ENGINEERING BY TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: French
   Clearwater French

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by   Builders FirstSource-Apex,NC.

Pages or sheets covered by this seal: I51101113 thru I51101144

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

North Carolina COA: C-0844

NORTH CAROLINA
PROFESSIONAL
SEAL
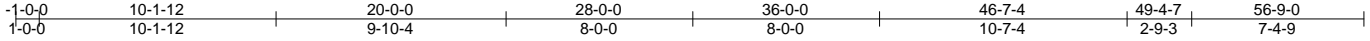036322
ENGINEER
ERIC A. GILBERT

April 1,2022

Gilbert, Eric

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

Job	Truss	Truss Type	Qty	Ply	Clearwater French	
FRENCH	A01	HIP	8	1		I51101113
					Job Reference (optional)	

Builders FirstSource (Apex, NC),   Apex, NC - 27523,   8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Mar 31 10:28:44 2022 Page 1
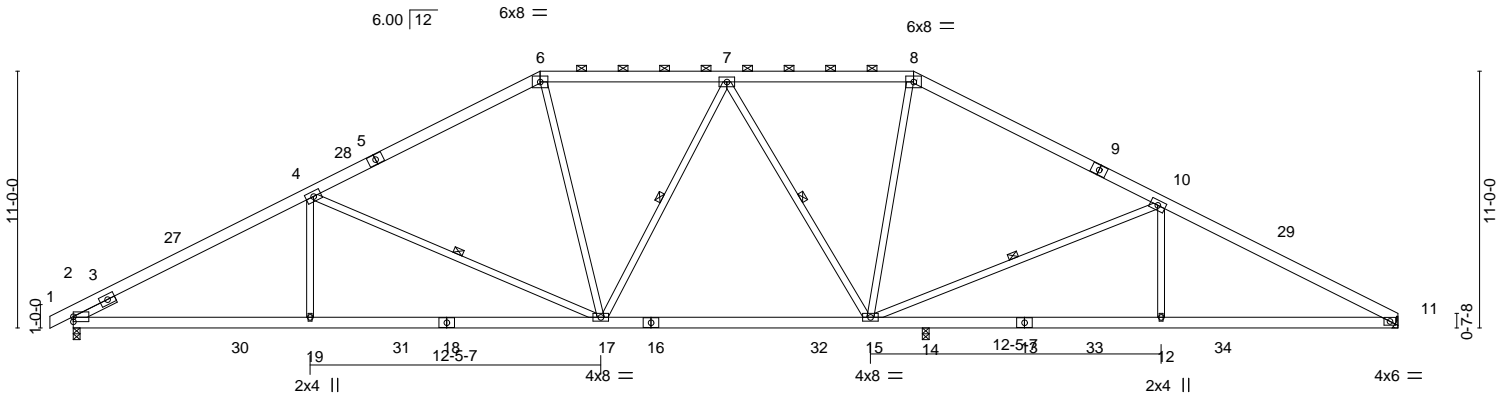ID:jww8HiIN90uFSTm7sxLqmezW8I3-AuxGXJO8yyg6_QZk8LYMdfTIoy9bKV3VA6Psq5zVRlH

-1-0-0   10-1-12   20-0-0   28-0-0   36-0-0   46-7-4   49-4-7   56-9-0
1-0-0   10-1-12   9-10-4   8-0-0   8-0-0   10-7-4   2-9-3   7-4-9

Scale = 1:98.7

10-1-12   22-7-3   34-1-13   36-8-0   46-7-4   56-9-0
10-1-12   12-5-7   11-6-10   2-6-3   9-11-4   10-1-12

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

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	-0.37	15-17	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.65	15-17	>679	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.76	Horz(CT)	0.11	11	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS		Wind(LL)	0.15	15-17	>999	240	Weight: 402 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 SP No.2
BOT CHORD   2x6 SP DSS
WEBS   2x4 SP No.3 *Except*
    4-17,10-15: 2x4 SP No.2
SLIDER   Left 2x4 SP No.3 1-11-12

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 2-3-7 oc purlins, except
    2-0-0 oc purlins (4-7-2 max.): 6-8.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS   1 Row at midpt   4-17, 7-17, 7-15, 10-15

REACTIONS.   (size)   2=0-3-8, 11=Mechanical, 14=0-3-8
    Max Horz   2=143(LC 16)
    Max Uplift   2=-117(LC 12), 11=-116(LC 13)
    Max Grav   2=2024(LC 2), 11=1690(LC 2), 14=935(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-4=-3430/247, 4-6=-2553/290, 6-7=-2346/304, 7-8=-1900/304, 8-10=-2162/288,
    10-11=-3053/255
BOT CHORD   2-19=-204/2973, 17-19=-204/2973, 15-17=-55/2250, 14-15=-148/2654, 12-14=-148/2654,
    11-12=-148/2654
WEBS   4-19=0/386, 4-17=-894/184, 6-17=0/685, 7-17=-57/310, 7-15=-868/119, 8-15=-3/522,
    10-15=-936/214, 10-12=0/308

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 4-8-2, Interior(1) 4-8-2 to 20-0-0, Exterior(2) 20-0-0 to 28-0-0, Interior(1) 28-0-0 to 36-0-0, Exterior(2) 36-0-0 to 44-0-5, Interior(1) 44-0-5 to 56-9-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 5x8 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
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) 2=117, 11=116.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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April 1,2022

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Clearwater French	I51101114
FRENCH	A01G	GABLE	2	1	Job Reference (optional)	

Builders FirstSource (Apex, NC),   Apex, NC - 27523,

8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Mar 31 10:28:48 2022 Page 1
ID:jww8HilN90uFSTm7sxLqmezW8I3-2gBnNgRe?BAYT2tVNBdInVd92ZgdGS155kN4zszVRID

-1-0-0 | 20-0-0 | 36-0-0 | 56-9-0
1-0-0 | 20-0-0 | 16-0-0 | 20-9-0
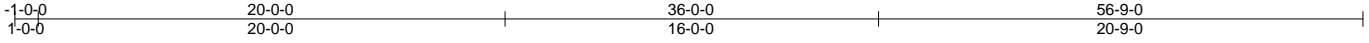
Scale = 1:98.7

Plate Offsets (X,Y)--   [13:0-4-0,0-3-8], [21:0-4-0,0-3-8], [54:0-5-0,0-4-8]

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	0.09	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00	1	n/r	120		
BCLL 0.0 *	Rep Stress Incr	NO	WB	0.13	Horz(CT)	0.01	32	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 552 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 SP No.2
BOT CHORD   2x6 SP No.2
WEBS   2x4 SP No.2
OTHERS   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 (6-0-0 max.): 13-21.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS   1 Row at midpt   21-43, 20-44, 19-45, 18-46, 17-47, 16-48,
             15-50, 14-51, 13-52, 12-53, 11-54, 22-42,
             23-41

REACTIONS.   All bearings 56-9-0.
(lb) - Max Horz   62=-134(LC 13)
        Max Uplift   All uplift 100 lb or less at joint(s) 62, 44, 45, 46, 47, 48, 50, 51, 53, 54, 55, 56, 57, 58, 59, 60,
                     61, 42, 41, 39, 38, 37, 36, 35, 34, 33.
        Max Grav   All reactions 250 lb or less at joint(s) 62, 43, 44, 45, 46, 47, 48, 50, 51, 52, 53, 54, 55, 56, 57,
                     58, 59, 60, 61, 42, 41, 39, 38, 37, 36, 35, 34, 33, 32.

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   11-12=-90/261, 12-13=-102/293, 13-14=-90/282, 14-15=-90/282, 15-16=-90/282,
             16-17=-90/282, 17-18=-90/282, 18-19=-90/282, 19-20=-90/282, 20-21=-90/282,
             21-22=-102/297, 22-23=-90/265

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope)
   gable end zone and C-C Corner(3) -1-0-0 to 4-8-2, Exterior(2) 4-8-2 to 20-0-0, Corner(3) 20-0-0 to 25-8-2, Exterior(2) 25-8-2 to
   36-0-0, Corner(3) 36-0-0 to 41-8-2, Exterior(2) 41-8-2 to 56-9-0 zone; cantilever left and right exposed ; end vertical left and right
   exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry
   Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 62, 44, 45, 46,
    47, 48, 50, 51, 53, 54, 55, 56, 57, 58, 59, 60, 61, 42, 41, 39, 38, 37, 36, 35, 34, 33.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
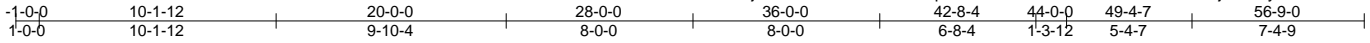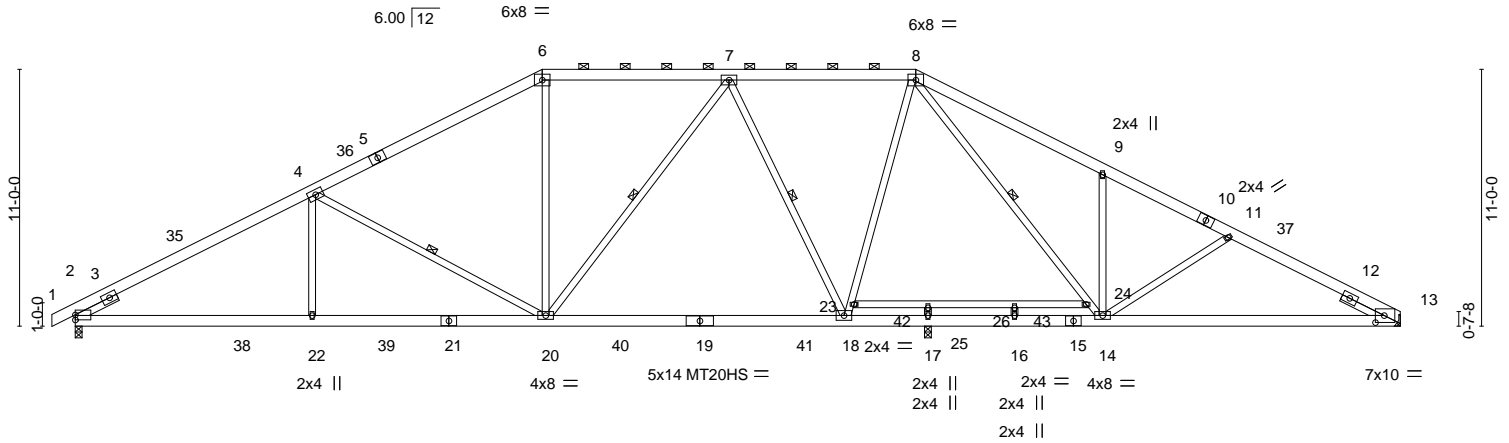
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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Clearwater French	
FRENCH	A01H	HIP	6	1		I51101115
					Job Reference (optional)	

Builders FirstSource (Apex, NC),   Apex, NC - 27523,

8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Mar 31 10:28:50 2022 Page 1
ID:jww8HilN90uFSTm7sxLqmezW8I3-?2IXoMTuXoQFiL0tVbfmtwjHNN7ykAZOY2sA1kzVRIB

Scale = 1:98.7

Plate Offsets (X,Y)--   [2:0-0-0,0-2-10], [13:0-4-8,0-3-10]

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	1.00	Vert(LL)	-0.41	18-20	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.75	18-20	>582	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.89	Horz(CT)	0.12	13	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS		Wind(LL)	0.15	18-20	>999	240	Weight: 430 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 SP No.2
BOT CHORD   2x6 SP DSS *Except*
             13-15: 2x6 SP No.2
WEBS   2x4 SP No.3
SLIDER   Left 2x4 SP No.3 1-11-12, Right 2x4 SP No.3 1-11-12

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 1-7-8 oc purlins, except
             2-0-0 oc purlins (4-6-1 max.): 6-8.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS   1 Row at midpt   4-20, 7-20, 7-18, 8-14

REACTIONS.   (size)   2=0-3-8, 13=Mechanical, 17=0-3-8
           Max Horz   2=144(LC 16)
           Max Uplift 2=-102(LC 12), 13=-86(LC 13), 17=-3(LC 13)
           Max Grav   2=2087(LC 2), 13=1802(LC 1), 17=790(LC 2)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-4=-3533/229, 4-6=-2837/258, 6-7=-2444/285, 7-8=-2203/260, 8-9=-2945/350,
             9-11=-2898/214, 11-13=-3169/227
BOT CHORD   2-22=-186/3065, 20-22=-186/3065, 18-20=-23/2419, 17-18=0/2084, 16-17=0/2084,
             14-16=0/2084, 13-14=-121/2834
WEBS   4-22=0/293, 4-20=-750/199, 6-20=0/794, 7-18=-688/162, 18-23=-21/566, 8-23=-23/512,
             11-14=-367/131, 8-24=-177/823, 14-24=-177/851, 9-14=-441/208

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope)
   gable end zone and C-C Exterior(2) -1-0-0 to 4-8-2, Interior(1) 4-8-2 to 20-0-0, Exterior(2) 20-0-0 to 28-0-0, Interior(1) 28-0-0
   to 36-0-0, Exterior(2) 36-0-0 to 44-0-0, Interior(1) 44-0-0 to 56-7-8 zone; cantilever left and right exposed ; end vertical left and right
   exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) All plates are 5x8 MT20 unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) 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) 13, 17 except
   (jt=lb) 2=102.
10) N/A

11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

April 1,2022

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Job	Truss	Truss Type	Qty	Ply	Clearwater French	
FRENCH	A01H	HIP	6	1		I51101115
					Job Reference (optional)	

Builders FirstSource (Apex, NC),   Apex, NC - 27523,

8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Mar 31 10:28:50 2022 Page 2
ID:jww8HilN90uFSTm7sxLqmezW8I3-?2IXoMTuXoQFiL0tVbfmtwjHNN7ykAZOY2sA1kzVRlB

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
       Vert: 1-6=-60, 6-8=-60, 8-13=-60, 27-31=-20
2) Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
       Vert: 1-6=-50, 6-8=-50, 8-13=-50, 27-38=-20, 38-39=-50, 39-40=-20, 40-41=-50, 31-41=-20, 42-43=-30(F)
3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
       Vert: 1-6=-20, 6-8=-20, 8-13=-20, 27-31=-40, 42-43=-40(F)
18) Dead + Uninhabitable Attic Storage: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
       Vert: 1-6=-20, 6-8=-20, 8-13=-20, 27-38=-20, 38-39=-60, 39-40=-20, 40-41=-60, 31-41=-20, 42-43=-40(F)
19) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
       Vert: 1-2=-46, 2-6=-50, 6-8=-34, 8-13=-43, 27-38=-20, 38-39=-50, 39-40=-20, 40-41=-50, 31-41=-20, 42-43=-30(F)
       Horz: 1-2=-4, 2-6=-0, 8-13=7
20) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
       Vert: 1-2=-39, 2-6=-43, 6-8=-34, 8-13=-50, 27-38=-20, 38-39=-50, 39-40=-20, 40-41=-50, 31-41=-20, 42-43=-30(F)
       Horz: 1-2=-11, 2-6=-7, 8-13=0
21) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
       Vert: 1-2=-30, 2-6=-34, 6-7=-34, 7-8=-44, 8-13=-44, 27-38=-20, 38-39=-50, 39-40=-20, 40-41=-50, 31-41=-20, 42-43=-30(F)
       Horz: 1-2=-20, 2-6=-16, 8-13=6
22) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
       Vert: 1-2=-40, 2-6=-44, 6-7=-44, 7-8=-34, 8-13=-34, 27-38=-20, 38-39=-50, 39-40=-20, 40-41=-50, 31-41=-20, 42-43=-30(F)
       Horz: 1-2=-10, 2-6=-6, 8-13=16
25) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
       Vert: 1-6=-50, 6-8=-50, 8-13=-20, 27-38=-20, 38-39=-50, 39-40=-20, 40-41=-50, 31-41=-20, 42-43=-30(F)
26) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
       Vert: 1-6=-20, 6-8=-50, 8-13=-50, 27-38=-20, 38-39=-50, 39-40=-20, 40-41=-50, 31-41=-20, 42-43=-30(F)

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Clearwater French	
FRENCH	A02	HIP	4	1		I51101116
					Job Reference (optional)	

Builders FirstSource (Apex, NC),   Apex, NC - 27523,

8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Mar 31 10:28:51 2022 Page 1
ID:jww8HilN90uFSTm7sxLqmezW8I3-TFsw?iUXI6Y6KVb42JA?P7FWWnWLTcTXnibkZBzVRIA

-1-0-0   10-1-12   20-0-0   28-0-0   36-0-0   45-10-4   56-0-0   57-0-0
1-0-0   10-1-12   9-10-4   8-0-0   8-0-0   9-10-4   10-1-12   1-0-0

Scale = 1:97.6

6.00 | 12

6x8 =   7x14 MT20HS

5x14 MT20HS

11-0-0

4x6 || 2x4 || 4x8 =   2x4 || 4x8 ||

10-1-12   22-5-8   33-6-8   36-8-0   45-10-4   49-0-0   55-5-8   56-0-0
10-1-12   12-3-12 11-1-0   3-1-8   9-2-4   3-1-12   6-5-8   0-6-8

Plate Offsets (X,Y)--   [8:0-7-0,0-2-8], [12:0-2-14,0-1-9], [17:0-3-8,0-2-8]
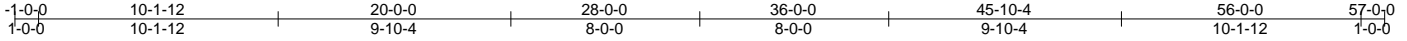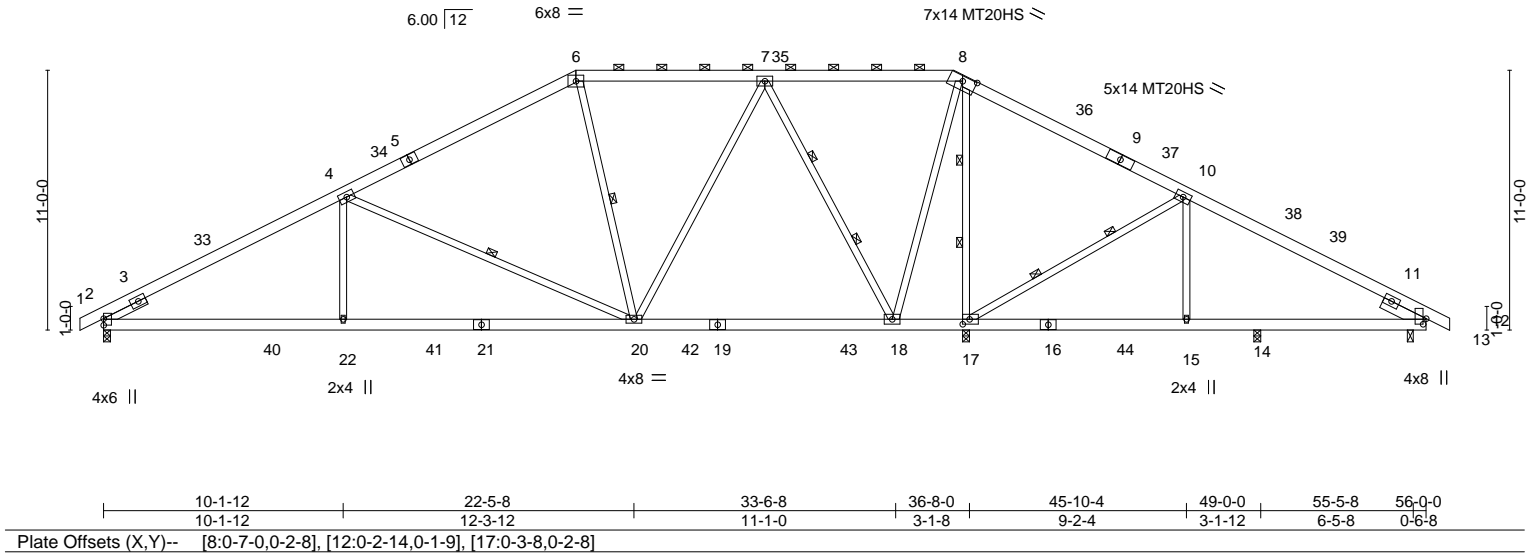
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	-0.18	18-20	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.30	18-20	>999	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.91	Horz(CT)	0.06	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS		Wind(LL)	0.04	22-25	>999	240	Weight: 417 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 SP DSS *Except*
5-6,6-8: 2x6 SP No.2
BOT CHORD   2x6 SP No.2
WEBS   2x4 SP No.3 *Except*
4-20,10-17,8-17: 2x4 SP No.2
SLIDER   Left 2x4 SP No.3 1-11-12, Right 2x6 SP No.2 1-11-12

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 6-0-0 oc purlins, except
2-0-0 oc purlins (6-0-0 max.): 6-8.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing,   Except:
6-0-0 oc bracing: 17-18.
WEBS   1 Row at midpt   4-20, 6-20
2 Rows at 1/3 pts   7-18, 10-17, 8-17

REACTIONS.   All bearings 0-3-8 except (jt=length) 17=0-4-10 (input: 0-3-8), 12=0-3-0.
(lb) -   Max Horz   2=140(LC 16)
Max Uplift   All uplift 100 lb or less at joint(s) 2, 17 except 12=-154(LC 13)
Max Grav   All reactions 250 lb or less at joint(s) 14 except 2=1266(LC 25),
17=3926(LC 1), 12=1027(LC 24)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-4=-1932/140, 4-6=-922/171, 6-7=-704/185, 7-8=0/569, 8-10=0/1261, 10-12=-1295/228
BOT CHORD   2-22=-116/1649, 20-22=-116/1649, 18-20=-153/258, 17-18=-887/193, 15-17=-109/1038,
14-15=-109/1038, 12-14=-109/1038
WEBS   4-22=0/444, 4-20=-1039/200, 7-20=-11/1011, 7-18=-1497/147, 8-18=-43/1546,
10-17=-2191/333, 8-17=-2559/186

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope)
gable end zone and C-C Exterior(2) -1-0-0 to 4-7-3, Interior(1) 4-7-3 to 20-0-0, Exterior(2) 20-0-0 to 28-0-0, Interior(1) 28-0-0 to
36-4-8, Exterior(2) 36-4-8 to 44-3-9, Interior(1) 44-3-9 to 57-0-0 zone; cantilever left and right exposed ; end vertical left and right
exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) All plates are 5x8 MT20 unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) WARNING: Required bearing size at joint(s) 17 greater than input bearing size.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 17 except
(jt=lb) 12=154.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
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

April 1,2022

Continued on page 2

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

Job	Truss	Truss Type	Qty	Ply	Clearwater French	
FRENCH	A02	HIP	4	1		I51101116
					Job Reference (optional)	

Builders FirstSource (Apex, NC),   Apex, NC - 27523,

8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Mar 31 10:28:51 2022 Page 2
ID:jww8HilN90uFSTm7sxLqmezW8I3-TFsw?iUXI6Y6KVb42JA?P7FWWnWLTcTXnibkZBzVRIA

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
    Uniform Loads (plf)
        Vert: 1-6=-60, 6-8=-60, 8-36=-60, 36-38=-260(F=-200), 13-38=-60, 23-27=-20

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Clearwater French	
FRENCH	A03	HIP	1	1		I51101117
					Job Reference (optional)	

Builders FirstSource (Apex, NC), Apex, NC - 27523,
8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Mar 31 10:28:53 2022 Page 1
ID:jww8HilN90uFSTm7sxLqmezW8I3-Pd_gQOVnqjoqZplSAkDTUYLs2aCqxWzqE04re3zVRl8

10-1-12 | 20-0-0 | 28-0-0 | 36-0-0 | 45-10-4 | 56-0-0 | 57-0-0
10-1-12 | 9-10-4 | 8-0-0 | 8-0-0 | 9-10-4 | 10-1-12 | 1-0-0

Scale = 1:97.3

10-1-12 | 22-5-8 | 33-6-8 | 36-8-0 | 45-10-4 | 49-0-0 | 55-5-8 | 56-0-0
10-1-12 | 12-3-12 | 11-1-0 | 3-1-8 | 9-2-4 | 3-1-12 | 6-5-8 | 0-6-8
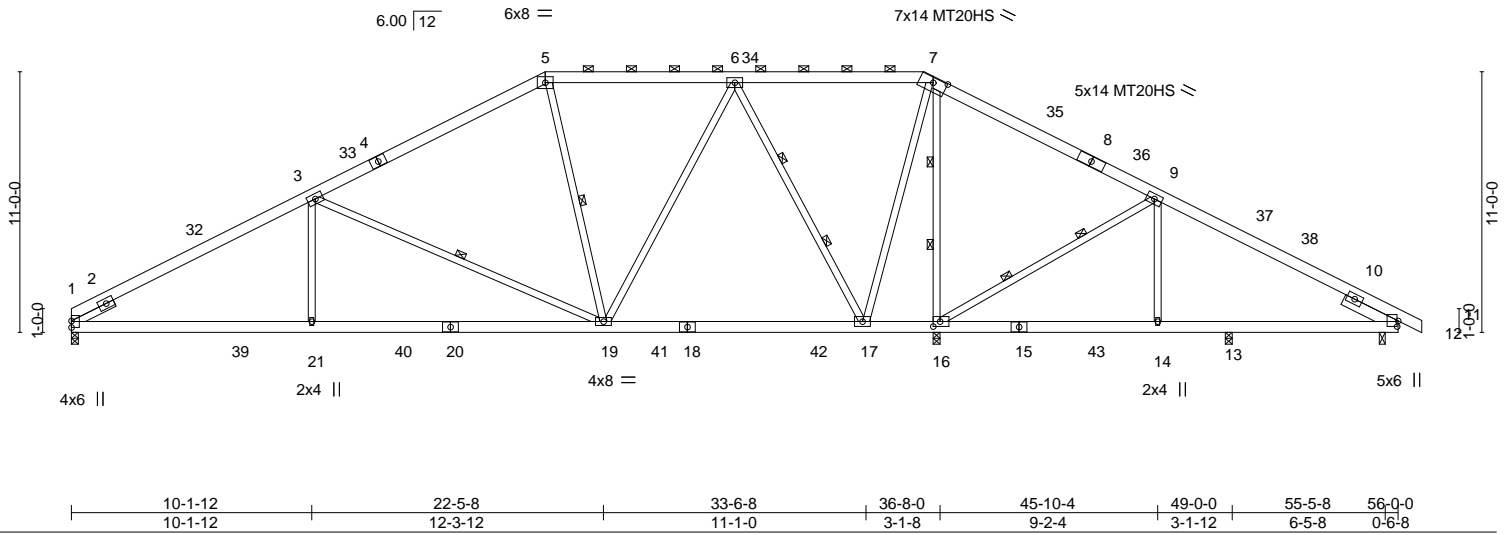
Plate Offsets (X,Y)--   [7:0-7-0,0-2-8], [11:0-2-14,0-0-9], [16:0-3-8,0-2-8]

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	0.71	Vert(LL)	-0.18	17-19	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.30	17-19	>999	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.91	Horz(CT)	0.06	11	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS		Wind(LL)	0.05	21-24	>999	240	Weight: 415 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 SP No.2 *Except*
            7-8,8-12: 2x6 SP DSS
BOT CHORD   2x6 SP No.2
WEBS   2x4 SP No.3 *Except*
            3-19,9-16,7-16: 2x4 SP No.2
SLIDER   Left 2x4 SP No.3 1-11-12, Right 2x6 SP No.2 2-5-12

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 4-11-5 oc purlins, except
            2-0-0 oc purlins (6-0-0 max.): 5-7.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing,   Except:
            6-0-0 oc bracing: 16-17.
WEBS   1 Row at midpt   3-19, 5-19
            2 Rows at 1/3 pts 6-17, 9-16, 7-16

REACTIONS.   All bearings 0-3-8 except (jt=length) 16=0-4-10 (input: 0-3-8), 11=0-3-0.
   (lb) - Max Horz 1=-145(LC 13)
           Max Uplift   All uplift 100 lb or less at joint(s) 1, 16 except 11=-159(LC 13)
           Max Grav   All reactions 250 lb or less at joint(s) 13 except 1=1214(LC 25),
               16=3918(LC 1), 11=1034(LC 24)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   1-3=-1929/142, 3-5=-920/175, 5-6=-701/190, 6-7=0/567, 7-9=0/1260, 9-11=-1299/239
BOT CHORD   1-21=-118/1646, 19-21=-118/1646, 17-19=-149/254, 16-17=-878/180, 14-16=-118/1051,
            13-14=-118/1051, 11-13=-118/1051
WEBS   3-21=0/445, 3-19=-1037/197, 6-19=-9/1010, 6-17=-1494/144, 7-17=-41/1548,
            9-16=-2189/332, 7-16=-2559/179

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-0-0 to 5-7-3, Interior(1) 5-7-3 to 20-0-0, Exterior(2) 20-0-0 to 28-0-0, Interior(1) 28-0-0 to 36-4-8 , Exterior(2) 36-4-8 to 44-3-9, Interior(1) 44-3-9 to 57-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) All plates are 5x8 MT20 unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) WARNING: Required bearing size at joint(s) 16 greater than input bearing size.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 16 except (jt=lb) 11=159.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
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

April 1,2022

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

Job	Truss	Truss Type	Qty	Ply	Clearwater French	
						I51101117
FRENCH	A03	HIP	1	1		
					Job Reference (optional)	

Builders FirstSource (Apex, NC),   Apex, NC - 27523,

8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Mar 31 10:28:53 2022 Page 2
ID:jww8HilN90uFSTm7sxLqmezW8I3-Pd_gQOVnqjoqZplSAkDTUYLs2aCqxWzqE04re3zVRl8

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
      Uniform Loads (plf)
            Vert: 1-5=-60, 5-7=-60, 7-35=-60, 35-37=-260(F=-200), 12-37=-60, 22-26=-20

⚠ WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not
a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall
building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing
is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the
fabrication, storage, delivery, erection and bracing of trusses and truss systems, see   **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Clearwater French	
FRENCH	A04	HIP	5	1		I51101118
					Job Reference (optional)	

Builders FirstSource (Apex, NC),   Apex, NC - 27523,

8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Mar 31 10:28:54 2022 Page 1
ID:jww8HilN90uFSTm7sxLqmezW8I3-tpY2djWPb1whBzKfkRki1mt3d_XJg?CzTfqOAWzVRI7

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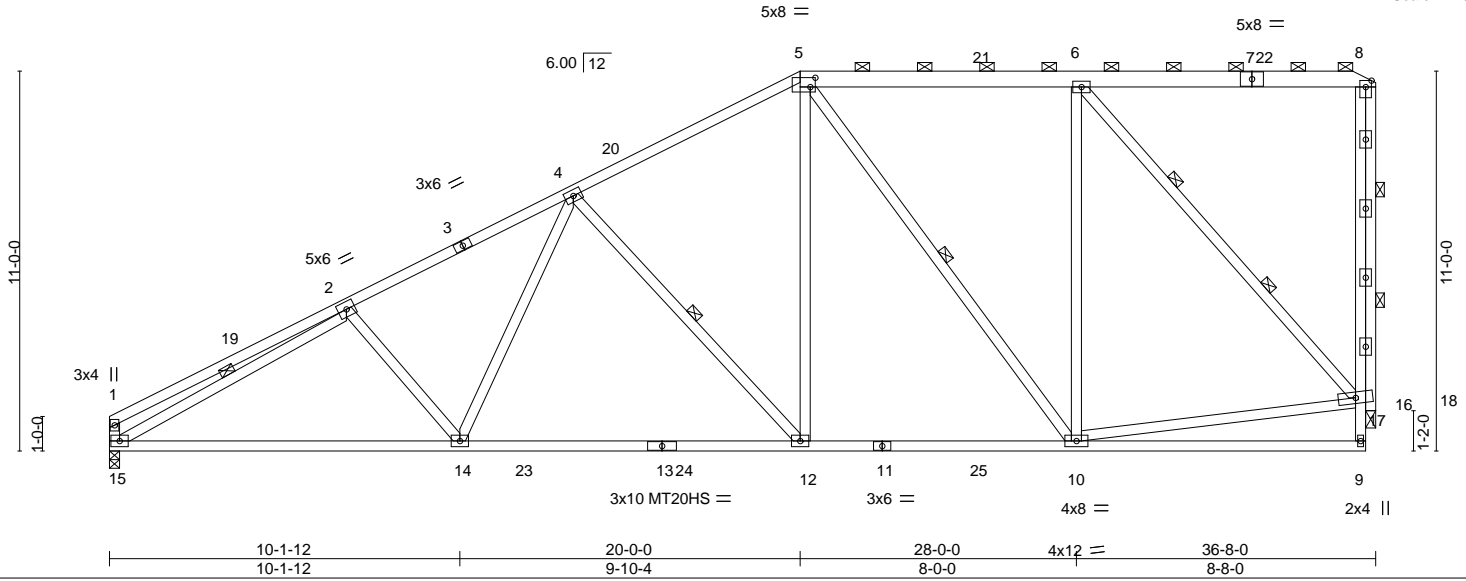
Plate Offsets (X,Y)--   [5:0-1-12,0-3-4]

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	-0.30	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.52	12-14	>836	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.07	18	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS		Wind(LL)	0.08	12-14	>999	240	Weight: 280 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
5-7,7-8: 2x6 SP No.2
BOT CHORD 2x4 SP No.1 *Except*
9-11: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
5-10,8-17: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-7-1 oc purlins,
except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 9-10.
WEBS 1 Row at midpt   2-15, 4-12, 5-10
2 Rows at 1/3 pts   6-16, 8-18

REACTIONS.   (size) 15=0-3-8, 18=0-3-8
Max Horz 15=297(LC 12)
Max Uplift 15=-26(LC 12), 18=-86(LC 9)
Max Grav 15=1455(LC 1), 18=1432(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   1-15=-357/85, 1-2=-461/71, 2-4=-2172/68, 4-5=-1523/100, 5-6=-955/80
BOT CHORD   14-15=-303/1970, 12-14=-200/1701, 10-12=-125/1302
WEBS   2-15=-1965/4, 4-14=0/477, 4-12=-652/170, 5-12=-25/812, 5-10=-600/105, 6-10=0/557,
8-16=-57/1235, 6-16=-1337/112, 10-16=-73/947, 8-18=-1433/119

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope)
gable end zone and C-C Exterior(2) 0-1-12 to 3-9-10, Interior(1) 3-9-10 to 20-0-0, Exterior(2) 20-0-0 to 25-2-0, Interior(1) 25-2-0 to
36-2-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for
reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) All plates are 4x6 MT20 unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Bearing at joint(s) 18 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) 15, 18.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 1,2022

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Clearwater French	I51101119
FRENCH	A05	SPECIAL	2	1	Job Reference (optional)	

Builders FirstSource (Apex, NC),   Apex, NC - 27523,
     8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Mar 31 10:28:55 2022 Page 1
ID:jww8HiIN90uFSTm7sxLqmezW8I3-L06Qr3X1MK2Yo6vrH9FxazQ84OqpPZr7iJZxiyzVRl6

6-9-8 | 13-3-8 | 20-1-0
6-9-8 | 6-6-0 | 6-9-8
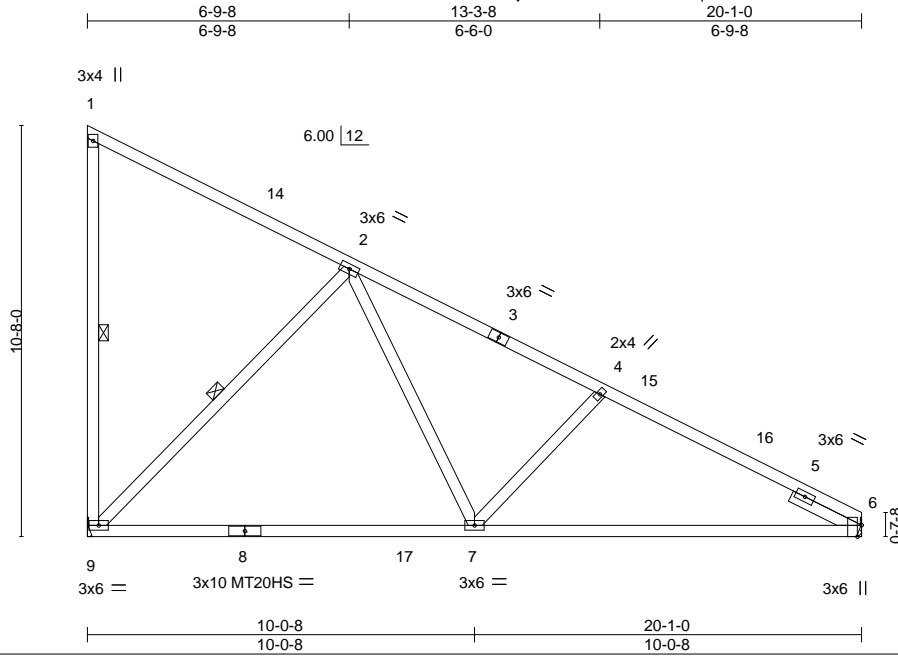
Scale = 1:59.8

Plate Offsets (X,Y)--   [6:0-3-9,Edge]

LOADING (psf)	SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC	1.00	Vert(LL)	-0.40	7-9	>600	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.64	7-9	>374	240	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.01	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS		Wind(LL)	-0.10	7-9	>999	240	Weight: 113 lb	FT = 20%

LUMBER-
TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.2
WEBS   2x4 SP No.3
SLIDER   Right 2x4 SP No.3 1-11-12

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 5-0-10 oc purlins, except end verticals.
BOT CHORD   Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS   1 Row at midpt   1-9, 2-9

REACTIONS.   (size)   9=Mechanical, 6=Mechanical
     Max Horz 9=-320(LC 10)
     Max Uplift 9=-32(LC 8)
     Max Grav 9=798(LC 1), 6=798(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-4=-959/85, 4-6=-1140/81
BOT CHORD   7-9=0/600, 6-7=-1/1011
WEBS   2-9=-762/118, 2-7=0/609, 4-7=-362/119

NOTES-
1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 4-4-11, Interior(1) 4-4-11 to 20-1-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) All plates are MT20 plates unless otherwise indicated.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9.

NORTH CAROLINA PROFESSIONAL
SEAL
036322
ERIC A. GILBERT
ENGINEER

April 1,2022

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

Job	Truss	Truss Type	Qty	Ply	Clearwater French	
FRENCH	A06	SPECIAL	3	1		I51101120
					Job Reference (optional)	

Builders FirstSource (Apex, NC),   Apex, NC - 27523,

8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Mar 31 10:28:56 2022 Page 1
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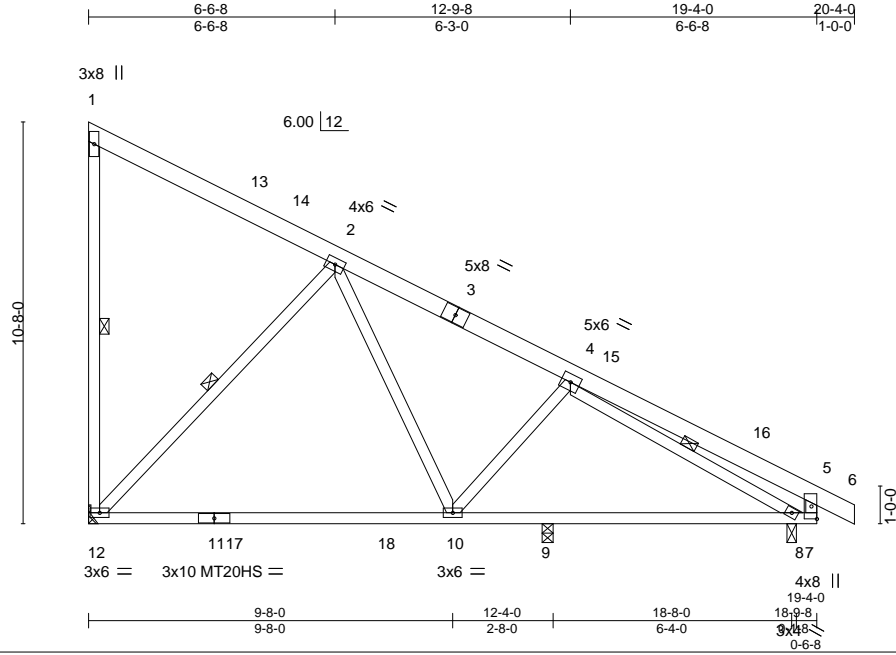
6-6-8 | 12-9-8 | 19-4-0 | 20-4-0
6-6-8 | 6-3-0 | 6-6-8 | 1-0-0

Scale = 1:61.2

3x8 ||
1

6.00 12

13
14
4x6 ||
2

5x8 ||
3

5x6 ||
4 15

16
5 6

1-0-0

10-8-0

12
1117   18   10
9
87
3x6 =   3x10 MT20HS =   3x6 =
4x8 ||
19-4-0

9-8-0 | 12-4-0 | 18-8-0 | 18-9-8
9-8-0 | 2-8-0 | 6-4-0 | 3x4
0-6-8

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.94	Vert(LL)	-0.25	10-12	>585	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.51	10-12	>285	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.94	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS		Wind(LL)	0.09	10-12	>999	240	Weight: 139 lb	FT = 20%

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

REACTIONS.   (size)   12=Mechanical, 9=0-3-8, 8=0-3-0
              Max Horz   12=-327(LC 10)
              Max Uplift 12=-108(LC 13), 9=-27(LC 18), 8=-95(LC 13)
              Max Grav   12=1706(LC 1), 9=122(LC 3), 8=1588(LC 19)

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

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   1-2=-436/127, 2-4=-2371/256, 4-5=-359/38, 5-7=-347/97
BOT CHORD   10-12=-51/1516, 9-10=-173/2246, 8-9=-173/2246, 7-8=0/284
WEBS   2-12=-1984/303, 2-10=-43/827, 4-10=-693/174, 4-8=-2323/273

NOTES-
1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope)
   gable end zone and C-C Exterior(2) 0-1-12 to 4-4-10, Interior(1) 4-4-10 to 20-4-0 zone; cantilever left and right exposed ; end vertical
   left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) All plates are MT20 plates unless otherwise indicated.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 8 except (jt=lb)
   12=108.
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)
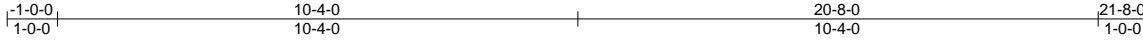   Vert: 1-13=-60, 4-13=-260(F=-200), 4-5=-60, 5-6=-60, 7-12=-20

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ENGINEER
ERIC A. GILBERT

April 1,2022

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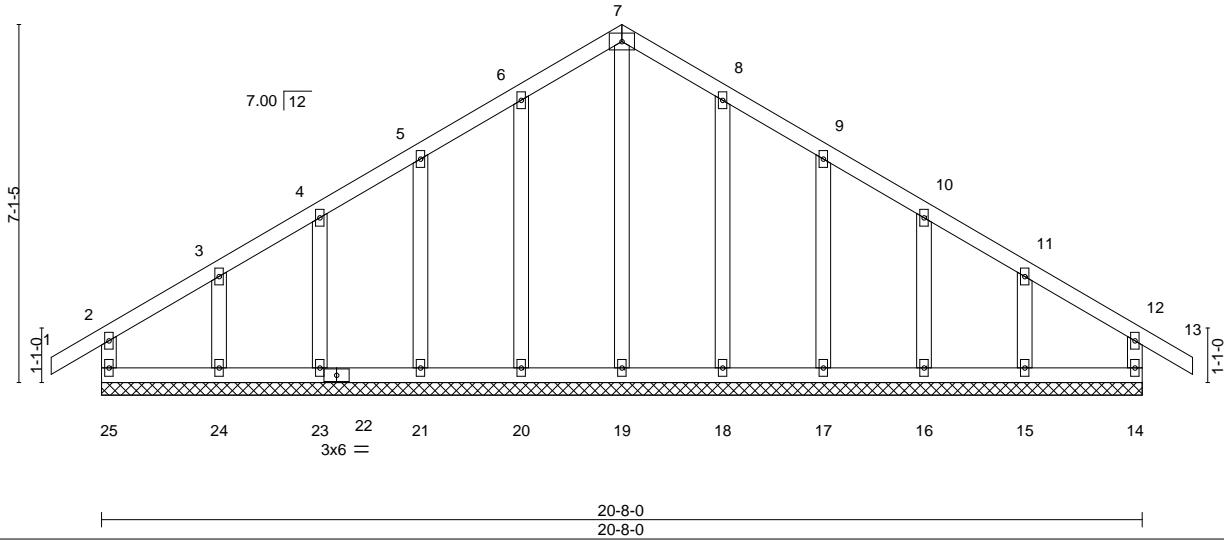
818 Soundside Road
Edenton, NC 27932

Builders FirstSource (Apex, NC),   Apex, NC - 27523,

8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Mar 31 10:28:57 2022 Page 1
ID:jww8HilN90uFSTm7sxLqmezW8I3-IOEBGlYHuyJG2Q3EPaHPfOViPBjRtXLQ9d22nqzVRl4

4x6 ═

Scale = 1:45.8

7.00 ⟍12

20-8-0
20-8-0

LOADING (psf)		SPACING-		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	13	n/r	120		MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.00	13	n/r	120			
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.12	Horz(CT)	0.00	14	n/a	n/a			
BCDL	10.0	Code IRC2015/TPI2014		Matrix-R								Weight: 125 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.
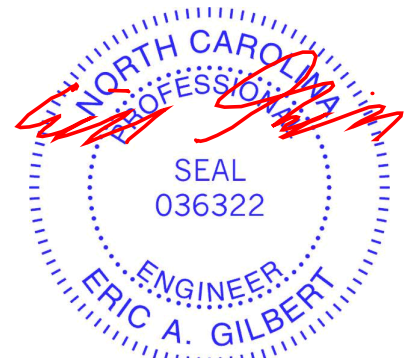BOT CHORD   Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.   All bearings 20-8-0.
(lb) -   Max Horz 25=155(LC 11)
Max Uplift   All uplift 100 lb or less at joint(s) 25, 14, 20, 21, 23, 24, 18, 17, 16, 15
Max Grav   All reactions 250 lb or less at joint(s) 25, 14, 19, 20, 21, 23, 24, 18, 17, 16, 15

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-0-0 to 2-0-0, Exterior(2) 2-0-0 to 10-4-0, Corner(3) 10-4-0 to 13-4-0, Exterior(2) 13-4-0 to 21-8-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 25, 14, 20, 21, 23, 24, 18, 17, 16, 15.

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Job	Truss	Truss Type	Qty	**Ply**	Clearwater French	
FRENCH	B01GR	COMMON	1	**3**	Job Reference (optional)	I51101122

Builders FirstSource (Apex, NC),   Apex, NC - 27523,

8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Mar 31 10:28:59 2022 Page 1
ID:jww8HilN90uFSTm7sxLqmezW8I3-EnLxhRaYPZZ_HkCcW_Kukpbx??K_LIHjcxX9sjzVRl2
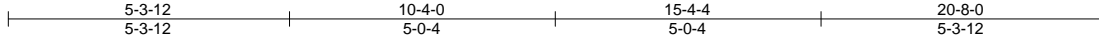
Scale = 1:43.5

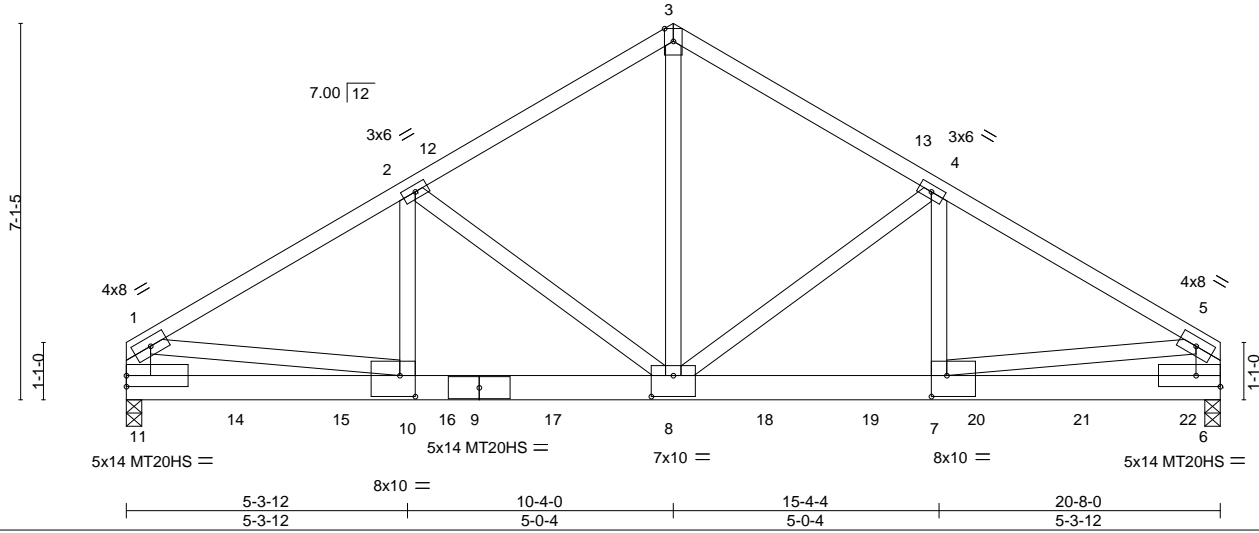Plate Offsets (X,Y)--   [7:0-3-8,0-4-12], [8:0-5-0,0-4-12], [10:0-3-8,0-4-12]

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	0.56	Vert(LL)	-0.10	7-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.20	7-8	>999	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.67	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS		Wind(LL)	0.07	7-8	>999	240	Weight: 415 lb	FT = 20%

LUMBER-
TOP CHORD   2x4 SP No.2
BOT CHORD   2x6 SP DSS
WEBS   2x4 SP No.3 *Except*
1-11,5-6: 2x6 SP No.2, 3-8,5-7,1-10: 2x4 SP No.2

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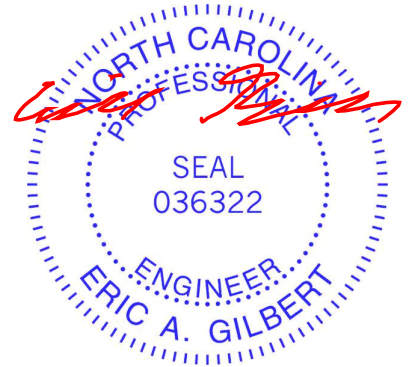BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.   (size)   11=0-3-8, 6=0-3-8 (req. 0-3-14)
Max Horz 11=-140(LC 6)
Max Uplift 11=-558(LC 8), 6=-613(LC 9)
Max Grav 11=8525(LC 1), 6=9932(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   1-11=-7012/476, 1-2=-11189/732, 2-3=-8504/567, 3-4=-8504/567, 4-5=-11451/711, 5-6=-7163/463
BOT CHORD   10-11=-238/1908, 8-10=-643/9585, 7-8=-565/9810, 6-7=-150/2017
WEBS   3-8=-529/8179, 4-8=-3172/272, 4-7=-187/3151, 5-7=-441/7893, 2-8=-2923/295, 2-10=-211/2936, 1-10=-453/7775

NOTES-
1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
   Bottom chords connected as follows: 2x6 - 3 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=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) WARNING: Required bearing size at joint(s) 6 greater than input bearing size.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=558, 6=613.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1670 lb down and 136 lb up at 2-0-12, 1670 lb down and 136 lb up at 4-0-12, 1670 lb down and 136 lb up at 6-0-12, 1670 lb down and 136 lb up at 8-0-12, 1707 lb down and 123 lb up at 10-0-12, 1707 lb down and 123 lb up at 12-0-12, 1707 lb down and 123 lb up at 14-0-12, 1707 lb down and 123 lb up at 16-0-12, and 1707 lb down and 123 lb up at 18-0-12, and 1712 lb down and 117 lb up at 20-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	**Ply**	Clearwater French	
						I51101122
FRENCH	B01GR	COMMON	1	**3**	Job Reference (optional)	

Builders FirstSource (Apex, NC),   Apex, NC - 27523,

8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Mar 31 10:28:59 2022 Page 2
ID:jww8HilN90uFSTm7sxLqmezW8I3-EnLxhRaYPZZ_HkCcW_Kukpbx??K_LIHjcxX9sjzVRl2

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, 6-11=-20
    Concentrated Loads (lb)
        Vert: 8=-1707(B) 14=-1648(B) 15=-1648(B) 16=-1648(B) 17=-1648(B) 18=-1707(B) 19=-1707(B) 20=-1707(B) 21=-1707(B) 22=-1712(B)

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Job	Truss	Truss Type	Qty	Ply	Clearwater French	
FRENCH	C01	COMMON	2	1		I51101123
					Job Reference (optional)	

Builders FirstSource (Apex, NC),   Apex, NC - 27523,   8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Mar 31 10:28:59 2022 Page 1
ID:jww8HiIN90uFSTm7sxLqmezW8I3-EnLxhRaYPZZ_HkCcW_Kukpbti?MNLRFjcxX9sjzVRl2

	-1-0-0	6-4-0	12-8-0	13-8-0
	1-0-0	6-4-0	6-4-0	1-0-0

4x6 ═

Scale = 1:30.7

7.00 |‾12‾

	6-4-0	12-8-0
	6-4-0	6-4-0

Plate Offsets (X,Y)--   [2:0-3-0,Edge], [4:0-3-0,Edge]
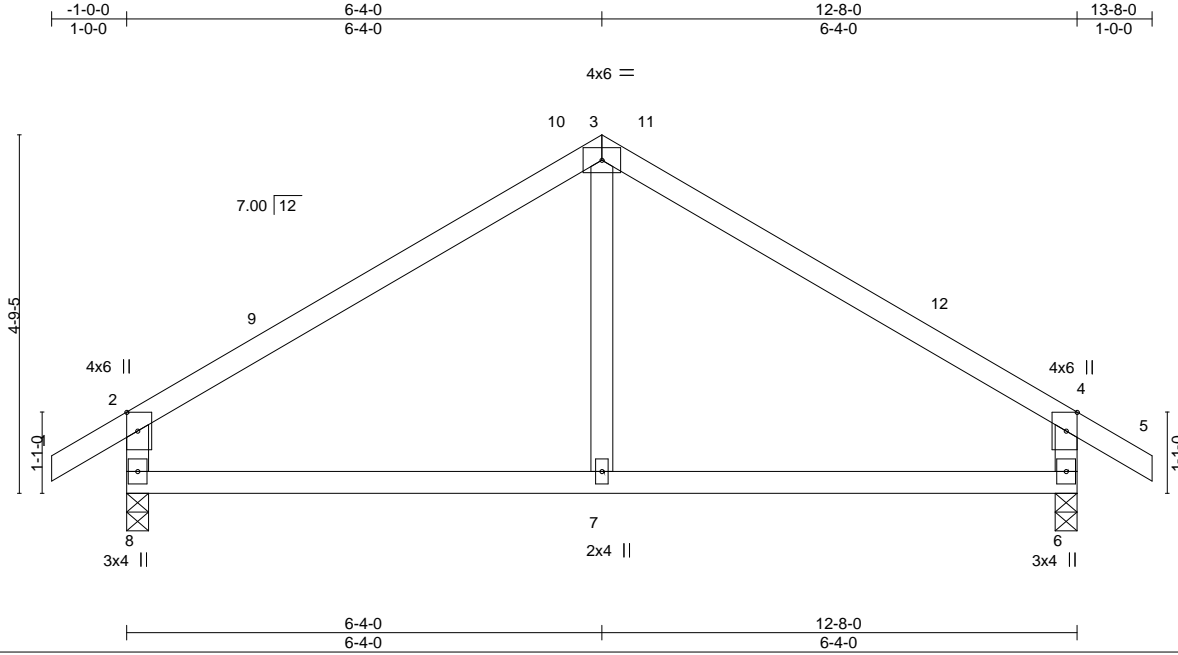
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	-0.04	6-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.08	6-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MR		Wind(LL)	-0.02	7-8	>999	240	Weight: 53 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.   (size)   8=0-3-8, 6=0-3-8
             Max Horz   8=-109(LC 10)
             Max Uplift 8=-19(LC 12), 6=-19(LC 13)
             Max Grav   8=564(LC 1), 6=564(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-8=-494/108, 2-3=-525/63, 3-4=-525/63, 4-6=-494/108
BOT CHORD   7-8=0/360, 6-7=0/360

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 6-4-0, Exterior(2) 6-4-0 to 10-6-15, Interior(1) 10-6-15 to 13-8-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.

April 1,2022

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ENGINEER

Job	Truss	Truss Type	Qty	Ply	Clearwater French	
FRENCH	C01G	GABLE	1	1		I51101124
					Job Reference (optional)	

Builders FirstSource (Apex, NC),   Apex, NC - 27523,
8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Mar 31 10:29:01 2022 Page 1
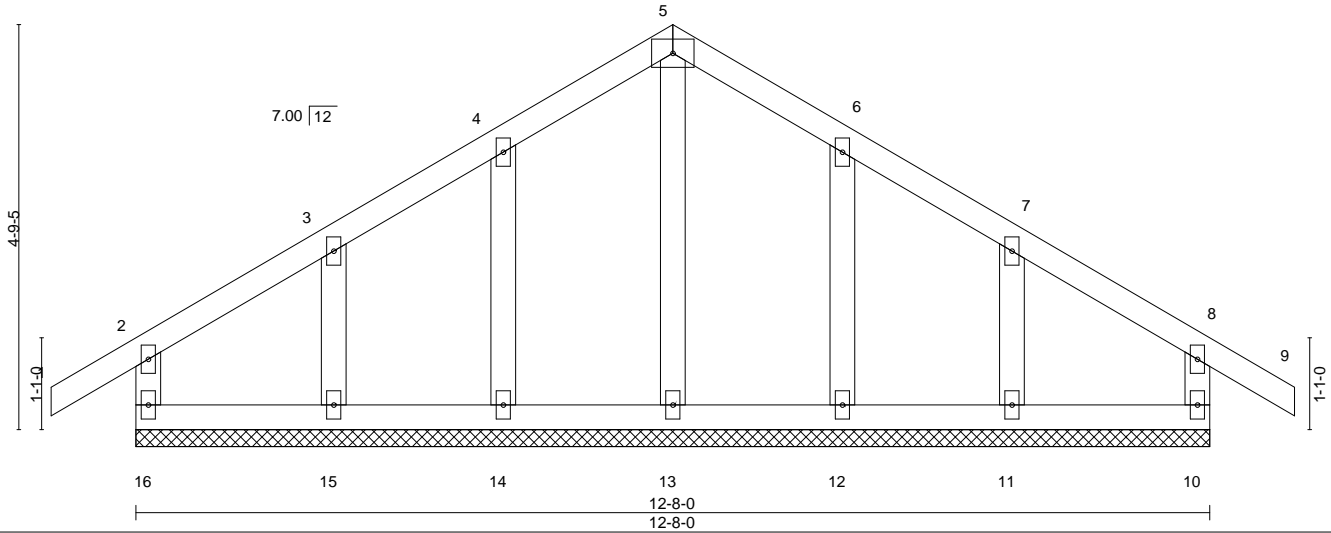ID:jww8HilN90uFSTm7sxLqmezW8I3-AATi67boxApiW1M?ePMMpEgNap6jpMV?4F0GwczVRl0

-1-0-0 | 6-4-0 | 12-8-0 | 13-8-0
1-0-0 | 6-4-0 | 6-4-0 | 1-0-0

4x6 =

Scale = 1:27.2

7.00 [12]

4-9-5

1-1-0

1-1-0

16   15   14   13   12   11   10

12-8-0
12-8-0

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	9	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	9	n/r	120		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.05	Horz(CT)	0.00	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-R							Weight: 67 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 6-0-0 oc bracing.

REACTIONS.   All bearings 12-8-0.
      (lb) - Max Horz 16=109(LC 11)
              Max Uplift   All uplift 100 lb or less at joint(s) 16, 10, 14, 15, 12, 11
              Max Grav   All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope)
   gable end zone and C-C Corner(3) -1-0-0 to 2-0-0, Exterior(2) 2-0-0 to 6-4-0, Corner(3) 6-4-0 to 9-4-0, Exterior(2) 9-4-0 to 13-8-0
   zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions
   shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry
   Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10, 14, 15,
    12, 11.

April 1,2022

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	**Ply**	Clearwater French	
FRENCH	C01GR	COMMON	1	**2**		I51101125
					Job Reference (optional)	

Builders FirstSource (Apex, NC),   Apex, NC - 27523,

8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Mar 31 10:29:02 2022 Page 1
ID:jww8HiIN90uFSTm7sxLqmezW8I3-eM14JScQiUxZ8BxBC7tbMSDSeCMkYe_9JvmpS2zVRI?

3-3-12 / 6-4-0 / 9-4-4 / 12-8-0
3-3-12 / 3-0-4 / 3-0-4 / 3-3-12

Scale = 1:30.5

4x6 ||

7.00 |12

5x6 //   5x6 \\\\

3x4 || 3x4 ||

9   4x12 =   12   13   8   14   15   7   16   17   6

7x10 =   7x10 =   4x12 =

4-3-13 / 8-4-3 / 12-8-0
4-3-13 / 4-0-5 / 4-3-13

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

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	0.47	Vert(LL)	-0.05	7-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.09	7-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.73	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS		Wind(LL)	0.03	7-8	>999	240	Weight: 171 lb	FT = 20%

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 5-1-2 oc purlins,
                except end verticals.
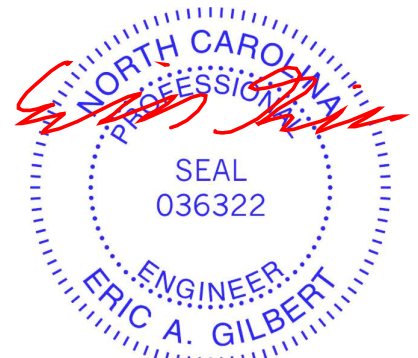BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.   (size)   9=0-3-8, 6=0-3-8
             Max Horz   9=-94(LC 6)
             Max Uplift   6=-266(LC 9)
             Max Grav   9=4183(LC 1), 6=5296(LC 2)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   1-9=-618/0, 1-2=-1001/0, 2-3=-5043/66, 3-4=-5675/302, 4-5=-1505/106, 5-6=-876/75
BOT CHORD   8-9=-41/4048, 7-8=-71/3438, 6-7=-200/4582
WEBS   3-7=-355/3548, 4-7=-106/841, 4-6=-4422/174, 3-8=0/2176, 2-8=-95/804, 2-9=-4288/130

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
   Bottom chords connected as follows: 2x6 - 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=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=266.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 778 lb down at 1-2-12, 778 lb down at 3-2-12, 1768 lb down and 137 lb up at 5-2-12, 1768 lb down and 137 lb up at 7-2-12, and 1768 lb down and 137 lb up at 9-2-12, and 1768 lb down and 137 lb up at 11-2-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

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, 6-9=-20

(seal) NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

April 1,2022

Continued on page 2

⚠ WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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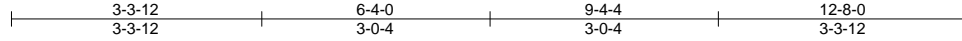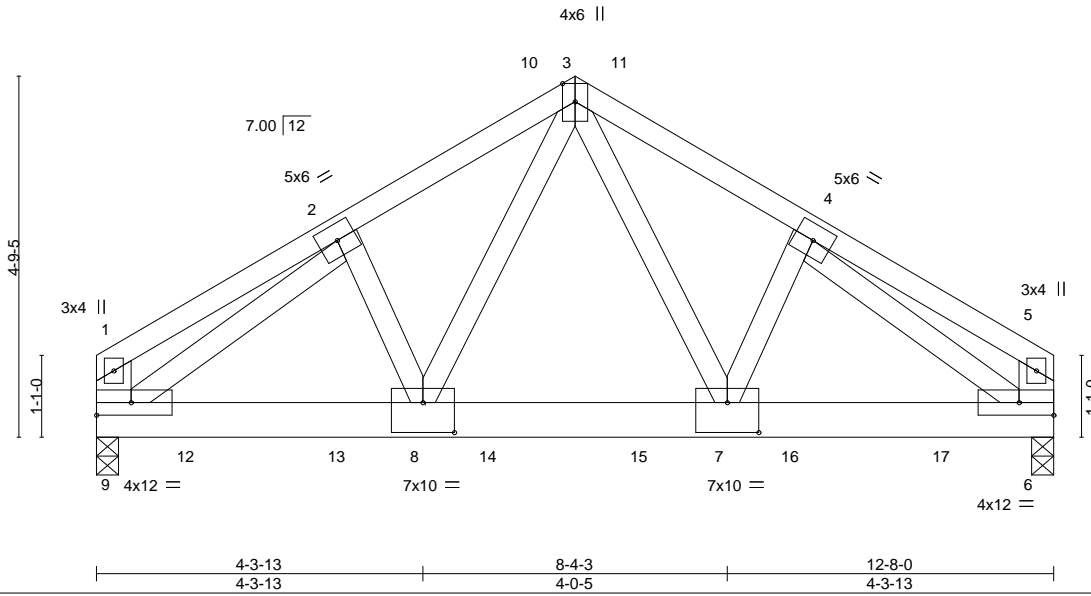818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Clearwater French	
FRENCH	C01GR	COMMON	1	**2**	Job Reference (optional)	I51101125

LOAD CASE(S) Standard
   Concentrated Loads (lb)
      Vert: 12=-778(B) 13=-778(B) 14=-1737(B) 15=-1737(B) 16=-1737(B) 17=-1737(B)

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Job	Truss	Truss Type	Qty	Ply	Clearwater French	
FRENCH	D01	COMMON	2	1		I51101126
					Job Reference (optional)	

Builders FirstSource (Apex, NC),   Apex, NC - 27523,

8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Mar 31 10:29:03 2022 Page 1
ID:jww8HiIN90uFSTm7sxLqmezW8I3-6YbSWod2To3PmLWNlqOquflYScjZHFLIXZVM?UzVRl_
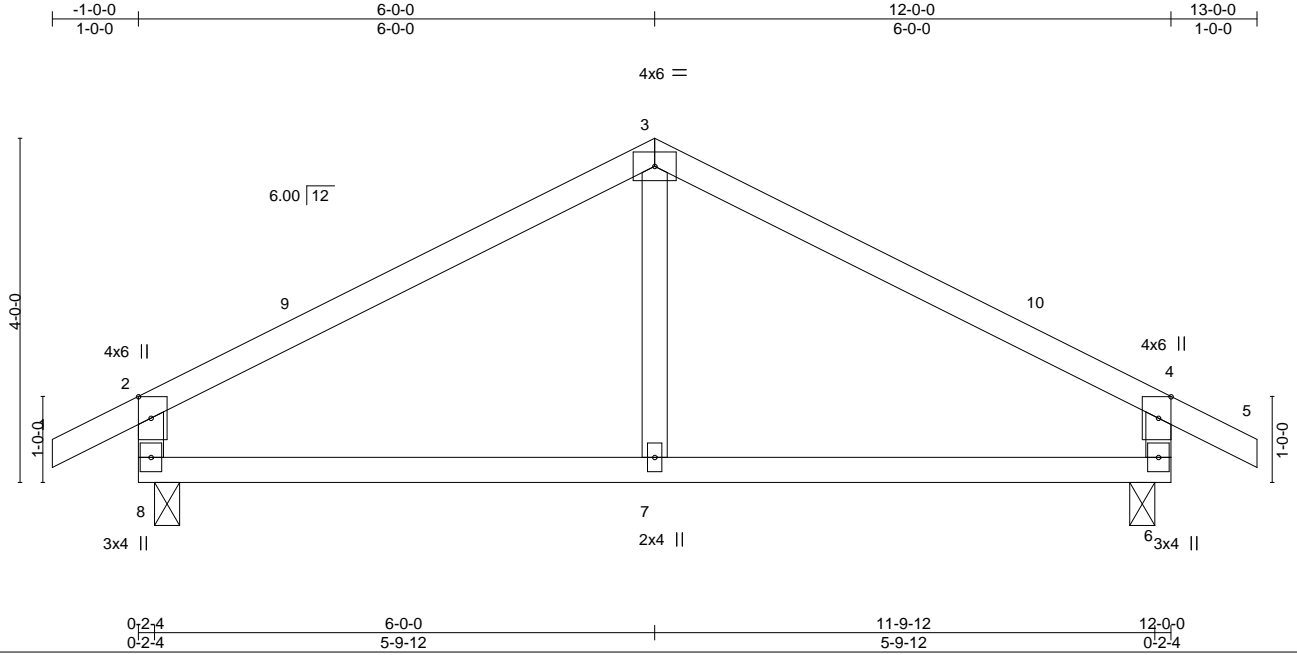
```
        -1-0-0              6-0-0                    12-0-0          13-0-0
         1-0-0              6-0-0                    6-0-0           1-0-0
```

4x6 ═

Scale = 1:26.8

6.00 ⌐12

4-0-0

9

10

4x6 ‖   2

4x6 ‖   4

5

1-0-0

1-0-0

8

7

6

3x4 ‖

2x4 ‖

3x4 ‖

```
   0-2-4        6-0-0                11-9-12           12-0-0
   0-2-4        5-9-12               5-9-12            0-2-4
```

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.03	7-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.07	7-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MR		Wind(LL)	0.01	7-8	>999	240	Weight: 48 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.   (size)   8=0-3-8, 6=0-3-8
              Max Horz 8=56(LC 11)
              Max Uplift 8=-23(LC 12), 6=-23(LC 13)
              Max Grav 8=537(LC 1), 6=537(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-8=-468/136, 2-3=-523/83, 3-4=-523/81, 4-6=-468/133
BOT CHORD   7-8=0/384, 6-7=0/384

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope)
   gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 6-0-0, Exterior(2) 6-0-0 to 10-2-15, Interior(1) 10-2-15 to
   13-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for
   reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.

NORTH CAROLINA
PROFESSIONAL
SEAL
036322
ENGINEER
ERIC A. GILBERT

April 1,2022

Job	Truss	Truss Type	Qty	Ply	Clearwater French	
FRENCH	D01GR	HIP	1	1		I51101127
					Job Reference (optional)	

Builders FirstSource (Apex, NC), Apex, NC - 27523,
8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Mar 31 10:29:04 2022 Page 1
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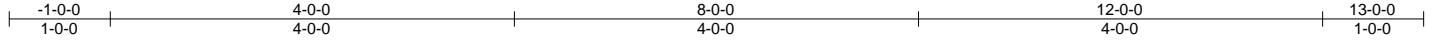
Scale = 1:22.8
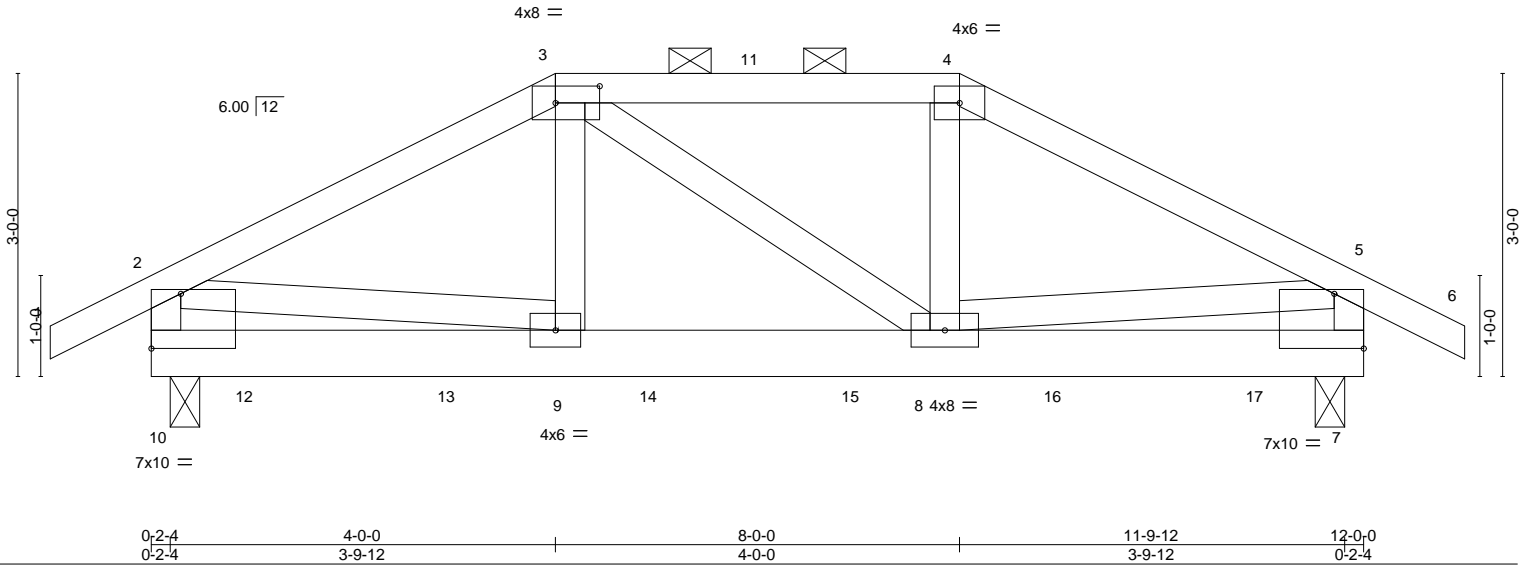
Plate Offsets (X,Y)-- [3:0-5-4,0-2-0], [7:Edge,0-6-8], [10:Edge,0-6-8]

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	0.33	Vert(LL)	-0.02	8-9	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.03	8-9	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB	0.27	Horz(CT)	0.00	7	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS		Wind(LL)	0.01	8-9	>999	240	Weight: 76 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 5-9-11 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 10=0-3-8, 7=0-3-8
Max Horz 10=44(LC 7)
Max Uplift 10=-159(LC 8), 7=-158(LC 9)
Max Grav 10=880(LC 1), 7=881(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-10=-722/141, 2-3=-982/175, 3-4=-844/175, 4-5=-981/174, 5-7=-717/140
BOT CHORD 8-9=-130/835
WEBS 2-9=-106/642, 5-8=-107/635

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=159, 7=158.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 108 lb down and 49 lb up at 1-0-0, 118 lb down and 43 lb up at 3-0-0, 118 lb down and 57 lb up at 5-0-0, 118 lb down and 57 lb up at 7-0-0, and 118 lb down and 43 lb up at 9-0-0, and 109 lb down and 47 lb up at 11-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-60, 2-3=-60, 3-4=-60, 4-5=-60, 5-6=-60, 7-10=-20
Concentrated Loads (lb)
Vert: 12=-108(B) 13=-118(B) 14=-118(B) 15=-118(B) 16=-118(B) 17=-109(B)

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Edenton, NC 27932

Scale = 1:17.9

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	-0.01	4-5	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS		Wind(LL)	0.01	4-5	>999	240	Weight: 19 lb	FT = 20%

LUMBER-
TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.2
WEBS   2x4 SP No.2 *Except*
             3-4: 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.   (size)   5=0-3-0, 4=Mechanical
                  Max Horz 5=64(LC 12)
                  Max Uplift 5=-4(LC 12), 4=-37(LC 12)
                  Max Grav 5=228(LC 1), 4=138(LC 1)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 3-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 4.

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Job	Truss	Truss Type	Qty	Ply	Clearwater French	
FRENCH	J02	MONO HIP	2	1		I51101129
					Job Reference (optional)	

Builders FirstSource (Apex, NC),　　　Apex, NC - 27523,
8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Mar 31 10:29:05 2022 Page 1
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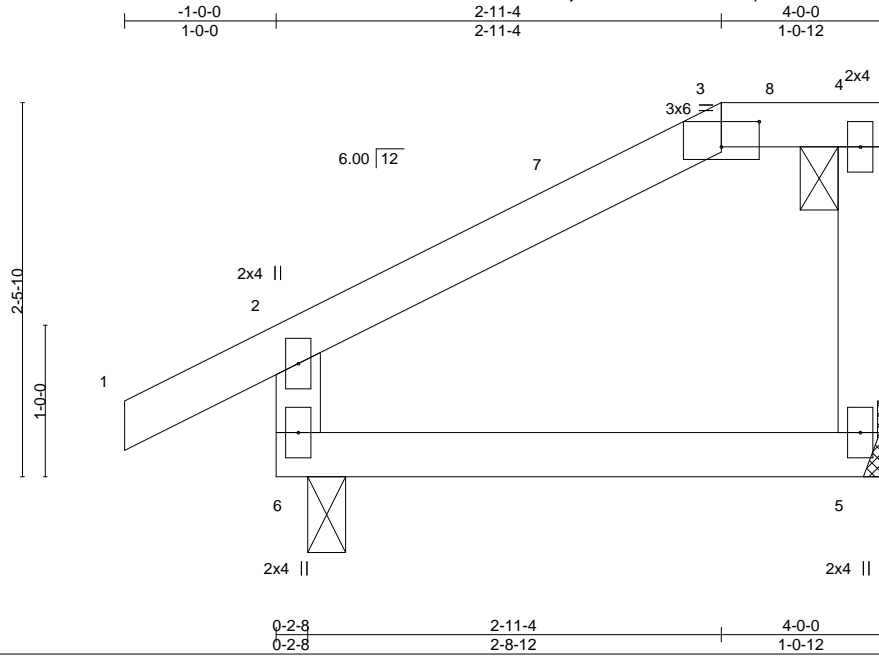
Scale = 1:15.2

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	-0.01	5-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.02	5-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS		Wind(LL)	0.01	5-6	>999	240	Weight: 18 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except*
4-5: 2x4 SP No.3

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

REACTIONS. (size) 6=0-3-0, 5=Mechanical
Max Horz 6=51(LC 12)
Max Uplift 6=-13(LC 12), 5=-23(LC 12)
Max Grav 6=228(LC 1), 5=138(LC 1)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 2-11-4, Exterior(2) 2-11-4 to 3-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) 6, 5.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
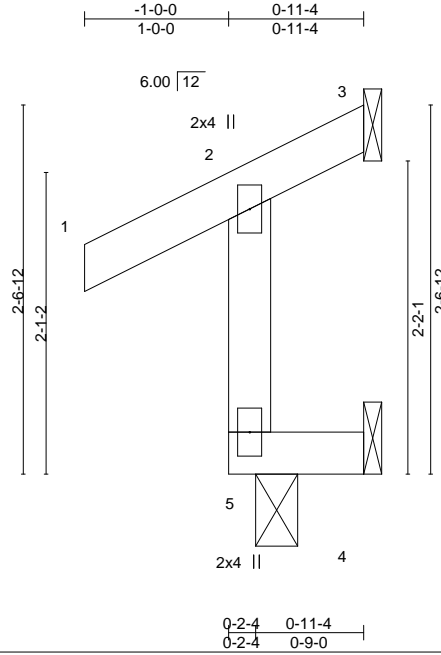
April 1,2022

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Clearwater French	
FRENCH	J03	JACK	2	1		I51101130
					Job Reference (optional)	

Builders FirstSource (Apex, NC),   Apex, NC - 27523,
8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Mar 31 10:29:06 2022 Page 1
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-1-0-0   0-11-4
1-0-0   0-11-4

Scale: 3/4"=1'

6.00 ⌐12

2x4 ‖

2-6-12
2-1-2

2-6-12
2-2-1

2x4 ‖

0-2-4   0-11-4
0-2-4   0-9-0

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	5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.00	5	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MR							Weight: 7 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 0-11-4 oc purlins, except end verticals.
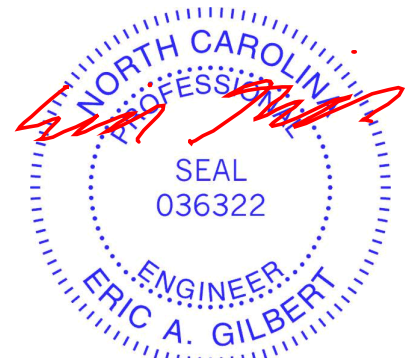BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.   (size)   5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=46(LC 9)
Max Uplift 5=-5(LC 8), 3=-31(LC 9), 4=-37(LC 9)
Max Grav 5=150(LC 1), 3=11(LC 10), 4=33(LC 10)

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

NOTES-
1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3, 4.

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Clearwater French	
FRENCH	J03GR	MONO HIP	2	1		I51101131
					Job Reference (optional)	

Builders FirstSource (Apex, NC),   Apex, NC - 27523,

8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Mar 31 10:29:07 2022 Page 1
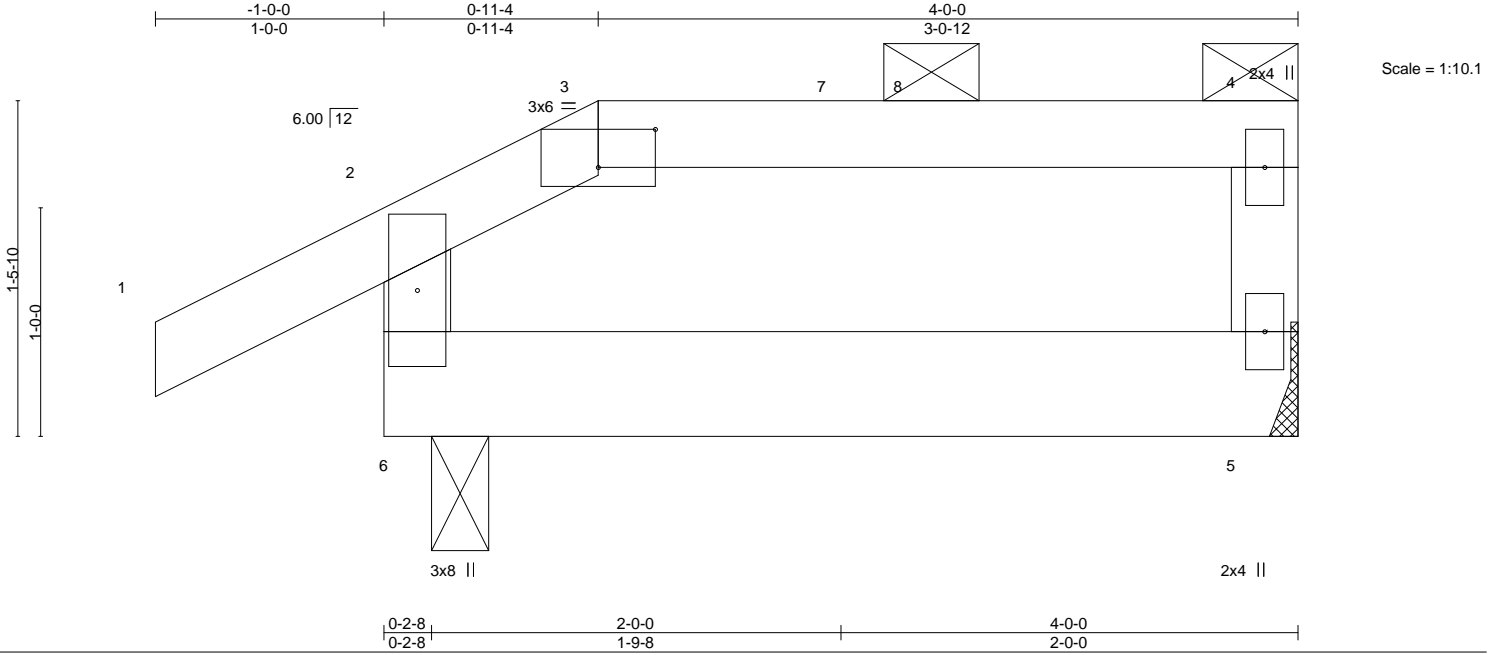ID:jww8HilN90uFSTm7sxLqmezW8I3-?KqzMAgZX0ZrEyp9_gTm3VwOBD8gD3RuSBTa7FzVRkw

Scale = 1:10.1

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

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	-0.00	5-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.01	5-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS		Wind(LL)	0.00	5-6	>999	240	Weight: 19 lb	FT = 20%

LUMBER-
TOP CHORD   2x4 SP No.2
BOT CHORD   2x6 SP No.2
WEBS   2x4 SP No.2 *Except*
            4-5: 2x4 SP No.3

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 4-0-0 oc purlins,
               except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.
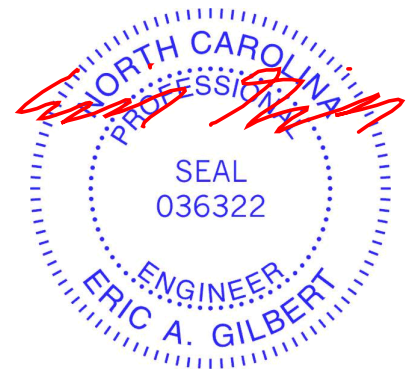
REACTIONS.   (size)   6=0-3-0, 5=Mechanical
            Max Horz 6=27(LC 5)
            Max Uplift 6=-37(LC 8), 5=-29(LC 5)
            Max Grav 6=215(LC 1), 5=128(LC 20)

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=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope)
   gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
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) 6, 5.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 75 lb up at 2-0-12 on top chord.
   The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
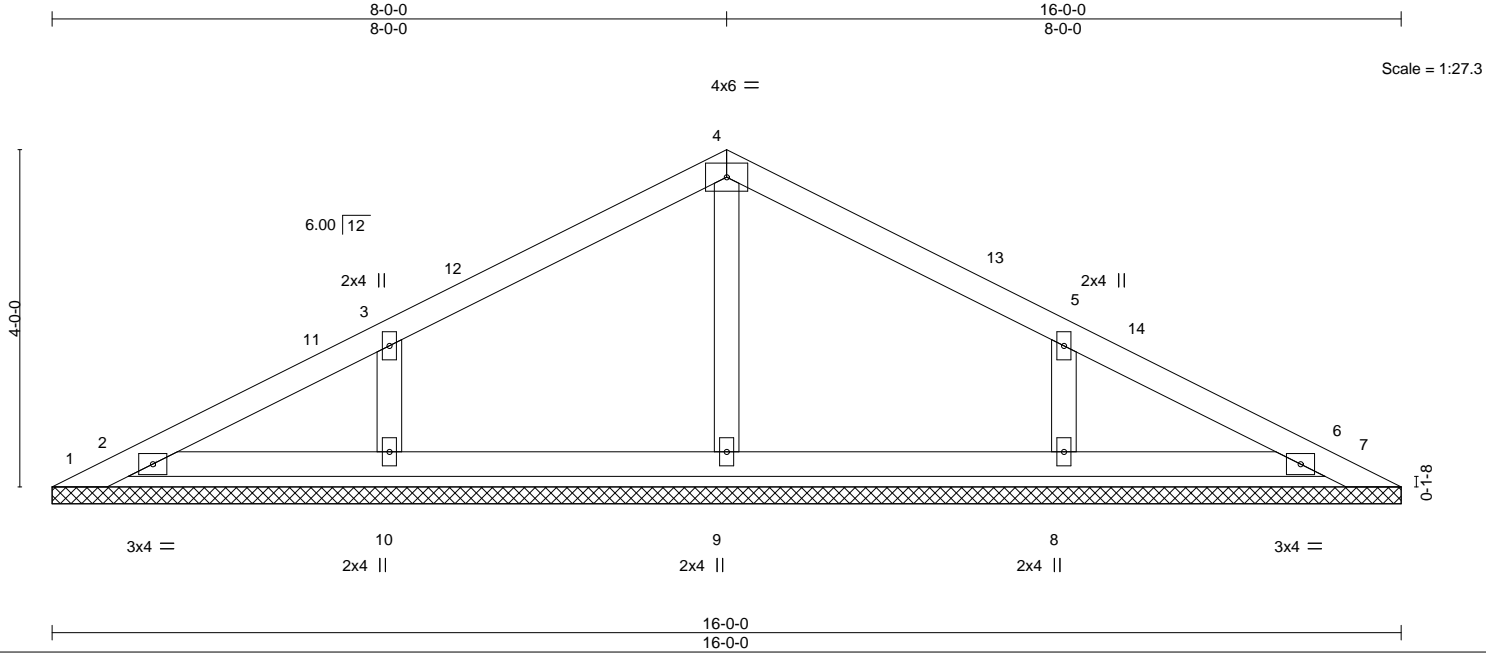
LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
        Vert: 1-2=-60, 2-3=-60, 3-4=-60, 5-6=-20
   Concentrated Loads (lb)
        Vert: 7=27(B)

April 1,2022

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Clearwater French	
FRENCH	PB01	GABLE	24	1		I51101132
					Job Reference (optional)	

Builders FirstSource (Apex, NC),   Apex, NC - 27523,

8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Mar 31 10:29:08 2022 Page 1
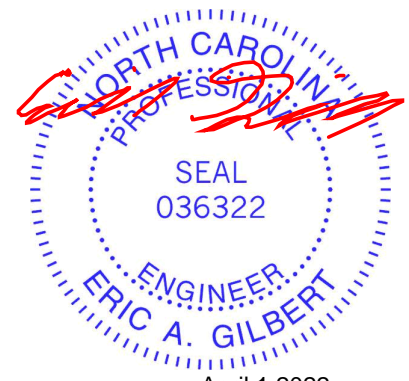ID:jww8HiIN90uFSTm7sxLqmezW8I3-TWOLaWhBIKhis6OLYN_?bjSY8dU4yW01hrD7fizVRkv

8-0-0 / 8-0-0
16-0-0 / 8-0-0

Scale = 1:27.3

4x6 =
6.00 ⟌12
2x4 || 3   11   12
2x4 || 13   5   14
1   2
6   7
3x4 =   10   9   8   3x4 =
2x4 || 2x4 || 2x4 ||
4-0-0
0-1-8
16-0-0
16-0-0

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.21	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	NO	WB	0.06	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 57 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 16-0-0.
(lb) - Max Horz 1=51(LC 16)
        Max Uplift   All uplift 100 lb or less at joint(s) 1, 7, 2, 6, 10, 8
        Max Grav   All reactions 250 lb or less at joint(s) 1, 7, 2, 6 except 9=281(LC 1), 10=322(LC 23), 8=322(LC 24)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-3-15 to 3-3-15, Exterior(2) 3-3-15 to 8-0-0, Corner(3) 8-0-0 to 11-0-0, Exterior(2) 11-0-0 to 15-8-1 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 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) 1, 7, 2, 6, 10, 8.
9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

NORTH CAROLINA
PROFESSIONAL
SEAL
036322
ENGINEER
ERIC A. GILBERT

April 1, 2022

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Clearwater French	
FRENCH	PB01G	GABLE	2	1		I51101133
					Job Reference (optional)	

Builders FirstSource (Apex, NC),   Apex, NC - 27523,

8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Mar 31 10:29:10 2022 Page 1
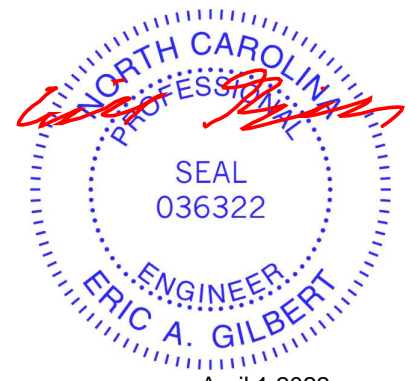ID:jww8HiIN90uFSTm7sxLqmezW8I3-PuW5_CiRqxxQ6QYjgo0Th8YwvR9RQQvK89iEjazVRkt

8-0-0
8-0-0
16-0-0
8-0-0

Scale = 1:26.1

4x6 =

6.00 [12]

4-0-0

3x4 =
3x4 =

16-0-0
16-0-0
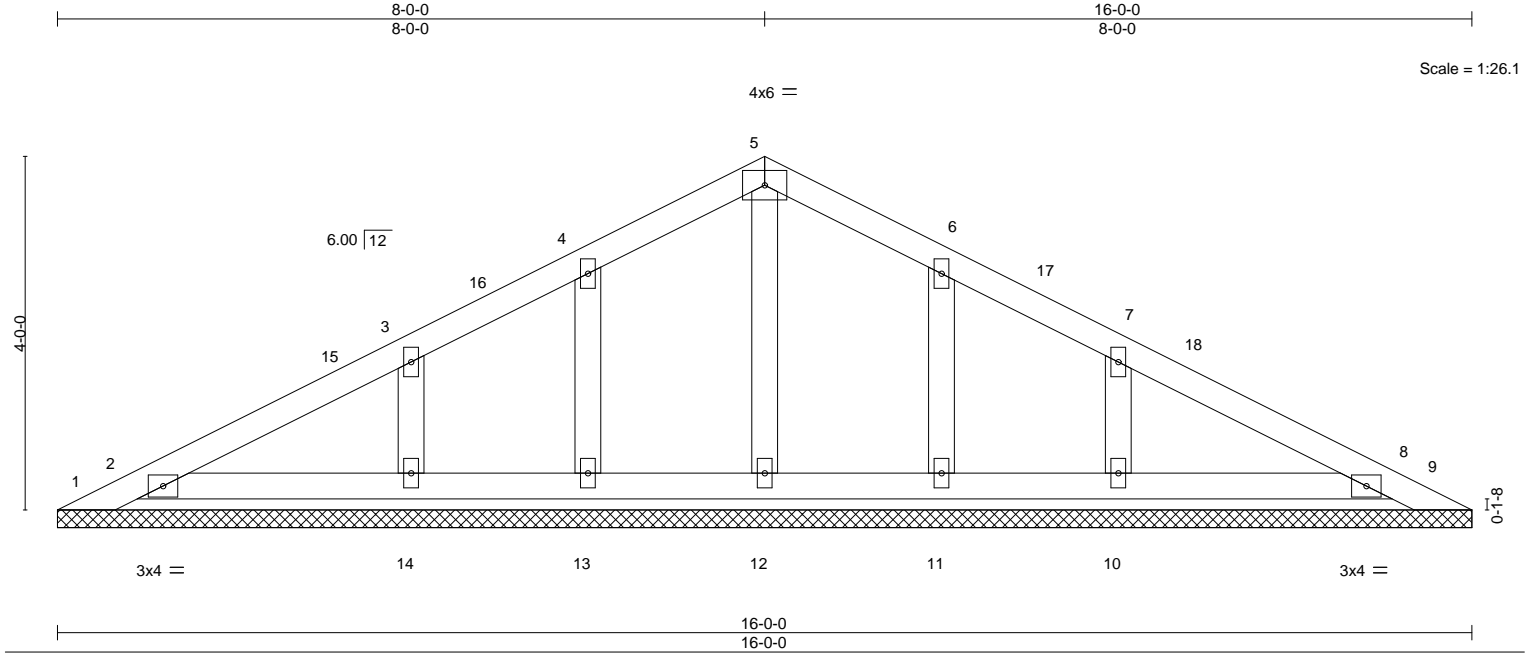
LOADING (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	NO	WB	0.03	Horz(CT)	0.00	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 63 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 16-0-0.
 (lb) - Max Horz 1=51(LC 12)
         Max Uplift   All uplift 100 lb or less at joint(s) 1, 9, 2, 8, 13, 14, 11, 10
         Max Grav   All reactions 250 lb or less at joint(s) 1, 9, 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=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-3-15 to 3-3-15, Exterior(2) 3-3-15 to 8-0-0, Corner(3) 8-0-0 to 11-0-0, Exterior(2) 11-0-0 to 15-8-1 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) 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) 1, 9, 2, 8, 13, 14, 11, 10.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
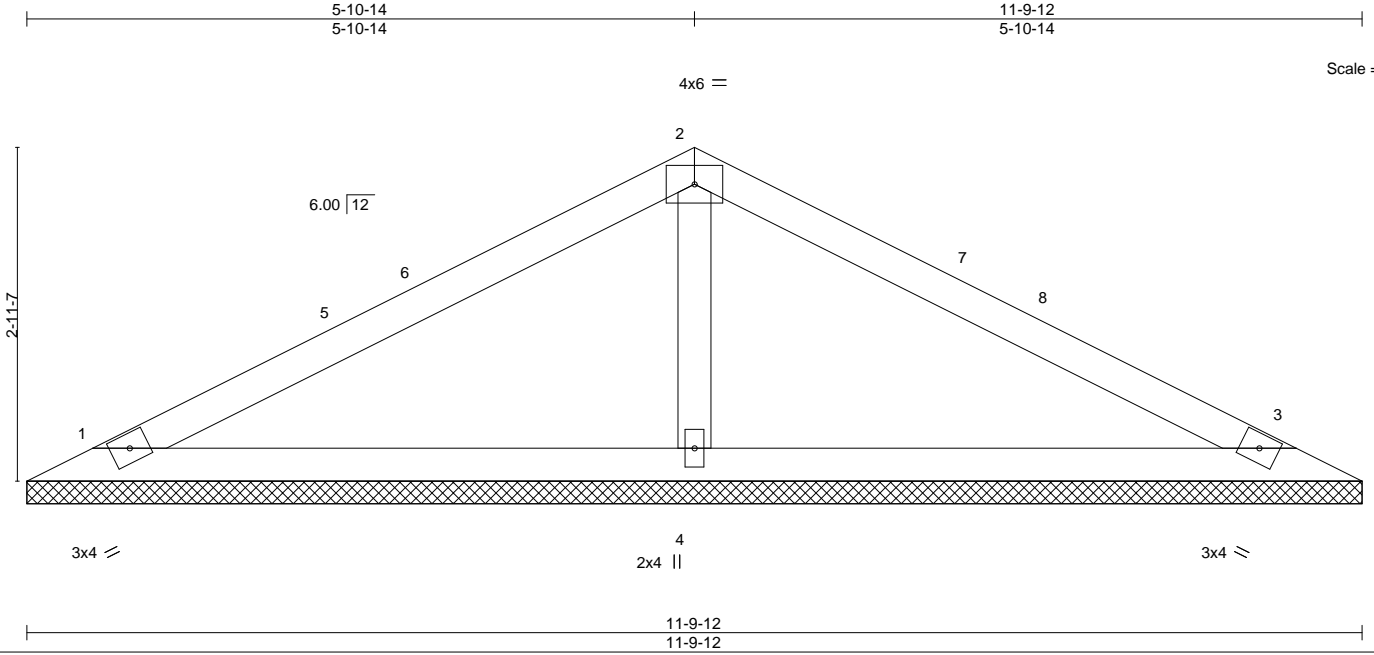
NORTH CAROLINA
PROFESSIONAL
SEAL
036322
ENGINEER
ERIC A. GILBERT

April 1,2022

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Clearwater French	
FRENCH	V01	GABLE	1	1		I51101134
					Job Reference (optional)	

Builders FirstSource (Apex, NC),   Apex, NC - 27523,
8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Mar 31 10:29:11 2022 Page 1
ID:jww8HiIN90uFSTm7sxLqmezW8I3-t54UCXj3bF3Hja7wDWXiDL4y_qPO9sbUNpRoG0zVRks

5-10-14
5-10-14
11-9-12
5-10-14

Scale = 1:20.4

4x6

6.00 [12

2-11-7

6
5
7
8

1
2
3

4
2x4 ||

3x4
3x4

11-9-12
11-9-12

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	0.68	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 39 lb	FT = 20%

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

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

REACTIONS.   (size)   1=11-9-12, 3=11-9-12, 4=11-9-12
Max Horz 1=-35(LC 17)
Max Uplift 1=-20(LC 12), 3=-26(LC 13)
Max Grav 1=194(LC 23), 3=194(LC 24), 4=463(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS   2-4=-308/87

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope)
gable end zone and C-C Exterior(2) 0-7-7 to 3-7-7, Interior(1) 3-7-7 to 5-10-14, Exterior(2) 5-10-14 to 8-10-14, Interior(1) 8-10-14 to
11-2-6 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for
reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

April 1,2022

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Clearwater French	
FRENCH	V02	VALLEY	1	1		I51101135
					Job Reference (optional)	

Builders FirstSource (Apex, NC),   Apex, NC - 27523,

8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Mar 31 10:29:12 2022 Page 1
ID:jww8HilN90uFSTm7sxLqmezW8I3-MHesPtkiMZB8Lki6nD3xmZdEbEq6uKLdcTBLoTzVRkr

3-10-14
3-10-14

7-9-12
3-10-14

Scale = 1:14.5

4x6 =

6.00 [12]

1-11-7

7-9-12
7-9-12

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	0.24	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 25 lb	FT = 20%

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.
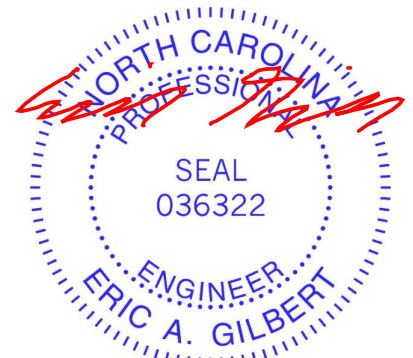
REACTIONS.   (size)   1=7-9-12, 3=7-9-12, 4=7-9-12
Max Horz 1=22(LC 12)
Max Uplift 1=-12(LC 12), 3=-16(LC 13)
Max Grav 1=121(LC 23), 3=121(LC 24), 4=288(LC 1)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope)
   gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and
   forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

April 1,2022

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TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Clearwater French	
FRENCH	V03	VALLEY	1	1		I51101136
					Job Reference (optional)	

Builders FirstSource (Apex, NC),   Apex, NC - 27523,

8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Mar 31 10:29:13 2022 Page 1
ID:jww8HilN90uFSTm7sxLqmezW8I3-qTBEdDlK6sK?ztHILxaAImASSeA5dnAmq7wuKvzVRkq

1-10-14
1-10-14

3-9-12
1-10-14

3x6 ═

6.00 ⌐12

Scale = 1:7.5

2

1

3

0-11-7

2x4 ⟋   2x4 ⟍

3-9-12
3-9-12

Plate Offsets (X,Y)--   [2:0-3-0,Edge]
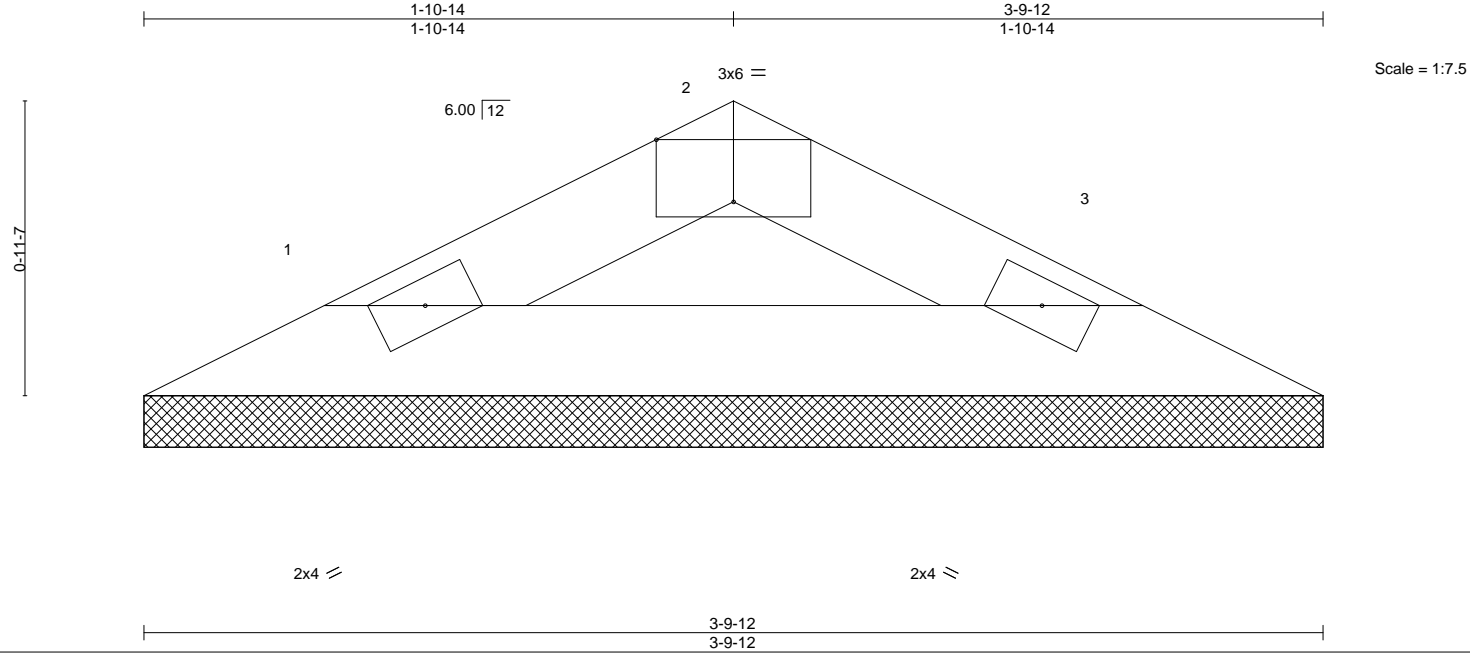
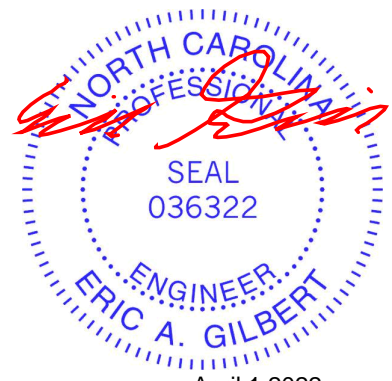| LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 10 lb	FT = 20%

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 3-9-12 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.   (size)   1=3-9-12, 3=3-9-12
                Max Horz 1=9(LC 16)
                Max Uplift 1=-3(LC 12), 3=-3(LC 13)
                Max Grav 1=103(LC 1), 3=103(LC 1)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope)
   gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and
   forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
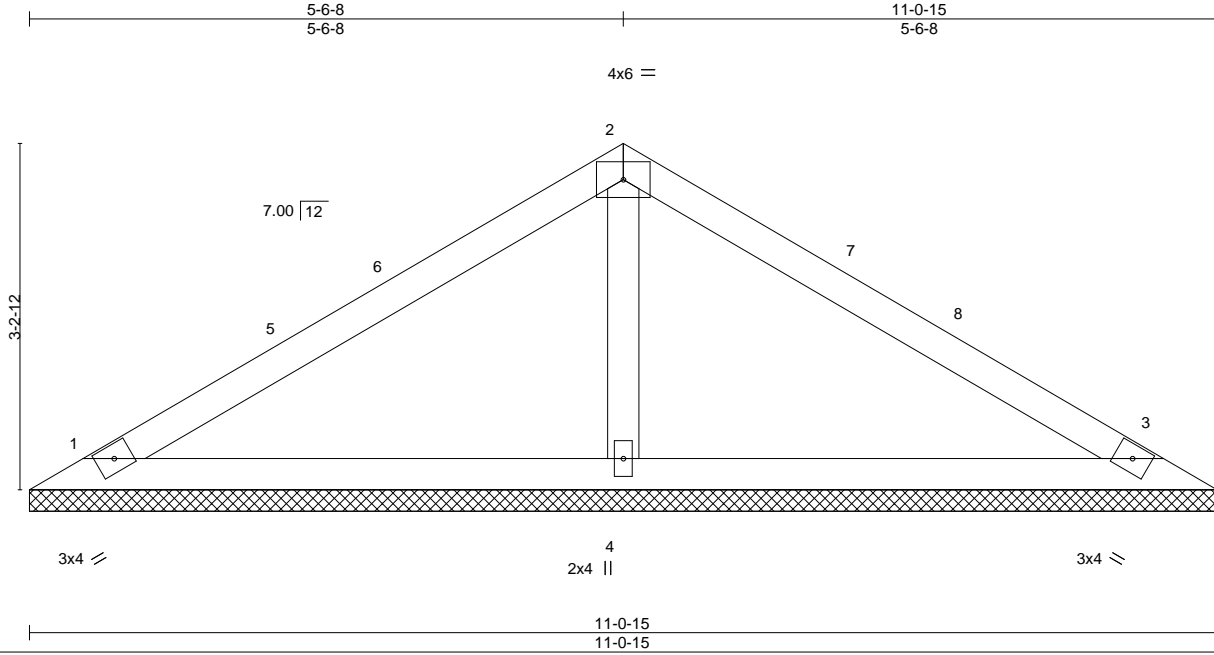
NORTH CAROLINA
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ERIC A. GILBERT

April 1,2022

ENGINEERING BY
TRENCO
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Clearwater French	
FRENCH	V12	GABLE	1	1		I51101137
					Job Reference (optional)	

5-6-8

5-6-8

11-0-15

5-6-8

4x6 ═

Scale = 1:21.5

7.00 ⌐12

3-2-12

11-0-15

11-0-15

LOADING (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 38 lb	FT = 20%

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

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

REACTIONS.   (size)   1=11-0-15, 3=11-0-15, 4=11-0-15
Max Horz 1=57(LC 11)
Max Uplift 1=-18(LC 12), 3=-26(LC 13)
Max Grav 1=188(LC 23), 3=188(LC 24), 4=424(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS   2-4=-277/61

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope)
   gable end zone and C-C Exterior(2) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 5-6-8, Exterior(2) 5-6-8 to 8-6-8, Interior(1) 8-6-8 to 10-6-7
   zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions
   shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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.

NORTH CAROLINA
PROFESSIONAL
SEAL
036322
ENGINEER
ERIC A. GILBERT

April 1,2022

ENGINEERING BY
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818 Soundside Road
Edenton, NC 27932
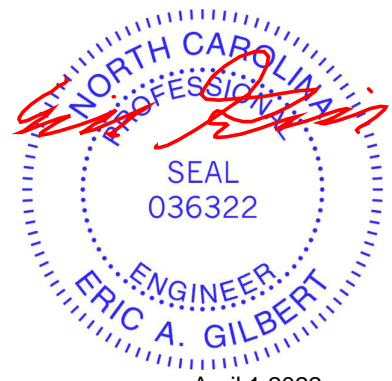
Job	Truss	Truss Type	Qty	Ply	Clearwater French	
FRENCH	V13	VALLEY	1	1		I51101138
					Job Reference (optional)	

Builders FirstSource (Apex, NC),   Apex, NC - 27523,

8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Mar 31 10:29:14 2022 Page 1
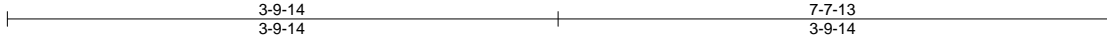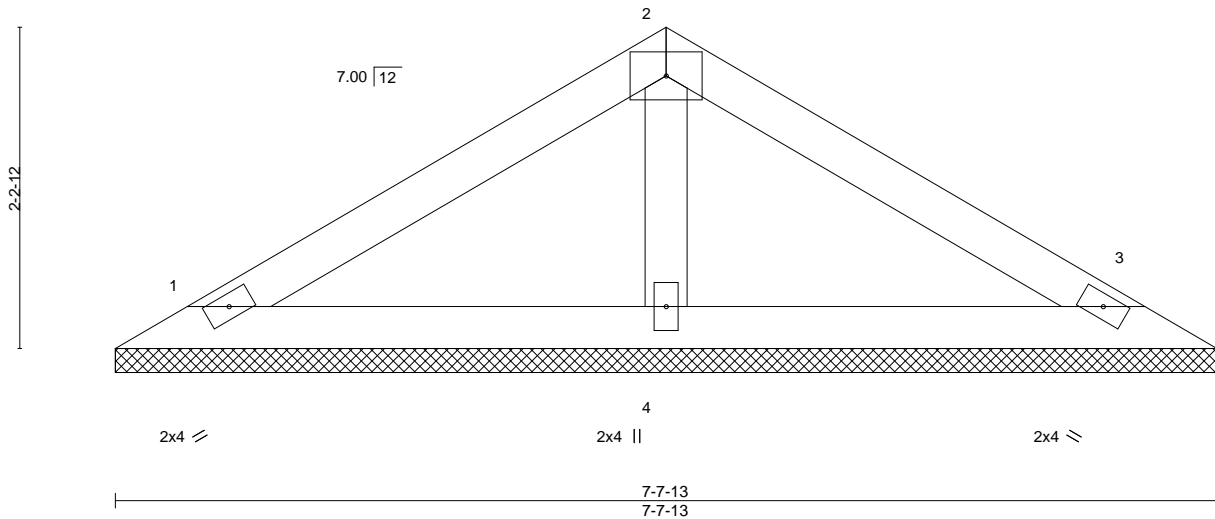ID:jww8HiIN90uFSTm7sxLqmezW8I3-IglcqZmytASsa1sVve5Pr_ia52WZMErw3ngSsLzVRkp

Scale: 3/4"=1'

LOADING (psf)
TCLL 20.0
TCDL 10.0
BCLL   0.0 *
BCDL 10.0

SPACING- 2-0-0
Plate Grip DOL 1.15
Lumber DOL 1.15
Rep Stress Incr YES
Code IRC2015/TPI2014

CSI.
TC 0.24
BC 0.18
WB 0.04
Matrix-S

DEFL. in (loc) l/defl L/d
Vert(LL) n/a - n/a 999
Vert(CT) n/a - n/a 999
Horz(CT) 0.00 3 n/a n/a

PLATES GRIP
MT20 244/190

Weight: 25 lb FT = 20%

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

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

REACTIONS. (size) 1=7-7-13, 3=7-7-13, 4=7-7-13
Max Horz 1=-38(LC 8)
Max Uplift 1=-12(LC 12), 3=-17(LC 13)
Max Grav 1=124(LC 23), 3=124(LC 24), 4=279(LC 1)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

April 1,2022

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

Job	Truss	Truss Type	Qty	Ply	Clearwater French	
FRENCH	V14	VALLEY	1	1		I51101139
					Job Reference (optional)	

Builders FirstSource (Apex, NC),   Apex, NC - 27523,

8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Mar 31 10:29:15 2022 Page 1
ID:jww8HilN90uFSTm7sxLqmezW8I3-msJ_2vmaeUaiCBRhSLceOBFnaSrW5hg3IRP?PozVRko

2-1-5
2-1-5

4-2-10
2-1-5

Scale = 1:8.9

3x6 =

7.00 [12]

1-2-12

2x4 //

2x4 \\

4-2-10
4-2-10

Plate Offsets (X,Y)--   [2:0-3-0,Edge]
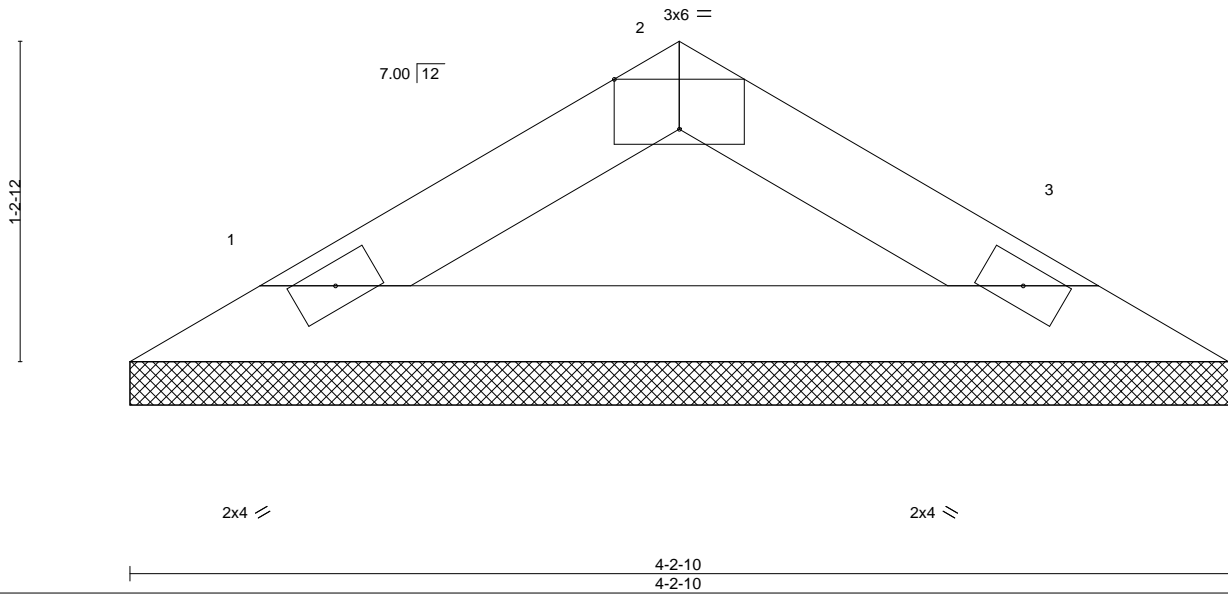
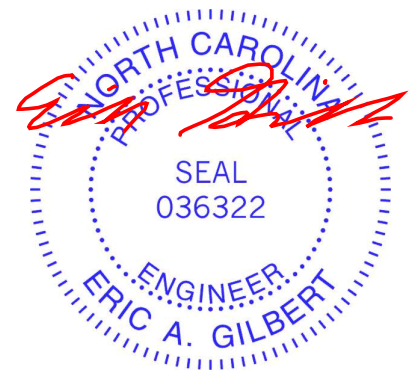| LOADING (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 12 lb	FT = 20%

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

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

REACTIONS.   (size)   1=4-2-10, 3=4-2-10
                  Max Horz 1=-18(LC 10)
                  Max Uplift 1=-4(LC 12), 3=-4(LC 13)
                  Max Grav 1=126(LC 1), 3=126(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
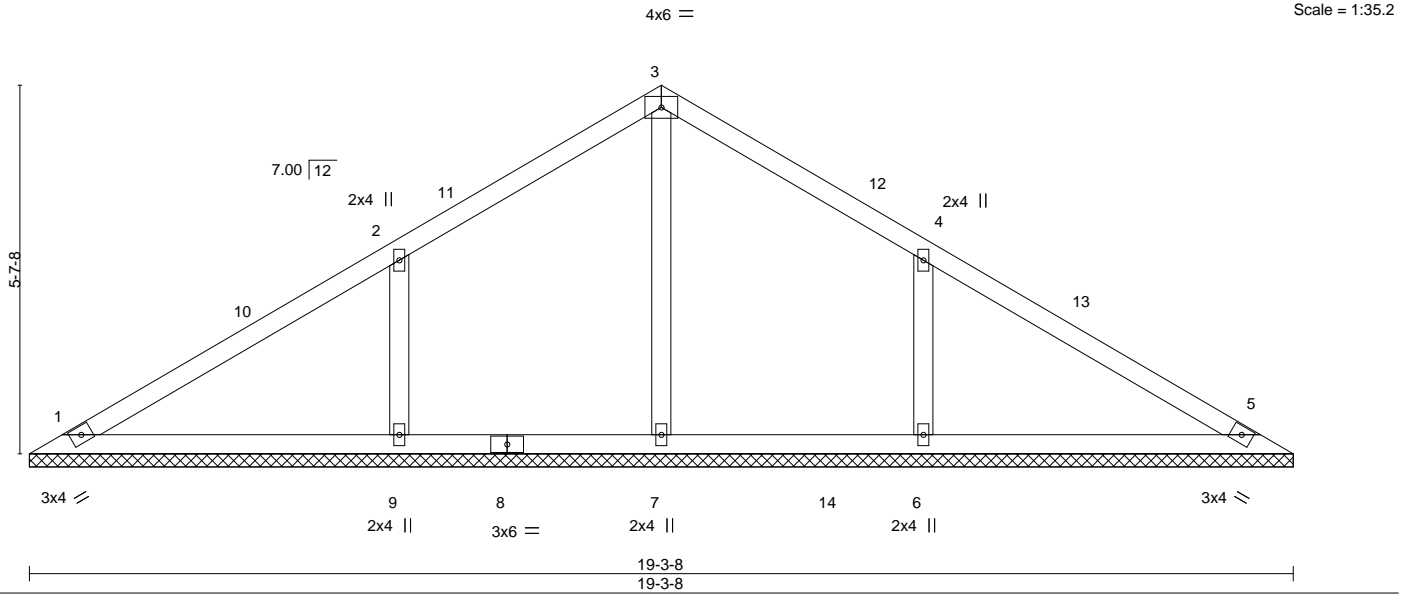
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope)
   gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and
   forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

NORTH CAROLINA
PROFESSIONAL
SEAL
036322
ENGINEER
ERIC A. GILBERT

April 1,2022

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Clearwater French	
FRENCH	V15	GABLE	1	1		I51101140
					Job Reference (optional)	

Builders FirstSource (Apex, NC),   Apex, NC - 27523,
8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Mar 31 10:29:16 2022 Page 1
ID:jww8HilN90uFSTm7sxLqmezW8I3-E2tMFFnCPniZqL0t037twOoqRr8Oq7aDX59YxEzVRkn

9-7-12
9-7-12
19-3-8
9-7-12

4x6 =

Scale = 1:35.2

7.00 |12

2x4 || 11

5-7-8

2

10

1

3x4 //

9
2x4 ||

8
3x6 =

7
2x4 ||

3

12
2x4 ||
4

13

5

3x4 \\

14

6
2x4 ||

19-3-8
19-3-8

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	0.57	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 76 lb	FT = 20%

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

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

REACTIONS.   All bearings 19-3-8.
(lb) - Max Horz 1=105(LC 9)
Max Uplift   All uplift 100 lb or less at joint(s) 1, 9, 6
Max Grav   All reactions 250 lb or less at joint(s) 1, 5 except 7=319(LC 22), 9=469(LC 19), 6=474(LC 20)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS   2-9=-335/156, 4-6=-334/156

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 9-7-12, Exterior(2) 9-7-12 to 12-7-12, Interior(1) 12-7-12 to 18-9-1 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9, 6.

NORTH CAROLINA
PROFESSIONAL
SEAL
036322
ERIC A. GILBERT
ENGINEER

April 1,2022

ENGINEERING BY
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Clearwater French	
FRENCH	V16	GABLE	1	1		I51101141
					Job Reference (optional)	

Builders FirstSource (Apex, NC),   Apex, NC - 27523,

8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Mar 31 10:29:17 2022 Page 1
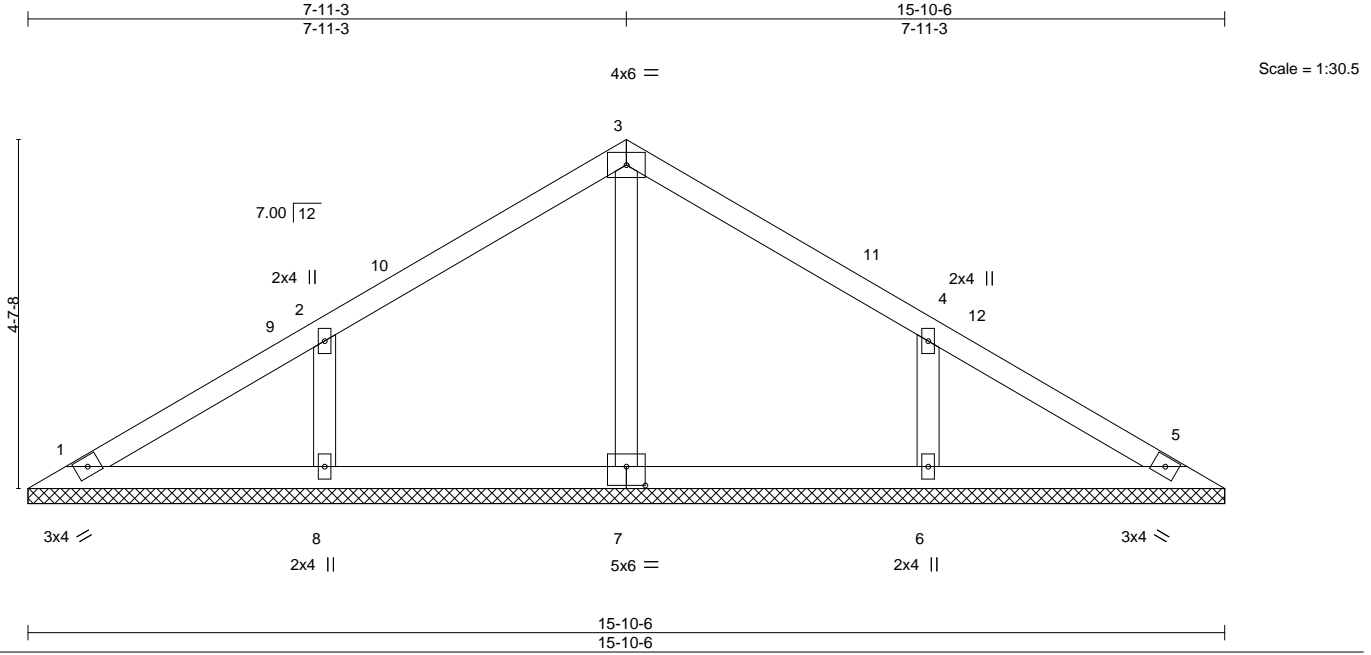ID:jww8HilN90uFSTm7sxLqmezW8I3-iFRISboqA5qQRVa4ame6TcK2hFXDZa2Mlku6TgzVRkm

7-11-3
7-11-3
15-10-6
7-11-3

4x6 ═

Scale = 1:30.5

7.00 ⌐12

15-10-6
15-10-6

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

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 60 lb	FT = 20%

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

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

REACTIONS.   All bearings 15-10-6.
   (lb) -   Max Horz 1=-85(LC 8)
            Max Uplift   All uplift 100 lb or less at joint(s) 1, 8, 6
            Max Grav   All reactions 250 lb or less at joint(s) 1, 5 except 7=263(LC 1), 8=352(LC 19), 6=352(LC 20)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS   2-8=-266/126, 4-6=-266/126

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 7-11-3, Exterior(2) 7-11-3 to 10-11-3, Interior(1) 10-11-3 to 15-3-14 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 8, 6.
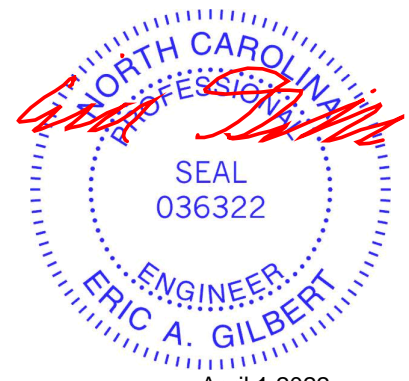
April 1,2022

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Clearwater French	
FRENCH	V17	GABLE	1	1		I51101142
					Job Reference (optional)	

Builders FirstSource (Apex, NC),   Apex, NC - 27523,
     8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Mar 31 10:29:18 2022 Page 1
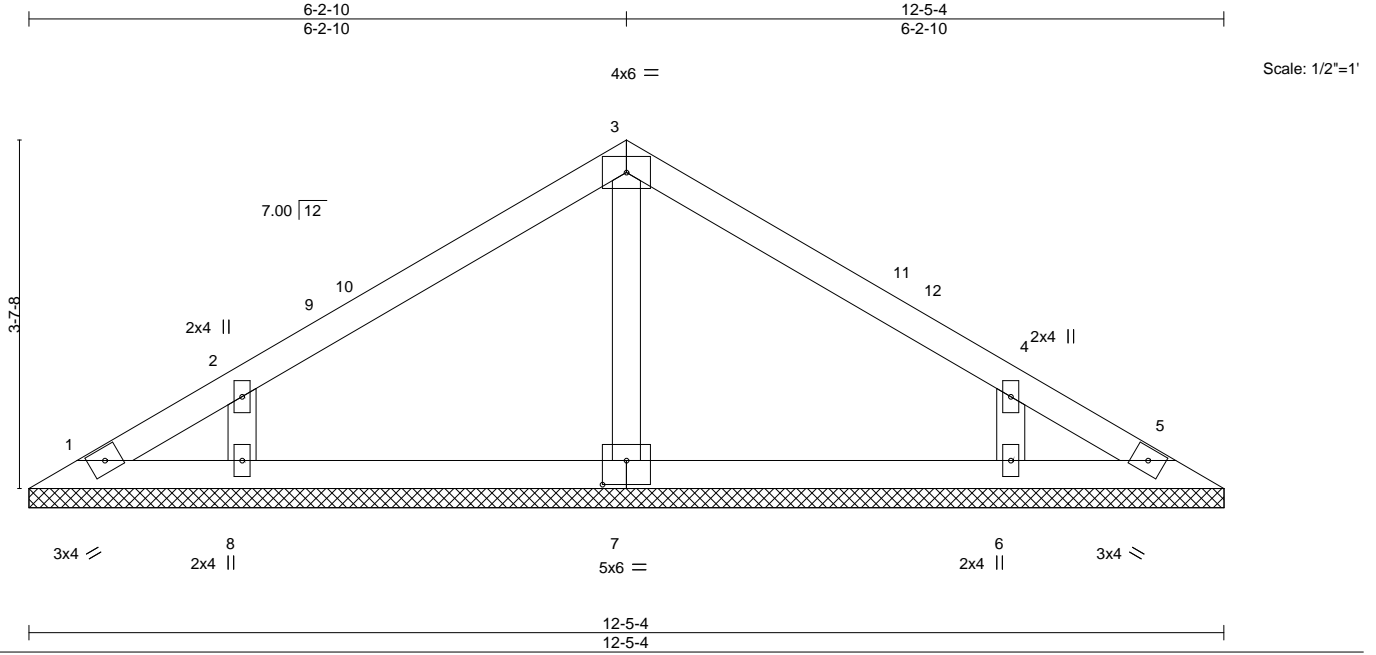ID:jww8HilN90uFSTm7sxLqmezW8I3-AR?7gxpSxPyH3f9G8U9L?ptE1fs8I2cW_Oef07zVRkI

Scale: 1/2"=1'

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

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 45 lb	FT = 20%

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

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

REACTIONS.   All bearings 12-5-4.
     (lb) -   Max Horz   1=65(LC 9)
           Max Uplift   All uplift 100 lb or less at joint(s) 1, 5, 8, 6
           Max Grav   All reactions 250 lb or less at joint(s) 1, 5 except 7=279(LC 1), 8=295(LC 23), 6=295(LC 24)

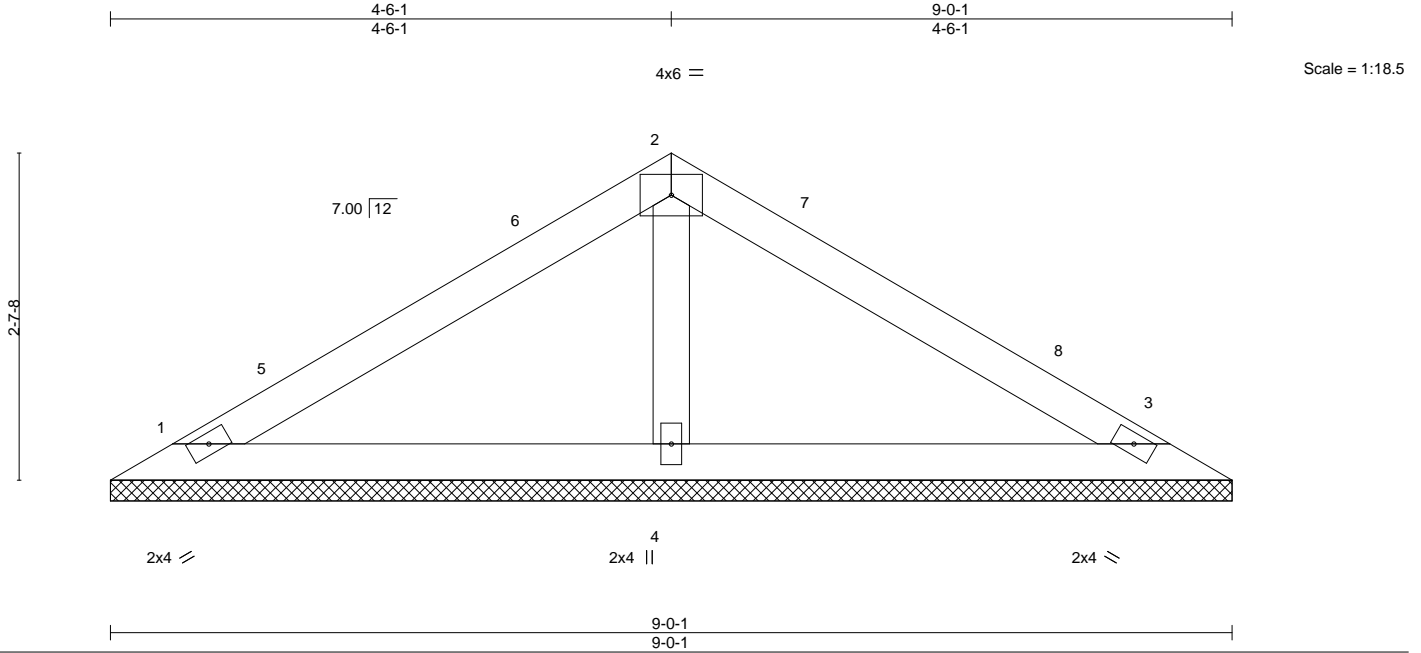**FORCES.**   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 6-2-10, Exterior(2) 6-2-10 to 9-2-10, Interior(1) 9-2-10 to 11-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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, 5, 8, 6.

(Seal: NORTH CAROLINA PROFESSIONAL ENGINEER, SEAL 036322, ERIC A. GILBERT)

April 1, 2022

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

Job	Truss	Truss Type	Qty	Ply	Clearwater French	
FRENCH	V18	GABLE	1	1		I51101143
					Job Reference (optional)	

Builders FirstSource (Apex, NC),   Apex, NC - 27523,

8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Mar 31 10:29:19 2022 Page 1
ID:jww8HilN90uFSTm7sxLqmezW8I3-edZVtGp5ii48hokShBhaY1QOv3BS1VxfD2NDYZzVRkk

4-6-1 / 4-6-1 / 9-0-1 / 4-6-1

4x6

Scale = 1:18.5

7.00 $\overline{12}$

2-7-8

9-0-1 / 9-0-1

2x4   2x4 || 2x4

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	0.37	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 30 lb	FT = 20%

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

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

REACTIONS.   (size)   1=9-0-1, 3=9-0-1, 4=9-0-1
            Max Horz 1=-46(LC 8)
            Max Uplift 1=-15(LC 12), 3=-21(LC 13)
            Max Grav 1=149(LC 23), 3=149(LC 24), 4=336(LC 1)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope)
   gable end zone and C-C Exterior(2) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 4-6-1, Exterior(2) 4-6-1 to 7-6-1, Interior(1) 7-6-1 to 8-5-10
   zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions
   shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

April 1,2022

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Clearwater French	
FRENCH	V19	VALLEY	1	1		I51101144
					Job Reference (optional)	

Builders FirstSource (Apex, NC),　　　Apex, NC - 27523,　　　　8.530 s Dec 6 2021 MiTek Industries, Inc. Thu Mar 31 10:29:20 2022 Page 1
ID:jww8HilN90uFSTm7sxLqmezW8I3-7q6t5cqjT0C?IyJeFvCp5Eyc2TaTmyYoRi7m4?zVRkj

2-9-8 / 5-6-15
2-9-8 / 2-9-8

4x6 ═

Scale = 1:12.6

7.00 ⎟12

LOADING (psf)
TCLL   20.0
TCDL   10.0
BCLL   0.0 *
BCDL   10.0

SPACING-   2-0-0
Plate Grip DOL   1.15
Lumber DOL   1.15
Rep Stress Incr   YES
Code IRC2015/TPI2014

CSI.
TC   0.15
BC   0.09
WB   0.02
Matrix-P

DEFL.   in   (loc) l/defl   L/d
Vert(LL)   n/a   -   n/a   999
Vert(CT)   n/a   -   n/a   999
Horz(CT)   0.00   3   n/a   n/a

PLATES   **GRIP**
MT20   244/190

Weight: 18 lb   FT = 20%

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 5-6-15 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.   (size)   1=5-6-15, 3=5-6-15, 4=5-6-15
Max Horz 1=26(LC 9)
Max Uplift 1=-12(LC 12), 3=-15(LC 13)
Max Grav 1=93(LC 1), 3=93(LC 1), 4=173(LC 1)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope)
   gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and
   forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

April 1,2022

ENGINEERING BY
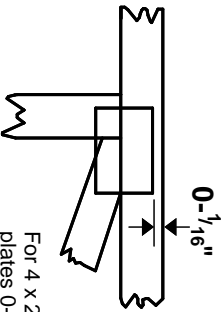**TRENCO**
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Symbols

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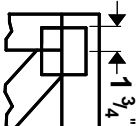
Center plate on joint unless x, y offsets are indicated.
Dimensions are in ft-in-sixteenths.
Apply plates to both sides of truss and fully embed teeth.

1 3/4"

0-1/16"

=

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

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

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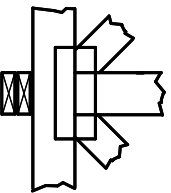
PLATE SIZE

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.
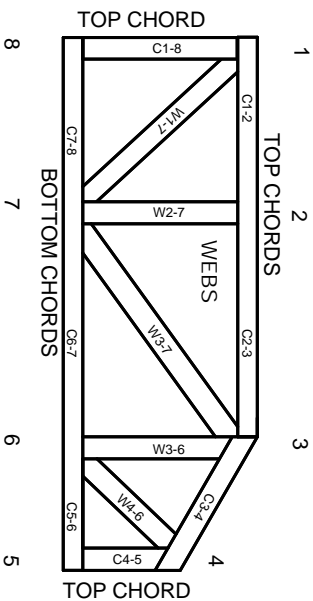
BEARING

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

dimensions shown in ft-in-sixteenths
(Drawings not to scale)

6-4-8

TOP CHORD

1
2
3

TOP CHORDS

C1-8
C1-2
W1-7
C2-3
WEBS
W2-7
W3-7
C6-7
C7-8

BOTTOM CHORDS

8
7
6
5

W3-6
W4-6
C3-4
C5-6
C4-5

TOP CHORD

4

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.

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⚠ 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 T or I bracing should be considered.

3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.

4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.

5. Cut members to bear tightly against each other.

6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.

7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.

8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.

10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.

11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.

12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.

13. Top chords must be sheathed or purlins provided at spacing indicated on design.

14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.

15. Connections not shown are the responsibility of others.

16. Do not cut or alter truss member or plate without prior approval of an engineer.

17. Install and load vertically unless indicated otherwise.

18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.

19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.

20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.

21. The design does not take into account any dynamic or other loads other than those expressly stated.