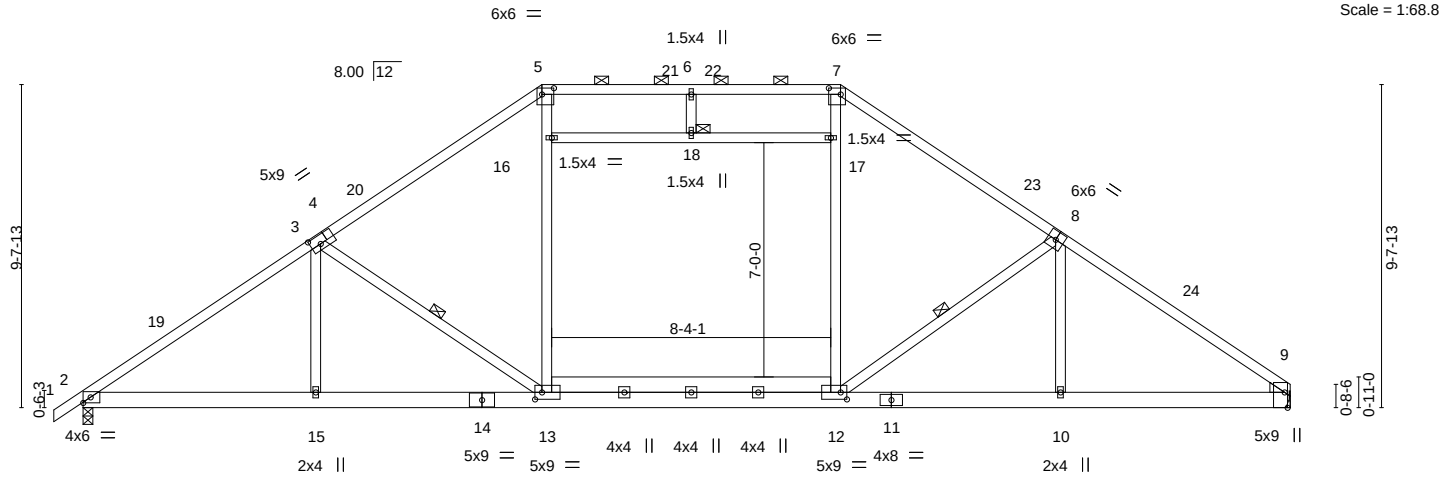
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp	
20900A	A1	ROOF TRUSS	1	1	Job Reference (optional)	I37233080

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:09:33 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-rHxG9qGYMxboqIWMQ2NFk8Ai3nalq?WQYDO4A2zBvLW

-0-10-8	6-11-6	13-8-8	18-2-0	22-7-9	29-2-6	36-0-12
0-10-8	6-11-6	6-9-1	4-5-9	4-5-9	6-6-14	6-10-6

Scale = 1:68.8



6-11-6	13-8-8	22-7-9	29-2-6	36-0-12
6-11-6	6-9-1	8-11-1	6-6-14	6-10-6

Plate Offsets (X,Y)-- [4:0-0-0,0-1-12], [4:0-3-8,0-3-0], [5:0-4-4,0-2-4], [7:0-4-4,0-2-4], [9:0-5-8,Edge], [9:0-1-6,0-5-8], [9:0-0-11,0-1-0], [12:0-2-4,0-2-8], [13:0-2-8,0-2-8]

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	0.81	Vert(LL)	-0.27	13-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.36	13-15	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.06	9	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Attic	-0.20	12-13	528	360	Weight: 246 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except*
16-17: 2x4 SP No.2
WEDGE
Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (3-2-15 max.): 5-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-13, 8-12
JOINTS 1 Brace at Jt(s): 18

REACTIONS. (lb/size) 2=1539/0-3-8, 9=1477/Mechanical
Max Horz 2=237(LC 9)
Max Uplift 2=-123(LC 12), 9=-99(LC 13)
Max Grav 2=1607(LC 2), 9=1558(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2453/246, 3-5=-2033/278, 5-6=-1677/278, 6-7=-1677/278, 7-8=-2031/286, 8-9=-2413/241
BOT CHORD 2-15=-186/2041, 13-15=-186/2041, 12-13=0/1610, 10-12=-108/1889, 9-10=-108/1891
WEBS 3-15=-6/312, 3-13=-584/291, 13-16=-16/693, 5-16=-6/746, 12-17=-23/700, 7-17=-12/752, 8-12=-541/291, 8-10=-8/297

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 2-8-12, Interior(1) 2-8-12 to 13-8-8, Exterior(2) 13-8-8 to 18-9-11, Interior(1) 18-9-11 to 22-7-9, Exterior(2) 22-7-9 to 27-8-12, Interior(1) 27-8-12 to 36-0-0 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) Ceiling dead load (5.0 psf) on member(s). 16-18, 17-18
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 12-13
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) 9.
10) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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.

May 29,2019

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

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp	I37233081
20900A	BE	COMMON SUPPORTED GAB	1	1	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:09:35 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-ng30aVHpuZrW4cgkXTPjpZFDRbRgI4Pj?XtBFwzBvLU

-0-10-8 9-4-0 18-8-0 19-6-8
0-10-8 9-4-0 9-4-0 0-10-8

Scale = 1:42.9

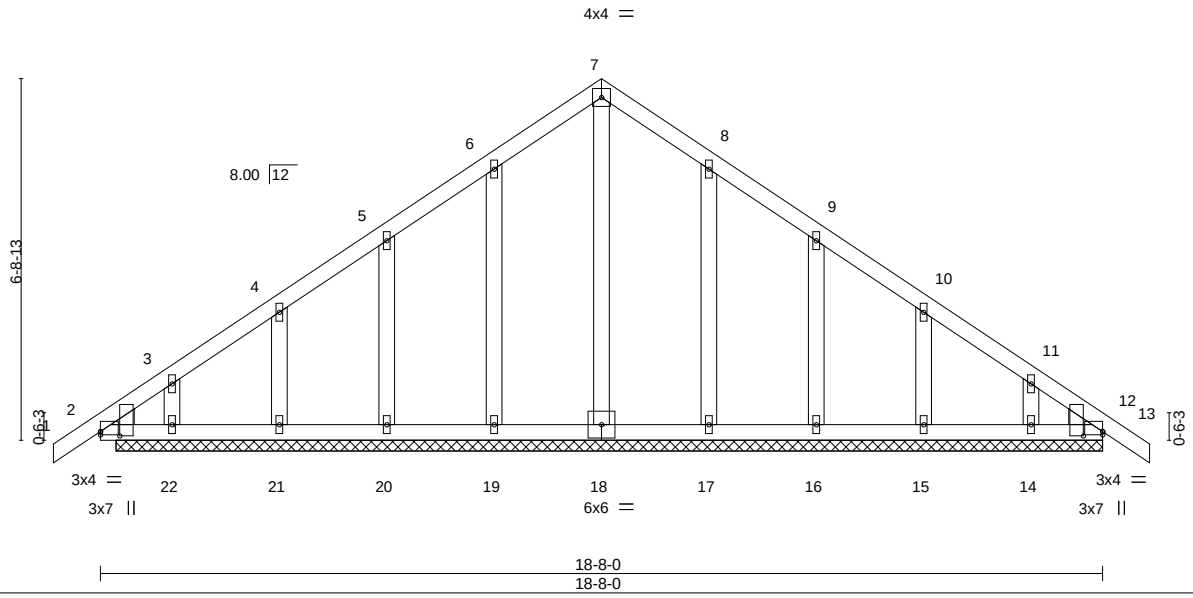


Plate Offsets (X,Y)-- [2:0-0-0,0-0-12], [2:0-0-15,0-4-5], [12:Edge,0-0-12], [12:0-0-15,0-4-5]

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	13	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	13	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 109 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 18-4-8.
(lb) - Max Horz 2=168(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 19, 20, 21, 22, 17, 16, 15, 14, 12
Max Grav All reactions 250 lb or less at joint(s) 2, 18, 19, 20, 21, 22, 17, 16, 15, 14, 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 Corner(3) -0-10-8 to 2-1-8, Exterior(2) 2-1-8 to 9-4-0, Corner(3) 9-4-0 to 12-4-0, Exterior(2) 12-4-0 to 19-6-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 1.5x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 19, 20, 21, 22, 17, 16, 15, 14, 12.
9) Non Standard bearing condition. Review required.

May 29,2019

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

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp
20900A	BG	COMMON GIRDER	1	2	I37233082
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:09:36 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-GsdPnrIRfszNhmFw5AxyMmoCa_gt1LnsEBcknMzBvLT

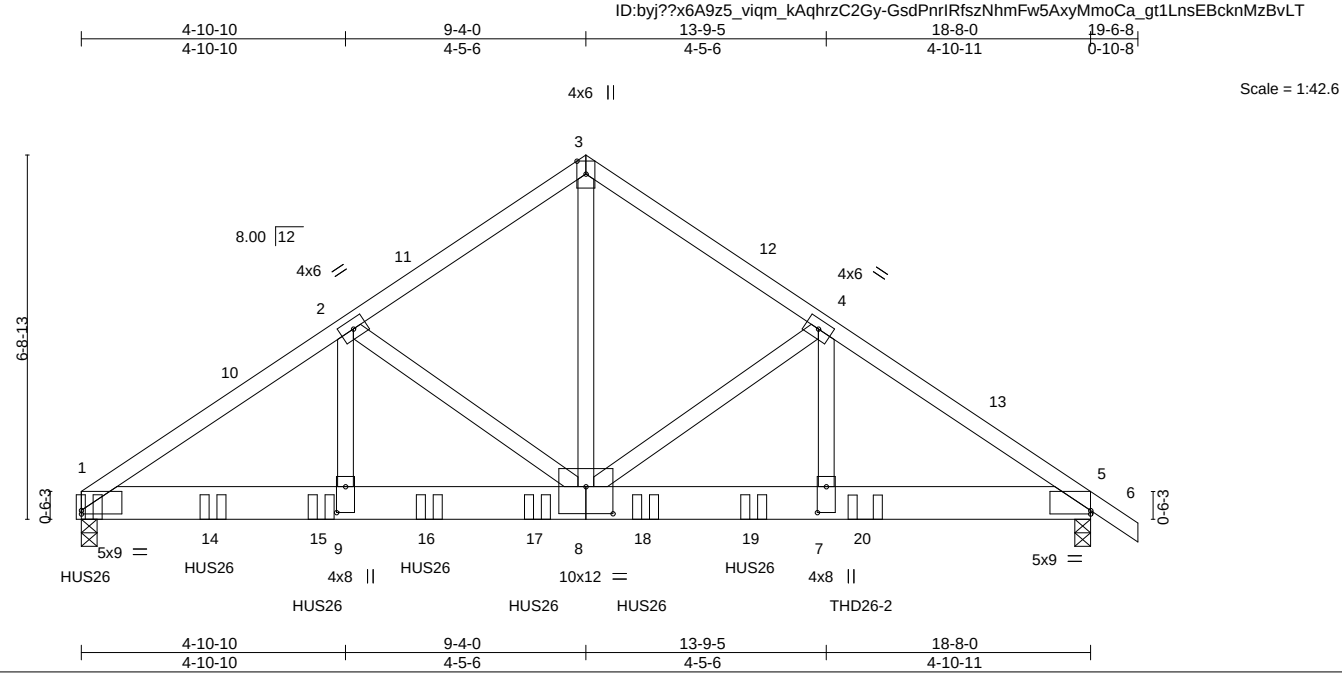


Plate Offsets (X,Y)-- [1:0-0-0,0-0-13], [5:Edge,0-0-12], [7:0-5-12,0-2-0], [8:0-6-0,0-6-0], [9:0-5-12,0-2-0]

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	0.80	Vert(LL)	-0.10	7-8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.20	7-8	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.86	Horz(CT)	0.04	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 251 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x8 SP DSS
WEBS 2x4 SP No.3 *Except*
3-8: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-3-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=7784/0-3-8 (req. 0-3-15), 5=5846/0-3-8
Max Horz 1=-164(LC 10)
Max Uplift 1=-846(LC 12), 5=-1048(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-9455/1135, 2-3=-6638/921, 3-4=-6636/915, 4-5=-9382/1592
BOT CHORD 1-9=-940/7715, 8-9=-940/7715, 7-8=-1233/7636, 5-7=-1233/7636
WEBS 3-8=-915/7004, 4-8=-2717/862, 4-7=-794/3015, 2-8=-2815/387, 2-9=-238/3115

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 0-7-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-5-0 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 9-4-0, Exterior(2) 9-4-0 to 12-4-0, Interior(1) 12-4-0 to 19-6-8 zone;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) WARNING: Required bearing size at joint(s) 1 greater than input bearing size.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=846, 5=1048.
9) Use USP HUS26 (With 16d nails into Girder & 16d nails into Truss) or equivalent spaced at 2-3-8 oc max. starting at 0-1-12 from the left end to 12-5-4 to connect truss(es) to back face of bottom chord.
10) Use USP THD26-2 (With 16d nails into Girder & 10d nails into Truss) or equivalent at 14-6-0 from the left end to connect truss(es) to back face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

May 29,2019

Continued on page 2

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

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: 1=-1464(B) 14=-1413(B) 15=-1413(B) 16=-1413(B) 17=-1413(B) 18=-1413(B) 19=-1413(B) 20=-2156(B)

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp	
20900A	CE	COMMON SUPPORTED GAB	1	1	Job Reference (optional)	I37233083

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:09:37 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-k3An?BJ3QA5EJvp7fuSBu_KZxO74m?w0TrMHJpzBvLS

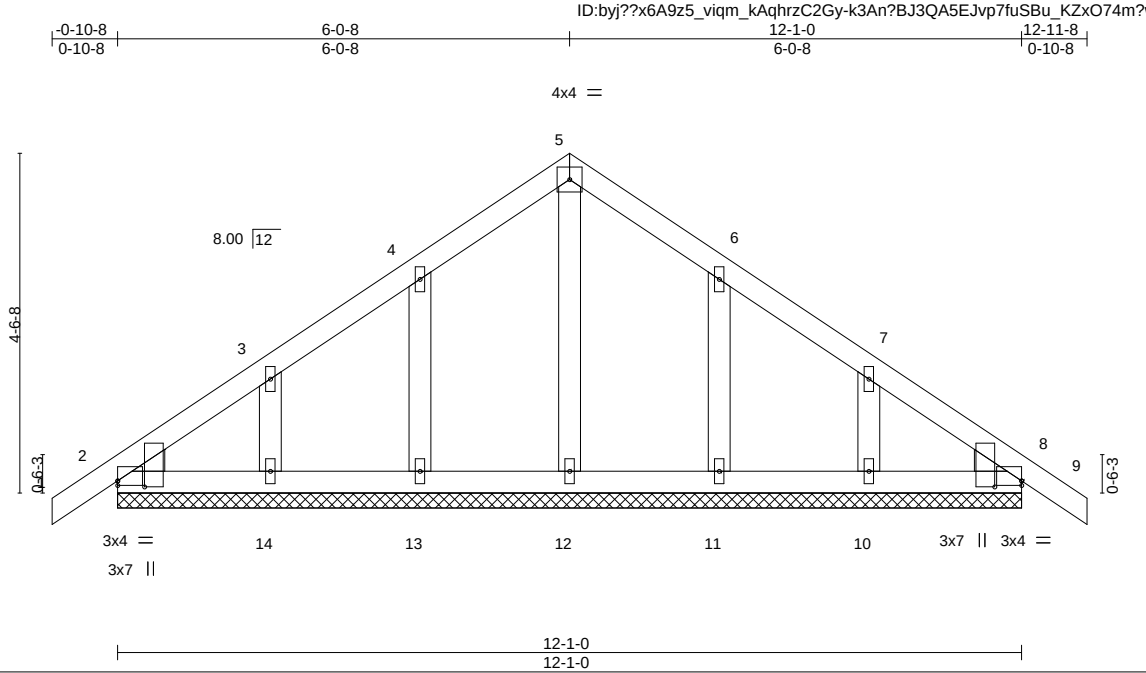


Plate Offsets (X,Y)-- [2:0-0-0,0-0-12], [2:0-0-15,0-4-5], [8:0-0-0,0-0-12], [8:0-0-15,0-4-5]

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	8	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	8	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 62 lb	FT = 20%

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

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

REACTIONS. All bearings 12-1-0.
(lb) - Max Horz 2=114(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 13, 14, 11, 10
Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

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

NOTES-
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 2-0-8, Exterior(2) 2-0-8 to 6-0-8, Corner(3) 6-0-8 to 9-0-8, Exterior(2) 9-0-8 to 12-11-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8, 13, 14, 11, 10.
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.

May 29,2019

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

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp
20900A	CG	COMMON GIRDER	1	2	I37233084
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:09:39 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-gRIXQtLJxnLyYDzVmJUf_PQrfCbBEhlJw9rOOhzBvLQ

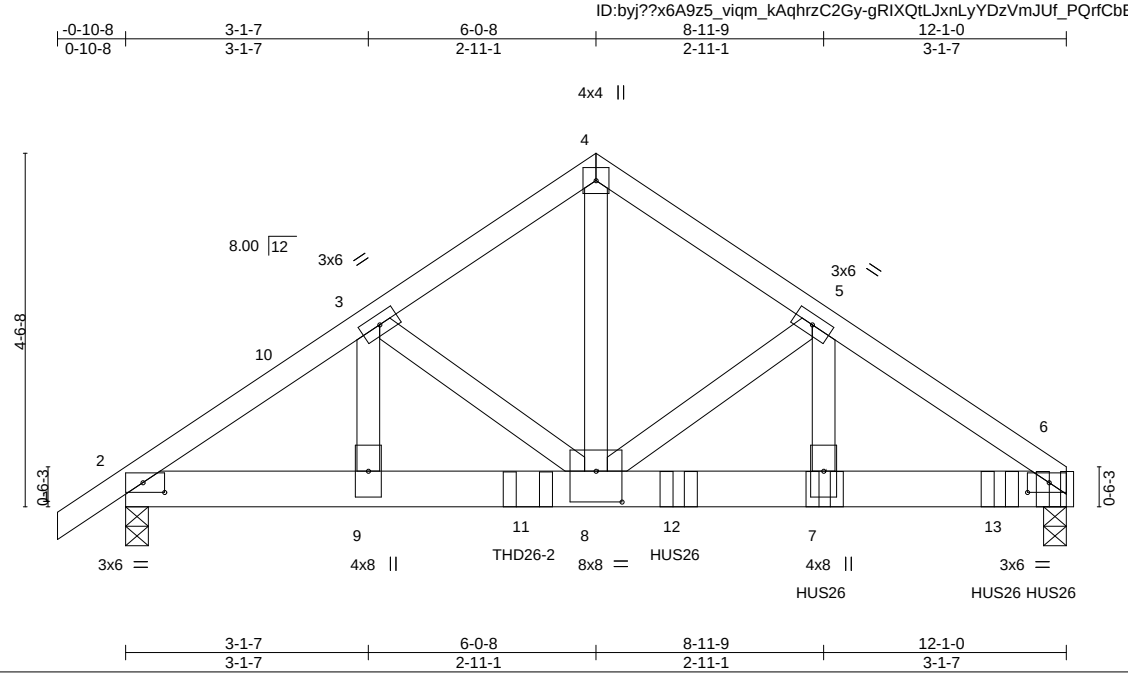


Plate Offsets (X,Y)-- [2:0-3-5,0-1-8], [6:0-3-5,0-1-8], [8:0-4-0,0-4-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	0.05	8-9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.09	8-9	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.91	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 145 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 4-11-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 6=6133/0-3-8 (req. 0-3-10), 2=2932/0-3-8
Max Horz 2=110(LC 32)
Max Uplift 6=-801(LC 13), 2=-670(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4695/1133, 3-4=-4192/974, 4-5=-4193/983, 5-6=-5934/998
BOT CHORD 2-9=-902/3725, 8-9=-902/3725, 7-8=-755/4750, 6-7=-755/4750
WEBS 4-8=-1005/4395, 5-8=-1612/96, 5-7=-22/1986, 3-8=-383/230, 3-9=-198/508

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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-0-8, Exterior(2) 6-0-8 to 8-11-9, Interior(1) 8-11-9 to 11-11-4 zone;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) WARNING: Required bearing size at joint(s) 6 greater than input bearing size.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=801.
9) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
10) Use USP THD26-2 (With 16d nails into Girder & 10d nails into Truss) or equivalent at 5-2-0 from the left end to connect truss(es) to back face of bottom chord.
11) Use USP HUS26 (With 16d nails into Girder & 16d nails into Truss) or equivalent spaced at 2-3-0 oc max. starting at 7-1-4 from the left end to 11-11-4 to connect truss(es) to back face of bottom chord.
12) Fill all nail holes where hanger is in contact with lumber.

May 29,2019

LOAD CASE(S) Standard

Continued on page 2

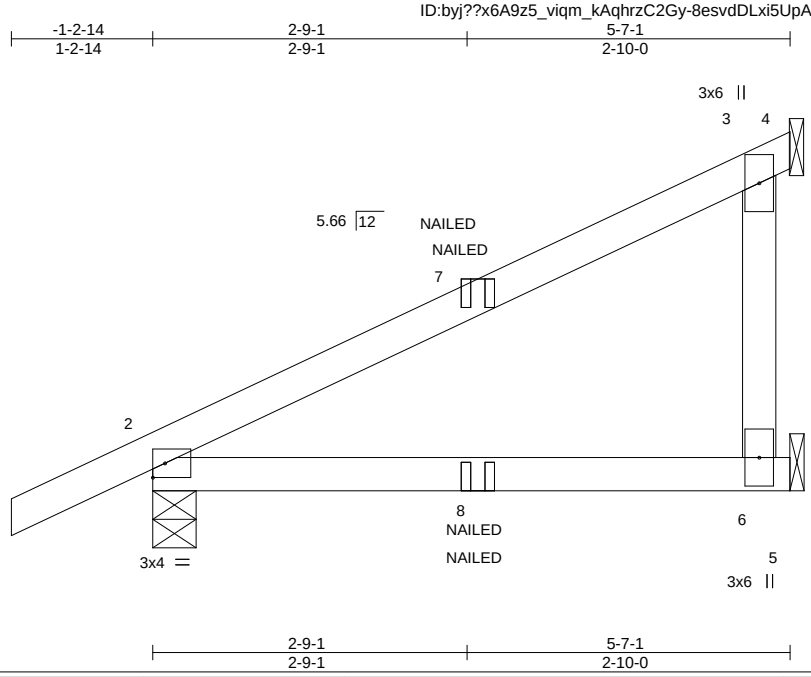
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-60, 4-6=-60, 2-6=-20
   Concentrated Loads (lb)
   Vert: 6=-1422(B) 7=-1413(B) 11=-2396(B) 12=-1413(B) 13=-1416(B)

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp
20900A	CJ1	DIAGONAL HIP GIRDER	1	1	I37233085
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:09:40 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-8esvdDLxi5UpANYiK0?uWcy?ac3hzMBS9paxw8zBvLP



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	-0.04	2-6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.08	2-6	>747	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 23 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-7-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 4=-575/Mechanical, 6=809/Mechanical, 2=279/0-4-9
Max Horz 2=121(LC 12)
Max Uplift 4=-598(LC 37), 6=-471(LC 12), 2=-27(LC 12)
Max Grav 4=389(LC 12), 6=820(LC 37), 2=279(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-260/299, 3-6=-763/903

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 Corner(3) -1-2-14 to 3-0-1, Exterior(2) 3-0-1 to 5-6-5 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) 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) 2 except (jt=lb) 4=598, 6=471.
6) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

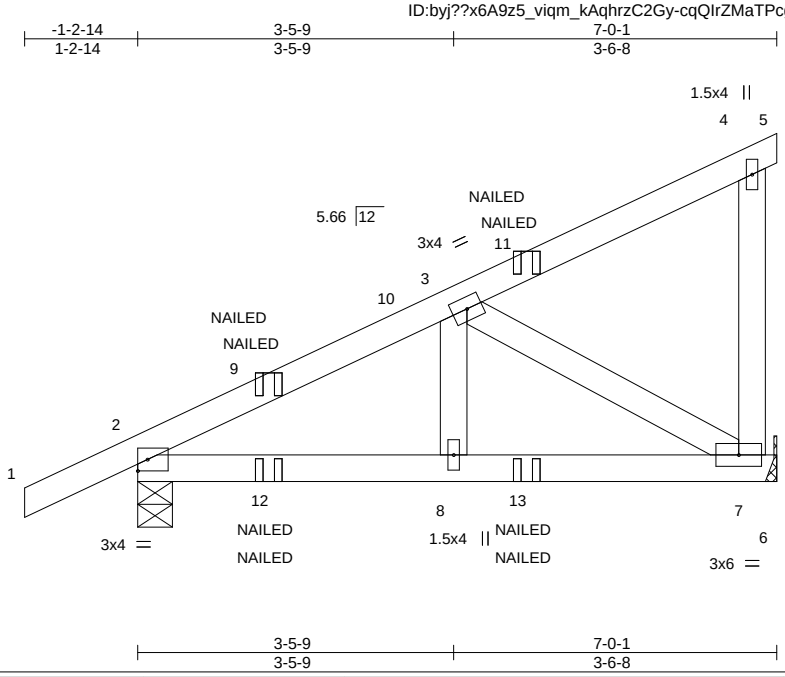
LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-4=-60, 2-5=-20

May 29,2019

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

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp	
20900A	CJ2	DIAGONAL HIP GIRDER	1	1	Job Reference (optional)	I37233086

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:09:41 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-cqQIrZMaTPcgoX7uukW73qVBA?SEio0cOTKVSazBvLO



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	0.29	Vert(LL)	-0.00	2-8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.01	2-8	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.09	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 36 lb	FT = 20%

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

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

REACTIONS. (lb/size) 7=263/Mechanical, 2=357/0-4-9
Max Horz 2=147(LC 12)
Max Uplift 7=-111(LC 12), 2=-63(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-431/50
BOT CHORD 2-8=-184/279, 7-8=-184/279
WEBS 3-7=-320/211

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 Corner(3) -1-2-14 to 3-0-1, Exterior(2) 3-0-1 to 7-0-1 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) 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) 2 except (jt=lb) 7=111.
6) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

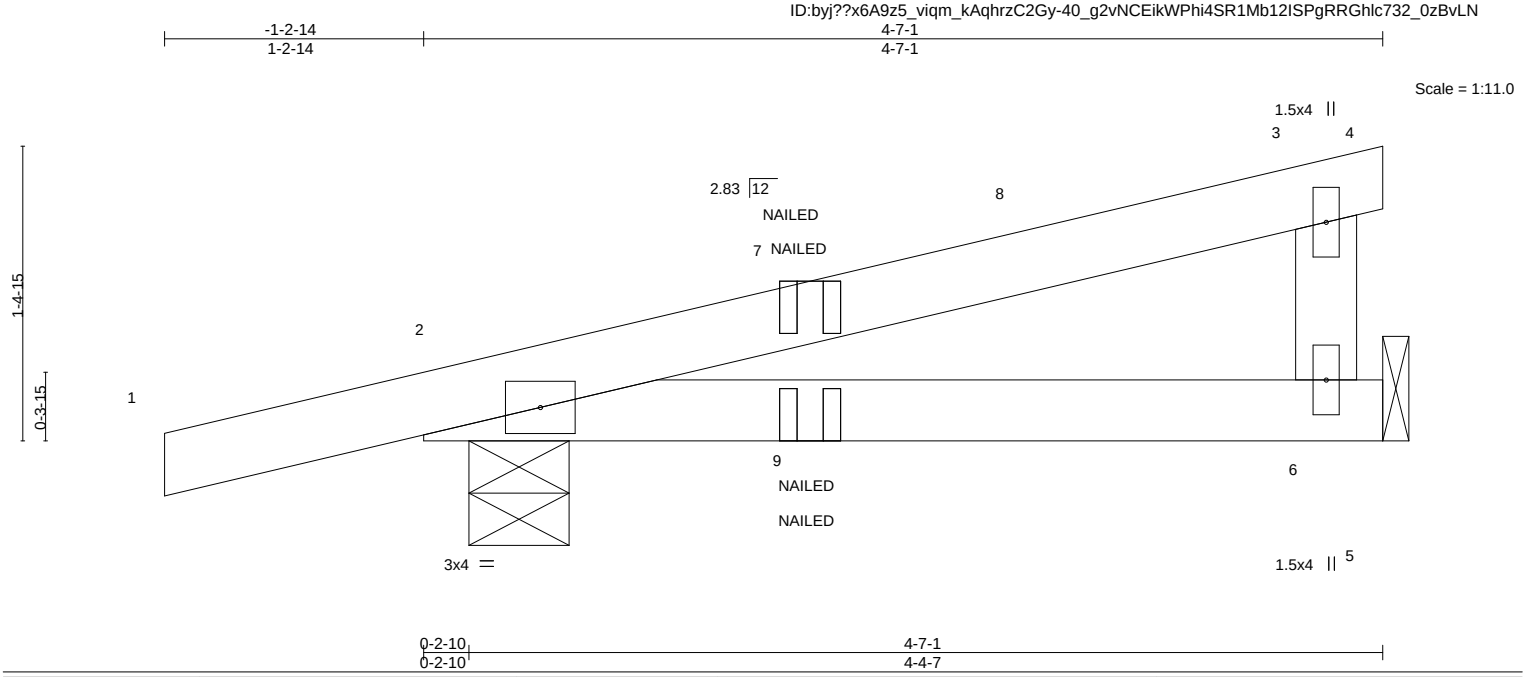
LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-60, 4-5=-20, 2-6=-20

May 29,2019

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

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp
20900A	CJL	DIAGONAL HIP GIRDER	2	1	I37233087
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:09:42 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-40_g2vNCEikWPhi4SR1Mb12ISPgRRGhlc732_0zBvLN



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	0.51	Vert(LL)	-0.02	2-6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.03	2-6	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00		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 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-7-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 6=158/Mechanical, 2=268/0-5-12
Max Horz 2=56(LC 8)
Max Uplift 6=-41(LC 12), 2=-107(LC 8)

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 Corner(3) -1-2-14 to 3-0-1, Exterior(2) 3-0-1 to 4-7-1 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) 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) 6.
6) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
7) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
8) 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=-20, 2-5=-20

May 29,2019

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

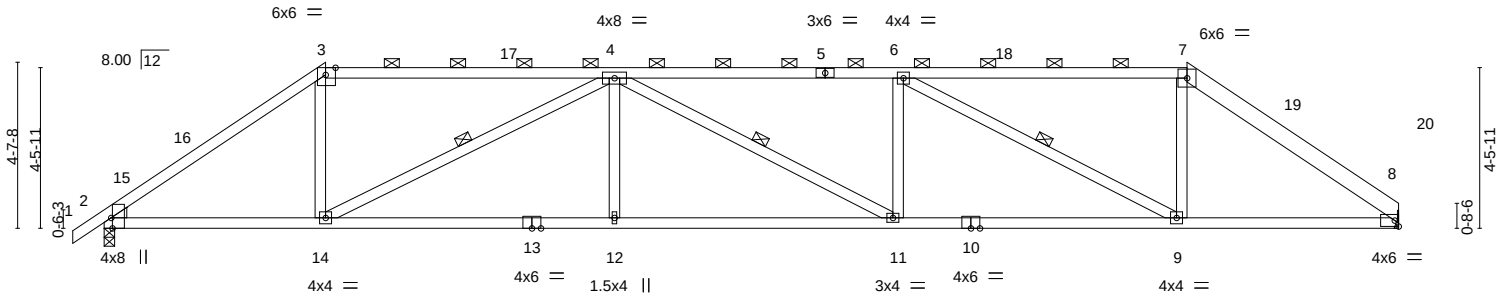
Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp
20900A	H1	HIP	1	1	I37233088
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:09:44 2019 Page 1

ID:byj??x6A9z5_viqm_kAqhrzC2Gy-1P6QTaOSmK_Ef_sTZs4qhS7ZuDItv?S24RY93vzBvLL

-0-10-8	6-2-0	14-2-10	22-1-7	30-2-0	36-0-12
0-10-8	6-2-0	8-0-9	7-10-13	8-0-9	5-10-12

Scale: 3/16"=1'



6-2-0	14-2-10	22-1-7	30-2-0	36-0-12
6-2-0	8-0-9	7-10-13	8-0-9	5-10-12

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [2:0-1-9,0-5-13], [2:0-0-12,0-1-3], [3:0-3-5,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)	-0.22	11-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.47	11-12	>915	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.15	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 182 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1 *Except*
1-3: 2x4 SP No.2, 7-8: 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (2-11-7 max.): 3-7.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 4-14, 4-11, 6-9

REACTIONS. (lb/size) 8=1433/Mechanical, 2=1496/0-3-8
Max Horz 2=109(LC 11)
Max Uplift 8=-146(LC 8), 2=-149(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2241/302, 3-4=-1725/298, 4-6=-3013/471, 6-7=-1758/307, 7-8=-2195/309
BOT CHORD 2-14=-270/1752, 12-14=-483/3027, 11-12=-483/3027, 9-11=-450/3013, 8-9=-171/1729
WEBS 3-14=-53/850, 4-14=-1524/337, 4-12=0/325, 6-11=0/323, 6-9=-1469/317, 7-9=-56/838

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 2-8-12, Interior(1) 2-8-12 to 6-2-0, Exterior(2) 6-2-0 to 11-3-4, Interior(1) 11-3-4 to 30-2-0, Exterior(2) 30-2-0 to 35-3-4, Interior(1) 35-3-4 to 36-0-0 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) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=146, 2=149.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 29,2019

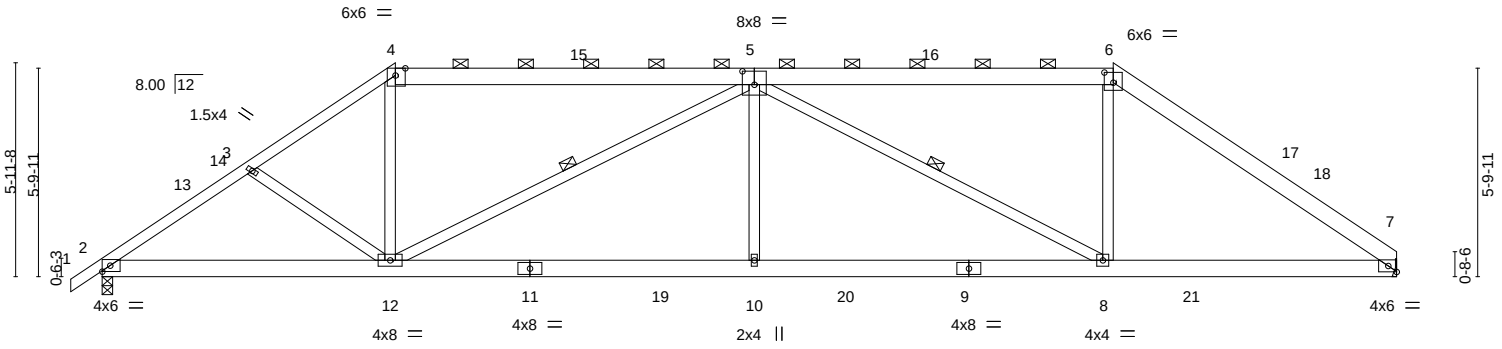
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp
20900A	H2	HIP	1	1	I37233089
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:09:45 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-VbfogwP4Xd65G8Rf7Zb3DggoxdjBeR7BI4IibLzBvLK

-0-10-8	4-2-3	8-2-0	14-10-0	18-2-0	21-6-0	28-2-0	36-0-12
0-10-8	4-2-3	3-11-14	6-8-0	3-4-0	3-4-0	6-8-0	7-10-12

Scale: 3/16"=1'



8-2-0	18-2-0	28-2-0	36-0-12
8-2-0	10-0-0	10-0-0	7-10-12

Plate Offsets (X,Y)-- [4:0-3-5,Edge], [5:0-4-0,0-4-8], [6:0-3-0,0-3-6]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.63	Vert(LL)	-0.12	10-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.26	10-12	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.08	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 232 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2 *Except*
1-4: 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-8-14 oc purlins, except
2-0-0 oc purlins (4-8-13 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-12, 5-8

REACTIONS. (lb/size) 7=1433/Mechanical, 2=1496/0-3-8
Max Horz 2=141(LC 11)
Max Uplift 7=-99(LC 8), 2=-103(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2230/328, 3-4=-2065/312, 4-5=-1674/298, 5-6=-1716/314, 6-7=-2183/303
BOT CHORD 2-12=-261/1756, 10-12=-348/2537, 8-10=-348/2537, 7-8=-136/1697
WEBS 4-12=-25/725, 5-12=-1094/278, 5-10=0/400, 5-8=-1029/280, 6-8=-12/750

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 2-8-12, Interior(1) 2-8-12 to 8-2-0, Exterior(2) 8-2-0 to 13-3-4, Interior(1) 13-3-4 to 28-2-0, Exterior(2) 28-2-0 to 33-3-4, Interior(1) 33-3-4 to 36-0-0 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) 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) 7 except (jt=lb) 2=103.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 29,2019

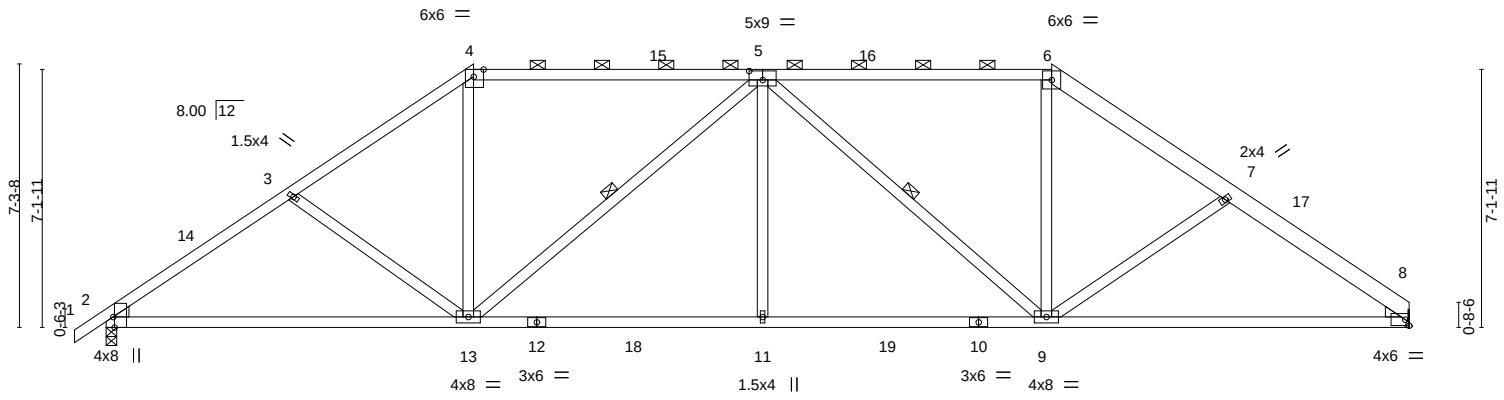
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp
20900A	H3	HIP	1	1	I37233090
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:09:46 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-znDBuGQiIxEyuI?rhH6ImtCuj0?6NzVLXk1G8nzBvLJ

-0-10-8	5-2-3	10-2-0	18-2-0	26-2-0	30-11-10	36-0-12
0-10-8	5-2-3	4-11-14	8-0-0	8-0-0	4-9-10	5-1-2

Scale: 3/16"=1'



5-2-3	10-2-0	18-2-0	26-2-0	36-0-12
5-2-3	4-11-14	8-0-0	8-0-0	9-10-12

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

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	0.94	Vert(LL)	-0.23	8-9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.49	2-13	>885	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.10	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 204 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except* 6-8: 2x6 SP No.2
BOT CHORD 2x4 SP No.1 *Except* 10-12: 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 3-6-6 oc purlins, except 2-0-0 oc purlins (2-2-0 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-13, 5-9

REACTIONS. (lb/size) 8=1433/Mechanical, 2=1496/0-3-8
Max Horz 2=175(LC 11)
Max Uplift 8=-94(LC 13), 2=-118(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2151/332, 3-4=-1931/312, 4-5=-1531/304, 5-6=-1546/302, 6-7=-1918/319, 7-8=-2137/335
BOT CHORD 2-13=-230/1700, 11-13=-207/1962, 9-11=-207/1962, 8-9=-201/1686
WEBS 3-13=-261/210, 4-13=-33/703, 5-13=-680/210, 5-11=0/383, 5-9=-662/201, 6-9=-32/689, 7-9=-257/213

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 2-8-12, Interior(1) 2-8-12 to 10-2-0, Exterior(2) 10-2-0 to 15-3-4, Interior(1) 15-3-4 to 26-2-0, Exterior(2) 26-2-0 to 31-2-2, Interior(1) 31-2-2 to 36-0-0 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) 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) 8 except (jt=lb) 2=118.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 29,2019

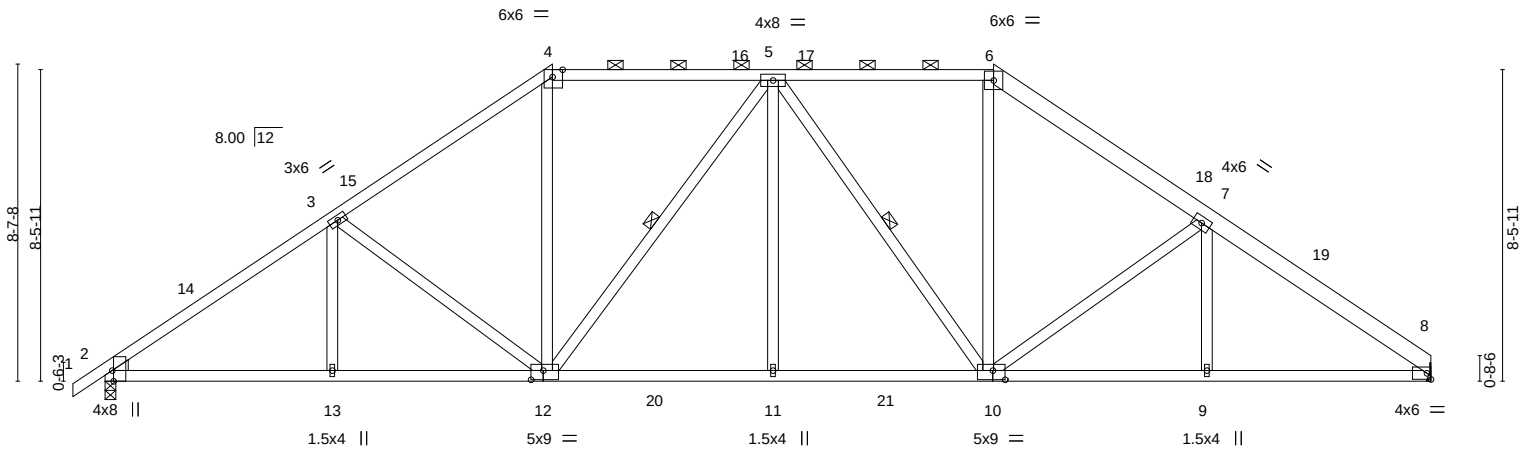
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp	
20900A	H4	HIP	1	1	Job Reference (optional)	I37233091

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:09:47 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-R_nZ5cRL3FMpWSa2E_dXI5lAMQOy6QyUmOnpgEzBvLI

-0-10-8	6-2-3	12-2-0	18-2-0	24-2-0	29-11-10	36-0-12
0-10-8	6-2-3	5-11-14	6-0-0	6-0-0	5-9-10	6-1-2

Scale = 1:62.7



6-2-3	12-2-0	18-2-0	24-2-0	29-11-10	36-0-12
6-2-3	5-11-14	6-0-0	6-0-0	5-9-10	6-1-2

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

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	0.50	Vert(LL)	-0.11	11-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.22	11-12	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.10	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 227 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-4-2 oc purlins, except 2-0-0 oc purlins (4-5-14 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-12, 5-10

REACTIONS. (lb/size) 8=1433/Mechanical, 2=1496/0-3-8
Max Horz 2=208(LC 11)
Max Uplift 8=-112(LC 13), 2=-136(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2214/292, 3-4=-1802/325, 4-5=-1398/317, 5-6=-1406/314, 6-7=-1791/331, 7-8=-2178/292
BOT CHORD 2-13=-183/1728, 12-13=-183/1728, 11-12=-105/1602, 10-11=-105/1602, 9-10=-159/1714, 8-9=-159/1714
WEBS 3-13=0/254, 3-12=-451/206, 4-12=-50/652, 5-12=-475/166, 5-11=0/335, 5-10=-464/158, 6-10=-55/644, 7-10=-444/208, 7-9=0/253

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 2-8-12, Interior(1) 2-8-12 to 12-2-0, Exterior(2) 12-2-0 to 17-3-4, Interior(1) 17-3-4 to 24-2-0, Exterior(2) 24-2-0 to 29-3-4, Interior(1) 29-3-4 to 36-0-0 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) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=112, 2=136.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

NORTH CAROLINA PROFESSIONAL SEAL 044925 ENGINEER SCOTT M. SEVIER

May 29,2019

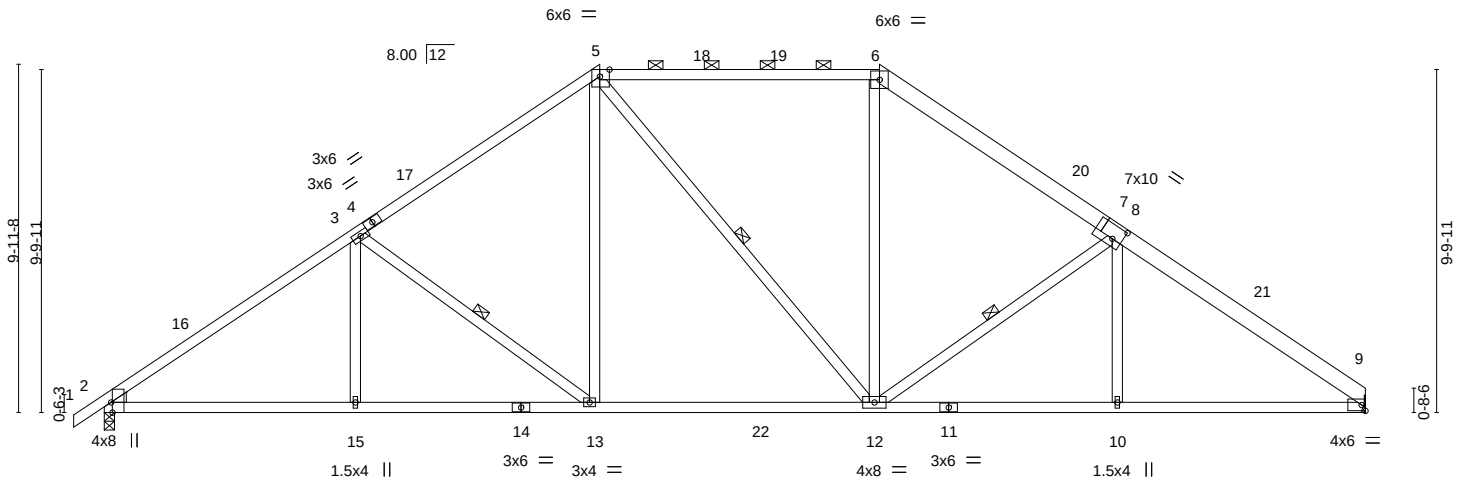
ENGINEERING BY TRENCO A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp	I37233092
20900A	H5	HIP	1	1	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:09:48 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-vALxJySzqYUg7c9Eoi8mrIHE_qiPrwwd?2WNCgzBvLH

-0-10-8 7-2-3 14-2-0 22-2-0 28-11-10 36-0-12
0-10-8 7-2-3 6-11-14 8-0-0 6-9-10 7-1-2

Scale = 1:65.9



7-2-3 14-2-0 22-2-0 28-11-10 36-0-12
7-2-3 6-11-14 8-0-0 6-9-10 7-1-2

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

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	-0.19	12-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.34	12-13	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.09	9	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 217 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
5-6: 2x4 SP No.1, 6-7,7-9: 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
5-12: 2x4 SP No.2
WEDGE
Left: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (2-2-0 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-13, 5-12, 8-12

REACTIONS. (lb/size) 2=1496/0-3-8, 9=1433/Mechanical
Max Horz 2=241(LC 9)
Max Uplift 2=-152(LC 12), 9=-128(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2189/283, 3-5=-1692/321, 5-6=-1312/321, 6-8=-1684/325, 8-9=-2148/283
BOT CHORD 2-15=-212/1701, 13-15=-212/1701, 12-13=-54/1302, 10-12=-139/1689, 9-10=-139/1689
WEBS 3-15=0/297, 3-13=-547/242, 5-13=-50/573, 6-12=-18/499, 8-12=-539/244, 8-10=0/292

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 2-8-12, Interior(1) 2-8-12 to 14-2-0, Exterior(2) 14-2-0 to 19-3-4, Interior(1) 19-3-4 to 22-2-0, Exterior(2) 22-2-0 to 27-3-4, Interior(1) 27-3-4 to 36-0-0 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) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=152, 9=128.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 29,2019

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

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp
20900A	H6	HIP	1	1	I37233093
					Job Reference (optional)

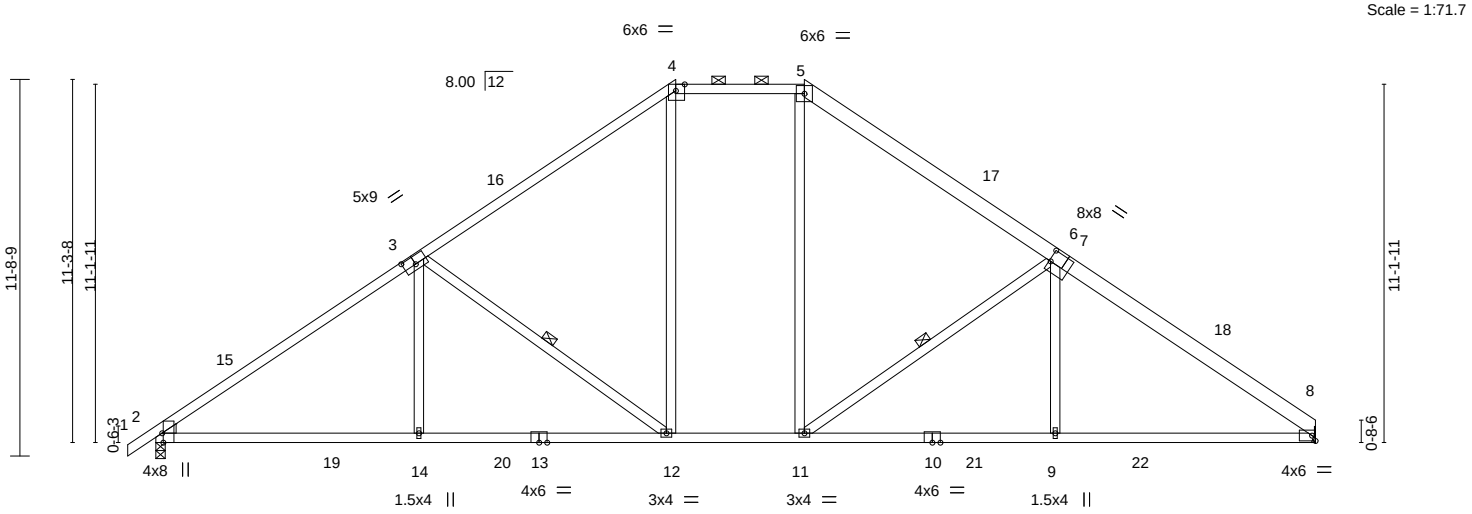
84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:09:49 2019 Page 1

ID:byj??x6A9z5_viqm_kAqhrzC2Gy-NMvJWISbbscXlmkQMPf?OWqOHE0YaKKnDiGwk6zBvLG

-0-10-8 5-6-3 8-2-3 10-10-2 16-2-0 20-2-0 27-11-10 36-0-12

0-10-8 5-6-3 2-7-15 2-7-15 5-3-14 4-0-0 7-9-10 8-1-2

Scale = 1:71.7



8-2-3 16-2-0 20-2-0 27-11-10 36-0-12

8-2-3 7-11-14 4-0-0 7-9-10 8-1-2

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

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	0.99	Vert(LL)	-0.37	9-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.51	9-11	>837	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.10	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 212 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2 *Except* 5-7,7-8: 2x6 SP No.2

BOT CHORD 2x4 SP No.2

WEBS 2x4 SP No.3

WEDGE Left: 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (5-0-15 max.): 4-5.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

WEBS 1 Row at midpt 3-12, 6-11

REACTIONS. (lb/size) 2=1496/0-3-8, 8=1433/Mechanical
Max Horz 2=274(LC 9)
Max Uplift 2=-165(LC 12), 8=-142(LC 13)
Max Grav 2=1561(LC 19), 8=1498(LC 20)

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

TOP CHORD 2-3=-2272/270, 3-4=-1620/316, 4-5=-1239/317, 5-6=-1605/323, 6-8=-2223/270

BOT CHORD 2-14=-249/1962, 12-14=-247/1974, 11-12=0/1290, 9-11=-117/1757, 8-9=-117/1757

WEBS 3-14=0/376, 3-12=-822/303, 4-12=-35/558, 5-11=-52/574, 6-11=-819/310, 6-9=0/369

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 2-8-12, Interior(1) 2-8-12 to 16-2-0, Exterior(2) 16-2-0 to 25-3-4, Interior(1) 25-3-4 to 36-0-0 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) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=165, 8=142.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 29,2019

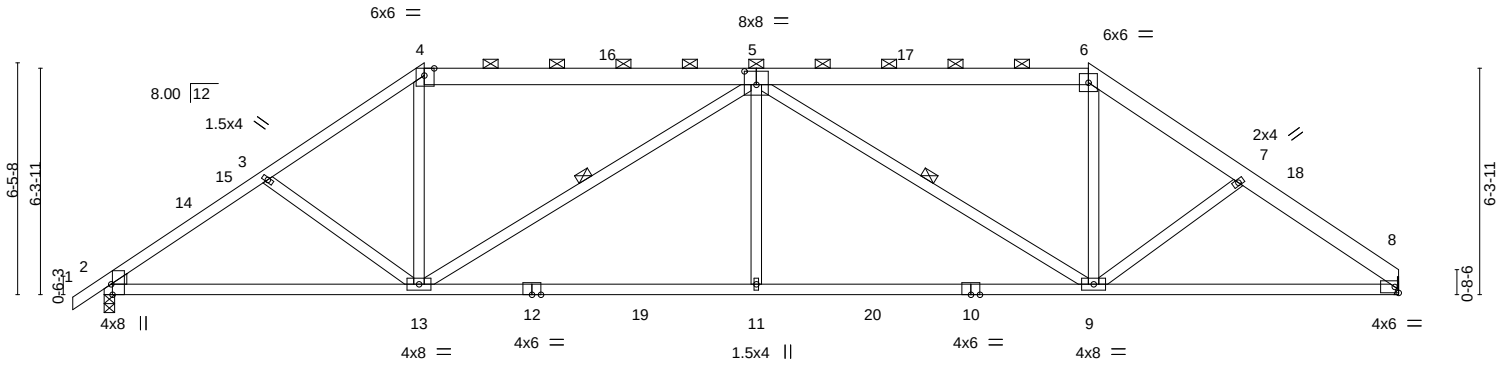
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp
20900A	H7	HIP	1	1	I37233094
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:09:50 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-rZThjeTDMAkONvJdw7BEwjNgCeKUJkfwSM?THZzBvLF

-0-10-8	4-6-11	8-11-0	15-1-0	18-2-0	21-3-0	27-5-1	31-7-2	36-0-12
0-10-8	4-6-11	4-4-5	6-2-0	3-1-0	3-1-0	6-2-0	4-2-2	4-5-10

Scale: 3/16"=1'



8-11-0	18-2-0	27-5-1	36-0-12
8-11-0	9-3-0	9-3-0	8-7-11

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

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	0.53	Vert(LL)	-0.14	11-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.33	11-13	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.58	Horz(CT)	0.11	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 212 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2 *Except* 1-4: 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 10-12: 2x4 SP No.1
WEBS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-7-12 oc purlins, except 2-0-0 oc purlins (5-1-0 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 5-13, 5-9

REACTIONS. (lb/size) 8=1433/Mechanical, 2=1496/0-3-8
Max Horz 2=154(LC 11)
Max Uplift 8=-81(LC 13), 2=-105(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2171/328, 3-4=-1996/313, 4-5=-1605/300, 5-6=-1605/301, 6-7=-1991/321, 7-8=-2154/328
BOT CHORD 2-13=-249/1711, 11-13=-286/2274, 9-11=-286/2274, 8-9=-202/1691
WEBS 4-13=-30/711, 5-13=-922/247, 5-11=0/425, 5-9=-918/237, 6-9=-27/694

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 2-8-12, Interior(1) 2-8-12 to 8-11-0, Exterior(2) 8-11-0 to 14-0-3, Interior(1) 14-0-3 to 27-5-1, Exterior(2) 27-5-1 to 32-6-4, Interior(1) 32-6-4 to 36-0-0 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) 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) 8 except (jt=lb) 2=105.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 29,2019

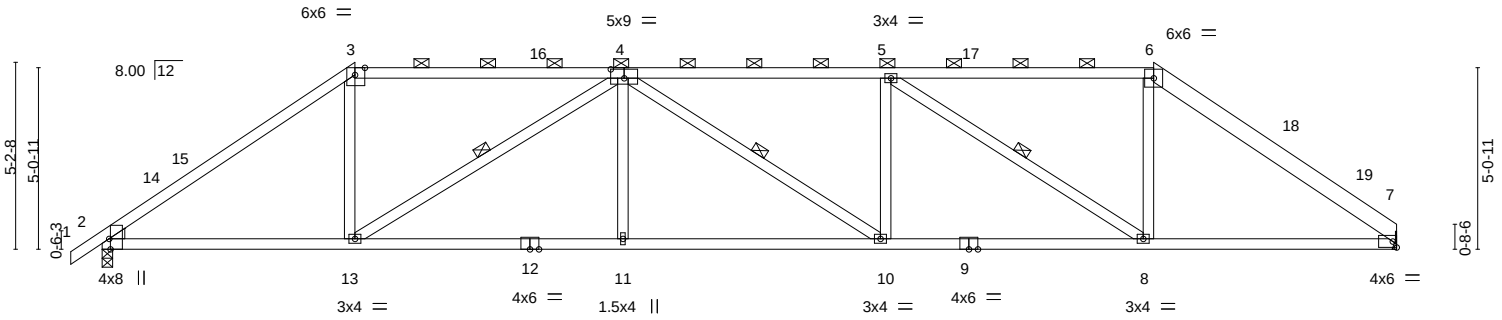
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp
20900A	H8	HIP	1	1	I37233095
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:09:51 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-Jl14x_Ur7TsF_3upTqiTTxvkD1id2Cg4h0l1p?zBvLE

-0-10-8	7-0-8	14-6-2	21-9-15	29-3-9	36-0-12
0-10-8	7-0-8	7-5-10	7-3-14	7-5-10	6-9-3

Scale: 3/16"=1'



7-0-8	14-6-2	21-9-15	29-3-9	36-0-12
7-0-8	7-5-10	7-3-14	7-5-10	6-9-3

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

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	0.90	Vert(LL)	-0.17	10-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.38	10-11	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.13	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 186 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
1-3: 2x4 SP No.1, 6-7: 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (2-2-0 max.): 3-6.
BOT CHORD Rigid ceiling directly applied or 9-2-13 oc bracing.
WEBS 1 Row at midpt 4-13, 4-10, 5-8

REACTIONS. (lb/size) 7=1433/Mechanical, 2=1496/0-3-8
Max Horz 2=124(LC 11)
Max Uplift 7=-125(LC 8), 2=-129(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2202/300, 3-4=-1689/306, 4-5=-2651/434, 5-6=-1711/307, 6-7=-2152/304
BOT CHORD 2-13=-253/1711, 11-13=-402/2664, 10-11=-403/2663, 8-10=-368/2651, 7-8=-147/1688
WEBS 3-13=-49/807, 4-13=-1221/287, 4-11=0/296, 5-10=0/295, 5-8=-1178/270, 6-8=-52/797

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 2-8-12, Interior(1) 2-8-12 to 7-0-8, Exterior(2) 7-0-8 to 12-1-11, Interior(1) 12-1-11 to 29-3-9, Exterior(2) 29-3-9 to 34-4-12, Interior(1) 34-4-12 to 36-0-0 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) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=125, 2=129.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 29,2019

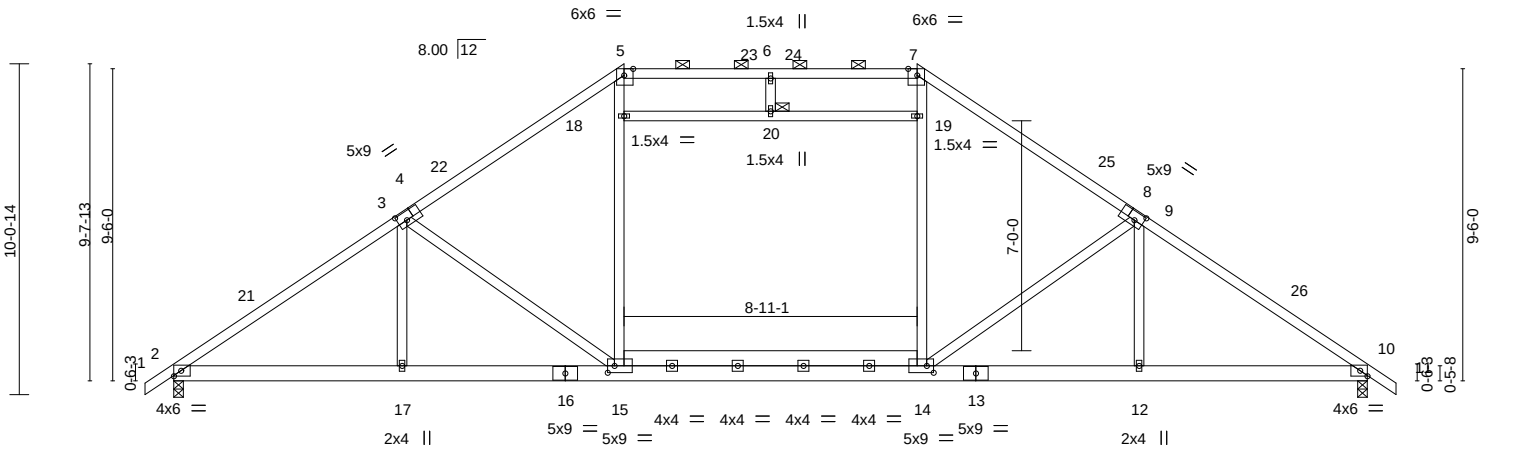
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp	I37233096
20900A	HA1	HIP	1	1	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:09:52 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-oxaS8JVTtn_6cDT?1XDi?8SxsR33nbMDwgUaLRzBvLD

-0-10-8	6-11-6	13-8-8	18-2-0	22-7-9	29-4-10	36-4-0	37-2-8
0-10-8	6-11-6	6-9-1	4-5-9	4-5-9	6-9-1	6-11-6	0-10-8

Scale = 1:70.1



6-11-6	13-8-8	22-7-9	29-4-10	36-4-0
6-11-6	6-9-1	8-11-1	6-9-1	6-11-6

Plate Offsets (X,Y)-- [4:0-0-0,0-1-12], [4:0-3-4,0-3-0], [5:0-3-5,Edge], [7:0-3-5,Edge], [8:0-0-0,0-1-12], [8:0-3-4,0-3-0], [14:0-2-8,0-2-8], [15:0-2-8,0-2-8]

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	0.78	Vert(LL)	-0.29	15-17	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.37	15-17	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.05	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 249 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except*
18-19: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-3-10 oc purlins, except
2-0-0 oc purlins (3-3-12 max.): 5-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 20

REACTIONS. (lb/size) 2=1503/0-3-8, 10=1503/0-3-8
Max Horz 2=239(LC 11)
Max Uplift 2=-149(LC 12), 10=-149(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2228/290, 3-5=-1773/327, 5-6=-1328/313, 6-7=-1328/313, 7-9=-1773/327, 9-10=-2227/290
BOT CHORD 2-17=-214/1822, 15-17=-214/1822, 14-15=-15/1402, 12-14=-140/1737, 10-12=-140/1737
WEBS 3-17=-19/289, 3-15=-571/291, 15-18=-15/581, 5-18=-21/613, 14-19=-15/581, 7-19=-21/613, 9-14=-571/292, 9-12=-19/288

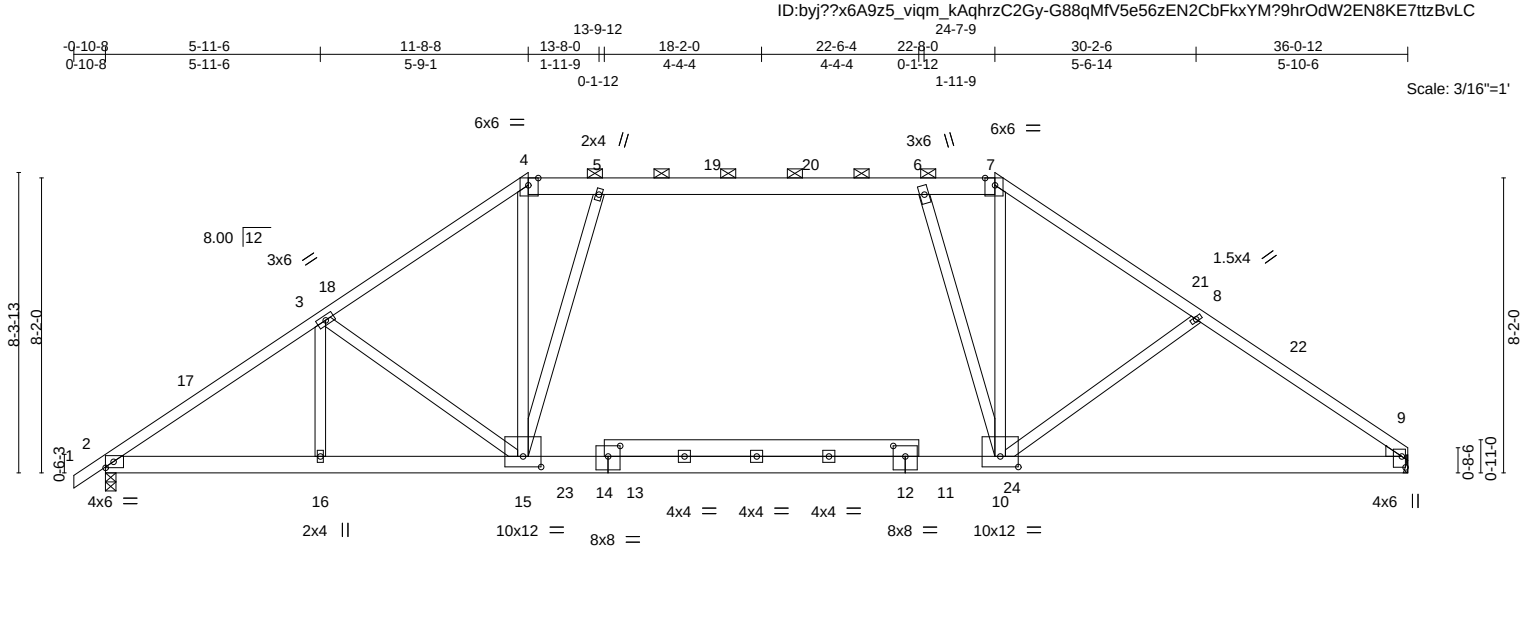
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-9-2, Interior(1) 2-9-2 to 13-8-8, Exterior(2) 13-8-8 to 18-10-2, Interior(1) 18-10-2 to 22-7-9, Exterior(2) 22-7-9 to 27-9-3, Interior(1) 27-9-3 to 37-2-8 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=149.
7) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 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.

May 29,2019

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

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp	I37233097
20900A	HA2	ROOF TRUSS	1	1	Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:09:53 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-G88qMfV5e56zEN2CbFkxYM?9hrOdW2EN8KE7ttzBvLC



5-11-6	11-8-8	13-8-0	18-2-0	22-8-0	24-7-9	30-2-6	36-0-12
5-11-6	5-9-1	1-11-9	4-6-0	4-6-0	1-11-9	5-6-14	5-10-6

Plate Offsets (X,Y)-- [4:0-3-5,Edge], [7:0-3-5,Edge], [9:0-3-10,0-1-4], [9:0-1-6,0-5-8], [9:0-0-11,0-1-0], [10:0-6-0,0-3-8], [12:0-4-0,0-3-8], [13:0-4-0,0-3-8], [15:0-6-0,0-3-8]

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)	-0.20	10-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.31	10-15	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.06	9	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 249 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except* 4-7: 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
WEDGE Right: 2x4 SP No.3

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

REACTIONS. (lb/size) 2=1496/0-3-8, 9=1433/Mechanical
Max Horz 2=201(LC 9)
Max Uplift 2=-133(LC 12), 9=-109(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2235/300, 3-4=-1934/316, 4-5=-1541/311, 5-6=-1653/349, 6-7=-1538/300, 7-8=-1931/313, 8-9=-2154/332
BOT CHORD 2-16=-182/1762, 15-16=-182/1762, 10-15=-119/1653, 9-10=-192/1687
WEBS 3-15=-407/218, 4-15=-202/1062, 7-10=-211/1066, 8-10=-287/243, 5-15=-752/400, 6-10=-729/428

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 2-8-12, Interior(1) 2-8-12 to 11-8-8, Exterior(2) 11-8-8 to 16-9-11, Interior(1) 16-9-11 to 24-7-9, Exterior(2) 24-7-9 to 29-8-12, Interior(1) 29-8-12 to 36-0-0 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) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=133, 9=109.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

May 29,2019

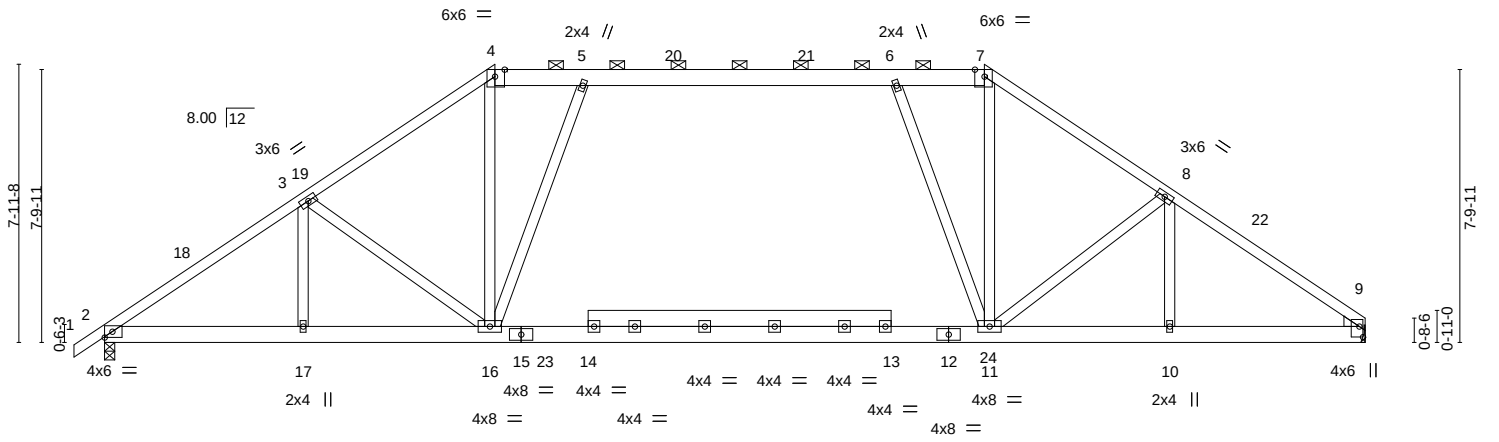
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp	
20900A	HA3	ROOF TRUSS	1	1	Job Reference (optional)	I37233098

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:09:54 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-kKiCZ?WkPOEpsXdO9yFA5ZXKIFiUFVJWN_zhQKzBvLB

-0-10-8	5-8-3	11-2-0	13-10-0	18-2-0	22-6-0	25-2-1	30-5-10	36-0-12
0-10-8	5-8-3	5-5-13	2-8-0	4-4-0	4-4-0	2-8-0	5-3-10	5-7-2

Scale = 1:65.9



5-8-3	11-2-0	18-2-0	25-2-1	30-5-10	36-0-12
5-8-3	5-5-13	7-0-0	7-0-0	5-3-10	5-7-2

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

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	0.59	Vert(LL)	-0.21	11-16	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.37	11-16	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.06	9	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 252 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except* 4-7: 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
WEDGE
Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-5-10 oc purlins, except 2-0-0 oc purlins (5-1-5 max.): 4-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=1496/0-3-8, 9=1433/Mechanical
Max Horz 2=192(LC 9)
Max Uplift 2=-128(LC 12), 9=-104(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2236/304, 3-4=-1983/313, 4-5=-1582/305, 5-6=-1726/362, 6-7=-1571/302, 7-8=-1968/319, 8-9=-2194/305
BOT CHORD 2-17=-194/1756, 16-17=-194/1756, 11-16=-153/1726, 10-11=-171/1707, 9-10=-171/1707
WEBS 3-16=-368/214, 4-16=-153/1011, 7-11=-151/1025, 8-11=-327/215, 5-16=-670/369, 6-11=-698/366

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 2-8-12, Interior(1) 2-8-12 to 11-2-0, Exterior(2) 11-2-0 to 16-3-3, Interior(1) 16-3-3 to 25-2-1, Exterior(2) 25-2-1 to 30-5-10, Interior(1) 30-5-10 to 36-0-0 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) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=128, 9=104.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

May 29,2019

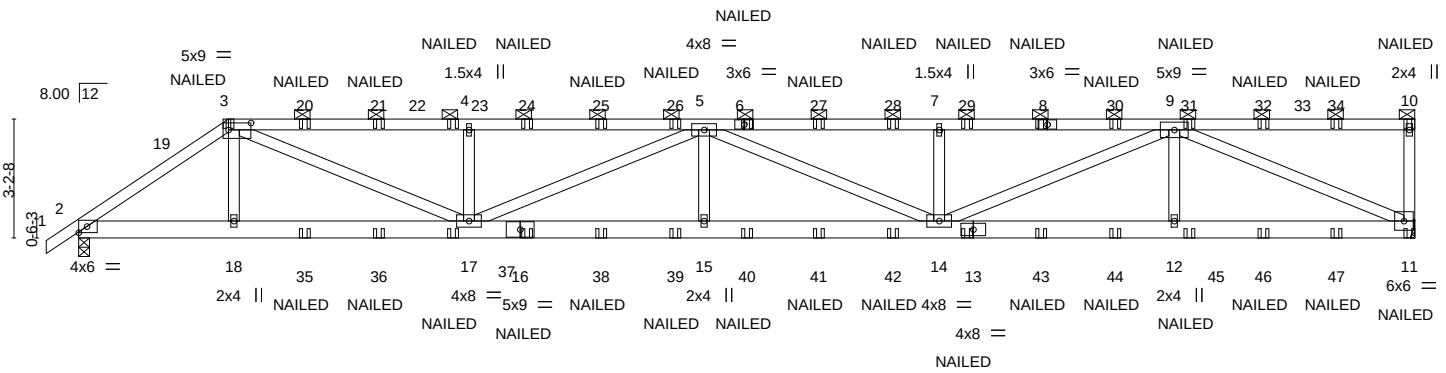
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp	
20900A	HG1	HALF HIP GIRDER	1	2	Job Reference (optional)	I37233099

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:09:58 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-c5yjPNZETdlFK8w9OoK6FPi_zs66BHR6IcxuZ5zBvL7

-0-10-8	4-0-8	10-6-7	16-10-9	23-2-11	29-6-14	36-0-12
0-10-8	4-0-8	6-5-14	6-4-2	6-4-2	6-4-2	6-5-14

Scale = 1:62.2



4-0-8	10-6-7	16-10-9	23-2-11	29-6-14	36-0-12
4-0-8	6-5-14	6-4-2	6-4-2	6-4-2	6-5-14

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

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	0.74	Vert(LL)	0.36	14-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.54	14-15	>800	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.91	Horz(CT)	0.09	11	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 423 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except* 3-6: 2x4 SP No.1
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (4-5-13 max.): 3-10.
BOT CHORD Rigid ceiling directly applied or 9-11-1 oc bracing.

REACTIONS. (lb/size) 11=2176/Mechanical, 2=2678/0-3-8
Max Horz 2=125(LC 31)
Max Uplift 11=-803(LC 9), 2=-1025(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4308/1754, 3-4=-6072/2359, 4-5=-6071/2359, 5-7=-6250/2319, 7-9=-6250/2319, 10-11=-293/208
BOT CHORD 2-18=-1449/3443, 17-18=-1470/3493, 15-17=-2637/6993, 14-15=-2637/6993, 12-14=-1477/4018, 11-12=-1477/4018
WEBS 3-18=-402/956, 3-17=-996/2811, 4-17=-551/392, 5-17=-1010/318, 5-15=0/388, 5-14=-814/348, 7-14=-511/353, 9-14=-923/2444, 9-12=0/403, 9-11=-4322/1582

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) 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 2-8-12, Interior(1) 2-8-12 to 4-0-8, Exterior(2) 4-0-8 to 9-1-11, Interior(1) 9-1-11 to 35-11-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
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) 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) 11=803, 2=1025.
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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 800 lb down and 496 lb up at 4-0-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

Continued on page 2

NORTH CAROLINA PROFESSIONAL SEAL 044925 ENGINEER SCOTT M. SEVIER
May 29,2019

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

LOAD CASE(S) Standard

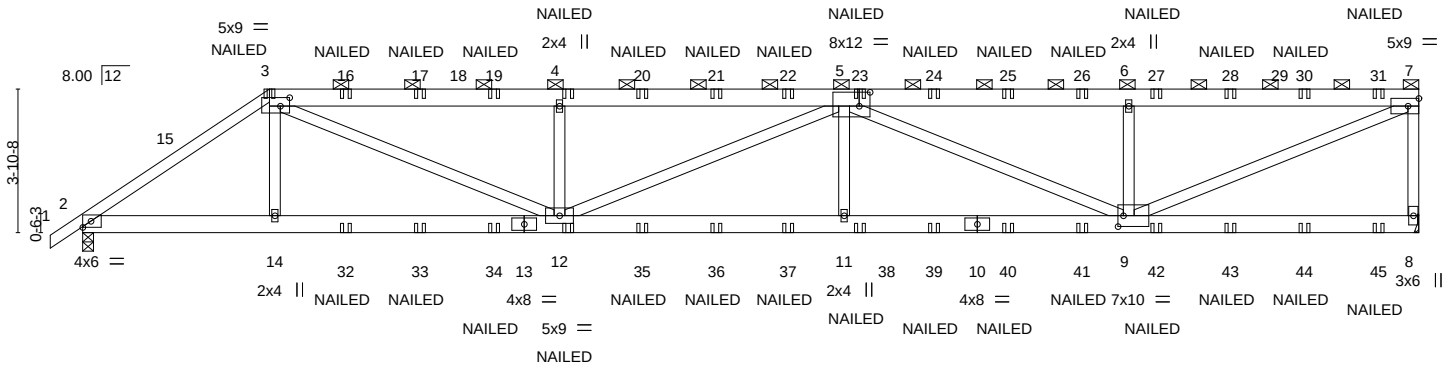
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
      Vert: 1-3=-60, 3-10=-60, 2-11=-20
   Concentrated Loads (lb)
      Vert: 3=-47(B) 6=-47(B) 10=-78(B) 11=-29(B) 16=-18(B) 18=-800(B) 8=-47(B) 13=-18(B) 20=-47(B) 21=-47(B) 23=-47(B) 24=-47(B) 25=-47(B) 26=-47(B) 27=-47(B) 28=-47(B) 29=-47(B) 30=-47(B) 31=-47(B) 32=-47(B) 34=-47(B) 35=-18(B) 36=-18(B) 37=-18(B) 38=-18(B) 39=-18(B) 40=-18(B) 41=-18(B) 42=-18(B) 43=-18(B) 44=-18(B) 45=-18(B) 46=-18(B) 47=-18(B)

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp
20900A	HG8	HALF HIP GIRDER	1	2	I37233100
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:10:03 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-z3lcS4dNI9NYRvp7ALwHyTPvhtr3sWRrRuffEIzBvL2

-0-10-8	5-0-8	12-10-7	20-6-10	28-2-13	36-0-12
0-10-8	5-0-8	7-9-15	7-8-3	7-8-3	7-9-15

Scale = 1:62.2



5-0-8	12-10-7	20-6-10	28-2-13	36-0-12
5-0-8	7-9-15	7-8-3	7-8-3	7-9-15

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

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	0.48	Vert(LL)	0.26	11-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.40	11-12	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.99	Horz(CT)	0.07	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 474 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2 *Except*
1-3: 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (5-9-6 max.): 3-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 8=2416/Mechanical, 2=2455/0-3-8
Max Horz 2=148(LC 35)
Max Uplift 8=-877(LC 9), 2=-782(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3973/1372, 3-4=-6041/2210, 4-5=-6040/2209, 5-6=-4441/1613, 6-7=-4441/1613, 7-8=-2282/933
BOT CHORD 2-14=-1163/3184, 12-14=-1164/3204, 11-12=-2312/6357, 9-11=-2312/6357
WEBS 3-14=-20/591, 3-12=-1200/3140, 4-12=-859/600, 5-12=-368/135, 5-11=0/511, 5-9=-2096/765, 6-9=-827/583, 7-9=-1736/4781

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) -0-10-8 to 2-8-12, Interior(1) 2-8-12 to 5-0-8, Exterior(2) 5-0-8 to 10-1-11, Interior(1) 10-1-11 to 35-11-0 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) 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) 8=877, 2=782.
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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 264 lb down and 130 lb up at 5-0-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

NORTH CAROLINA PROFESSIONAL SEAL 044925 ENGINEER SCOTT M. SEVIER
May 29,2019

LOAD CASE(S) Standard

Continued on page 2

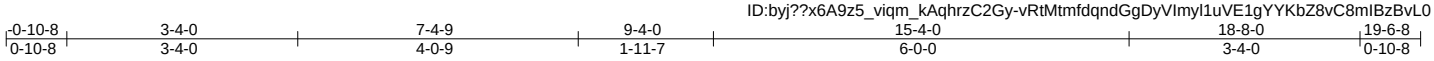
ENGINEERING BY TRENCO A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

LOAD CASE(S) Standard

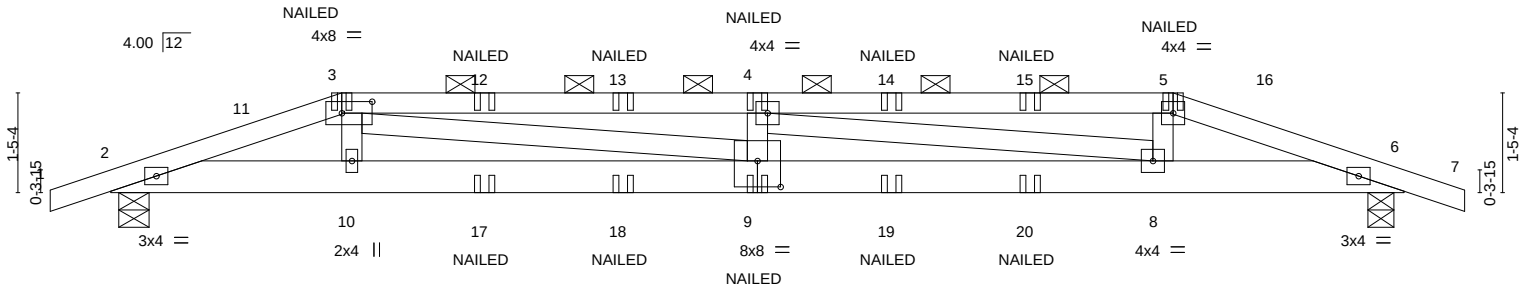
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
      Vert: 1-3=-60, 3-7=-60, 2-8=-20
   Concentrated Loads (lb)
      Vert: 3=-79(F) 14=-264(F) 12=-28(F) 4=-79(F) 16=-79(F) 17=-79(F) 19=-79(F) 20=-79(F) 21=-79(F) 22=-79(F) 23=-79(F) 24=-79(F) 25=-79(F) 26=-79(F) 27=-79(F) 28=-79(F) 30=-79(F) 31=-80(F) 32=-28(F) 33=-28(F) 34=-28(F) 35=-28(F) 36=-28(F) 37=-28(F) 38=-28(F) 39=-28(F) 40=-28(F) 41=-28(F) 42=-28(F) 43=-28(F) 44=-28(F) 45=-29(F)

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp
20900A	HGL	HIP GIRDER	1	2	I37233101
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:10:05 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-vRtMtmfdqndGgDyVImyl1uVE1gYYKbZ8vC8mIBzBvL0



Scale = 1:33.3



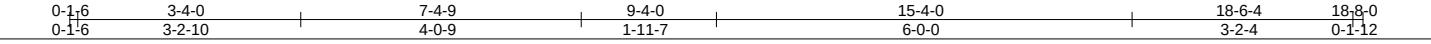


Plate Offsets (X,Y)-- [3:0-5-4,0-2-0], [9:0-4-0,0-4-8]

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	0.55	Vert(LL)	0.18	9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.25	9	>873	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.31	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 189 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 6-0-0 oc purlins, except 2-0-0 oc purlins (5-6-2 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=1054/0-5-4, 6=1051/0-4-8
Max Horz 2=-24(LC 9)
Max Uplift 2=-456(LC 8), 6=-454(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2778/1637, 3-4=-4085/2533, 4-5=-2654/1600, 5-6=-2747/1617
BOT CHORD 2-10=-1504/2605, 9-10=-1532/2648, 8-9=-2474/4085, 6-8=-1492/2579
WEBS 3-10=-207/374, 3-9=-962/1497, 4-8=-1491/958, 5-8=-362/560

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=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 3-4-0, Exterior(2) 3-4-0 to 7-6-15, Interior(1) 7-6-15 to 15-4-0, Exterior(2) 15-4-0 to 19-6-8 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) One RT7A USP 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.
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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 141 lb down and 98 lb up at 3-4-0, and 141 lb down and 98 lb up at 15-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

May 29,2019

Continued on page 2

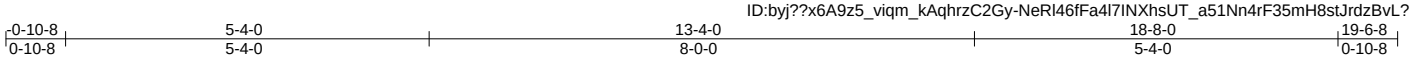
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

LOAD CASE(S) Standard

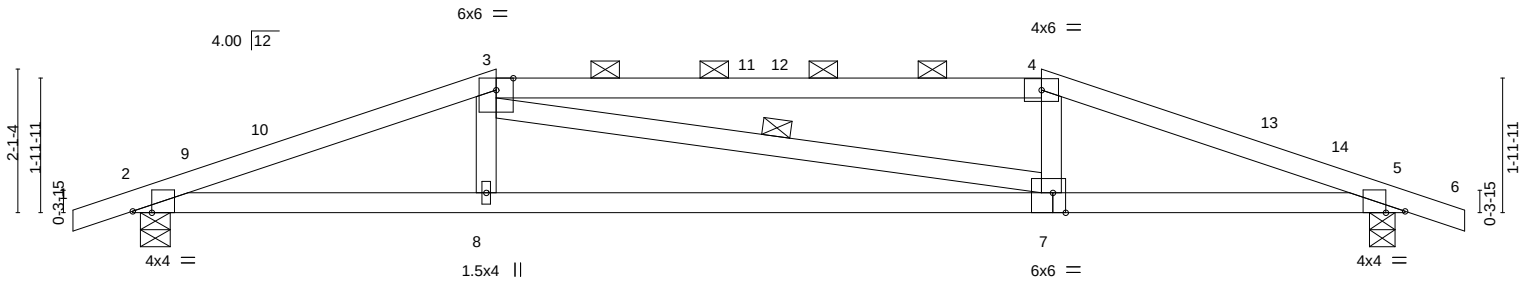
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-60, 3-5=-60, 5-7=-60, 2-6=-20
   Concentrated Loads (lb)
   Vert: 3=-25(F) 5=-25(F) 10=-141(F) 9=-11(F) 4=-25(F) 8=-141(F) 12=-25(F) 13=-25(F) 14=-25(F) 15=-25(F) 17=-11(F) 18=-11(F) 19=-11(F) 20=-11(F)

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp
20900A	HL1	HIP	1	1	I37233102
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:10:06 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-NeRI46fFa4I7INXhsUT_a51Nn4rF35mH8stJrdzBvL?



Scale = 1:33.8



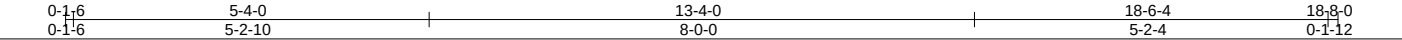


Plate Offsets (X,Y)-- [2:0-3-6,Edge], [5:0-3-6,Edge], [7:0-2-4,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.68	Vert(LL)	0.29	7-8	>753	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.32	7-8	>674	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.05	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 76 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
3-4: 2x4 SP DSS
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

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

REACTIONS. (lb/size) 2=796/0-5-4, 5=794/0-4-8
Max Horz 2=-34(LC 13)
Max Uplift 2=-336(LC 8), 5=-335(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1849/1438, 3-4=-1656/1332, 4-5=-1808/1404
BOT CHORD 2-8=-1318/1716, 7-8=-1294/1702, 5-7=-1282/1670
WEBS 3-8=-276/302, 4-7=-290/313

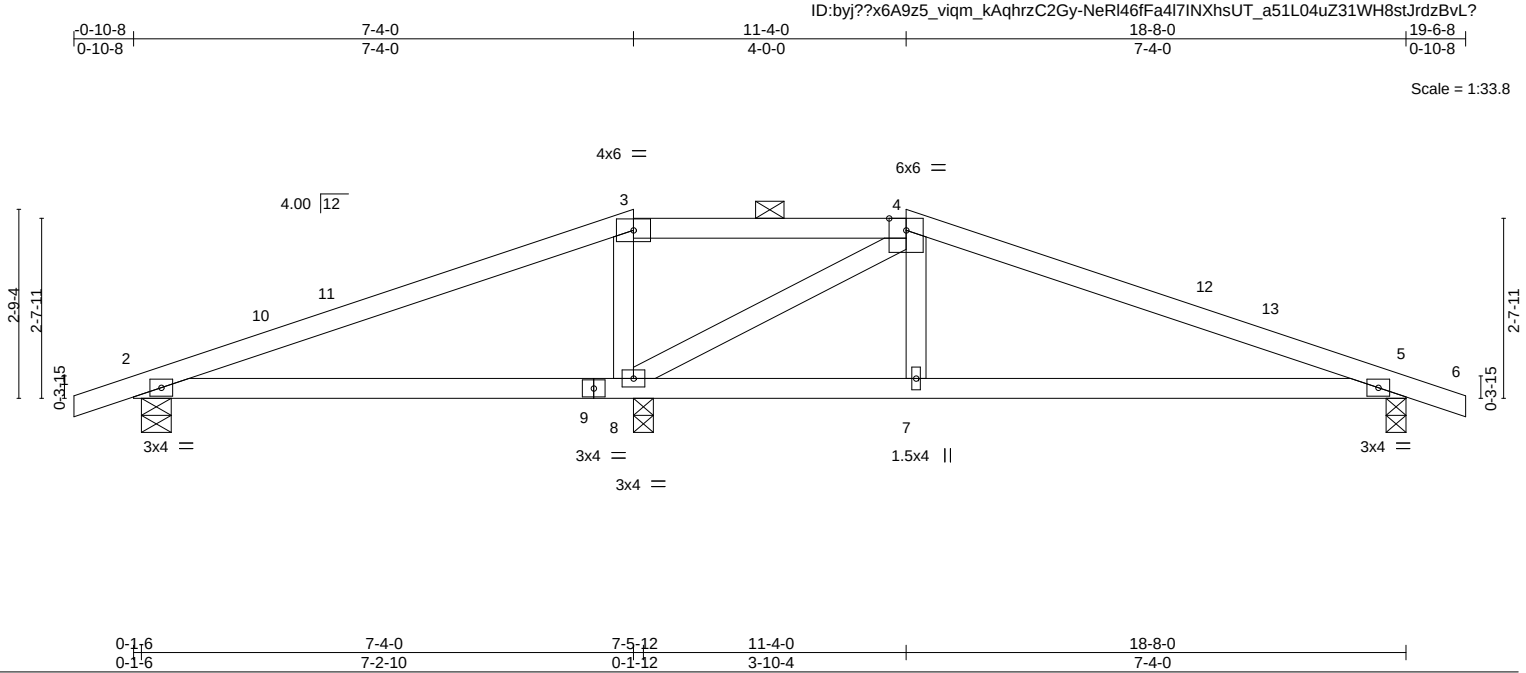
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-4-0, Exterior(2) 5-4-0 to 9-6-15, Interior(1) 9-6-15 to 13-4-0, Exterior(2) 13-4-0 to 17-6-15, Interior(1) 17-6-15 to 19-6-8 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) One RT7A USP 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.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 29,2019

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

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp
20900A	HL2	HIP	1	1	I37233103
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:10:06 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-NeRl46fFa4l7INXhsUT_a51L04uZ31WH8stJrdzBvL?



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	0.79	Vert(LL)	0.15	2-8	>558	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.18	5-7	>745	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 73 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-4-5 oc purlins, except 2-0-0 oc purlins (10-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (lb/size) 8=871/0-3-8, 5=461/0-3-8, 2=259/0-5-4
Max Horz 2=45(LC 16)
Max Uplift 8=-182(LC 8), 5=-118(LC 9), 2=-150(LC 8)
Max Grav 8=871(LC 1), 5=466(LC 24), 2=281(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-11/259, 4-5=-530/93
BOT CHORD 7-8=-18/430, 5-7=-14/438
WEBS 3-8=-398/168, 4-8=-701/92

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 7-4-0, Exterior(2) 7-4-0 to 15-6-15, Interior(1) 15-6-15 to 19-6-8 zone; porch left 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) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8, 5, and 2. This connection is for uplift only and does not consider lateral forces.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 29,2019

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

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp
20900A	J1	JACK-OPEN	17	1	I37233104
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:10:07 2019 Page 1

ID:byj??x6A9z5_viqm_kAqhrzC2Gy-rq_7ISgtLOtzvX6uPB_D6Jad8UKtoZtQMWdtN4zBvL_

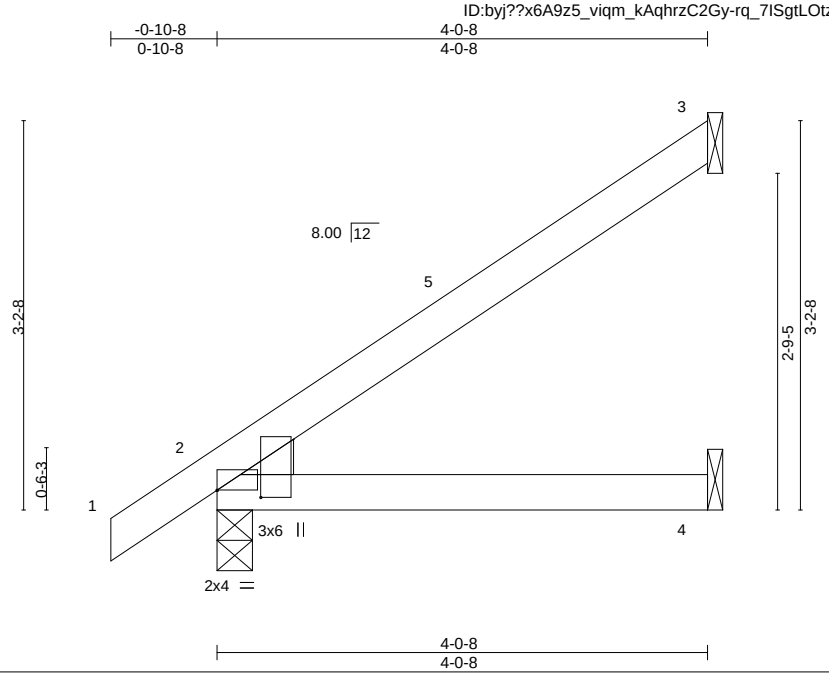


Plate Offsets (X,Y)-- [2:Edge,0-0-0], [2:0-0-11,0-4-5]

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	0.26	Vert(LL)	-0.01	2-4	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.03	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: 16 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 4-0-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 3=107/Mechanical, 2=223/0-3-8, 4=38/Mechanical
Max Horz 2=123(LC 12)
Max Uplift 3=-88(LC 12), 2=-12(LC 12)
Max Grav 3=119(LC 19), 2=223(LC 1), 4=77(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 3-11-12 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) 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 RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.

May 29,2019

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

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp
20900A	J2	JACK-OPEN	2	1	I37233105
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:10:08 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-K0YVVohW6i?qXgh4zuVSfW6rvuiFX07abAMQuWzBvKz

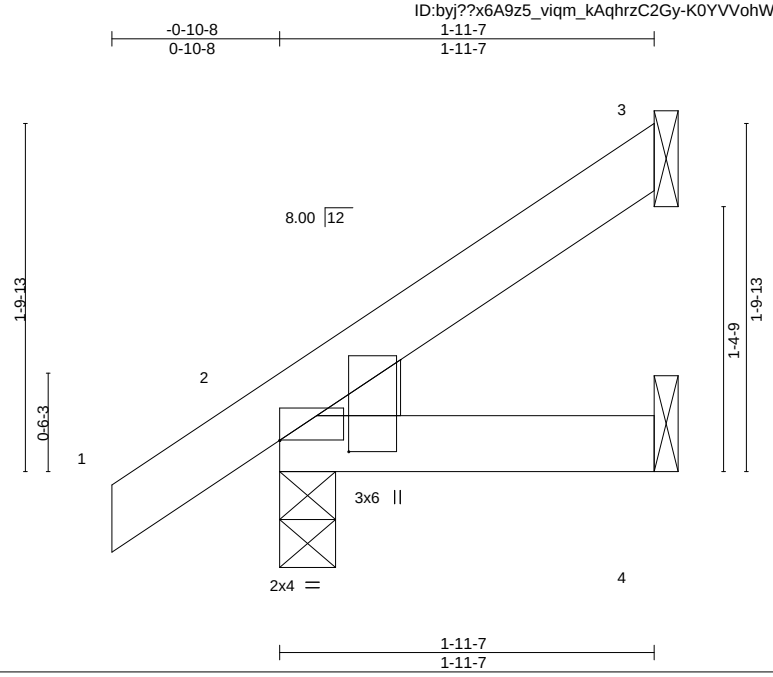


Plate Offsets (X,Y)-- [2:Edge,0-0-0], [2:0-0-11,0-4-5]

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	0.07	Vert(LL)	-0.00	2	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	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: 9 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 1-11-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 3=45/Mechanical, 2=144/0-3-8, 4=19/Mechanical
Max Horz 2=70(LC 12)
Max Uplift 3=-42(LC 12), 2=-17(LC 12)
Max Grav 3=52(LC 19), 2=144(LC 1), 4=38(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) 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) 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 RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.

May 29,2019

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

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp
20900A	J3	JACK-OPEN	16	1	I37233106
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:10:09 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-oD6tj7i8t?7h9qGGXc0hBkfx0l_ZGTNjqp6_RyzBvKy

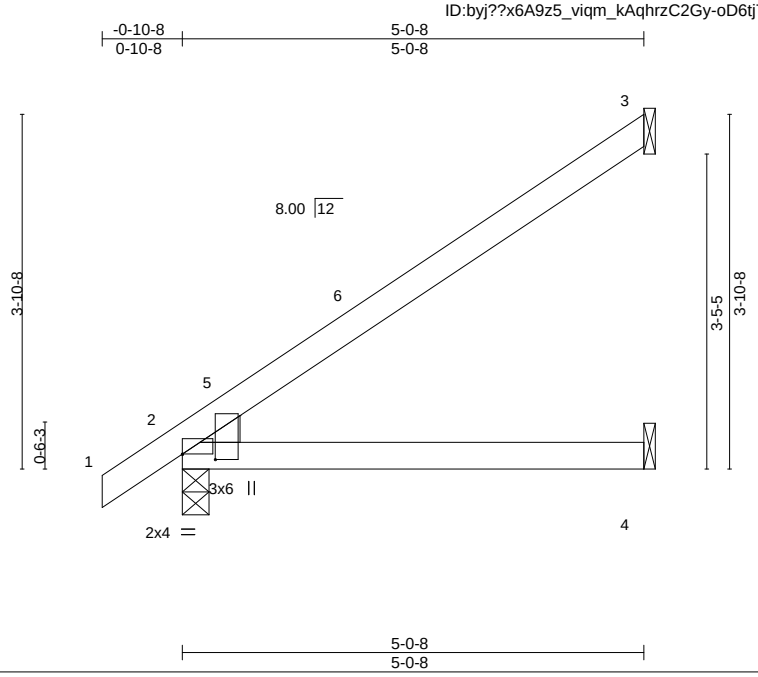


Plate Offsets (X,Y)-- [2:0-0-0,0-0-0], [2:0-0-11,0-4-5]

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	0.43	Vert(LL)	-0.03	2-4	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.07	2-4	>886	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: 19 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 5-0-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 3=139/Mechanical, 2=261/0-3-8, 4=48/Mechanical
Max Horz 2=149(LC 12)
Max Uplift 3=-111(LC 12), 2=-10(LC 12)
Max Grav 3=153(LC 19), 2=261(LC 1), 4=97(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 4-11-12 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) 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) except (jt=lb) 3=111.
6) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.

May 29,2019

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

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp
20900A	J4	JACK-OPEN	2	1	I37233107
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:10:09 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-oD6tj7i8t?7h9qGGXc0hBkf?bI1mGTNjqp6_RyzBvKy

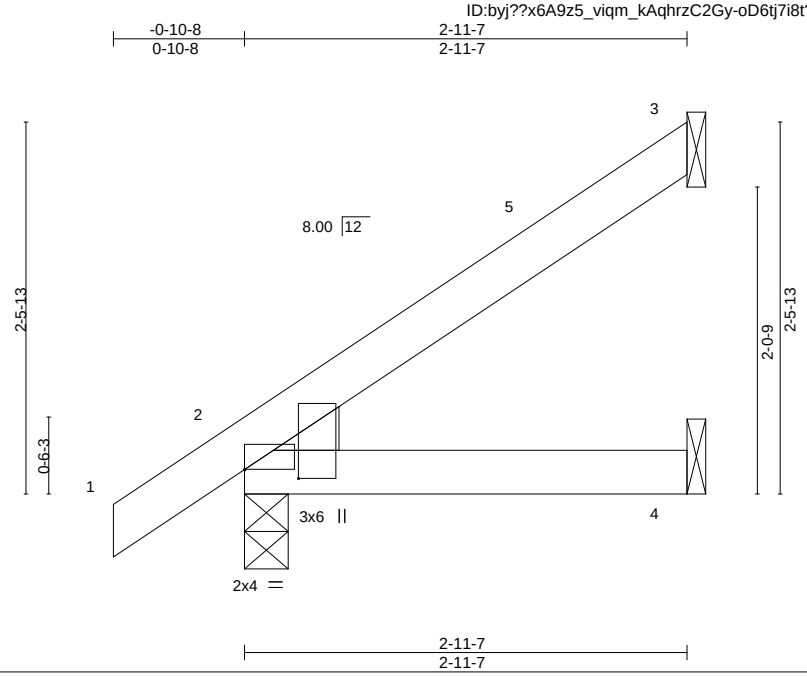


Plate Offsets (X,Y)-- [2:Edge,0-0-0], [2:0-0-11,0-4-5]

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	0.13	Vert(LL)	-0.00	2-4	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.01	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: 12 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 2-11-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 3=71/Mechanical, 2=182/0-3-8, 4=27/Mechanical
Max Horz 2=95(LC 12)
Max Uplift 3=-63(LC 12), 2=-15(LC 12)
Max Grav 3=81(LC 19), 2=182(LC 1), 4=55(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 2-10-11 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) 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 RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.

May 29,2019

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

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp
20900A	J5	JACK-OPEN	2	1	I37233108
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:10:10 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-GPgFwTjmeJFYm_rT5JYwkxCCZhOB?wdt2TrXzOzBvKx

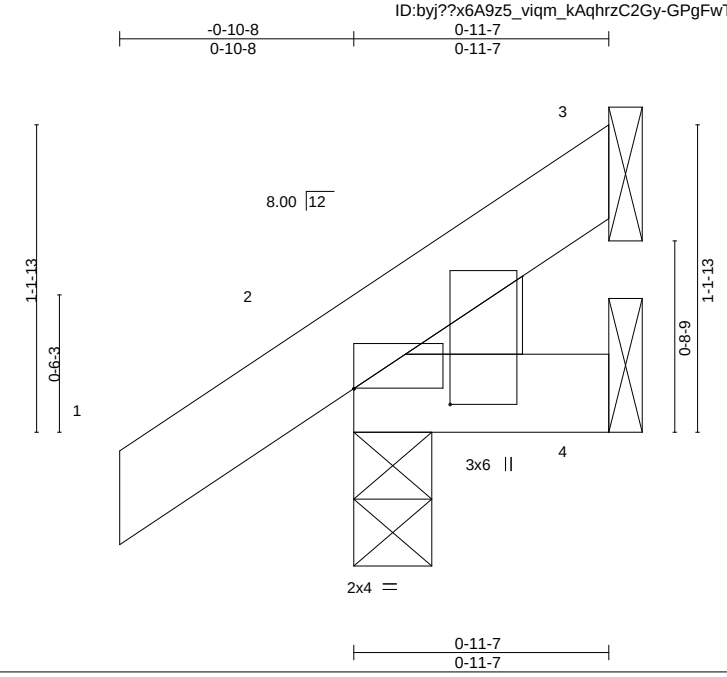


Plate Offsets (X,Y)-- [2:Edge,0-0-0], [2:0-0-11,0-4-5]

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	0.06	Vert(LL)	-0.00	2	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	-0.00	2	>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: 6 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 0-11-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 3=0/Mechanical, 2=118/0-3-8, 4=9/Mechanical
Max Horz 2=45(LC 12)
Max Uplift 3=-14(LC 12), 2=-24(LC 12)
Max Grav 3=8(LC 8), 2=118(LC 1), 4=18(LC 3)

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

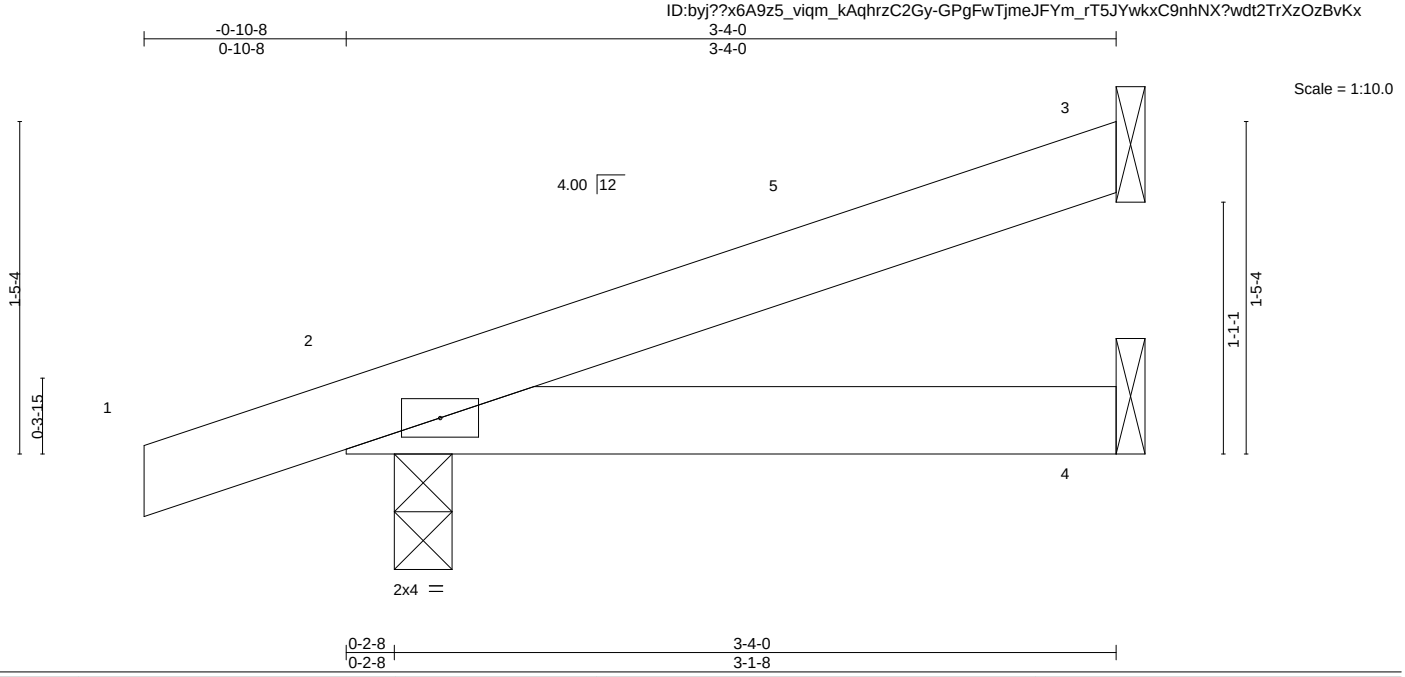
NOTES-
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed 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) 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 RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.

May 29,2019

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

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp
20900A	JL1	JACK-OPEN	7	1	I37233109
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:10:10 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-GPgFwTjmeJFYm_rT5JYwkxC9nhNX?wdt2TrXzOzBvKx



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)	-0.01	2-4	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.01	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: 12 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 3-4-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 3=85/Mechanical, 4=31/Mechanical, 2=195/0-3-0
Max Horz 2=57(LC 8)
Max Uplift 3=-46(LC 12), 4=-10(LC 8), 2=-91(LC 8)
Max Grav 3=85(LC 1), 4=63(LC 3), 2=195(LC 1)

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

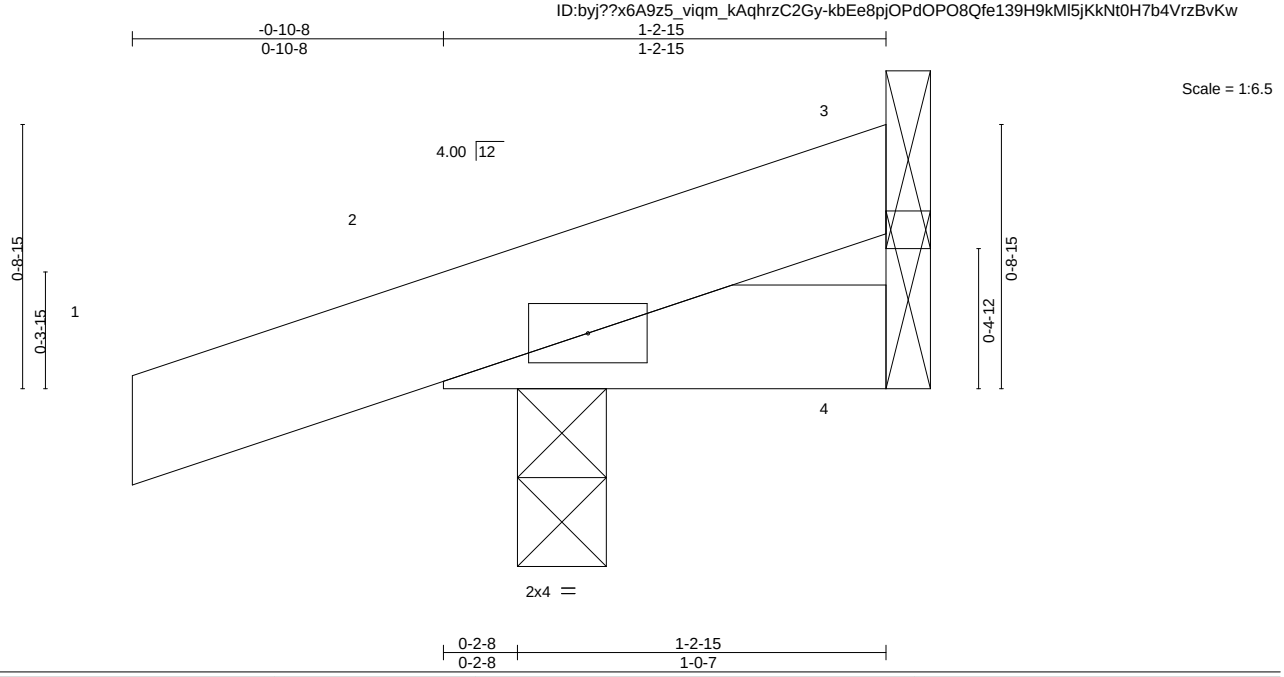
NOTES-
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-3-4 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions 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) 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, 4, 2.

May 29,2019

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

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp
20900A	JL2	JACK-OPEN	4	1	I37233110
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:10:11 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-kbEe8pjOPdOPO8Qfe139H9kMl5jKkNt0H7b4VrzBvKw



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	-0.00	2	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	-0.00	2	>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: 5 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 1-2-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 3=16/Mechanical, 4=12/Mechanical, 2=122/0-3-0
Max Horz 2=31(LC 8)
Max Uplift 3=-11(LC 12), 4=-4(LC 8), 2=-67(LC 8)
Max Grav 3=16(LC 1), 4=24(LC 3), 2=122(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) 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, 4.
6) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.

May 29,2019

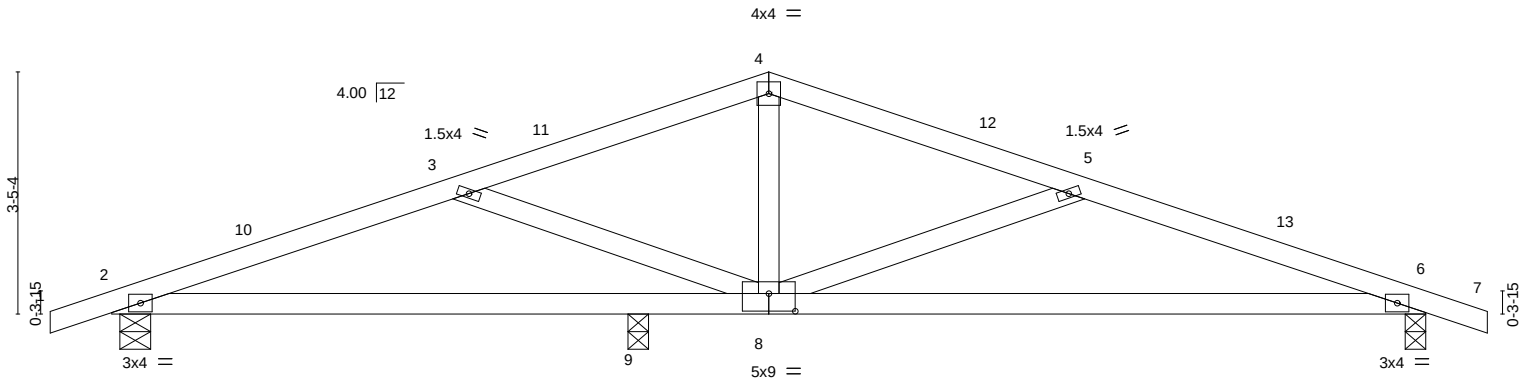
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp
20900A	L2	COMMON	1	1	I37233111
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:10:12 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-Coo0L9k0AwWG0I?rCkaOpMHRkVsaTnrAWnKe1HzBvKv

-0-10-8	5-0-14	9-4-0	13-7-2	18-8-0	19-6-8
0-10-8	5-0-14	4-3-2	4-3-2	5-0-14	0-10-8

Scale = 1:32.7



0-1-6	7-5-12	9-4-0	12-8-0	18-8-0
0-1-6	7-4-6	1-10-4	3-4-0	6-0-0

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

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	0.46	Vert(LL)	-0.21	6-8	>643	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.46	6-8	>289	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.04	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 78 lb	FT = 20%

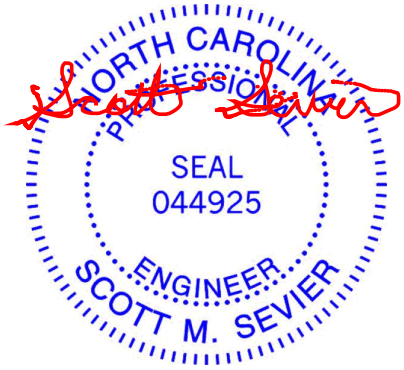
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-4-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 6=715/0-3-8, 2=679/0-5-4, 9=197/0-3-8
Max Horz 2=57(LC 12)
Max Uplift 6=-130(LC 9), 2=-190(LC 8), 9=-105(LC 8)
Max Grav 6=715(LC 1), 2=679(LC 1), 9=207(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1361/259, 3-4=-954/127, 4-5=-956/116, 5-6=-1396/272
BOT CHORD 2-9=-252/1241, 8-9=-252/1241, 6-8=-207/1292
WEBS 4-8=0/349, 3-8=-429/233, 5-8=-474/222

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 9-4-0, Exterior(2) 9-4-0 to 12-4-0, Interior(1) 12-4-0 to 19-6-8 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=105.
6) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6 and 2. This connection is for uplift only and does not consider lateral forces.



May 29,2019

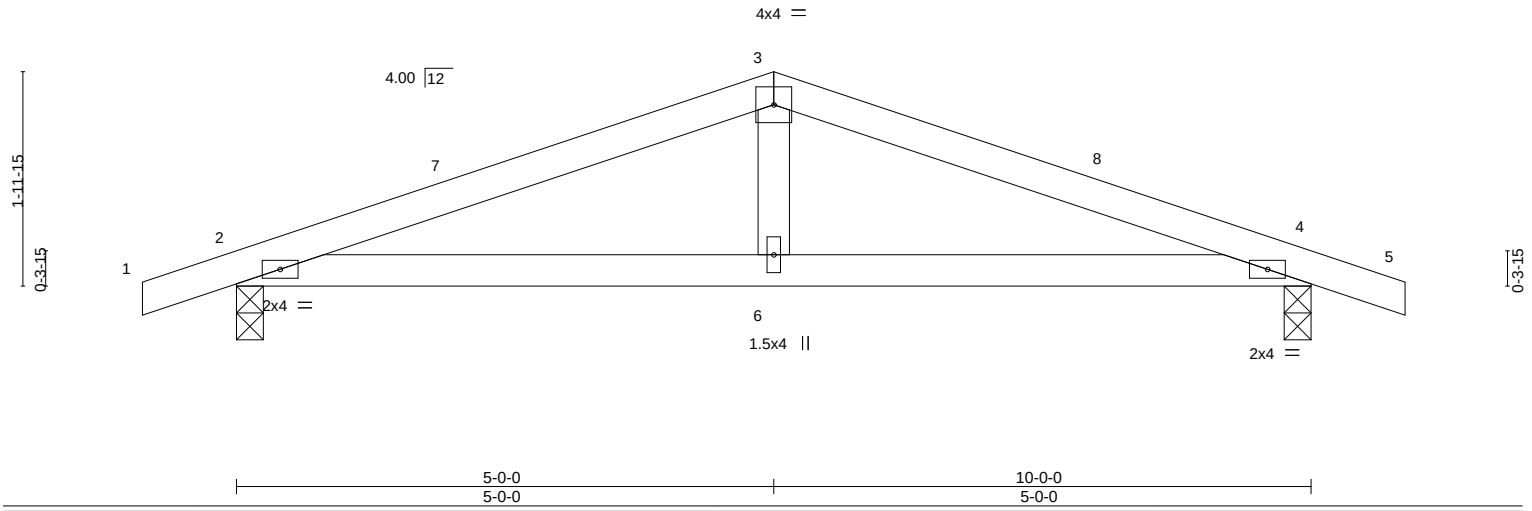
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp
20900A	P1	COMMON	4	1	I37233112
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:10:13 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-g_MOYVlexEe7dSa2mS5dMaqeXvLMCG?JlR4BajzBvKu

-0-10-8 / 0-10-8 | 5-0-0 / 5-0-0 | 10-0-0 / 5-0-0 | 10-10-8 / 0-10-8

Scale = 1:21.4



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	0.33	Vert(LL)	0.04	4-6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.04	2-6	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 36 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 8-0-10 oc bracing.

REACTIONS. (lb/size) 2=450/0-3-0, 4=450/0-3-0
Max Horz 2=-33(LC 13)
Max Uplift 2=-185(LC 8), 4=-185(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-705/598, 3-4=-705/594
BOT CHORD 2-6=-506/622, 4-6=-506/622

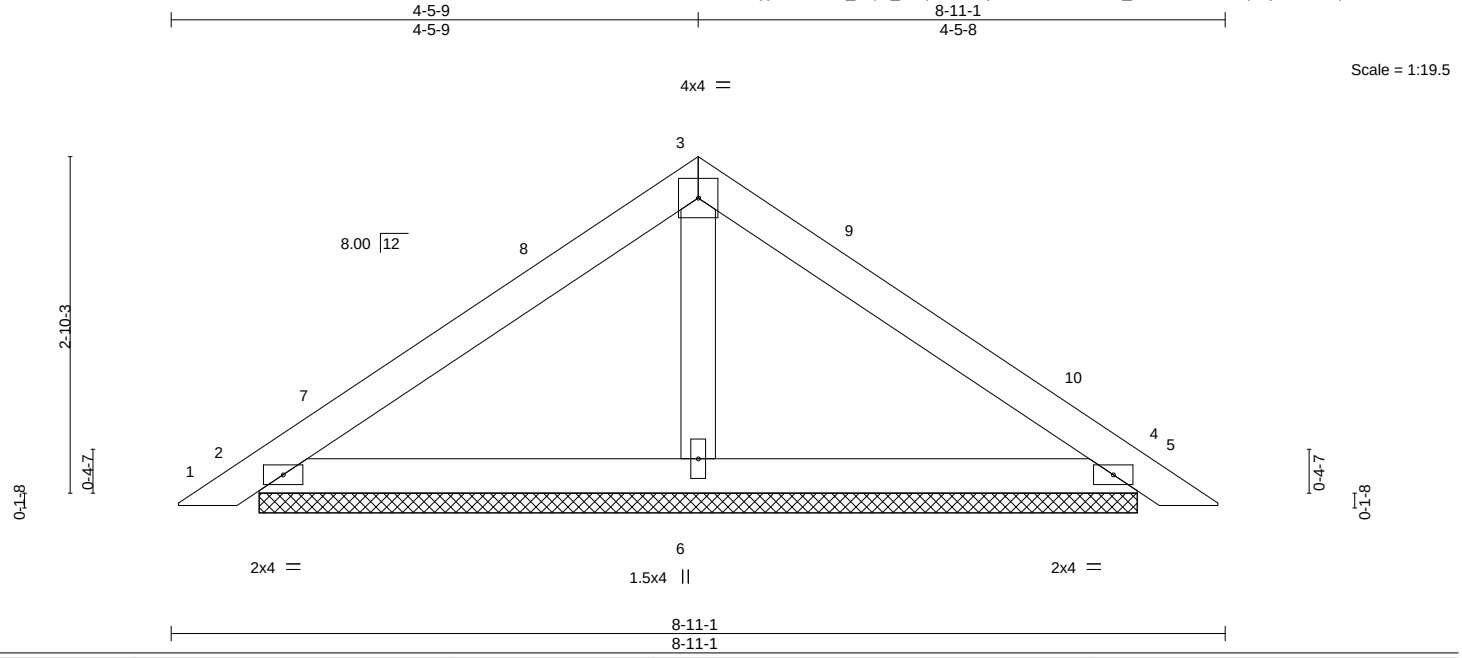
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-0-0, Exterior(2) 5-0-0 to 8-0-0, Interior(1) 8-0-0 to 10-10-8 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=185.
6) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 4. This connection is for uplift only and does not consider lateral forces.

May 29,2019

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

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp	
20900A	PB1	PIGGYBACK	1	1	Job Reference (optional)	I37233113

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:10:14 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-8AwmmrmGiYm_Fb8EK9csunMqPJj4xk?Sz5pl6AzBvKt



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)	0.01	5	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	0.01	5	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 30 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=188/7-5-3, 4=188/7-5-3, 6=270/7-5-3
Max Horz 2=-68(LC 10)
Max Uplift 2=-46(LC 12), 4=-55(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) 0-3-11 to 3-3-11, Interior(1) 3-3-11 to 4-5-9, Exterior(2) 4-5-9 to 7-5-9, Interior(1) 7-5-9 to 8-7-6 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

May 29,2019

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

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp
20900A	PB2	PIGGYBACK	1	1	I37233114
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:10:14 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-8AwmmrmGiYm_Fb8EK9csunMs1Jj5xk6Sz5pl6AzBvKt

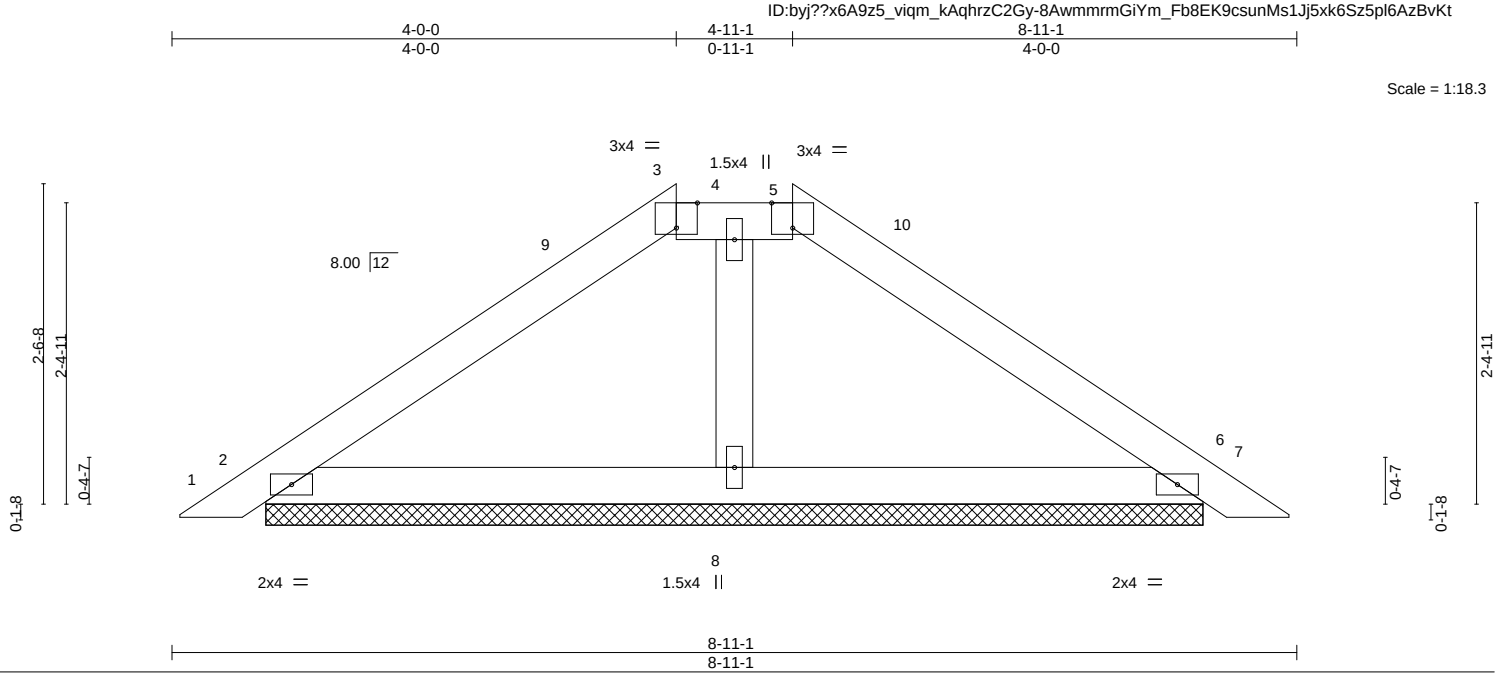


Plate Offsets (X,Y)-- [3:0-2-0,Edge], [5:0-2-0,Edge]

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	0.15	Vert(LL)	0.00	7	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	0.01	7	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 29 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
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. (lb/size) 2=193/7-5-3, 6=193/7-5-3, 8=261/7-5-3
Max Horz 2=-59(LC 10)
Max Uplift 2=-46(LC 12), 6=-53(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) 0-3-11 to 3-3-11, Interior(1) 3-3-11 to 4-0-0, Exterior(2) 4-0-0 to 8-7-6 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 29,2019

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

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp	
20900A	PB3	PIGGYBACK	1	1	Job Reference (optional)	I37233115

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:10:15 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-cMT8zBmvTrurtljQtt75R?v2Ui3NgBFcClZIeczBvKs

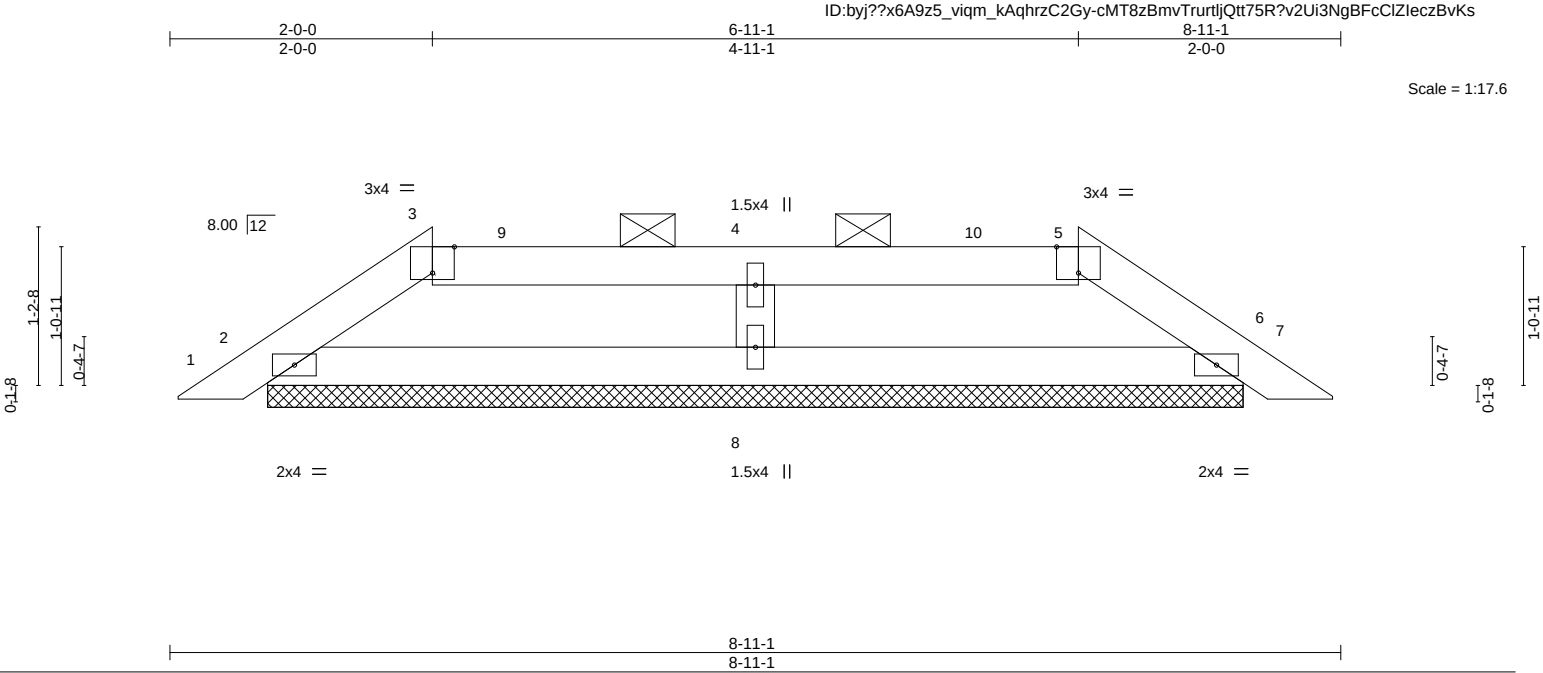


Plate Offsets (X,Y)-- [3:0-2-0,Edge], [5:0-2-0,Edge]

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	0.11	Vert(LL)	0.00	7	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	0.00	7	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 26 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. (lb/size) 2=184/7-5-3, 6=184/7-5-3, 8=279/7-5-3
Max Horz 2=-26(LC 10)
Max Uplift 2=-30(LC 12), 6=-30(LC 13), 8=-31(LC 9)

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) 0-3-11 to 6-2-15, Interior(1) 6-2-15 to 6-11-1, Exterior(2) 6-11-1 to 8-7-6 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6, 8.
8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 29,2019

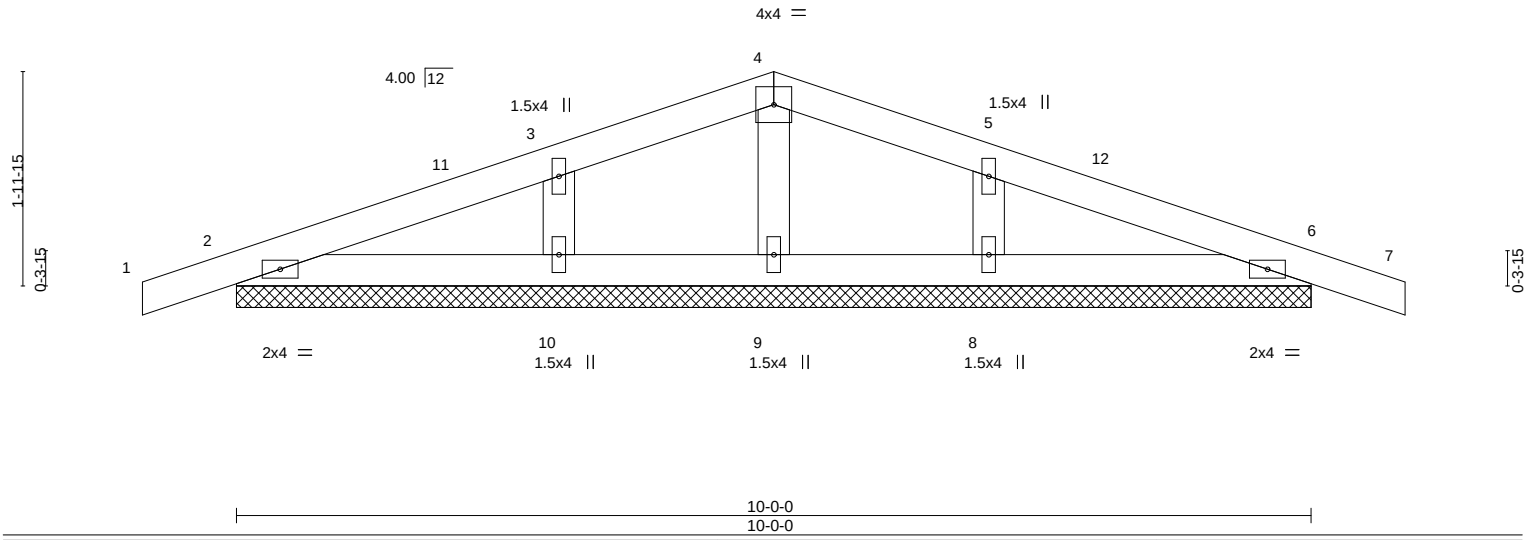
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp	
20900A	PE	COMMON SUPPORTED GAB	1	1	Job Reference (optional)	I37233116

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:10:16 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-5Z1WBXnXE90iUvIcRaeK_CSDP6RkPeGlRPIrA2zBvKr

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

Scale = 1:21.4



10-0-0
10-0-0

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	0.00	7	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00	7	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 38 lb	FT = 20%

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

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

REACTIONS. All bearings 10-0-0.
(lb) - Max Horz 2=-33(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 2, 6, 10, 8
Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9, 10, 8

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

NOTES-
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 2-1-8, Exterior(2) 2-1-8 to 5-0-0, Corner(3) 5-0-0 to 8-0-0, Exterior(2) 8-0-0 to 10-10-8 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6, 10, 8.
9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.

May 29,2019

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

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp
20900A	V1	VALLEY	1	1	I37233117
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:10:17 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-ZlbvOto9?S8Z63tp?HAZWQ_PkWnL85tvf32PjUzBvKq

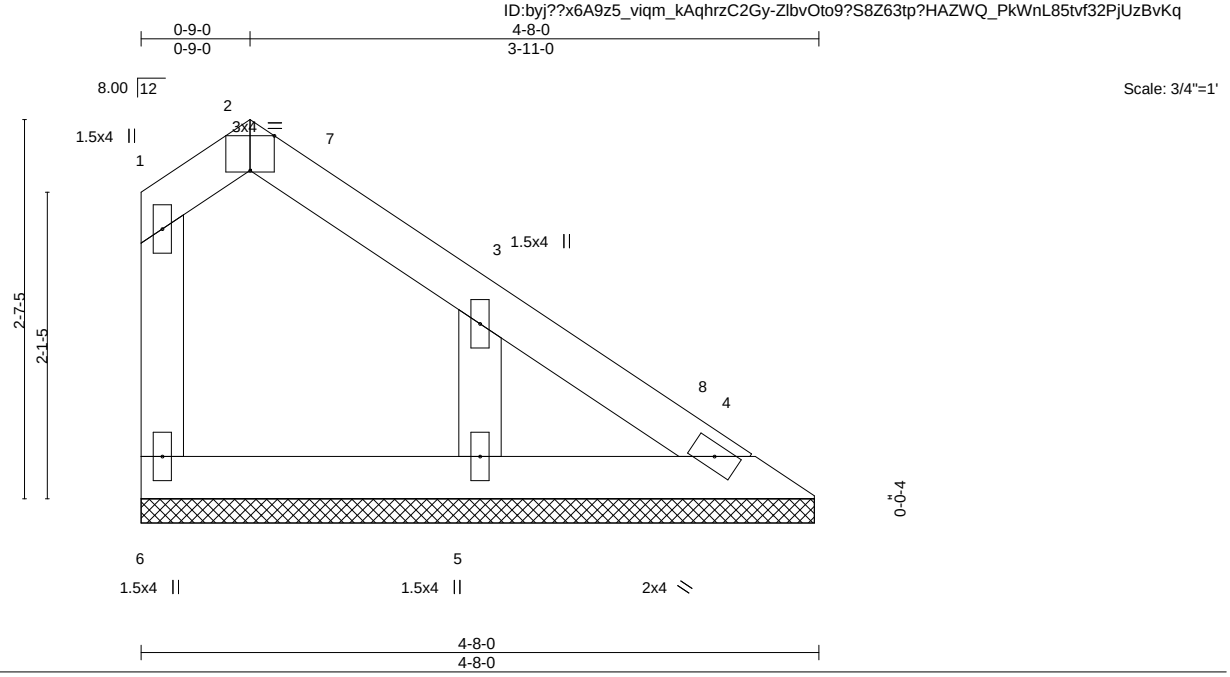


Plate Offsets (X,Y)-- [2:0-2-0,Edge]

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	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
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-S							Weight: 19 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 4-8-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 6=77/4-7-10, 4=61/4-7-10, 5=185/4-7-10
Max Horz 6=-80(LC 13)
Max Uplift 6=-11(LC 13), 5=-65(LC 13)
Max Grav 6=77(LC 1), 4=61(LC 1), 5=196(LC 20)

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

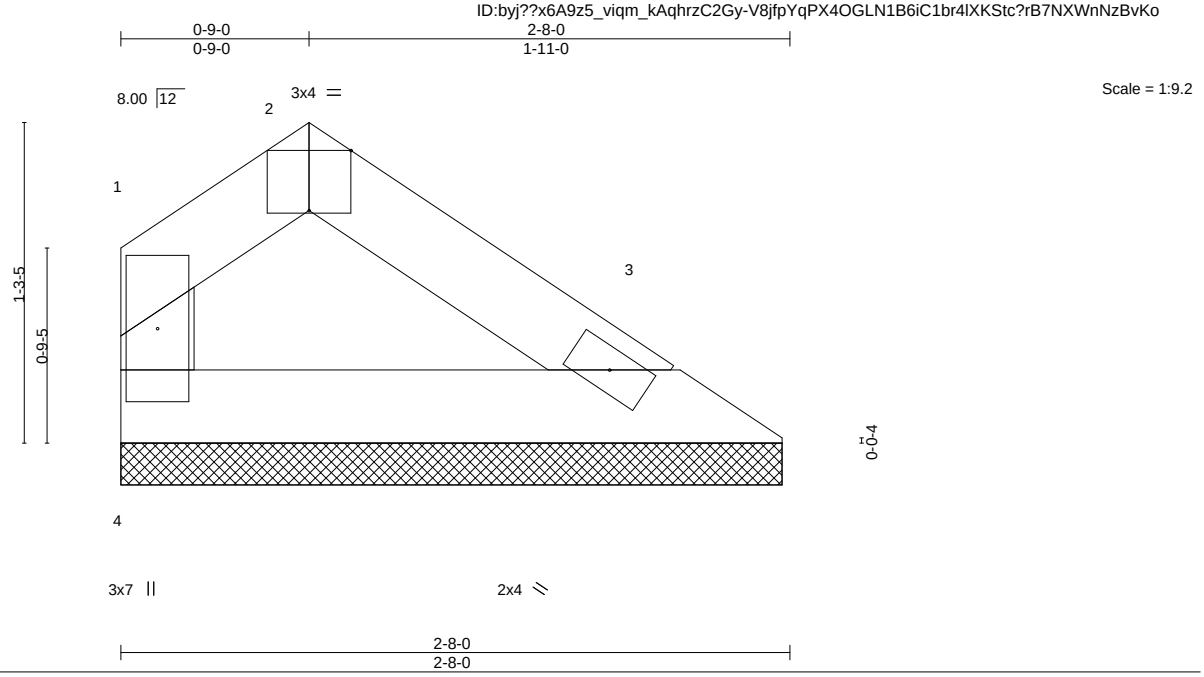
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 3-9-0, Interior(1) 3-9-0 to 4-2-4 zone;C-C 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 5.

May 29,2019

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

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp
20900A	V2	VALLEY	1	1	I37233118
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:10:19 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-V8jfpYqPX4OGLN1B6iC1br4lXKStc?rB7NXWnNzBvKo



Scale = 1:9.2

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	0.04	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-R							Weight: 9 lb	FT = 20%

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

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

REACTIONS. (lb/size) 4=82/2-7-10, 3=82/2-7-10
Max Horz 4=-28(LC 13)
Max Uplift 4=-12(LC 13), 3=-8(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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 3.

May 29,2019

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

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp
20900A	V3	GABLE	1	1	I37233119
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:10:19 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-V8jfpYqPX4OGLN1B6iC1br4jDKRWc_oB7NXWnNzBvKo

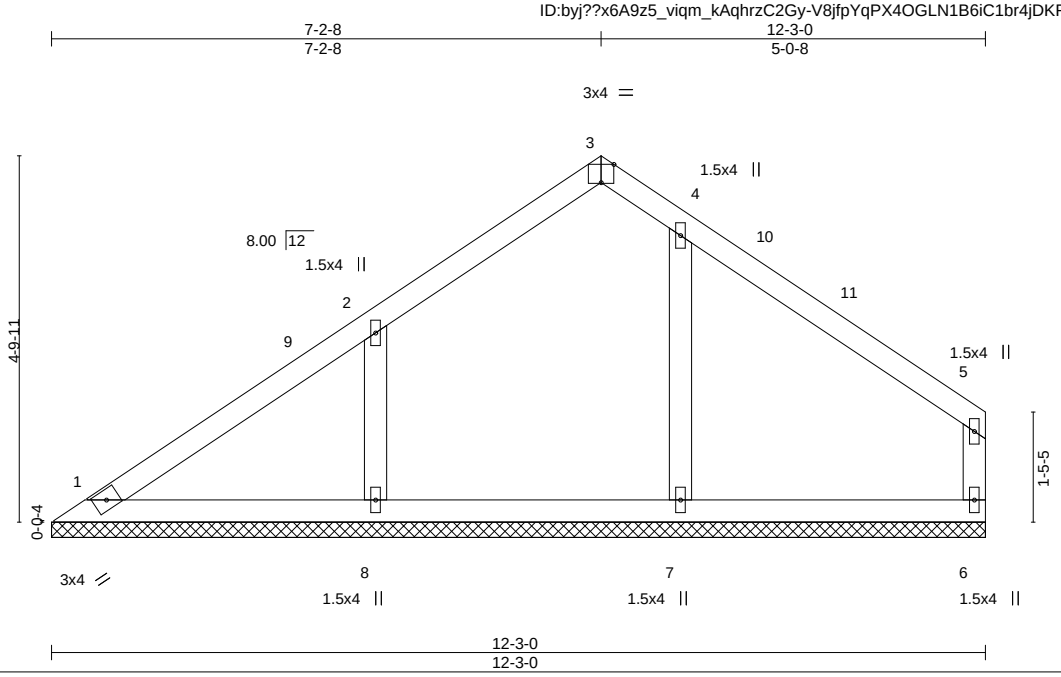


Plate Offsets (X,Y)-- [3:0-2-0,Edge]

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	0.19	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	0.07	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 50 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 12-3-0.
(lb) - Max Horz 1=108(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 6, 7 except 8=-119(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 6 except 7=293(LC 1), 8=368(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-274/163

NOTES-

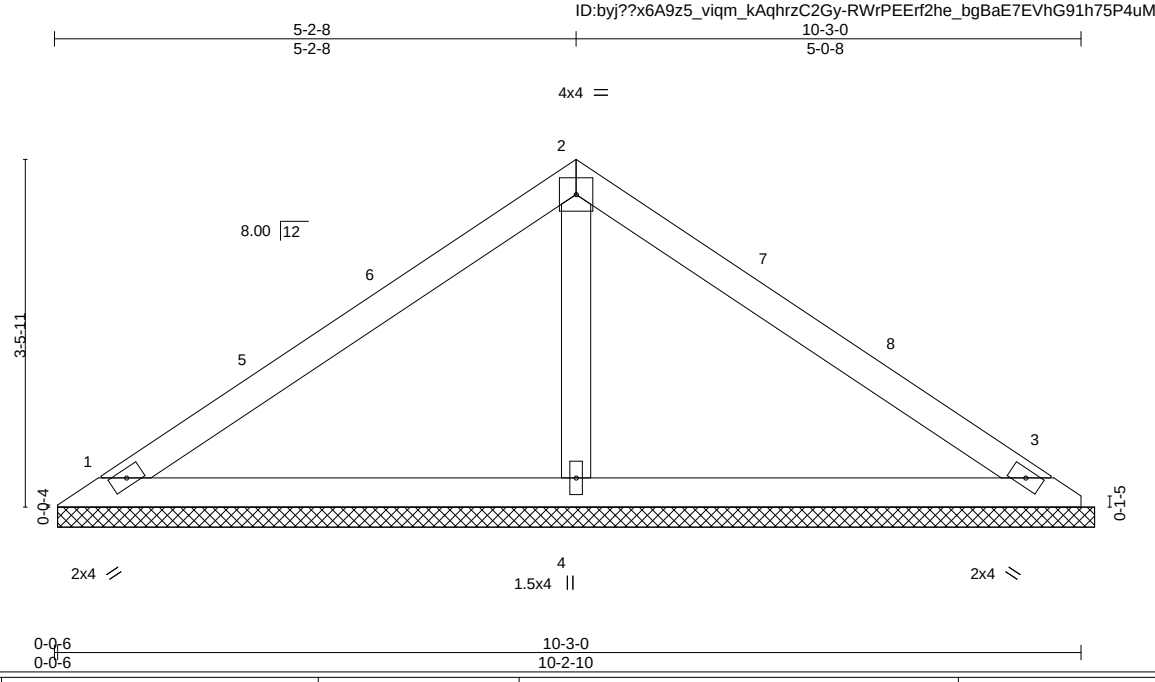
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 7-2-8, Exterior(2) 7-2-8 to 10-2-8, Interior(1) 10-2-8 to 12-1-4 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 6, 7 except (jt=lb) 8=119.

May 29,2019

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

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp
20900A	V4	VALLEY	1	1	I37233120
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:10:21 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-RWrPEErf2he_bgBaE7EVhG91h75P4uMUah0csGzBvKm



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 36 lb	FT = 20%

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

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

REACTIONS. (lb/size) 1=186/10-4-4, 3=186/10-4-4, 4=384/10-4-4
Max Horz 1=-78(LC 8)
Max Uplift 1=-35(LC 12), 3=-45(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) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 5-2-8, Exterior(2) 5-2-8 to 8-2-8, Interior(1) 8-2-8 to 9-11-4 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.

May 29,2019

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

Job	Truss	Truss Type	Qty	Ply	238.2338.D.10x10cvp
20900A	V5	VALLEY	1	1	I37233121
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue May 28 17:10:22 2019 Page 1
ID:byj??x6A9z5_viqm_kAqhrzC2Gy-vjPoRasIp?mrCqmmorlkDTiEHXO7pLbepLlAOizBvKl

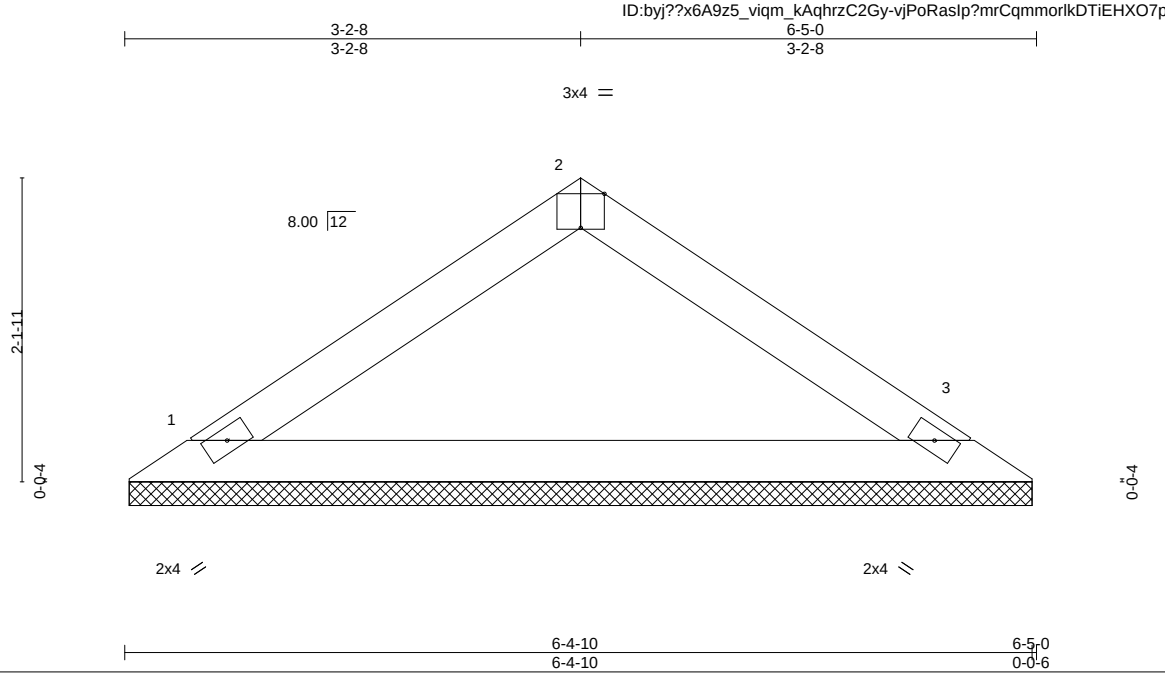


Plate Offsets (X,Y)-- [2:0-2-0,Edge]

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	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.38	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: 19 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=218/6-4-4, 3=218/6-4-4
Max Horz 1=-45(LC 8)
Max Uplift 1=-23(LC 12), 3=-23(LC 13)

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

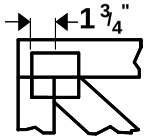
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

May 29,2019

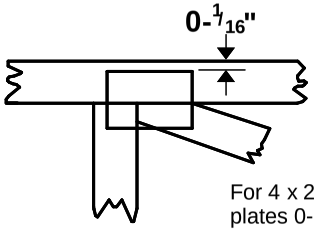
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

This symbol indicates the required direction of slots in connector plates.

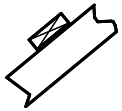
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

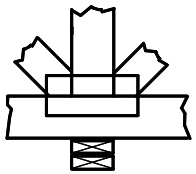
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING

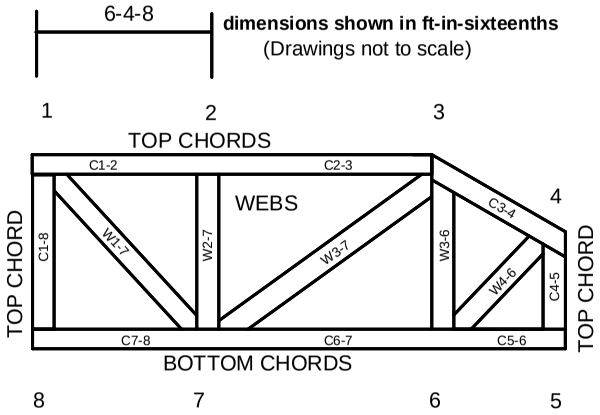


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

MiTek®

ENGINEERING BY TRENCO
A MiTek Affiliate

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.