ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 20787-20787A
Winston C Vlt Mst

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: I38025764 thru I38025776

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

North Carolina COA: C-0844

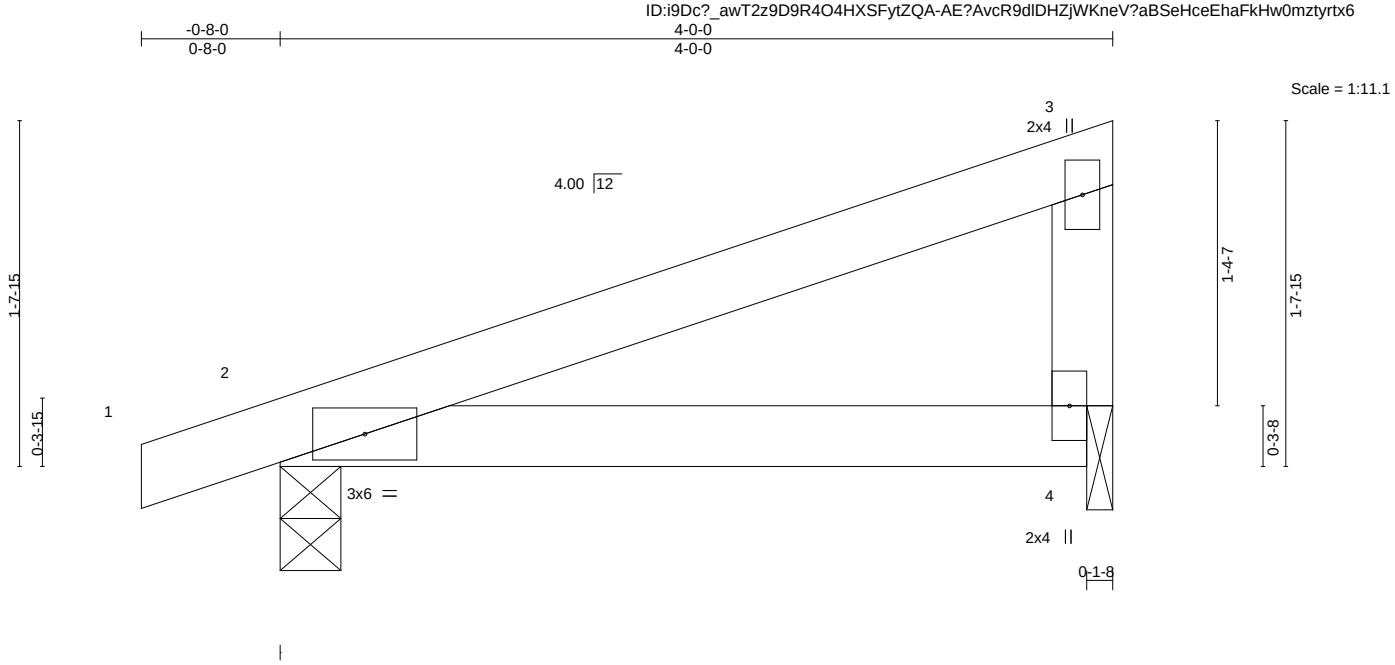
August 5,2019

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	Winston C Vlt Mst
20787-20787A	JK1	MONO TRUSS	10	1	I38025764
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.310 s Jun 11 2019 MiTek Industries, Inc. Fri Aug 2 12:45:27 2019 Page 1
ID:i9Dc?_awT2z9D9R4O4HXSFytZQA-AE?AvcR9dlDHZjWKneV?aBSeHceEhaFkHw0mztyrtx6



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	0.02	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.02	4-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 15 lb	FT = 20%

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

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

REACTIONS. (lb/size) 2=198/0-3-8, 4=151/0-1-8
Max Horz 2=43(LC 11)
Max Uplift 2=-62(LC 12), 4=-42(LC 12)

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

NOTES-
1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed; porch left 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) Bearings are assumed to be: Joint 2 User Defined crushing capacity of 425 psi.
5) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.

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Job	Truss	Truss Type	Qty	Ply	Winston C Vlt Mst
20787-20787A	T1	COMMON	5	1	I38025765
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.310 s Jun 11 2019 MiTek Industries, Inc. Fri Aug 2 12:45:28 2019 Page 1
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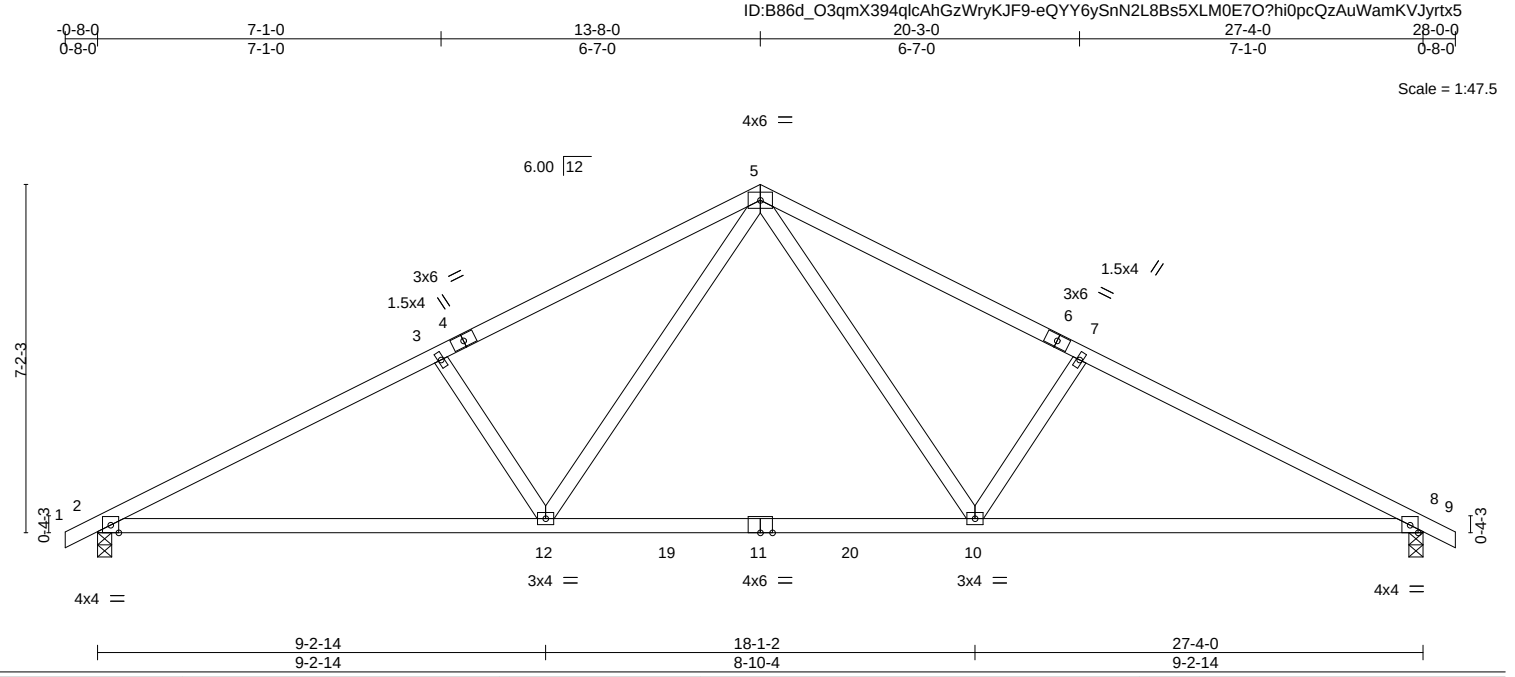

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	-0.26	10-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.38	10-12	>868	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.06	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 124 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 3-3-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=1133/0-3-8, 8=1133/0-3-8
Max Horz 2=-121(LC 10)
Max Uplift 2=-72(LC 12), 8=-72(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1921/342, 3-5=-1723/356, 5-7=-1723/356, 7-8=-1921/342
BOT CHORD 2-12=-214/1693, 10-12=-48/1095, 8-10=-215/1675
WEBS 3-12=-429/216, 5-12=-94/720, 5-10=-94/720, 7-10=-429/216

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) All bearings are assumed to be User Defined crushing capacity of 425 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.

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Job	Truss	Truss Type	Qty	Ply	Winston C Vlt Mst
20787-20787A	T1AGE	GABLE	1	1	I38025766 Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.310 s Jun 11 2019 MiTek Industries, Inc. Fri Aug 2 12:45:29 2019 Page 1
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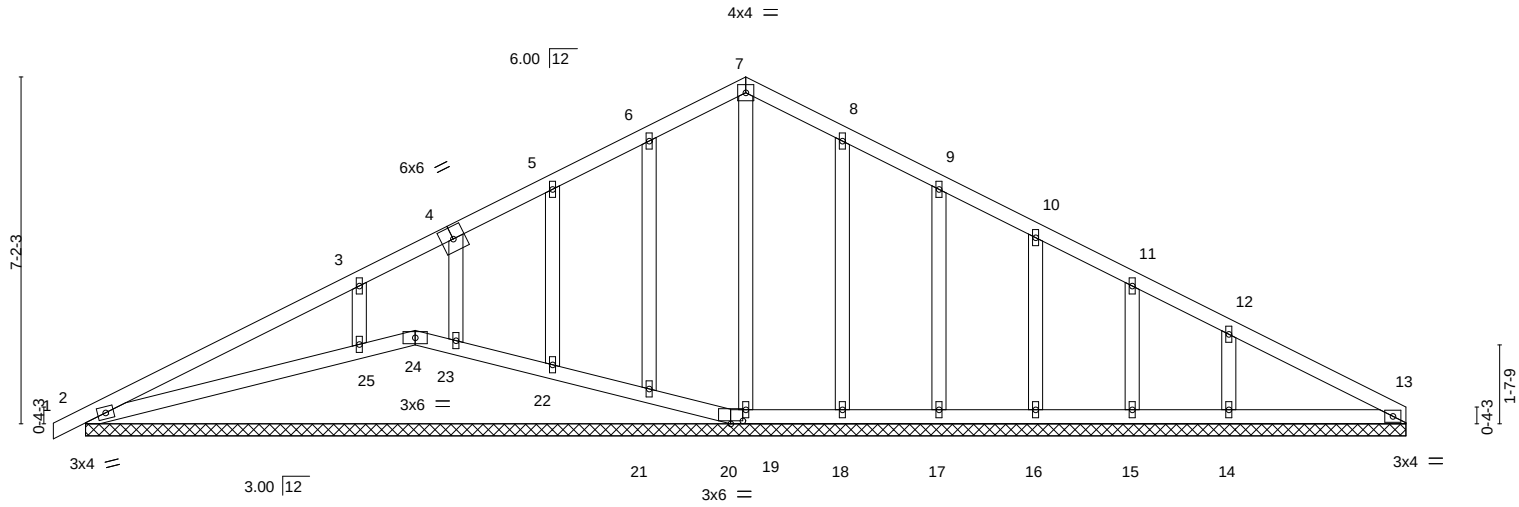
-0-8-0 6-9-14 13-8-0 27-4-0
0-8-0 6-9-14 6-10-2 13-8-0

Scale: 1/4"=1'



6-9-14 13-4-4 27-4-0
6-9-14 6-6-6 13-11-12

Plate Offsets (X,Y)-- [20:0-3-0,0-0-12]

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	0.39	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	0.01	1	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	13	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 144 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, Except:
6-0-0 oc bracing: 24-25,23-24.

REACTIONS. All bearings 27-4-0.
(lb) - Max Horz 2=120(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 20, 21, 22, 25, 18, 17, 16, 15, 14 except 24=-126(LC 3)
Max Grav All reactions 250 lb or less at joint(s) 13, 2, 24, 20, 19, 21, 22, 23, 18, 17, 16, 15 except 25=519(LC 21), 14=299(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-25=-343/184

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) All bearings are assumed to be User Defined crushing capacity of 425 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 20, 21, 22, 25, 18, 17, 16, 15, 14 except (jt=lb) 24=126.
11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 24, 21, 22, 23, 25.

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Job	Truss	Truss Type	Qty	Ply	Winston C Vlt Mst
20787-20787A	T1AV	SPECIAL	4	1	I38025767
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.310 s Jun 11 2019 MiTek Industries, Inc. Fri Aug 2 12:45:30 2019 Page 1
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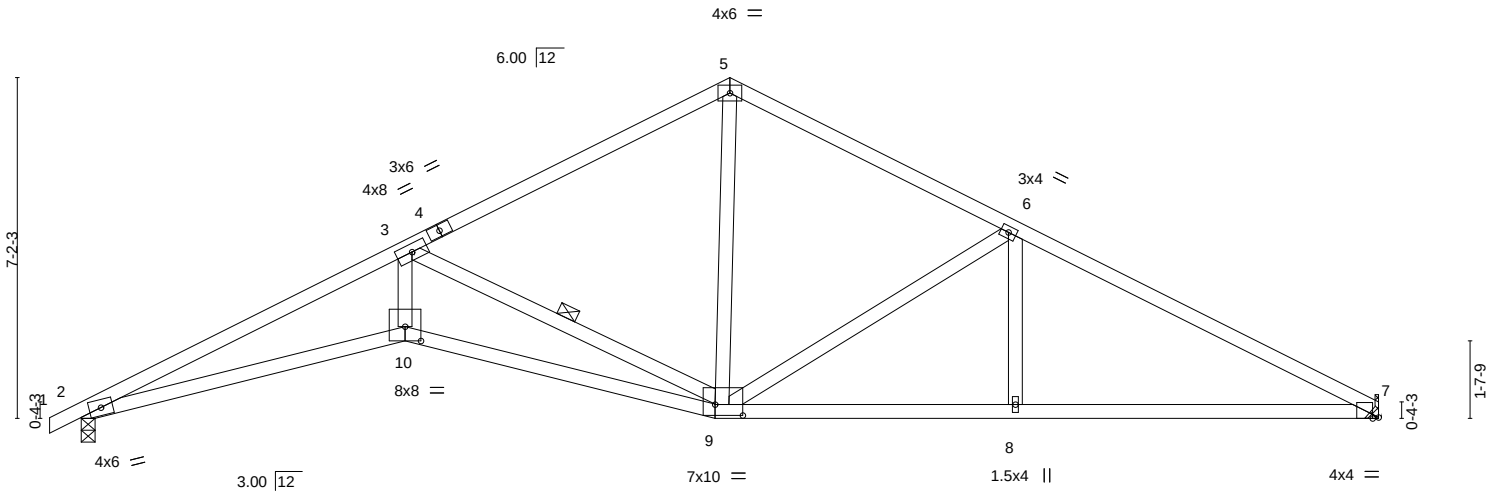
-0-8-0	6-9-14	13-8-0	19-8-3	27-4-0
0-8-0	6-9-14	6-10-2	6-0-3	7-7-13

Scale = 1:48.5



6-9-14	13-4-4	19-8-3	27-4-0
6-9-14	6-6-6	6-3-15	7-7-13

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

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)	-0.24	10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.51	9-10	>647	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.76	Horz(CT)	0.25	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 127 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 2-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 3-9

REACTIONS. (lb/size) 7=1093/Mechanical, 2=1134/0-3-8
Max Horz 2=120(LC 11)
Max Uplift 7=-53(LC 12), 2=-73(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3636/554, 3-5=-1355/289, 5-6=-1313/291, 6-7=-1941/323
BOT CHORD 2-10=-440/3294, 9-10=-439/3295, 8-9=-201/1662, 7-8=-201/1662
WEBS 3-10=-138/1708, 3-9=-2329/414, 5-9=-107/760, 6-9=-686/181, 6-8=0/313

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) Bearings are assumed to be: Joint 2 User Defined crushing capacity of 425 psi.
6) Refer to girder(s) for truss to truss connections.
7) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 2.

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Job	Truss	Truss Type	Qty	Ply	Winston C Vlt Mst
20787-20787A	T1B	ROOF TRUSS	2	1	I38025768
					Job Reference (optional)

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-0-8-0	7-1-0	9-8-0	11-8-0	13-8-0	15-8-0	20-3-0	27-4-0
0-8-0	7-1-0	2-7-0	2-0-0	2-0-0	2-0-0	4-7-0	7-1-0

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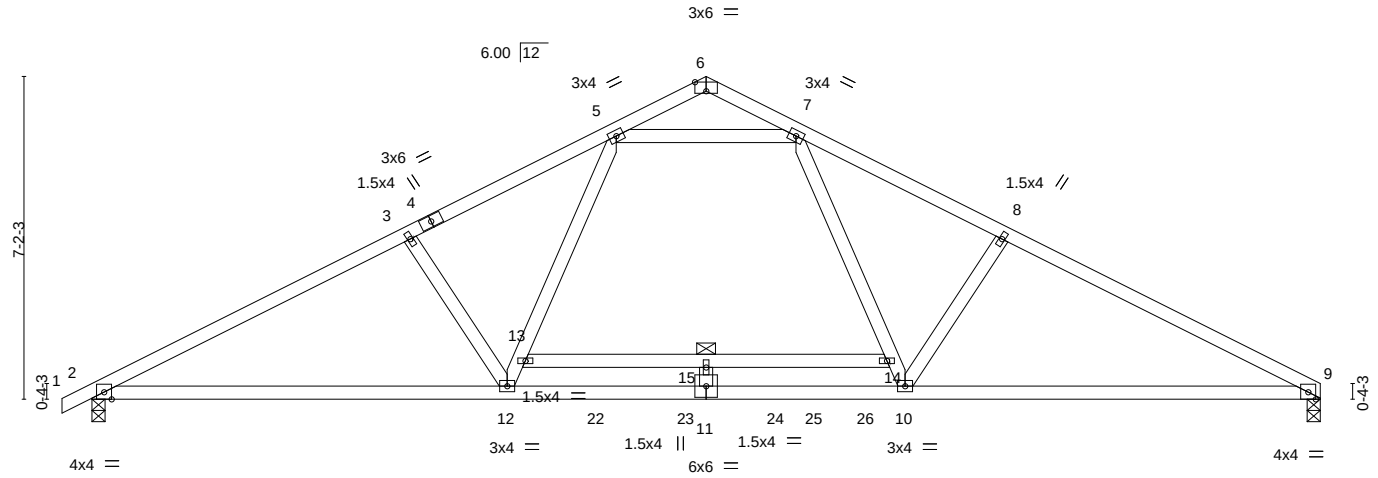

9-2-14	13-8-0	18-1-2	27-4-0
9-2-14	4-5-2	4-5-2	9-2-14

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	-0.24	10-18	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.45	10-18	>737	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.06	9	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 136 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3 *Except* 13-14: 2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-9-1 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 13-14

REACTIONS. (lb/size) 9=1093/0-3-8, 2=1134/0-3-8
Max Horz 2=120(LC 11)
Max Uplift 9=-53(LC 12), 2=-73(LC 12)
Max Grav 9=1130(LC 31), 2=1171(LC 27)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1995/336, 3-5=-1801/343, 7-8=-1803/344, 8-9=-1997/337
BOT CHORD 2-12=-217/1737, 11-12=-96/1307, 10-11=-96/1307, 9-10=-219/1740
WEBS 3-12=-439/184, 8-10=-442/185, 12-13=-65/614, 5-13=-59/620, 7-14=-61/623, 10-14=-67/617, 5-7=-1190/303

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) All bearings are assumed to be User Defined crushing capacity of 425 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 2.
7) Load case(s) 26, 27, 28, 29, 30, 31 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
8) MULTIPLE LOADCASES – This design is the composite result of multiple load cases.
9) User moving load cases exist: Review the load cases for details.
10) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.
11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard Except:
26) User defined: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-6=-60(F), 6-9=-60(F), 16-19=-20(F)
27) 1st User Defined Moving Load - User defined: Lumber Increase=1.15, Plate Increase=1.15

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Continued on page 2

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LOAD CASE(S)

Uniform Loads (plf)
Vert: 1-6=-60(F), 6-9=-60(F), 12-19=-20(F), 12-22=-50(F=-20), 16-22=-20(F)

28) 2nd User Defined Moving Load - User defined: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-6=-60(F), 6-9=-60(F), 19-22=-20(F), 22-23=-50(F=-20), 16-23=-20(F)

29) 3rd User Defined Moving Load - User defined: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-6=-60(F), 6-9=-60(F), 19-23=-20(F), 23-24=-50(F=-20), 16-24=-20(F)

30) 4th User Defined Moving Load - User defined: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-6=-60(F), 6-9=-60(F), 19-24=-20(F), 24-26=-50(F=-20), 16-26=-20(F)

31) 5th User Defined Moving Load - User defined: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-6=-60(F), 6-9=-60(F), 19-25=-20(F), 10-25=-50(F=-20), 10-16=-20(F)

Job	Truss	Truss Type	Qty	Ply	Winston C Vlt Mst
20787-20787A	T1BV	ROOF TRUSS	3	1	I38025769 Job Reference (optional)

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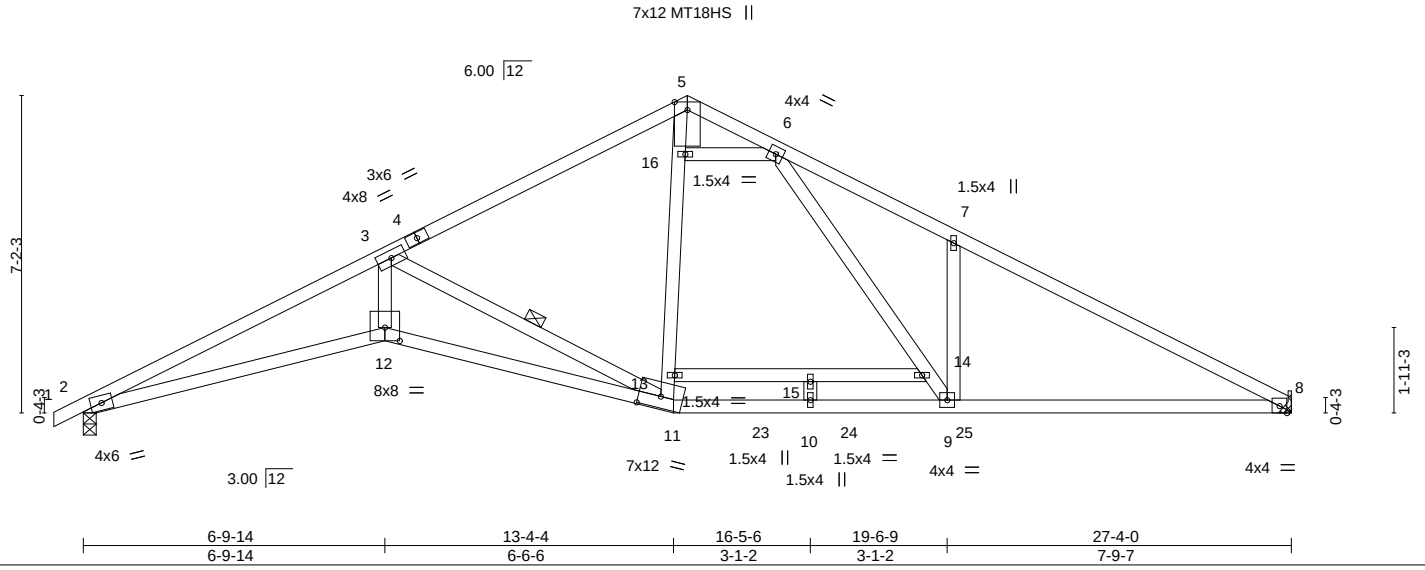
-0-8-0 6-9-14 13-8-0 15-8-0 19-6-9 20-1-7 27-4-0
0-8-0 6-9-14 6-10-2 2-0-0 3-10-9 0-6-14 7-2-9

Scale = 1:52.1



6-9-14 13-4-4 16-5-6 19-6-9 27-4-0
6-9-14 6-6-6 3-1-2 3-1-2 7-9-7

Plate Offsets (X,Y)-- [11:0-6-0,0-3-2], [12:0-4-0,0-3-10]

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	12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.48	11-12	>678	180	MT18HS	244/190
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.25	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 138 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
5-11: 2x4 SP No.1, 13-14: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 3-11

REACTIONS. (lb/size) 8=1093/Mechanical, 2=1134/0-3-8
Max Horz 2=120(LC 11)
Max Uplift 8=-53(LC 12), 2=-73(LC 12)
Max Grav 8=1140(LC 30), 2=1162(LC 27)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3733/549, 3-5=-1433/293, 5-6=-849/178, 6-7=-2083/454, 7-8=-2022/320
BOT CHORD 2-12=-434/3380, 11-12=-434/3380, 10-11=-31/1127, 9-10=-31/1127, 8-9=-199/1755
WEBS 3-12=-134/1742, 3-11=-2337/401, 11-13=-16/445, 13-16=-13/462, 5-16=-38/553, 6-14=-213/888, 9-14=-249/978, 7-9=-527/254, 6-16=-463/121

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearings are assumed to be: Joint 2 User Defined crushing capacity of 425 psi.
7) Refer to girder(s) for truss to truss connections.
8) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 2.
10) Load case(s) 26, 27, 28, 29, 30 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
11) MULTIPLE LOADCASES – This design is the composite result of multiple load cases.
12) User moving load cases exist: Review the load cases for details.
13) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.
14) 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 Except:

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LOAD CASE(S)

26) User defined: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-60(F), 5-8=-60(F), 12-20=-20(F), 11-12=-20(F), 11-17=-20(F)

27) 1st User Defined Moving Load - User defined: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-60(F), 5-8=-60(F), 12-20=-20(F), 11-12=-20(F), 11-23=-50(F=-20), 17-23=-20(F)

28) 2nd User Defined Moving Load - User defined: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-60(F), 5-8=-60(F), 12-20=-20(F), 11-12=-20(F), 11-23=-20(F), 23-24=-50(F=-20), 17-24=-20(F)

29) 3rd User Defined Moving Load - User defined: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-60(F), 5-8=-60(F), 12-20=-20(F), 11-12=-20(F), 11-24=-20(F), 24-25=-50(F=-20), 17-25=-20(F)

30) 4th User Defined Moving Load - User defined: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-60(F), 5-8=-60(F), 12-20=-20(F), 11-12=-20(F), 11-24=-20(F), 9-24=-50(F=-20), 9-17=-20(F)

Job	Truss	Truss Type	Qty	Ply	Winston C Vlt Mst
20787-20787A	T1D	ROOF TRUSS	4	1	I38025770
					Job Reference (optional)

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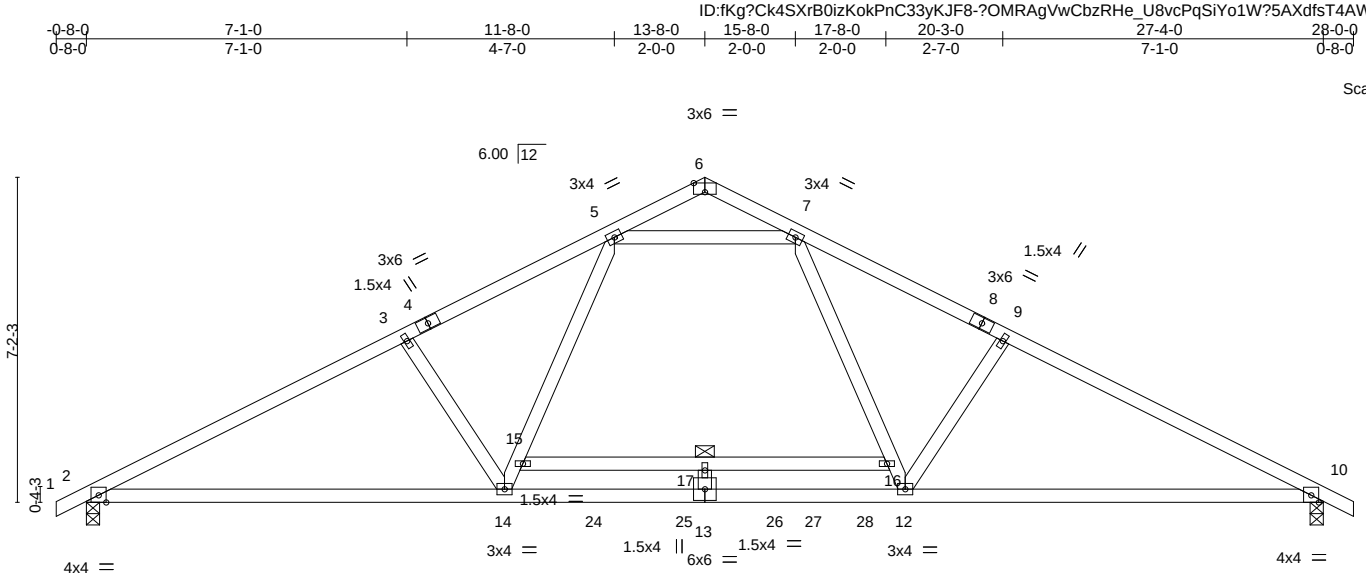

Plate Offsets (X,Y)-- [6:0-3-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.24	14-20	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.44	14-20	>745	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.06	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 137 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3 *Except*
	15-16: 2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-9-12 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 15-16

REACTIONS. (lb/size) 2=1133/0-3-8, 10=1133/0-3-8
Max Horz 2=-121(LC 10)
Max Uplift 2=-72(LC 12), 10=-72(LC 12)
Max Grav 2=1171(LC 27), 10=1171(LC 31)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1994/335, 3-5=-1800/342, 7-9=-1800/342, 9-10=-1994/335
BOT CHORD 2-14=-205/1736, 13-14=-85/1306, 12-13=-85/1306, 10-12=-206/1736
WEBS 3-14=-440/184, 9-12=-440/184, 14-15=-66/614, 5-15=-60/620, 7-16=-60/620, 12-16=-66/614, 5-7=-1190/302

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) All bearings are assumed to be User Defined crushing capacity of 425 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10.
7) Load case(s) 26, 27, 28, 29, 30, 31 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
8) MULTIPLE LOADCASES – This design is the composite result of multiple load cases.
9) User moving load cases exist: Review the load cases for details.
10) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.
11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard Except:
26) User defined: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-6=-60(F), 6-11=-60(F), 18-21=-20(F)
27) 1st User Defined Moving Load - User defined: Lumber Increase=1.15, Plate Increase=1.15

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LOAD CASE(S)

Uniform Loads (plf)
Vert: 1-6=-60(F), 6-11=-60(F), 14-18=-20(F), 14-24=-50(F=-20), 21-24=-20(F)

28) 2nd User Defined Moving Load - User defined: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-6=-60(F), 6-11=-60(F), 18-24=-20(F), 24-25=-50(F=-20), 21-25=-20(F)

29) 3rd User Defined Moving Load - User defined: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-6=-60(F), 6-11=-60(F), 18-25=-20(F), 25-26=-50(F=-20), 21-26=-20(F)

30) 4th User Defined Moving Load - User defined: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-6=-60(F), 6-11=-60(F), 18-26=-20(F), 26-28=-50(F=-20), 21-28=-20(F)

31) 5th User Defined Moving Load - User defined: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-6=-60(F), 6-11=-60(F), 18-27=-20(F), 12-27=-50(F=-20), 12-21=-20(F)

Job	Truss	Truss Type	Qty	Ply	Winston C Vlt Mst
20787-20787A	T1GE	GABLE	1	1	I38025771
					Job Reference (optional)

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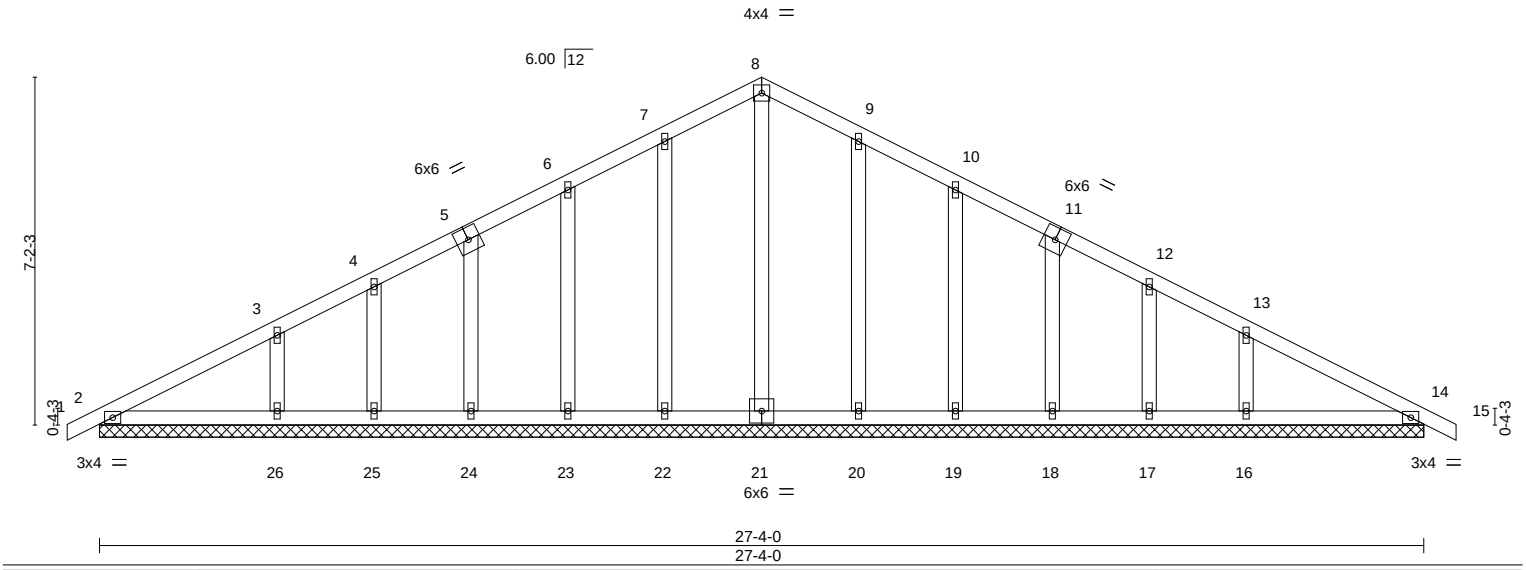

27-4-0
27-4-0

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	0.00	15	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	0.01	15	n/r	90		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.09	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 153 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 27-4-0.
(lb) - Max Horz 2=-121(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 22, 23, 24, 25, 26, 20, 19, 18, 17, 16, 14
Max Grav All reactions 250 lb or less at joint(s) 2, 21, 22, 23, 24, 25, 20, 19, 18, 17, 14 except 26=292(LC 21), 16=292(LC 22)

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=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) All bearings are assumed to be User Defined crushing capacity of 425 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 22, 23, 24, 25, 26, 20, 19, 18, 17, 16, 14.
11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 14.

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Job	Truss	Truss Type	Qty	Ply	Winston C Vlt Mst
20787-20787A	T2	FINK	10	1	I38025772
					Job Reference (optional)

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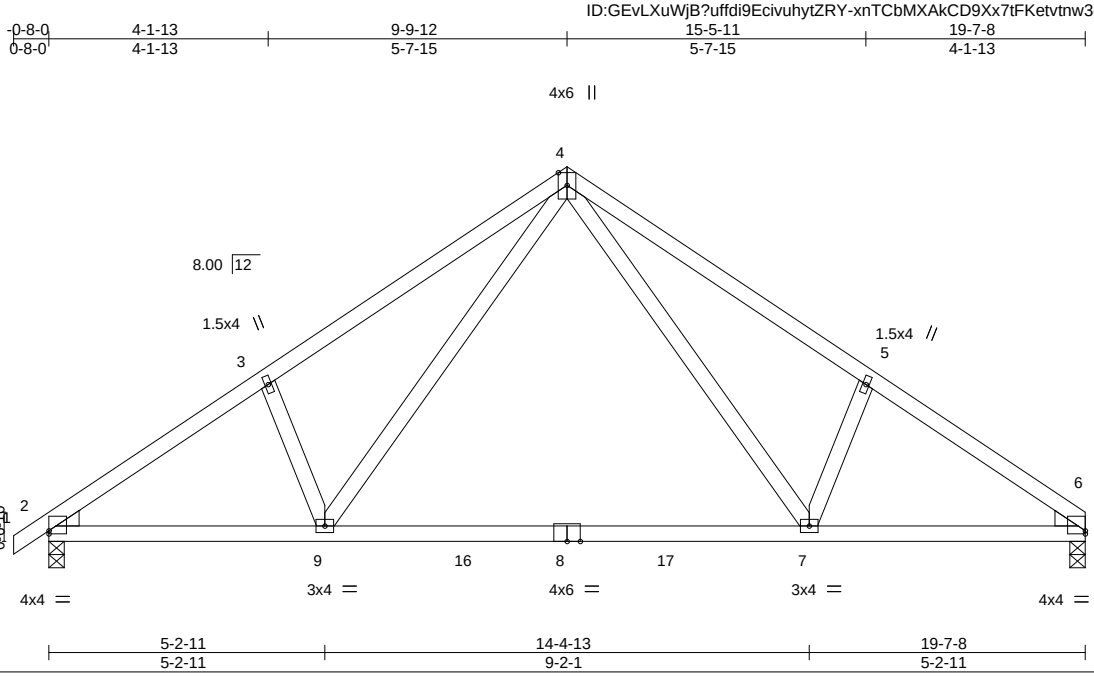

Plate Offsets (X,Y)-- [2:0-0-0,0-0-11], [6:Edge,0-0-11]

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)	-0.24	7-9	>965	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.43	7-9	>542	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 100 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-8-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=826/0-3-8, 6=784/0-3-8
Max Horz 2=130(LC 11)
Max Uplift 2=-58(LC 12), 6=-38(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1166/122, 3-4=-1112/194, 4-5=-1115/195, 5-6=-1169/123
BOT CHORD 2-9=-54/1003, 7-9=0/602, 6-7=-55/916
WEBS 3-9=-263/155, 4-9=-56/557, 4-7=-57/561, 5-7=-265/155

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) All bearings are assumed to be User Defined crushing capacity of 425 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.

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Job	Truss	Truss Type	Qty	Ply	Winston C Vlt Mst
20787-20787A	T2GE	GABLE	1	1	I38025773
					Job Reference (optional)

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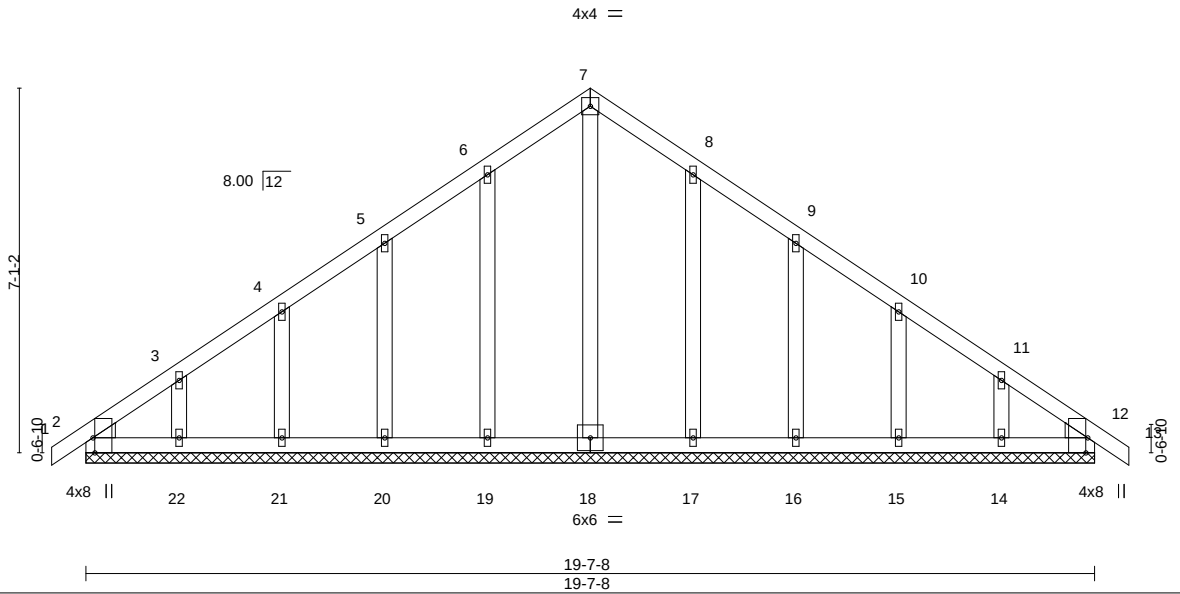

19-7-8
19-7-8

Plate Offsets (X,Y)-- [2:0-0-9,0-0-13], [2:0-1-1,0-5-2], [2:0-3-8,Edge], [12:0-0-9,0-0-13], [12:0-1-1,0-5-2], [12:0-3-8,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	0.05	Vert(LL)	-0.00	12	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	12	n/r	90		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.09	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 116 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 19-7-8.
(lb) - Max Horz 2=133(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 19, 20, 21, 22, 17, 16, 15, 14
Max Grav All reactions 250 lb or less at joint(s) 2, 12, 18, 19, 20, 21, 22, 17, 16, 15, 14

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=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) All bearings are assumed to be User Defined crushing capacity of 425 psi.
10) 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.

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Job	Truss	Truss Type	Qty	Ply	Winston C Vlt Mst
20787-20787A	T3	COMMON	6	1	I38025774
					Job Reference (optional)

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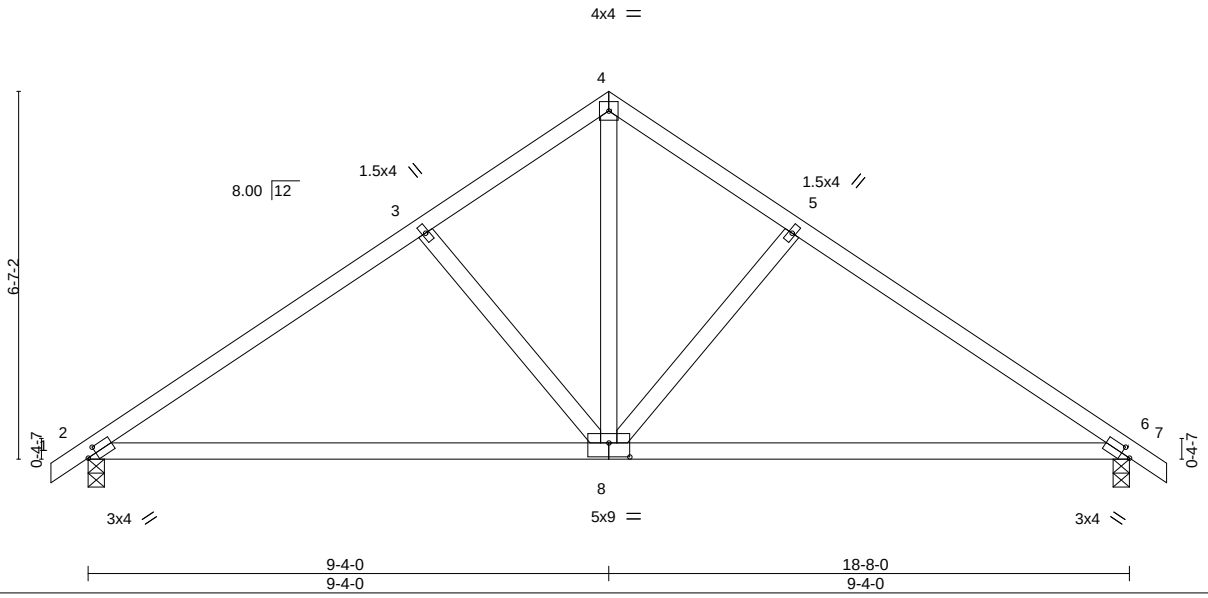

Plate Offsets (X,Y)-- [2:0-2-0,0-1-8], [6:0-2-0,0-1-8], [8:0-4-8,0-3-0]

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	0.45	Vert(LL)	-0.13	8-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.29	8-14	>781	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 88 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 5-0-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=787/0-3-8, 6=787/0-3-8
Max Horz 2=-127(LC 10)
Max Uplift 2=-56(LC 12), 6=-56(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-989/134, 3-4=-790/141, 4-5=-790/141, 5-6=-989/134
BOT CHORD 2-8=-17/777, 6-8=-17/777
WEBS 3-8=-304/137, 4-8=-104/683, 5-8=-305/137

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) All bearings are assumed to be User Defined crushing capacity of 425 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.

August 5,2019

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

Job	Truss	Truss Type	Qty	Ply	Winston C Vlt Mst
20787-20787A	T3GE	GABLE	1	1	I38025775
					Job Reference (optional)

84 Components (Dunn), Dunn, NC - 28334, 8.310 s Jun 11 2019 MiTek Industries, Inc. Fri Aug 2 12:45:37 2019 Page 1
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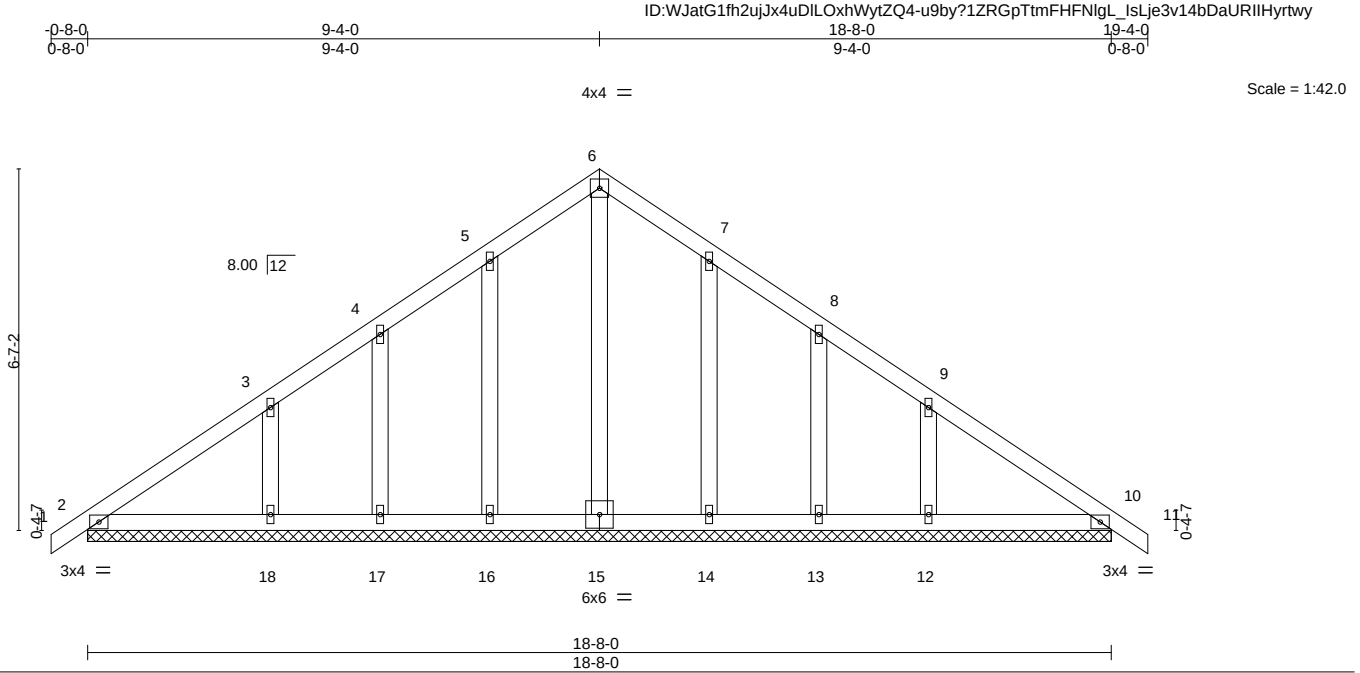

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	0.00	11	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	0.01	11	n/r	90		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.07	Horz(CT)	0.00	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 103 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 18-8-0.
(lb) - Max Horz 2=-127(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 16, 17, 18, 14, 13, 12, 10
Max Grav All reactions 250 lb or less at joint(s) 2, 15, 16, 17, 14, 13, 10 except 18=270(LC 17), 12=269(LC 18)

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=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) All bearings are assumed to be User Defined crushing capacity of 425 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 16, 17, 18, 14, 13, 12, 10.

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Job	Truss	Truss Type	Qty	Ply	Winston C Vlt Mst
20787-20787A	T3GR	HOWE	1	2	I38025776
					Job Reference (optional)

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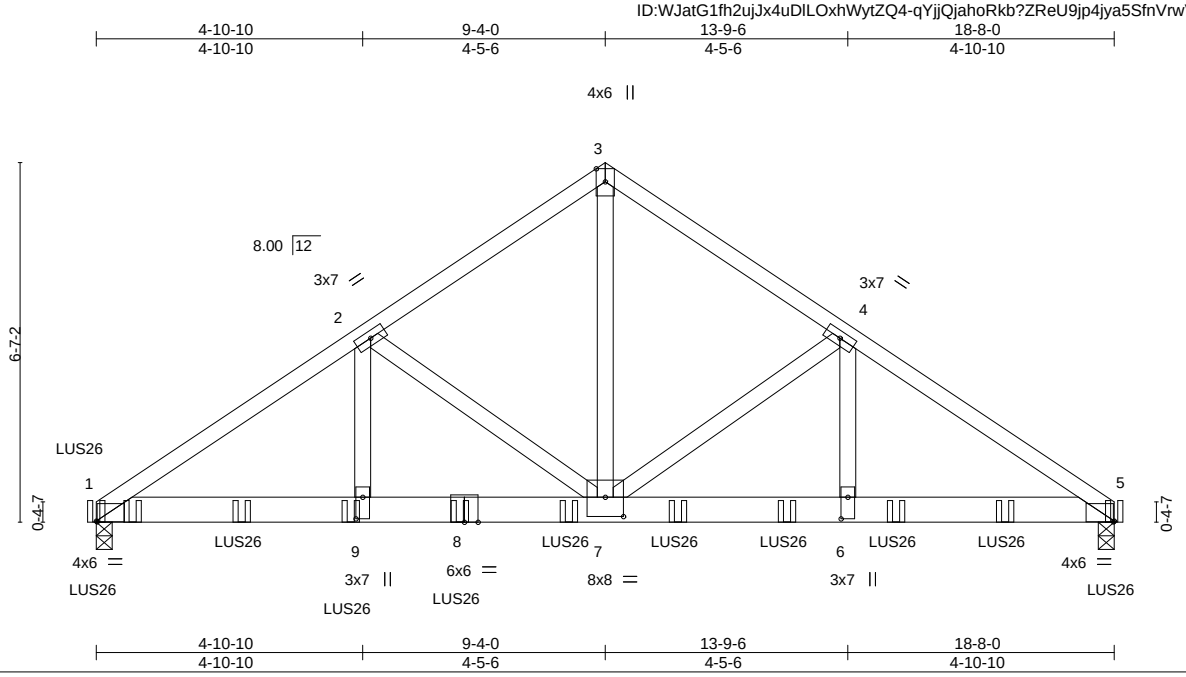

Plate Offsets (X,Y)-- [1:0-0-3,0-0-3], [5:0-0-3,0-0-3], [6:0-4-12,0-1-8], [7:0-4-0,0-4-4], [9:0-4-12,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.59	Vert(LL)	-0.09	7-9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.18	7-9	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.66	Horz(CT)	0.05	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 220 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=5421/(0-3-8 + TBE4 Simpson Strong-Tie) (req. 0-4-8), 5=5421/(0-3-8 + TBE4 Simpson Strong-Tie) (req. 0-4-8)
Max Horz 1=118(LC 11)
Max Uplift 1=-450(LC 12), 5=-450(LC 12)
Max Grav 1=5714(LC 17), 5=5714(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-8055/706, 2-3=-5410/528, 3-4=-5411/528, 4-5=-8054/706
BOT CHORD 1-9=-517/6762, 7-9=-517/6762, 6-7=-517/6677, 5-6=-517/6677
WEBS 3-7=-493/5704, 4-7=-2821/305, 4-6=-184/2842, 2-7=-2821/305, 2-9=-184/2842

NOTES-
1) 2-ply truss to be connected together with 10d (0.120"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=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be User Defined crushing capacity of 425 psi.
8) TBE4 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 5. This connection is for uplift only and does not consider lateral forces.
9) Girder carries tie-in span(s): 27-4-0 from 0-0-0 to 18-8-0
10) Use Simpson Strong-Tie LUS26 (4-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-0-0 from the left end to 18-8-0 to connect truss(es) to front face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

August 5,2019

Continued on page 2

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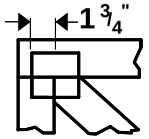
LOAD CASE(S) Standard

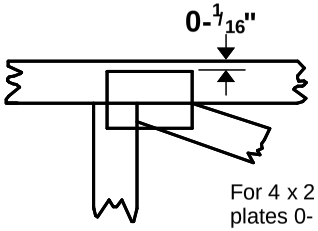
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-60, 3-5=-60, 1-5=-521(F=-501)

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.

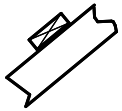
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

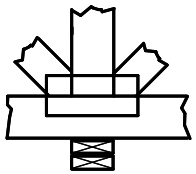
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

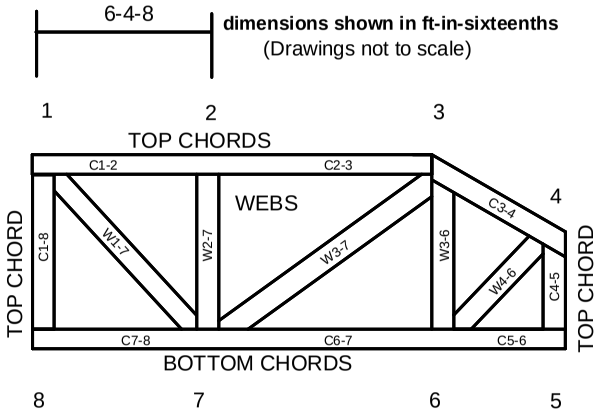


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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