ENGINEERING BY TRENCO
A MiTek Affiliate

RE: J0923-5060
Weaver/Lot 1 West Pointe III/Harnett

Site Information:

Customer: Project Name: J0923-5060
Lot/Block: Model:
Address: Subdivision:
City: State:

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):
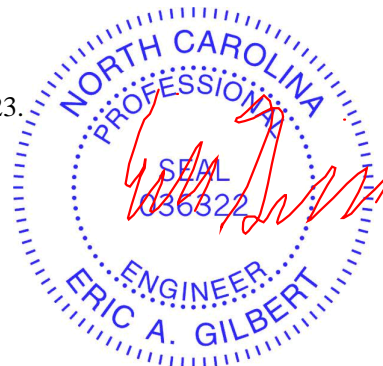
Design Code: IRC2015/TPI2014   Design Program: MiTek 20/20 8.4
Wind Code: ASCE 7-10   Wind Speed: 130 mph
Roof Load: 40.0 psf   Floor Load: N/A psf

This package includes 26 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I57749337	A1	4/13/2023	21	I57749357	VC1	4/13/2023
2	I57749338	A1GE	4/13/2023	22	I57749358	VC2	4/13/2023
3	I57749339	A2	4/13/2023	23	I57749359	VC3	4/13/2023
4	I57749340	A3	4/13/2023	24	I57749360	VC4	4/13/2023
5	I57749341	A4	4/13/2023	25	I57749361	VC5	4/13/2023
6	I57749342	A5	4/13/2023	26	I57749362	VC6	4/13/2023
7	I57749343	A6	4/13/2023				
8	I57749344	A7	4/13/2023				
9	I57749345	A7GE	4/13/2023				
10	I57749346	B1	4/13/2023				
11	I57749347	B1GE	4/13/2023				
12	I57749348	B2	4/13/2023				
13	I57749349	B3	4/13/2023				
14	I57749350	B4	4/13/2023				
15	I57749351	C1	4/13/2023				
16	I57749352	C1GE	4/13/2023				
17	I57749353	C2	4/13/2023				
18	I57749354	C3	4/13/2023				
19	I57749355	VB1	4/13/2023				
20	I57749356	VB2	4/13/2023				

The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Truss Design Engineer's Name: Gilbert, Eric

My license renewal date for the state of North Carolina is December 31, 2023.

North Carolina COA: C-0844

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 TRENCO. Any project specific information included is for TRENCO customers file reference purpose only, and was not taken into account in the preparation of these designs. 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.

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

April 13, 2023

Gilbert, Eric

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 1 West Pointe III/Harnett	
J0923-5060	A1	ROOF SPECIAL	6	1		I57749337
					Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Apr 13 10:43:27 2023 Page 1
ID:nGEYJn1QAngpJfECepmG8Mz?may-wtv6wFzlm?19B1nip6QzcH447e7_N6WhfibbT1zR9JU
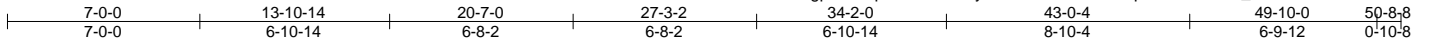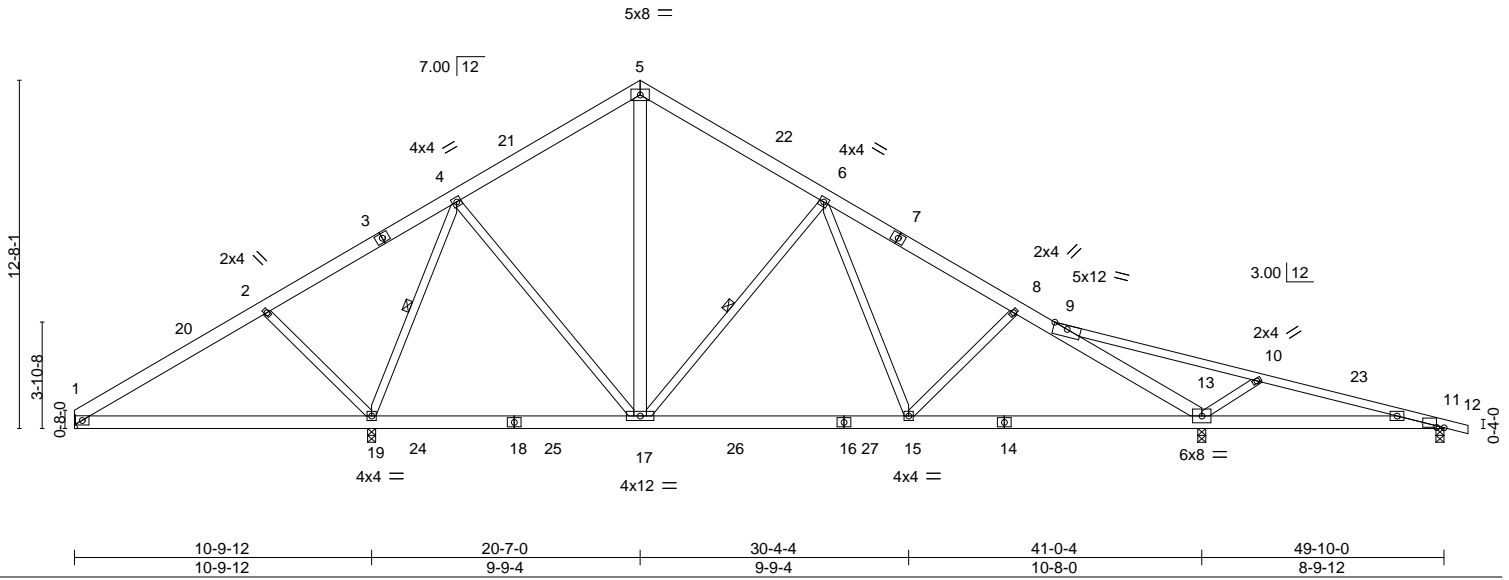
Scale = 1:83.8

Plate Offsets (X,Y)-- [11:0-3-4,0-0-3]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.11	15-17	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.17	15-17	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.02	13	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.03	15-17	>999	240	Weight: 354 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 SP No.1 *Except*
   9-12: 2x4 SP No.1
BOT CHORD   2x6 SP No.1
WEBS   2x4 SP No.2 *Except*
   5-17: 2x6 SP No.1

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS   1 Row at midpt   4-19, 6-17

REACTIONS.   All bearings 0-3-8 except (jt=length) 1=Mechanical.
   (lb) -   Max Horz   1=-297(LC 6)
      Max Uplift   All uplift 100 lb or less at joint(s) 1, 11 except 13=-189(LC 11), 19=-186(LC 10)
      Max Grav   All reactions 250 lb or less at joint(s) except 13=1672(LC 1), 1=329(LC 21), 19=2060(LC 17),
         11=279(LC 22)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-53/272, 3-4=-14/432, 4-21=-879/314, 5-21=-790/341, 5-22=-766/342,
      6-22=-851/306, 6-7=-1354/361, 7-8=-1514/338, 8-9=-1585/359, 9-13=-2019/488,
      9-10=-136/537
BOT CHORD   19-24=0/367, 18-24=0/367, 18-25=0/367, 17-25=0/367, 17-26=-27/1101, 16-26=-27/1101,
      16-27=-27/1101, 15-27=-27/1101, 15-14=-157/1388, 13-14=-157/1388
WEBS   2-19=-484/260, 4-19=-1463/351, 4-17=0/659, 5-17=-133/470, 6-17=-753/272,
      10-13=-608/280, 6-15=-23/481

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope)
   and C-C Exterior(2) 0-0-12 to 4-5-9, Interior(1) 4-5-9 to 16-2-3, Exterior(2) 16-2-3 to 24-11-13, Interior(1) 24-11-13 to 46-3-11,
   Exterior(2) 46-3-11 to 50-8-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip
   DOL=1.60
3) All plates are 4x6 MT20 unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 11 except (jt=lb)
   13=189, 19=186.
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced
   standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S)   Standard

April 13,2023

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 1 West Pointe III/Harnett	
J0923-5060	A1GE	GABLE	1	1		I57749338
					Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Apr 13 10:43:28 2023 Page 1
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Scale = 1:85.7

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	0.01	29	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	0.01	29	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.01	28	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 434 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 SP No.1 *Except*
            21-29: 2x4 SP No.1
BOT CHORD   2x6 SP No.1
OTHERS   2x4 SP No.2

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 6-0-0 oc bracing,   Except:
            10-0-0 oc bracing: 32-33,31-32,30-31,28-30.
WEBS   1 Row at midpt   12-44, 11-45, 10-46, 9-48, 13-43, 14-42,
                              15-41
JOINTS   1 Brace at Jt(s): 24, 23

REACTIONS.   All bearings 49-10-0.
    (lb) -   Max Horz 1=-384(LC 6)
             Max Uplift   All uplift 100 lb or less at joint(s) 45, 46, 48, 49, 50, 51, 52, 53, 43, 42, 41, 39, 38, 37, 34, 33
                          except 1=-106(LC 8), 28=-126(LC 7), 54=-133(LC 10), 35=-128(LC 11), 30=-183(LC 11)
             Max Grav   All reactions 250 lb or less at joint(s) 32, 1, 45, 46, 48, 49, 50, 51, 52, 53, 54, 43, 42, 41, 39, 38,
                        37, 35, 34, 33 except 28=281(LC 1), 44=263(LC 20), 31=297(LC 3), 30=354(LC 22)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   1-2=-379/319, 2-3=-283/273, 3-4=-223/253, 9-10=-148/262, 10-11=-203/304,
             11-12=-233/336, 12-13=-233/336, 13-14=-203/302, 22-55=-273/273, 24-55=-273/273,
             23-24=-296/343, 23-56=-257/242, 32-56=-257/242
BOT CHORD   1-54=-154/288, 53-54=-154/288, 52-53=-154/288, 51-52=-154/288, 50-51=-154/288,
             49-50=-154/288, 48-49=-154/288, 47-48=-154/288, 46-47=-154/288, 45-46=-154/288,
             44-45=-154/288, 43-44=-154/288, 42-43=-154/288, 41-42=-154/288, 40-41=-154/288,
             39-40=-154/288, 38-39=-154/288, 37-38=-154/288, 36-37=-154/288, 35-36=-154/288,
             34-35=-154/288, 33-34=-154/288, 32-33=-288/154
WEBS   27-30=-275/252

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-0-0 to 4-7-0, Exterior(2) 4-7-0 to 16-2-3, Corner(3) 16-2-3 to 24-11-13, Exterior(2) 24-11-13 to 46-3-11, Corner(3) 46-3-11 to 50-8-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 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 30.0psf 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) 45, 46, 48, 49, 50, 51, 52, 53, 43, 42, 41, 39, 38, 37, 34, 33 except (jt=lb) 1=106, 28=126, 54=133, 35=128, 30=183.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 13,2023

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 1 West Pointe III/Harnett	
J0923-5060	A1GE	GABLE	1	1		I57749338
					Job Reference (optional)	

LOAD CASE(S) Standard

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 1 West Pointe III/Harnett	
J0923-5060	A2	ROOF SPECIAL	1	1		I57749339
					Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Apr 13 10:43:29 2023 Page 1
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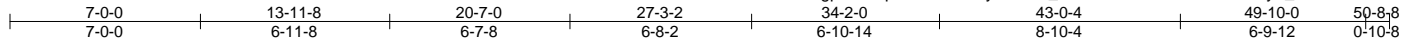
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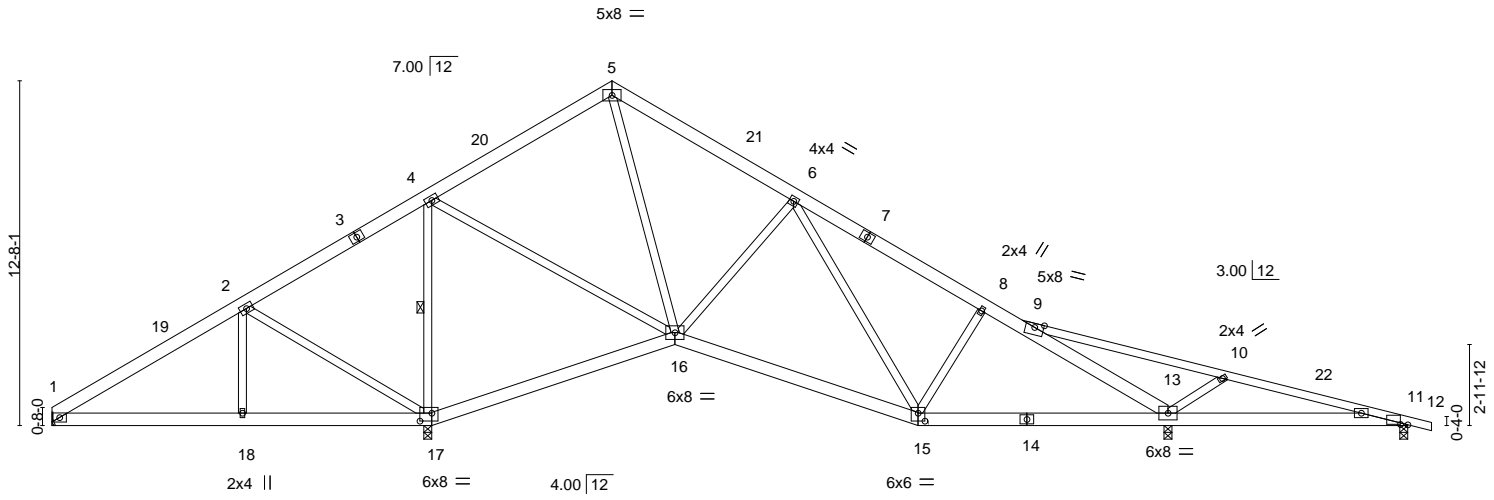
Plate Offsets (X,Y)--	[11:0-3-4,0-0-3], [15:0-3-0,0-3-8], [17:0-5-4,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.56	Vert(LL)	-0.06	15-16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.13	15-16	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.03	11	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.07	11-13	>999	240	Weight: 345 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1 *Except*
  9-12: 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 4-17

REACTIONS. All bearings 0-3-8 except (jt=length) 1=Mechanical.
  (lb) - Max Horz 1=-297(LC 6)
    Max Uplift All uplift 100 lb or less at joint(s) 1 except 17=-170(LC 10), 13=-187(LC 11), 11=-150(LC 7)
    Max Grav All reactions 250 lb or less at joint(s) except 1=384(LC 21), 17=1990(LC 1), 13=1457(LC 1), 11=289(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-19=-377/106, 2-19=-260/150, 2-3=-27/413, 3-4=0/568, 4-20=-607/210, 5-20=-547/237,
  5-21=-624/249, 6-21=-662/213, 6-7=-947/307, 7-8=-1036/283, 8-9=-1075/265,
  9-13=-1609/353, 9-10=-106/495
BOT CHORD 1-18=-120/281, 17-18=-120/281, 16-17=-581/276, 15-16=0/828, 14-15=-74/924,
  13-14=-74/924
WEBS 2-18=0/308, 2-17=-671/221, 4-17=-1384/288, 4-16=-17/969, 5-16=-43/264,
  6-16=-575/291, 8-15=-253/167, 10-13=-608/296

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-12 to 4-5-9, Interior(1) 4-5-9 to 16-2-3, Exterior(2) 16-2-3 to 24-11-13, Interior(1) 24-11-13 to 46-3-11, Exterior(2) 46-3-11 to 50-8-8 zone; porch right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 4x6 MT20 unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf 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) 1 except (jt=lb) 17=170, 13=187, 11=150.
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

April 13,2023

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 1 West Pointe III/Harnett	
J0923-5060	A3	SPECIAL TRUSS	3	1	Job Reference (optional)	I57749340

Comtech, Inc., Fayetteville, NC 28309
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Apr 13 10:43:29 2023 Page 1
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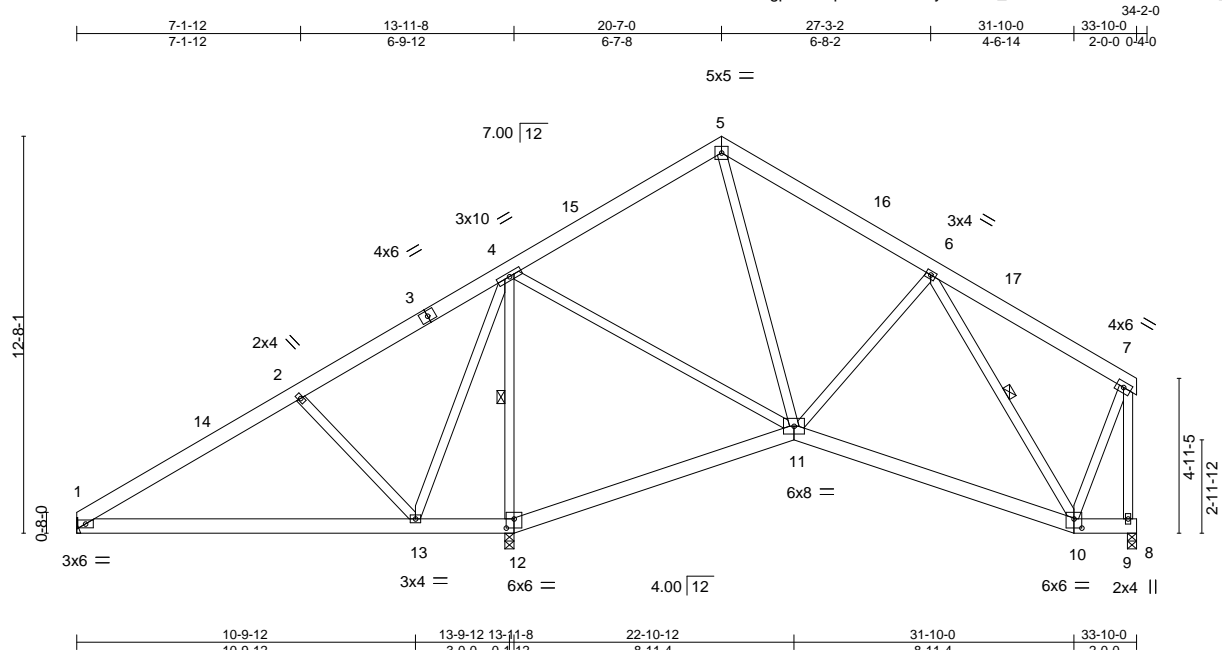
Plate Offsets (X,Y)-- [10:0-3-0,0-3-8], [12:0-3-0,0-3-8]

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)	-0.09	1-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.19	1-13	>871	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.02	9	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.02	1-13	>999	240	Weight: 271 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 SP No.1
BOT CHORD   2x6 SP No.1
WEBS   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 6-0-0 oc bracing.
WEBS   1 Row at midpt   6-10, 4-12

REACTIONS.   (lb/size)   1=458/Mechanical, 12=1508/0-3-8 (min. 0-1-12), 9=720/0-3-8 (min. 0-1-8)
Max Horz 1=287(LC 7)
Max Uplift 1=-1(LC 10), 12=-193(LC 10), 9=-56(LC 11)
Max Grav 1=486(LC 21), 12=1508(LC 1), 9=720(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   1-14=-502/37, 2-14=-386/61, 4-15=-536/209, 5-15=-487/236, 5-16=-541/249,
6-16=-578/212, 7-17=-272/91, 7-9=-725/148
BOT CHORD   1-13=-167/427, 10-11=-104/506
WEBS   6-10=-552/147, 4-12=-1368/396, 4-11=-49/580, 7-10=-23/497, 4-13=-100/561,
2-13=-462/253

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope)
and C-C Exterior(2) 0-0-12 to 4-5-9, Interior(1) 4-5-9 to 16-2-3, Exterior(2) 16-2-3 to 24-11-13, Interior(1) 24-11-13 to 29-1-15,
Exterior(2) 29-1-15 to 33-6-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip
DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf 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) 1, 9 except (jt=lb)
12=193.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced
standard ANSI/TPI 1.

LOAD CASE(S) Standard

April 13,2023

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TRENCO
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818 Soundside Road
Edenton, NC 27932

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8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Apr 13 10:43:30 2023 Page 1
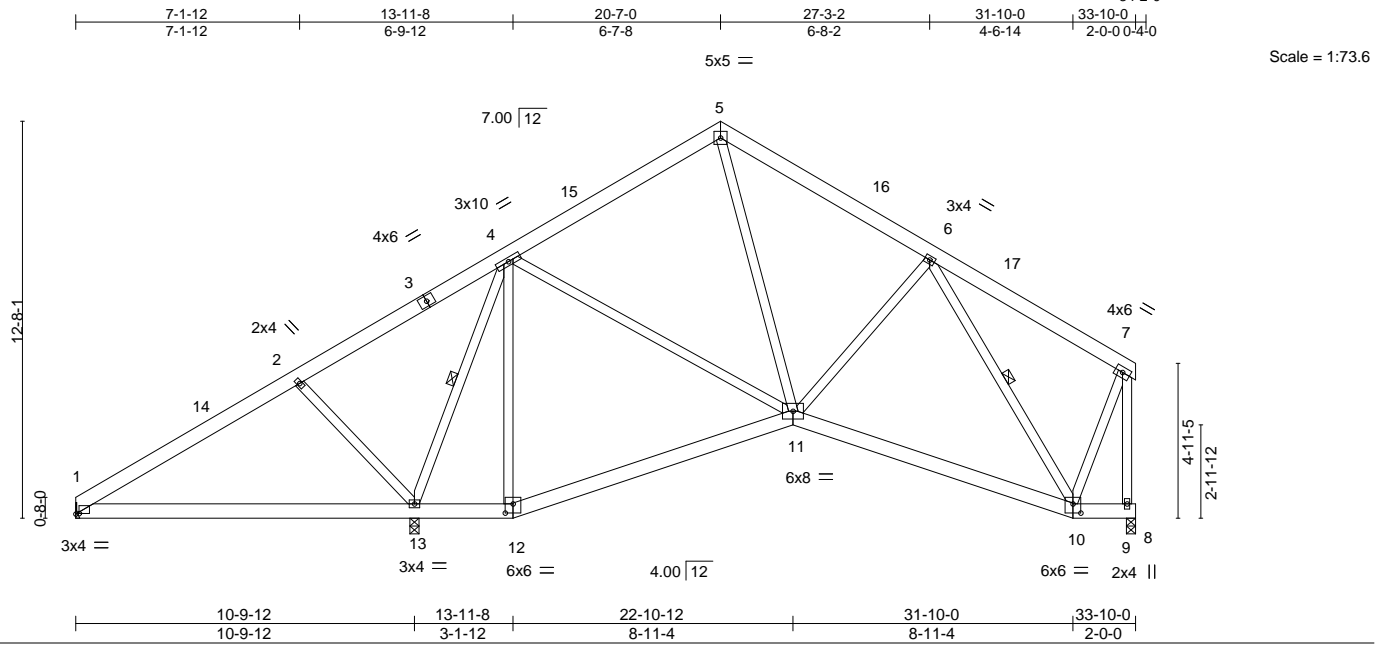ID:nGEYJn1QAngpJfECepmG8Mz?may-LSaFZH?B3wPk2UWHUE_gEvilKrAHaVf7LgqF4MzR9JR

Scale = 1:73.6

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

LOADING (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	-0.08	1-13	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.16	1-13	>788	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.02	9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.01	11	>999	240	Weight: 271 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 SP No.1
BOT CHORD   2x6 SP No.1
WEBS   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, Except:
6-0-0 oc bracing: 1-13.
WEBS   1 Row at midpt   6-10, 4-13

REACTIONS. (lb/size)   1=319/Mechanical, 9=863/0-3-8 (min. 0-1-8), 13=1503/0-3-8 (min. 0-1-12)
Max Horz 1=287(LC 7)
Max Uplift 9=-65(LC 11), 13=-200(LC 10)
Max Grav 1=350(LC 21), 9=863(LC 1), 13=1503(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   1-14=-257/52, 3-4=-58/316, 4-15=-704/253, 5-15=-655/280, 5-16=-766/308,
6-16=-803/272, 6-17=-272/128, 7-17=-323/105, 7-9=-865/185
BOT CHORD   11-12=-80/290, 10-11=-141/646
WEBS   6-10=-737/196, 4-11=0/365, 5-11=-87/381, 7-10=-55/617, 4-13=-1035/300,
2-13=-474/256

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-12 to 4-5-9, Interior(1) 4-5-9 to 16-2-3, Exterior(2) 16-2-3 to 24-11-13, Interior(1) 24-11-13 to 29-1-15, Exterior(2) 29-1-15 to 33-6-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf 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) 9 except (jt=lb) 13=200.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
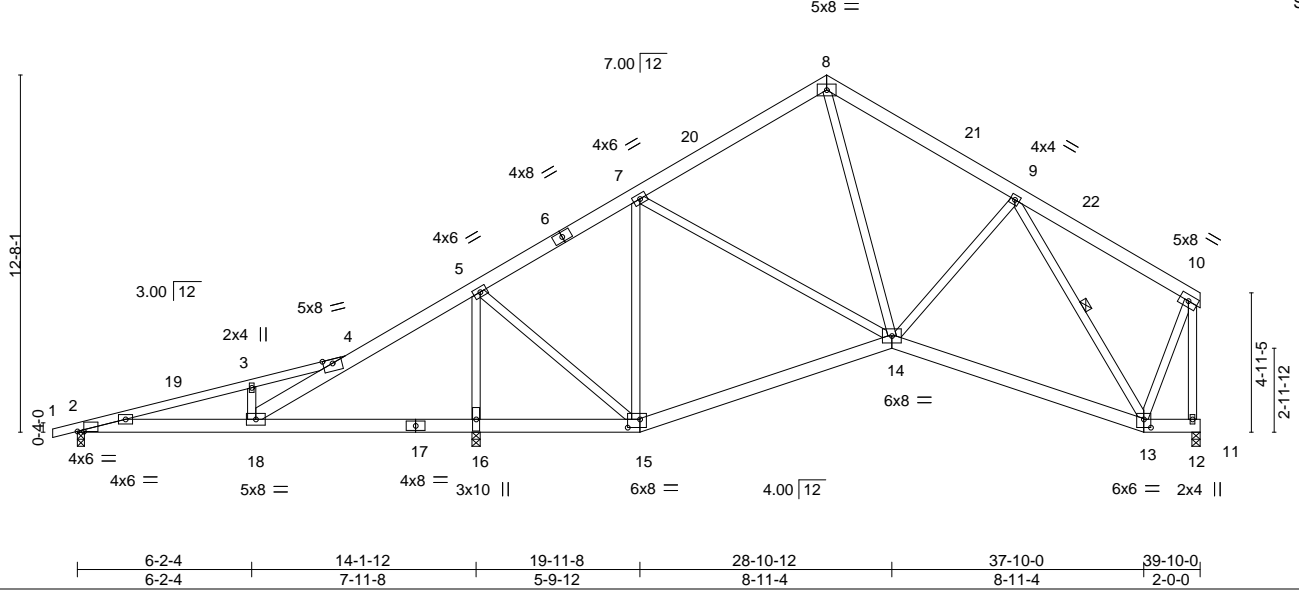
LOAD CASE(S) Standard

April 13,2023

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 1 West Pointe III/Harnett	
J0923-5060	A5	SPECIAL TRUSS	3	1		I57749342
					Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Apr 13 10:43:30 2023 Page 1
ID:nGEYJn1QAngpJfECepmG8Mz?may-LSaFZH?B3wPk2UWHUE_gEvij9rBOaM47LgqF4MzR9JR

Dimensions (top): -0-10-8, 6-2-4, 9-6-0, 14-1-12, 19-11-8, 26-7-0, 33-3-2, 39-10-0
Dimensions: 0-10-8, 6-2-4, 3-3-12, 4-7-12, 5-9-12, 6-7-8, 6-8-2, 6-6-14

Scale = 1:81.7

Dimensions (bottom): 6-2-4, 14-1-12, 19-11-8, 28-10-12, 37-10-0, 39-10-0
6-2-4, 7-11-8, 5-9-12, 8-11-4, 8-11-4, 2-0-0
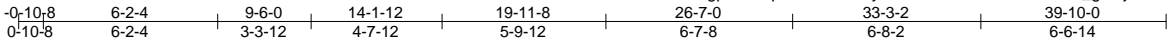
Plate Offsets (X,Y)-- [2:0-2-12,0-0-1], [13:0-3-0,0-3-8], [15:0-5-4,0-3-8]

LOADING (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.06	14-15	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.13	14-15	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.02	12	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.07	16-18	>999	240	Weight: 298 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1 *Except*
1-4: 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 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 6-0-0 oc bracing.
WEBS 1 Row at midpt 9-13

REACTIONS. (lb/size) 12=817/0-3-8 (min. 0-1-8), 16=2152/0-3-8 (min. 0-2-9), 2=252/0-3-0 (min. 0-1-8)
Max Horz 2=292(LC 7)
Max Uplift 12=-67(LC 11), 16=-265(LC 10), 2=-143(LC 6)
Max Grav 12=818(LC 18), 16=2152(LC 1), 2=255(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 4-18=-833/1004, 4-5=-860/1234, 5-6=-362/68, 6-7=-298/98, 7-20=-712/136,
8-20=-676/162, 8-21=-794/152, 9-21=-831/116, 9-22=-279/92, 10-22=-330/68,
10-12=-836/86
BOT CHORD 17-18=-950/676, 16-17=-950/676, 15-16=-950/676, 14-15=-32/454, 13-14=-48/610
WEBS 5-15=-566/1367, 7-15=-793/393, 7-14=-161/450, 8-14=-48/397, 9-13=-691/75,
10-13=0/590, 3-18=-347/178, 5-16=-1957/909

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 22-2-3, Exterior(2) 22-2-3 to 30-11-13, Interior(1) 30-11-13 to 35-1-15, Exterior(2) 35-1-15 to 39-6-12 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf 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) 12 except (jt=lb) 16=265, 2=143.
6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

April 13,2023

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

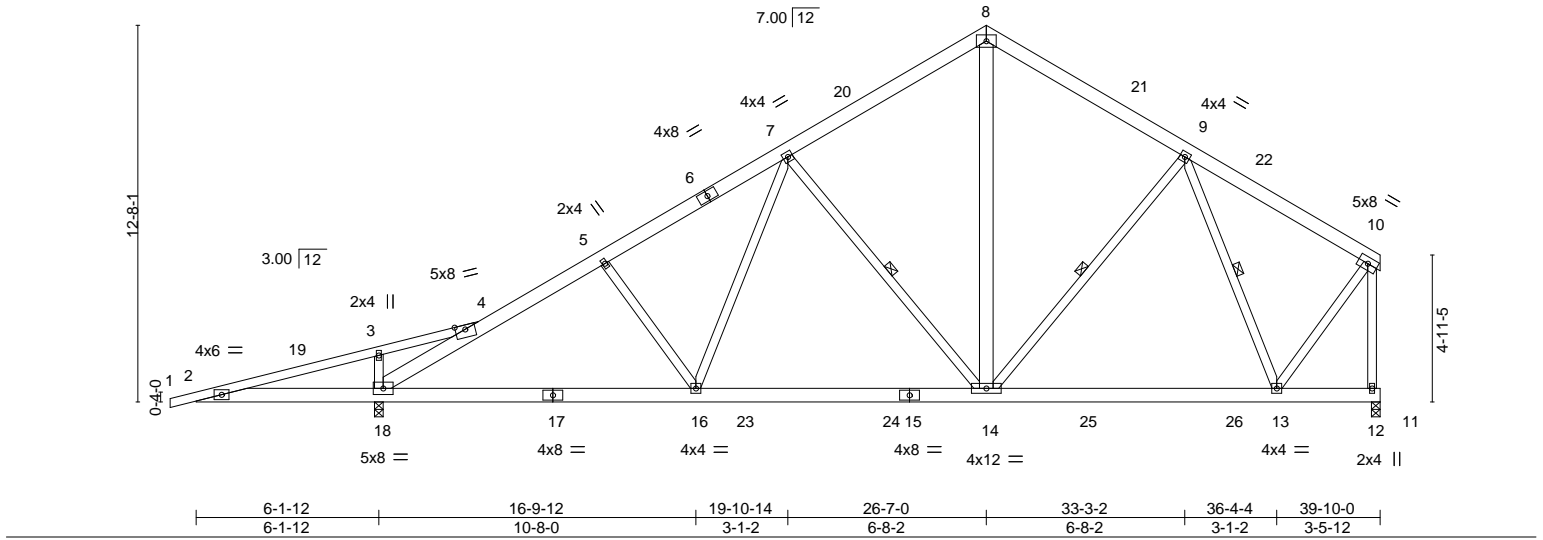| Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 1 West Pointe III/Harnett	
J0923-5060	A6	SPECIAL TRUSS	1	1		I57749343
					Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Apr 13 10:43:31 2023 Page 1
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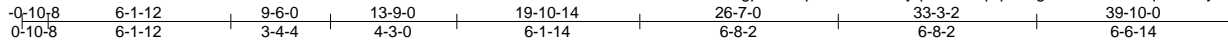
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	-0.13	14-16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.20	14-16	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.03	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	-0.05	16-18	>999	240	Weight: 307 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 SP No.1 *Except*
1-4: 2x4 SP No.1
BOT CHORD   2x6 SP No.1
WEBS   2x4 SP No.2 *Except*
8-14: 2x6 SP No.1

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 5-3-4 oc purlins, except end verticals.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 2-18.
WEBS   1 Row at midpt   7-14, 9-14, 9-13

REACTIONS.   (lb/size)   12=1287/0-3-8 (min. 0-1-11), 18=1936/0-3-8 (min. 0-2-5)
Max Horz   18=292(LC 7)
Max Uplift   12=-84(LC 11), 18=-199(LC 10)
Max Grav   12=1444(LC 17), 18=1936(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-19=-982/946, 3-19=-972/991, 3-4=-924/958, 4-18=-2613/1034, 4-5=-2011/179,
5-6=-1879/190, 6-7=-1752/219, 7-20=-1233/332, 8-20=-1138/368, 8-21=-1174/366,
9-21=-1263/330, 9-22=-710/187, 10-22=-837/164, 10-12=-1490/264
BOT CHORD   2-18=-920/1004, 17-18=-261/1814, 16-17=-261/1814, 16-23=-174/1529, 23-24=-174/1529,
15-24=-174/1529, 14-15=-174/1529, 14-25=-150/935, 25-26=-150/935, 13-26=-150/935
WEBS   7-14=-755/209, 8-14=-169/852, 10-13=-124/1195, 7-16=-16/504, 9-13=-698/207,
3-18=-344/175

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 22-2-3, Exterior(2) 22-2-3 to 30-11-13, Interior(1) 30-11-13 to 35-1-15, Exterior(2) 35-1-15 to 39-6-12 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12 except (jt=lb) 18=199.
6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

April 13,2023

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 1 West Pointe III/Harnett	
J0923-5060	A7	SPECIAL TRUSS	5	1		I57749344
					Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Apr 13 10:43:32 2023 Page 1
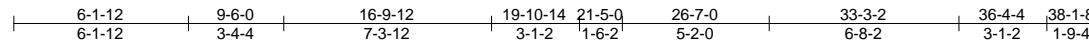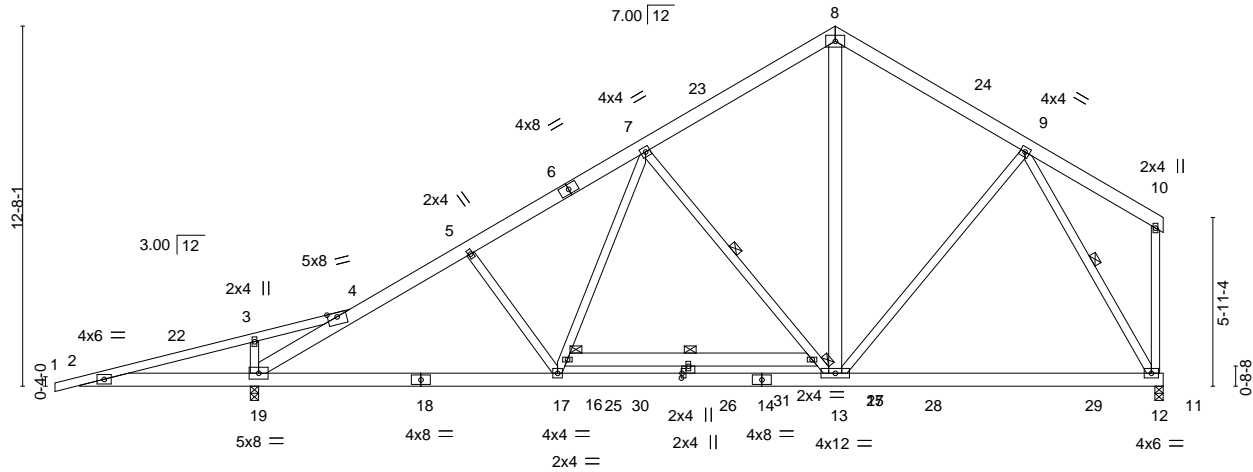ID:nGEYJn1QAngpJfECepmG8Mz?may-Hri?_z1RbXfSHoggbf08JKn_Gfn72MhQp_JM8EzR9JP
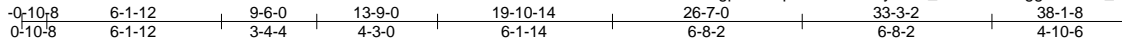
Scale = 1:81.1

Plate Offsets (X,Y)-- [20:0-2-0,0-0-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.25	12-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.37	12-13	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.58	Horz(CT)	0.04	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	-0.05	17-19	>999	240	Weight: 314 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1 *Except*
1-4: 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
8-13,20-21: 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-0-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 2-19.
6-0-0 oc bracing: 15-16.
WEBS 1 Row at midpt 7-15, 9-12

REACTIONS. (lb/size) 12=1302/0-3-8 (min. 0-1-14), 19=1964/0-3-8 (min. 0-2-5)
Max Horz 19=291(LC 7)
Max Uplift 12=-40(LC 10), 19=-145(LC 10)
Max Grav 12=1591(LC 17), 19=1965(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-22=-989/943, 3-22=-979/988, 3-4=-931/955, 4-19=-2783/922, 4-5=-2188/61,
5-6=-2056/71, 6-7=-1982/100, 7-23=-1270/248, 8-23=-1176/284, 8-24=-1214/280,
9-24=-1297/253
BOT CHORD 2-19=-916/1010, 18-19=-196/1959, 17-18=-196/1959, 17-25=-97/1754, 25-26=-97/1754,
14-26=-97/1754, 14-27=-97/1754, 13-27=-97/1754, 13-28=-109/739, 28-29=-109/739,
12-29=-109/739
WEBS 7-15=-848/184, 13-15=-1063/135, 8-13=-78/880, 9-13=-9/545, 16-17=-26/430,
7-16=0/661, 9-12=-1462/232, 3-19=-343/175

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 22-2-3, Exterior(2) 22-2-3 to 30-11-13, Interior(1) 30-11-13 to 33-3-2, Exterior(2) 33-3-2 to 37-10-4 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12 except (jt=lb) 19=145.
6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
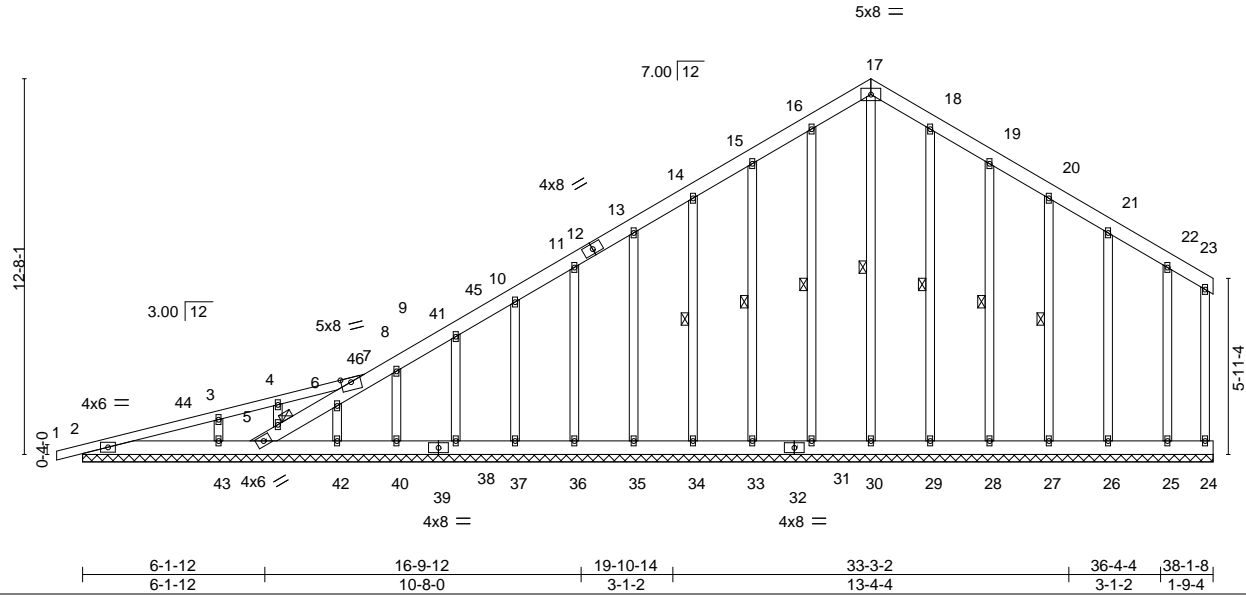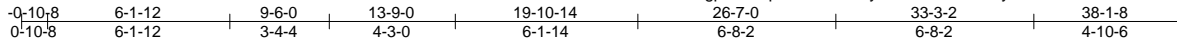
LOAD CASE(S) Standard

April 13,2023

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 1 West Pointe III/Harnett	
J0923-5060	A7GE	GABLE	1	1		I57749345
					Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Apr 13 10:43:33 2023 Page 1
ID:nGEYJn1QAngpJfECepmG8Mz?may-l1GNBJ13MrnIvyFs9MXNrYKHv3F6nvmZ1e2vghzR9JO

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	-0.00	24	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 362 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1 *Except*
1-7: 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
OTHERS 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 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 2-43,41-43.
WEBS 1 Row at midpt 17-30, 16-31, 15-33, 14-34, 18-29, 19-28, 20-27
JOINTS 1 Brace at Jt(s): 5

REACTIONS. All bearings 38-1-8.
(lb) - Max Horz 2=406(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 24, 30, 31, 33, 34, 35, 36, 37, 38, 40, 43, 29, 28, 27, 26, 25 except 2=-137(LC 6), 42=-113(LC 6)
Max Grav All reactions 250 lb or less at joint(s) 2, 24, 41, 30, 31, 33, 34, 35, 36, 37, 38, 40, 42, 29, 28, 27, 26, 25 except 43=398(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-44=-257/180, 7-8=-327/280, 8-9=-301/283, 9-10=-264/256, 14-15=-182/272, 15-16=-221/313, 16-17=-250/325, 17-18=-250/312, 18-19=-221/274

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 22-2-3, Corner(3) 22-2-3 to 30-11-13, Exterior(2) 30-11-13 to 33-5-7, Corner(3) 33-5-7 to 37-10-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 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 30.0psf 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) 24, 30, 31, 33, 34, 35, 36, 37, 38, 40, 43, 29, 28, 27, 26, 25 except (jt=lb) 2=137, 42=113.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

April 13,2023

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 1 West Pointe III/Harnett	
J0923-5060	B1	COMMON	1	1		I57749346
					Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Apr 13 10:43:34 2023 Page 1
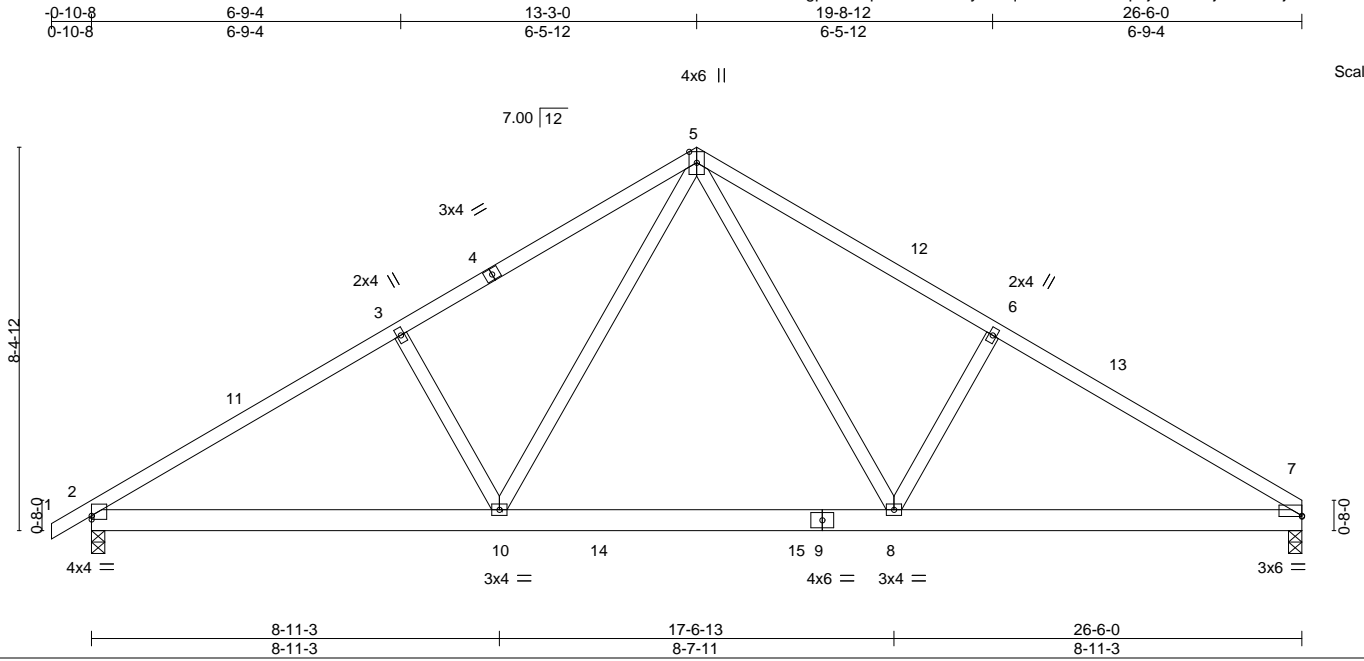ID:nGEYJn1QAngpJfECepmG8Mz?may-DEqmOe2h78v9X6p2j42cOltMjSX1WLejGIoSD7zR9JN

Plate Offsets (X,Y)-- [2:0-0-0,0-0-15], [7:0-0-0,0-0-3]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.11	8-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.16	8-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.23	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.04	2-10	>999	240	Weight: 149 lb	FT = 20%

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

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

REACTIONS. (lb/size)   7=1047/0-3-8 (min. 0-1-8), 2=1111/0-3-8 (min. 0-1-8)
Max Horz 2=196(LC 7)
Max Uplift 7=-85(LC 11), 2=-99(LC 10)
Max Grav 7=1077(LC 18), 2=1136(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-11=-1667/385, 3-11=-1576/409, 3-4=-1510/426, 4-5=-1417/462, 5-12=-1420/469,
            6-12=-1514/434, 6-13=-1512/415, 7-13=-1670/391
BOT CHORD   2-10=-238/1462, 10-14=-55/963, 14-15=-55/963, 9-15=-55/963, 8-9=-55/963,
            7-8=-250/1326
WEBS   5-8=-158/711, 6-8=-392/256, 5-10=-147/706, 3-10=-383/240

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope)
   and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 8-10-3, Exterior(2) 8-10-3 to 17-7-13, Interior(1) 17-7-13 to 21-11-7,
   Exterior(2) 21-11-7 to 26-4-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip
   DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 2.
6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced
   standard ANSI/TPI 1.

LOAD CASE(S) Standard

April 13,2023

TRENCO
ENGINEERING BY
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 1 West Pointe III/Harnett	
J0923-5060	B1GE	GABLE	1	1		I57749347
					Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Apr 13 10:43:35 2023 Page 1
ID:nGEYJn1QAngpJfECepmG8Mz?may-hQO8c_3JuS108GOFHnZrxzPf_sy3Fp4sVyX0lZzR9JM
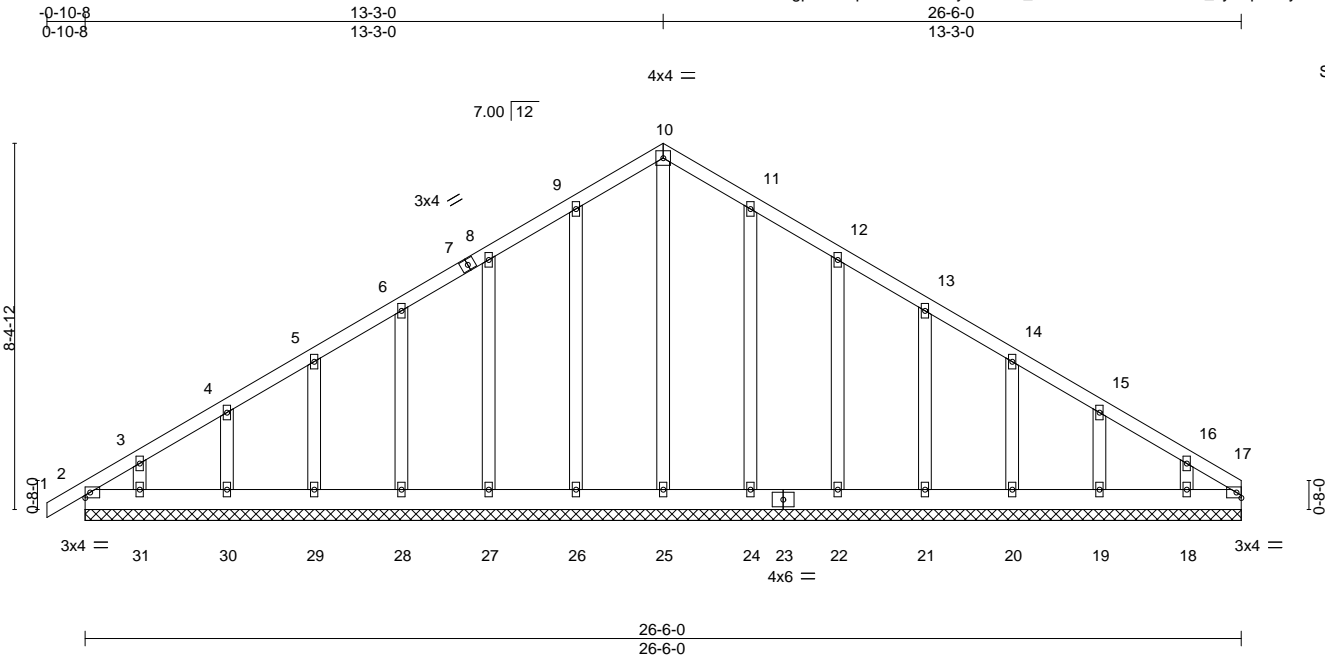
LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL	20.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00	17	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 185 lb	FT = 20%

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

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

REACTIONS.   All bearings 26-6-0.
(lb) -   Max Horz 2=244(LC 7)
Max Uplift   All uplift 100 lb or less at joint(s) 17, 2, 26, 27, 28, 29, 30, 24, 22, 21, 20, 19 except 31=-108(LC 10), 18=-113(LC 11)
Max Grav   All reactions 250 lb or less at joint(s) 17, 2, 25, 26, 27, 28, 29, 30, 31, 24, 22, 21, 20, 19, 18

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-263/188

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 3-3-0, Exterior(2) 3-3-0 to 8-10-3, Corner(3) 8-10-3 to 17-7-13, Exterior(2) 17-7-13 to 22-1-3, Corner(3) 22-1-3 to 26-6-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 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 30.0psf 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) 17, 2, 26, 27, 28, 29, 30, 24, 22, 21, 20, 19 except (jt=lb) 31=108, 18=113.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

April 13,2023

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 1 West Pointe III/Harnett	
J0923-5060	B2	ROOF SPECIAL	2	1	Job Reference (optional)	I57749348

Comtech, Inc., Fayetteville, NC 28309

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Apr 13 10:43:35 2023 Page 1
ID:nGEYJn1QAngpJfECepmG8Mz?may-hQO8c_3JuS108GOFHnZrxzPXZsnDFoisVyX0lZzR9JM
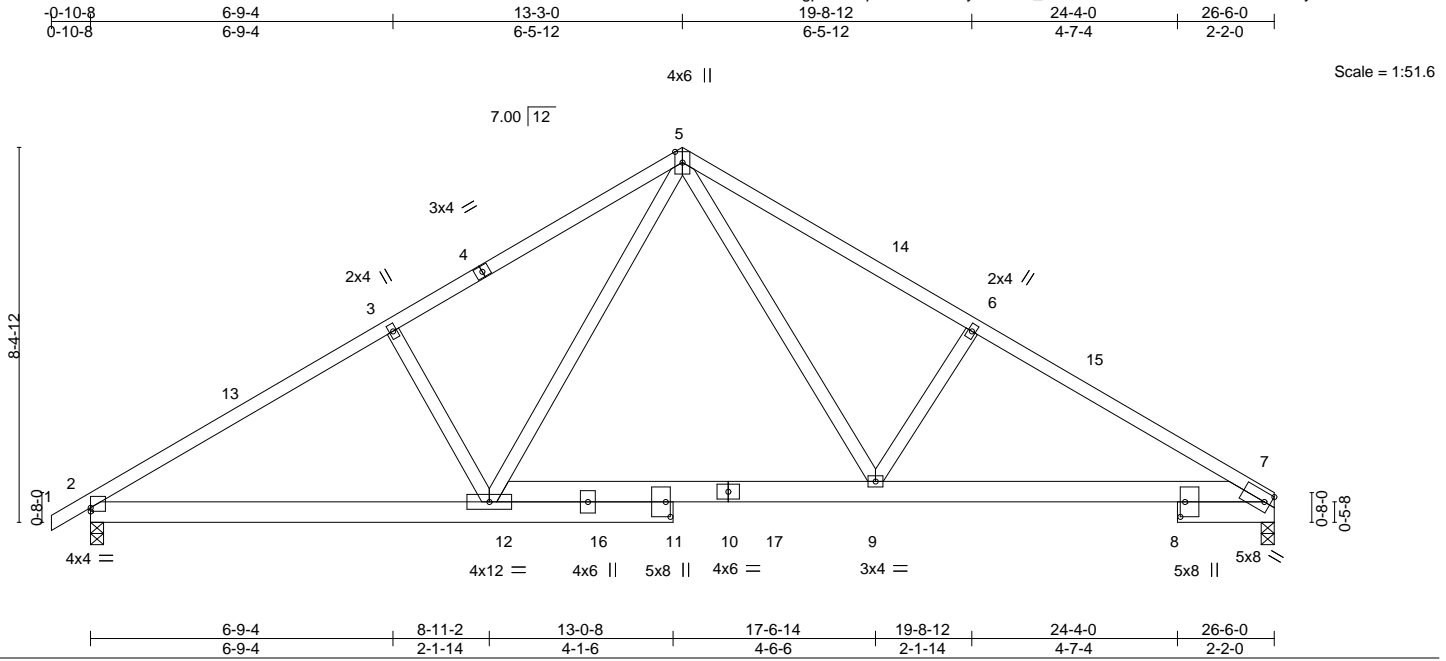
-0-10-8 6-9-4 13-3-0 19-8-12 24-4-0 26-6-0
0-10-8 6-9-4 6-5-12 6-5-12 4-7-4 2-2-0

4x6 ||

7.00 |12

Scale = 1:51.6

6-9-4 / 6-9-4
8-11-2 / 2-1-14
13-0-8 / 4-1-6
17-6-14 / 4-6-6
19-8-12 / 2-1-14
24-4-0 / 4-7-4
26-6-0 / 2-2-0

Plate Offsets (X,Y)-- [2:0-0-0,0-0-15], [8:0-4-0,0-1-4], [11:0-4-0,0-1-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.10	9-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.22	7-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.06	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.07	7-9	>999	240	Weight: 161 lb	FT = 20%

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 4-1-9 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 7=1047/0-3-8 (min. 0-1-8), 2=1111/0-3-8 (min. 0-1-8)
Max Horz 2=196(LC 7)
Max Uplift 7=-85(LC 11), 2=-99(LC 10)
Max Grav 7=1068(LC 18), 2=1126(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-13=-1709/397, 3-13=-1619/420, 3-4=-1526/419, 4-5=-1434/454, 5-14=-1553/490,
             6-14=-1647/455, 6-15=-1663/449, 7-15=-1821/425
BOT CHORD   2-12=-248/1502, 12-16=-60/999, 11-16=-58/1005, 10-11=-58/1006, 10-17=-58/1006,
             9-17=-58/1006, 8-9=-279/1455, 7-8=-284/1436
WEBS   5-12=-131/665, 3-12=-381/240, 5-9=-182/838, 6-9=-387/253

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope)
   and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 8-10-3, Exterior(2) 8-10-3 to 17-7-13, Interior(1) 17-7-13 to 21-11-7,
   Exterior(2) 21-11-7 to 26-4-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip
   DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 2.
6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced
   standard ANSI/TPI 1.

LOAD CASE(S) Standard

SEAL
036322
NORTH CAROLINA
PROFESSIONAL
ENGINEER
ERIC A. GILBERT

April 13,2023

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 1 West Pointe III/Harnett	
J0923-5060	B3	ROOF SPECIAL	4	1		I57749349
					Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Apr 13 10:43:36 2023 Page 1
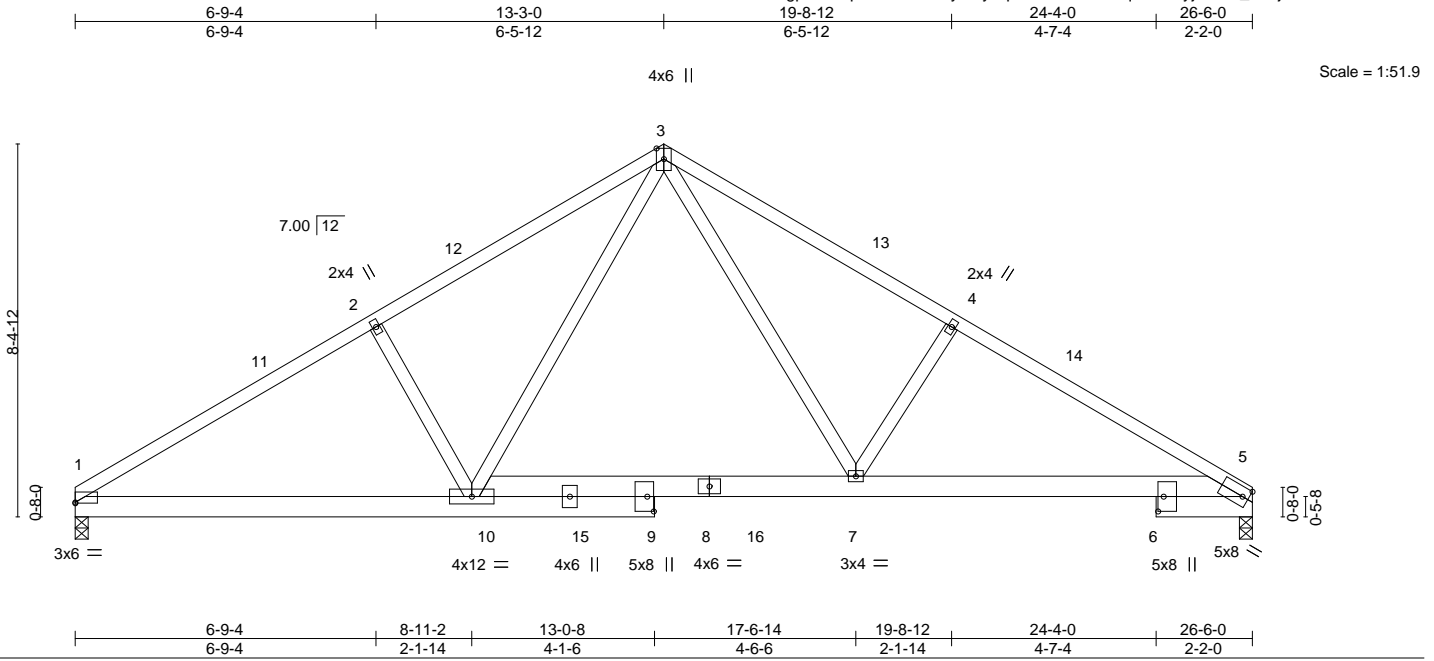ID:nGEYJn1QAngpJfECepmG8Mz?may-9cyWpK4xfm9tmPzRqV54TAyjYG7S_Fu0jcHZH0zR9JL

Scale = 1:51.9

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	-0.10	7-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.22	5-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.06	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.07	5-7	>999	240	Weight: 160 lb	FT = 20%

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 4-1-8 oc purlins.
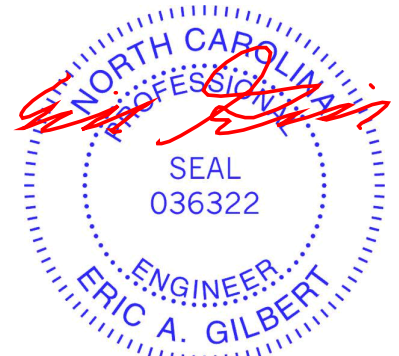BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.   (lb/size) 1=1048/0-3-8 (min. 0-1-8), 5=1048/0-3-8 (min. 0-1-8)
Max Horz 1=192(LC 7)
Max Uplift 1=-85(LC 10), 5=-85(LC 11)
Max Grav 1=1068(LC 17), 5=1069(LC 18)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   1-11=-1714/408, 2-11=-1556/432, 2-12=-1531/430, 3-12=-1436/466, 3-13=-1555/496,
4-13=-1649/460, 4-14=-1665/455, 5-14=-1823/431
BOT CHORD   1-10=-266/1511, 10-15=-64/1000, 9-15=-62/1006, 8-9=-61/1007, 8-16=-61/1007,
7-16=-61/1007, 6-7=-284/1456, 5-6=-289/1438
WEBS   3-10=-142/670, 2-10=-390/256, 3-7=-184/839, 4-7=-387/254

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope)
   and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 8-10-3, Exterior(2) 8-10-3 to 17-7-13, Interior(1) 17-7-13 to 21-11-7, Exterior(2)
   21-11-7 to 26-4-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5.
6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced
   standard ANSI/TPI 1.

LOAD CASE(S) Standard

April 13,2023

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 1 West Pointe III/Harnett	
J0923-5060	B4	COMMON	1	1		I57749350
					Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Apr 13 10:43:36 2023 Page 1
ID:nGEYJn1QAngpJfECepmG8Mz?may-9cyWpK4xfm9tmPzRqV54TAyjXGDX_F50jcHZH0zR9JL

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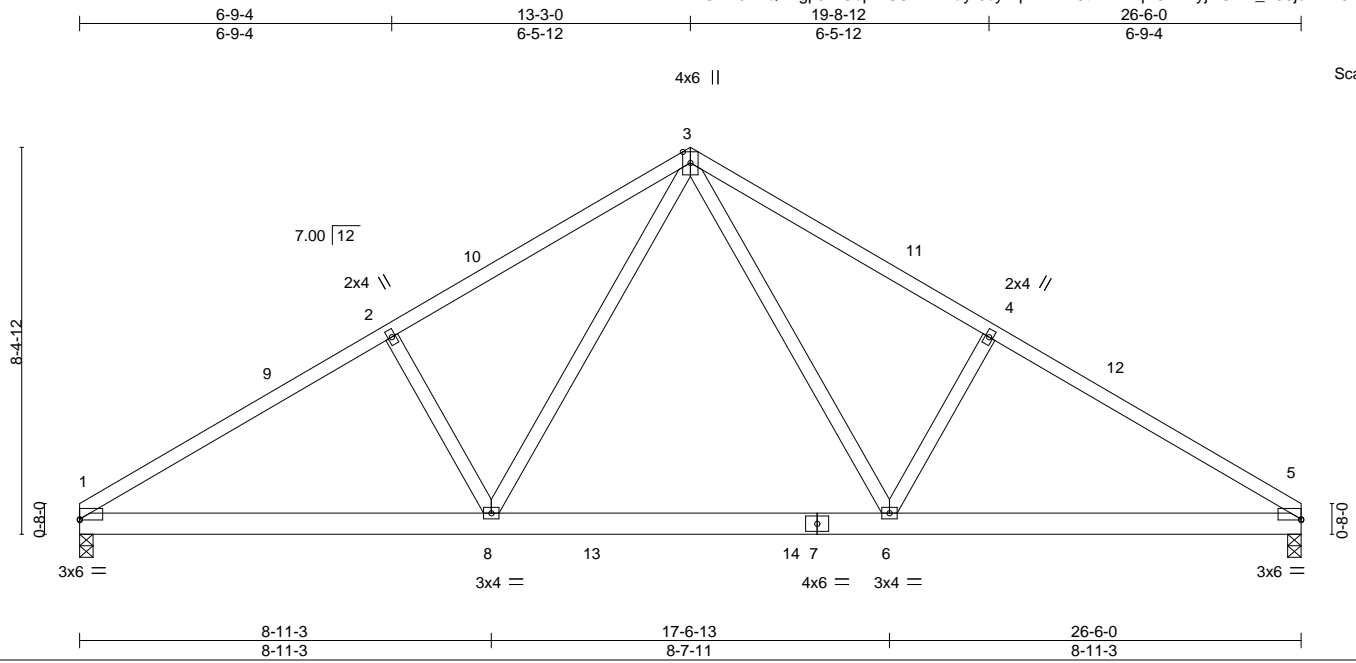
Plate Offsets (X,Y)-- [1:0-0-0,0-0-3], [5:0-0-0,0-0-3]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	-0.11	6-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.16	6-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.23	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.03	1-8	>999	240	Weight: 147 lb	FT = 20%

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 4-4-6 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.   (lb/size)   1=1048/0-3-8 (min. 0-1-8), 5=1048/0-3-8 (min. 0-1-8)
Max Horz   1=192(LC 7)
Max Uplift 1=-85(LC 10), 5=-85(LC 11)
Max Grav   1=1077(LC 17), 5=1077(LC 18)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   1-9=-1672/396, 2-9=-1513/420, 2-10=-1516/439, 3-10=-1422/474, 3-11=-1422/474,
4-11=-1516/439, 4-12=-1513/420, 5-12=-1672/396
BOT CHORD   1-8=-254/1471, 8-13=-58/964, 13-14=-58/964, 7-14=-58/964, 6-7=-58/964,
5-6=-254/1327
WEBS   3-6=-159/712, 4-6=-393/256, 3-8=-159/712, 2-8=-393/256

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 8-10-3, Exterior(2) 8-10-3 to 17-7-13, Interior(1) 17-7-13 to 21-11-7, Exterior(2) 21-11-7 to 26-4-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5.
6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

April 13,2023

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 1 West Pointe III/Harnett	
J0923-5060	C1	COMMON	1	1		I57749351
					Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Apr 13 10:43:36 2023 Page 1
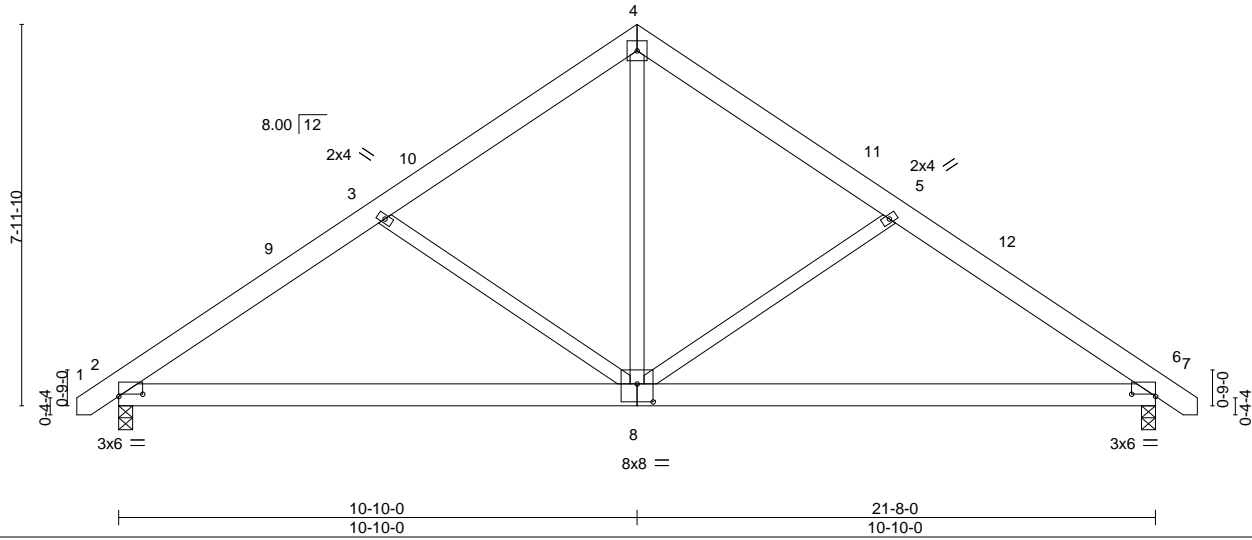ID:nGEYJn1QAngpJfECepmG8Mz?may-9cyWpK4xfm9tmPzRqV54TAypNGCZ_EX0jcHZH0zR9JL
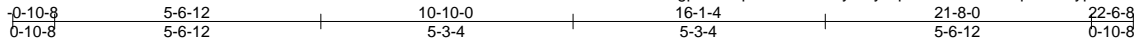
Plate Offsets (X,Y)-- [2:0-6-0,0-0-9], [6:0-6-0,0-0-9], [8:0-4-0,0-4-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	-0.07	6-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.38	Vert(CT)	-0.14	6-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.02	2-8	>999	240	Weight: 146 lb	FT = 20%

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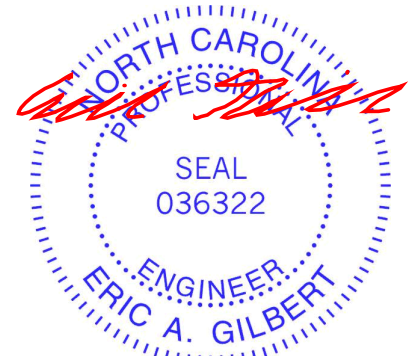BOT CHORD   2x6 SP No.1
WEBS   2x4 SP No.2

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

REACTIONS. (lb/size) 2=907/0-3-8 (min. 0-1-8), 6=907/0-3-8 (min. 0-1-8)
Max Horz 2=185(LC 9)
Max Uplift 2=-78(LC 10), 6=-78(LC 11)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-9=-1148/319, 3-9=-1021/339, 3-10=-890/262, 4-10=-856/295, 4-11=-856/295,
             5-11=-890/262, 5-12=-1021/339, 6-12=-1148/319
BOT CHORD   2-8=-164/920, 6-8=-164/884
WEBS   4-8=-148/673, 5-8=-364/232, 3-8=-364/232

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope)
   and C-C Exterior(2) -0-8-12 to 3-8-1, Interior(1) 3-8-1 to 6-5-3, Exterior(2) 6-5-3 to 15-2-13, Interior(1) 15-2-13 to 17-11-15, Exterior(2)
   17-11-15 to 22-4-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf 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) 2, 6.
6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced
   standard ANSI/TPI 1.

LOAD CASE(S) Standard

April 13,2023

TRENCO
ENGINEERING BY
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 1 West Pointe III/Harnett	
J0923-5060	C1GE	GABLE	1	1		I57749352
					Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Apr 13 10:43:37 2023 Page 1
ID:nGEYJn1QAngpJfECepmG8Mz?may-eoVu1g4aQ3IkOZYdOCcJ0OV_bgdQjk49yG06qSzR9JK

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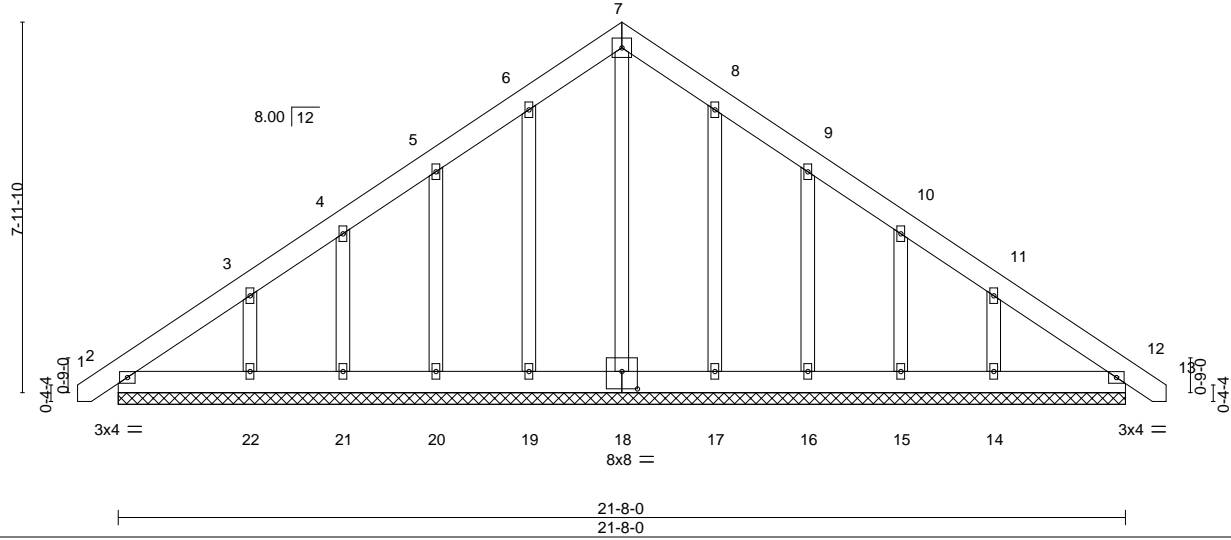
Plate Offsets (X,Y)-- [18:0-4-0,0-4-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	0.00	12	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	12	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 172 lb	FT = 20%

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

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

REACTIONS.   All bearings 21-8-0.
(lb) - Max Horz 2=231(LC 9)
Max Uplift   All uplift 100 lb or less at joint(s) 2, 19, 21, 17, 15 except 20=-101(LC 10), 22=-146(LC 10),
16=-103(LC 11), 14=-143(LC 11)
Max Grav   All reactions 250 lb or less at joint(s) 2, 12, 18, 19, 20, 21, 17, 16, 15 except 22=255(LC 17),
14=251(LC 18)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope)
gable end zone and C-C Corner(3) -0-8-12 to 3-8-1, Exterior(2) 3-8-1 to 6-5-3, Corner(3) 6-5-3 to 15-2-13, Exterior(2) 15-2-13 to
17-11-15, Corner(3) 17-11-15 to 22-4-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate
grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry
Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 19, 21, 17, 15
except (jt=lb) 20=101, 22=146, 16=103, 14=143.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and
referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

April 13,2023

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 1 West Pointe III/Harnett	
J0923-5060	C2	COMMON	3	1		I57749353
					Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Apr 13 10:43:37 2023 Page 1
ID:nGEYJn1QAngpJfECepmG8Mz?may-eoVu1g4aQ3IkOZYdOCcJ0OVz6gXjjhn9yG06qSzR9JK
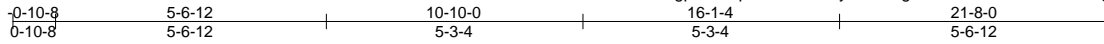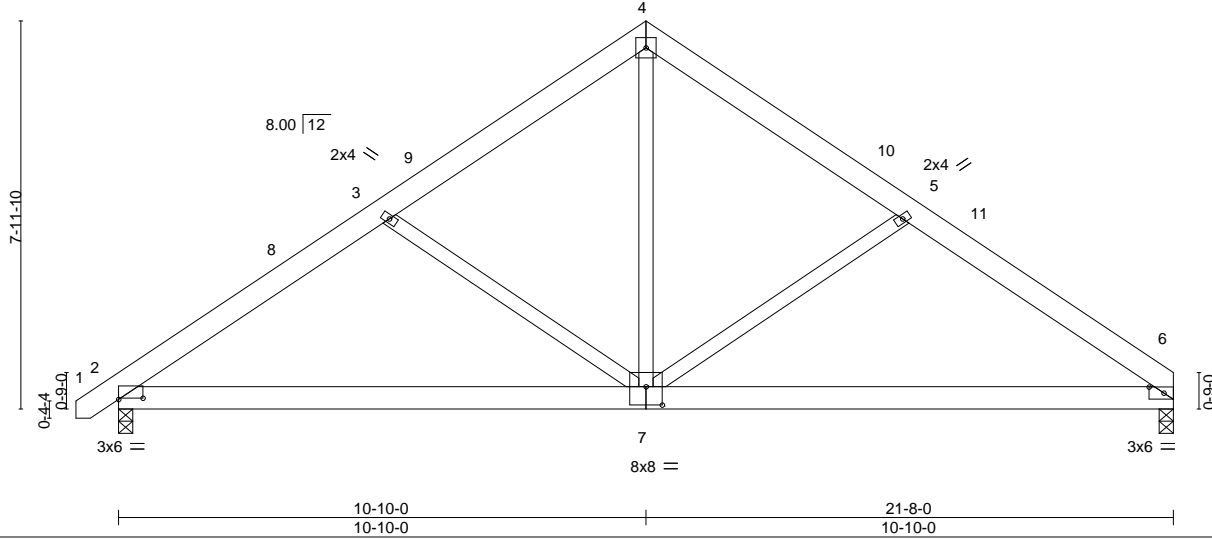
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Plate Offsets (X,Y)-- [2:0-6-0,0-0-5], [6:0-3-10,0-1-8], [7:0-4-0,0-4-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	-0.07	6-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.15	6-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.02	2-7	>999	240	Weight: 144 lb	FT = 20%

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.
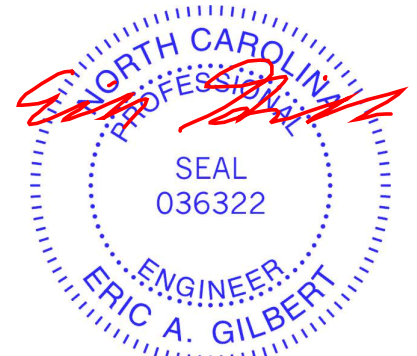
REACTIONS. (lb/size)   6=854/0-3-8 (min. 0-1-8), 2=908/0-3-8 (min. 0-1-8)
Max Horz 2=183(LC 9)
Max Uplift 6=-65(LC 11), 2=-78(LC 10)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-8=-1150/324, 3-8=-1021/344, 3-9=-890/267, 4-9=-856/300, 4-10=-856/301,
             5-10=-889/268, 5-11=-1020/350, 6-11=-1151/329
BOT CHORD   2-7=-180/918, 6-7=-191/888
WEBS   4-7=-156/672, 5-7=-362/247, 3-7=-364/232

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope)
   and C-C Exterior(2) -0-8-12 to 3-8-1, Interior(1) 3-8-1 to 6-5-3, Exterior(2) 6-5-3 to 15-2-13, Interior(1) 15-2-13 to 17-1-7, Exterior(2)
   17-1-7 to 21-6-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf 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) 6, 2.
6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced
   standard ANSI/TPI 1.

LOAD CASE(S) Standard

NORTH CAROLINA
PROFESSIONAL
SEAL
036322
ENGINEER
ERIC A. GILBERT

April 13,2023

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 1 West Pointe III/Harnett	
J0923-5060	C3	COMMON	1	**2**		I57749354
					Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Apr 13 10:43:38 2023 Page 1
ID:nGEYJn1QAngpJfECepmG8Mz?may-6?3GE05CBNQb?j7qyw7YYb17W4seS86JBwmgMuzR9JJ
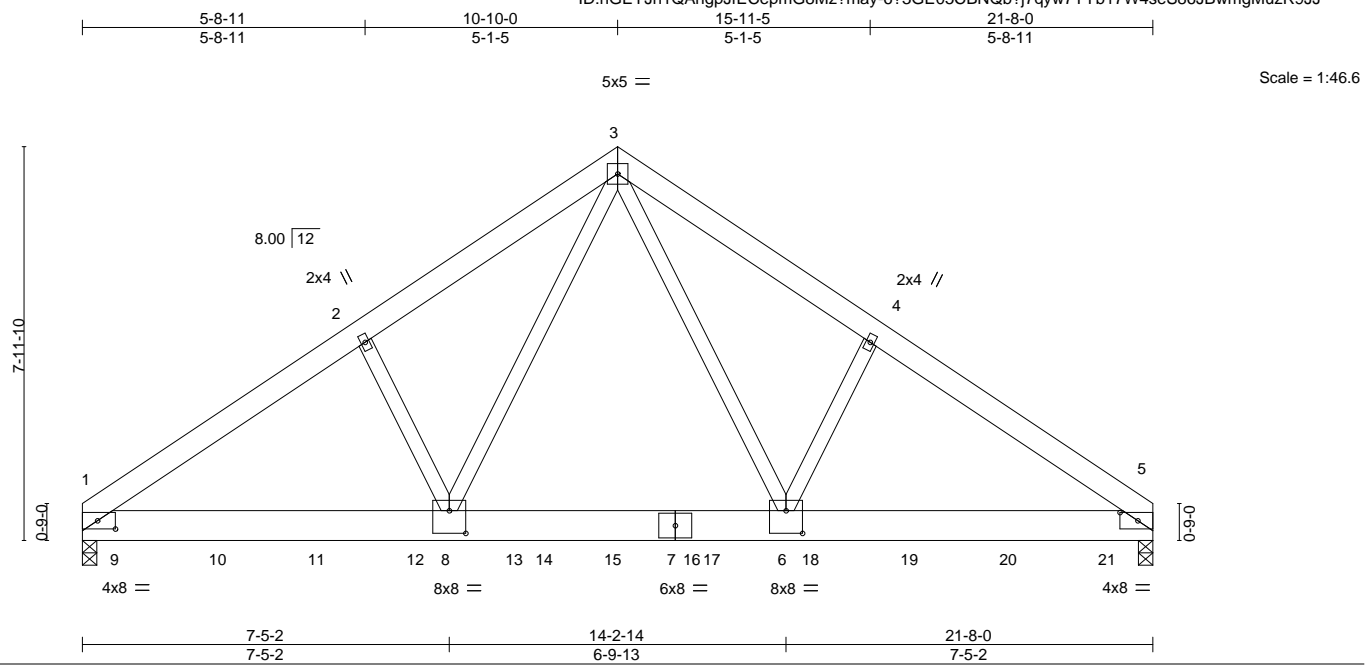
Plate Offsets (X,Y)--   [1:0-4-5,0-2-0], [5:0-4-5,0-2-0], [6:0-4-0,0-5-8], [8:0-4-0,0-5-8]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	-0.05	1-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.09	1-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.26	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.03	1-8	>999	240	Weight: 326 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 SP No.1
BOT CHORD   2x8 SP No.1
WEBS   2x4 SP No.2

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

REACTIONS.   (lb/size)   1=3000/0-3-8 (min. 0-1-12), 5=2665/0-3-8 (min. 0-1-9)
Max Horz 1=-177(LC 6)
Max Uplift 1=-58(LC 8), 5=-142(LC 9)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   1-2=-3667/201, 2-3=-3529/266, 3-4=-3283/271, 4-5=-3421/206
BOT CHORD   1-9=-178/2943, 9-10=-178/2943, 10-11=-178/2943, 11-12=-178/2943, 8-12=-178/2943,
8-13=-41/1981, 13-14=-41/1981, 14-15=-41/1981, 7-15=-41/1981, 7-16=-41/1981,
16-17=-41/1981, 6-17=-41/1981, 6-18=-103/2738, 18-19=-103/2738, 19-20=-103/2738,
20-21=-103/2738, 5-21=-103/2738
WEBS   2-8=-296/207, 3-8=-152/2114, 3-6=-161/1625, 4-6=-295/209

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.
   Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.
   Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope);
   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 30.0psf 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb)
   5=142.
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced
   standard ANSI/TPI 1.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 334 lb down at 0-8-12, 466 lb
   down and 21 lb up at 2-8-12, 466 lb down and 21 lb up at 4-8-12, 466 lb down and 21 lb up at 6-8-12, 364 lb down and 41 lb up at
   8-8-12, 309 lb down and 24 lb up at 10-8-12, 309 lb down and 24 lb up at 12-8-12, 309 lb down and 24 lb up at 14-8-12, 309 lb
   down and 24 lb up at 16-8-12, and 309 lb down and 24 lb up at 18-8-12, and 311 lb down and 22 lb up at 20-8-12 on bottom chord.
   The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

April 13,2023

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 1 West Pointe III/Harnett
J0923-5060	C3	COMMON	1	**2**	I57749354
					Job Reference (optional)

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
    Uniform Loads (plf)
        Vert: 1-5=-20, 1-3=-60, 3-5=-60
    Concentrated Loads (lb)
        Vert: 9=-334(F) 10=-466(F) 11=-466(F) 12=-466(F) 13=-364(F) 15=-309(F) 17=-309(F) 18=-309(F) 19=-309(F) 20=-309(F) 21=-311(F)

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 1 West Pointe III/Harnett	
J0923-5060	VB1	VALLEY	1	1		I57749355
					Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Apr 13 10:43:39 2023 Page 1
ID:nGEYJn1QAngpJfECepmG8Mz?may-aBdfSM6qyhYSdti0Wden5paI4TIvBe3SQaVDuLzR9JI

3-11-10 / 7-11-4
3-11-10 / 3-11-10

Scale = 1:16.2

4x4 =

7.00 ⟍12

2-3-13
0-0-4

2x4 ⟋⟋   2x4 ‖   2x4 ⟍⟍

7-11-4
7-11-4

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 26 lb	FT = 20%

LUMBER-
TOP CHORD   2x4 SP No.1
BOT CHORD   2x4 SP No.1
OTHERS   2x4 SP No.2

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

REACTIONS. (lb/size)   1=144/7-11-4 (min. 0-1-8), 3=144/7-11-4 (min. 0-1-8), 4=260/7-11-4 (min. 0-1-8)
Max Horz 1=-48(LC 8)
Max Uplift 1=-26(LC 10), 3=-30(LC 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=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf 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.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

NORTH CAROLINA
PROFESSIONAL
SEAL
036322
ENGINEER
ERIC A. GILBERT

April 13,2023

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

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 1 West Pointe III/Harnett	
J0923-5060	VB2	VALLEY	1	1		I57749356
					Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Apr 13 10:43:39 2023 Page 1
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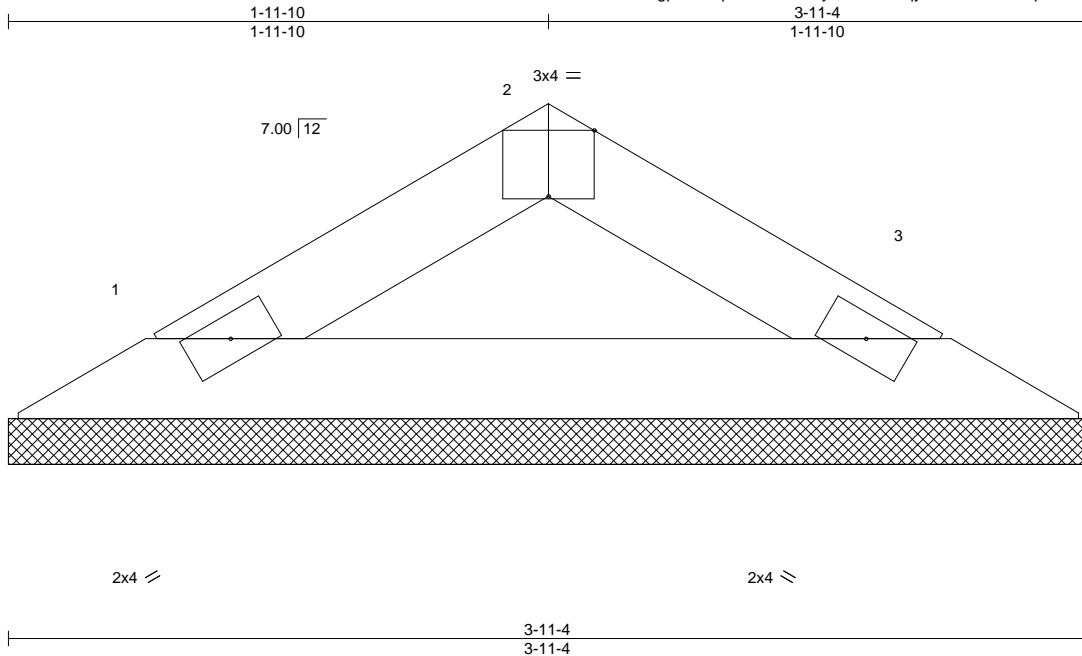
Scale = 1:8.4

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.02	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	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 11 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=114/3-11-4 (min. 0-1-8), 3=114/3-11-4 (min. 0-1-8)
Max Horz 1=20(LC 7)
Max Uplift 1=-9(LC 10), 3=-9(LC 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=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf 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.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

April 13,2023

TRENCO
ENGINEERING BY
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 1 West Pointe III/Harnett	
J0923-5060	VC1	VALLEY	1	1		I57749357
					Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Apr 13 10:43:40 2023 Page 1
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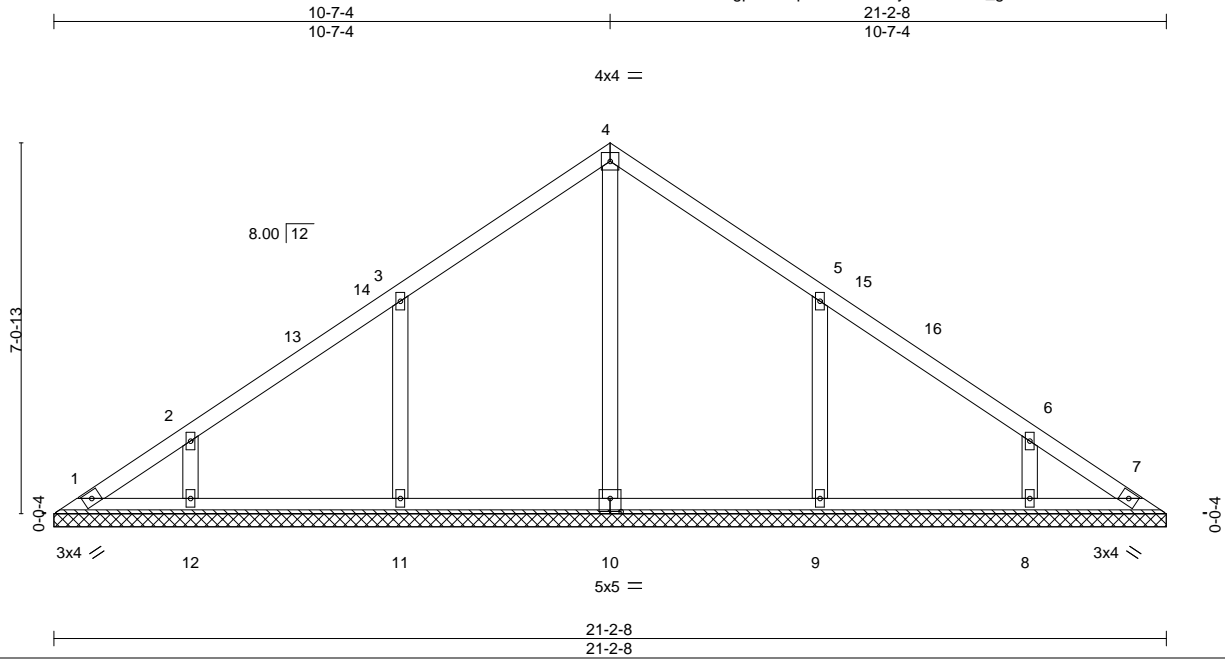
Plate Offsets (X,Y)-- [5:0-0-0,0-0-0], [6:0-0-0,0-0-0], [10:0-2-8,0-3-0]

LOADING (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC	0.16	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	0.14	Horz(CT)	0.00	7	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 92 lb	FT = 20%

LUMBER-
TOP CHORD   2x4 SP No.1
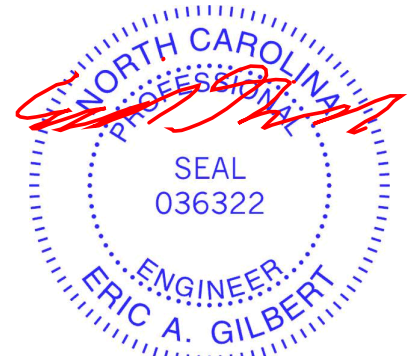BOT CHORD   2x4 SP No.1
OTHERS   2x4 SP No.2

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

REACTIONS.   All bearings 21-2-8.
    (lb) - Max Horz 1=-162(LC 6)
            Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 12, 8 except 11=-113(LC 10), 9=-113(LC 11)
            Max Grav   All reactions 250 lb or less at joint(s) 1, 7 except 10=446(LC 17), 11=461(LC 17), 12=277(LC 17),
                       9=461(LC 18), 8=277(LC 18)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS   3-11=-318/213, 5-9=-318/213

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope)
   and C-C Exterior(2) 0-5-12 to 4-10-9, Interior(1) 4-10-9 to 6-2-7, Exterior(2) 6-2-7 to 15-0-1, Interior(1) 15-0-1 to 16-3-15, Exterior(2)
   16-3-15 to 20-8-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 12, 8 except
   (jt=lb) 11=113, 9=113.
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced
   standard ANSI/TPI 1.

LOAD CASE(S) Standard

April 13,2023

ENGINEERING BY
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 1 West Pointe III/Harnett	
J0923-5060	VC2	VALLEY	1	1		I57749358
					Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Apr 13 10:43:40 2023 Page 1
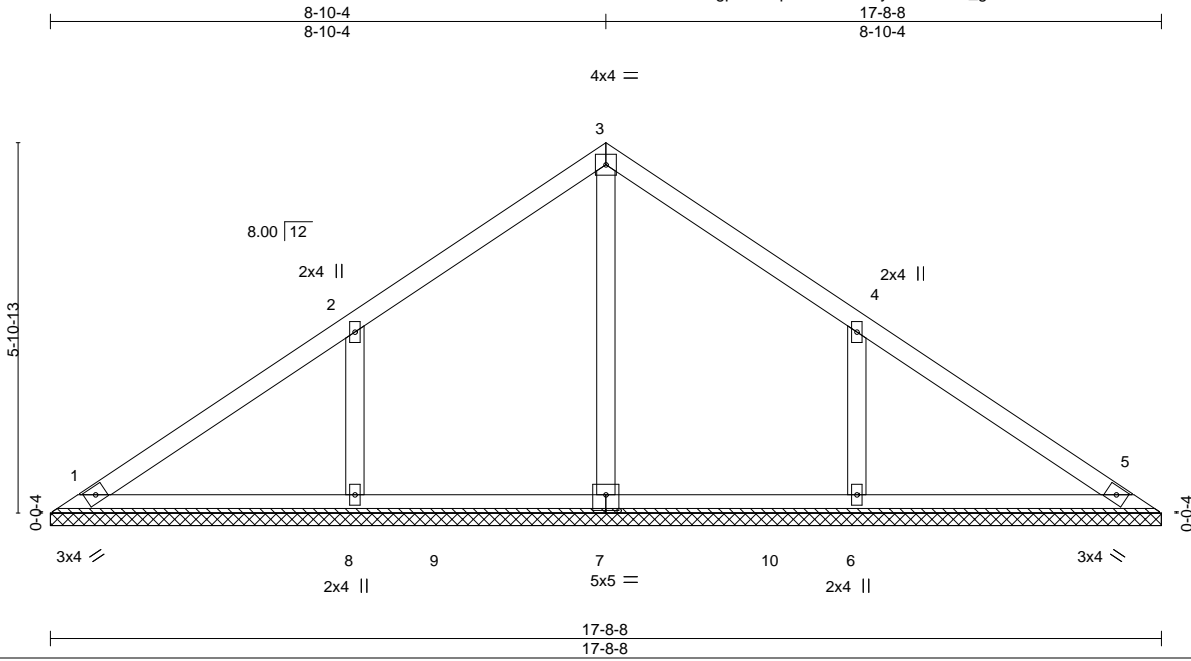ID:nGEYJn1QAngpJfECepmG8Mz?may-2NB1fi7Si_gJF1HC3K90e07TUtd6w4KbeEFnQnzR9JH

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.15	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: 72 lb	FT = 20%

LUMBER-
TOP CHORD   2x4 SP No.1
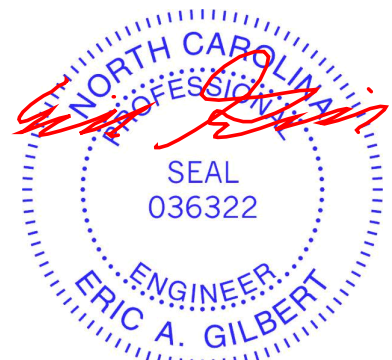BOT CHORD   2x4 SP No.1
OTHERS   2x4 SP No.2

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

REACTIONS.   All bearings 17-8-8.
(lb) -   Max Horz   1=-134(LC 6)
         Max Uplift   All uplift 100 lb or less at joint(s) 1 except 8=-130(LC 10), 6=-129(LC 11)
         Max Grav   All reactions 250 lb or less at joint(s) 1, 5 except 7=402(LC 17), 8=462(LC 17), 6=462(LC 18)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS   2-8=-357/249, 4-6=-357/249

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf 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 except (jt=lb) 8=130, 6=129.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
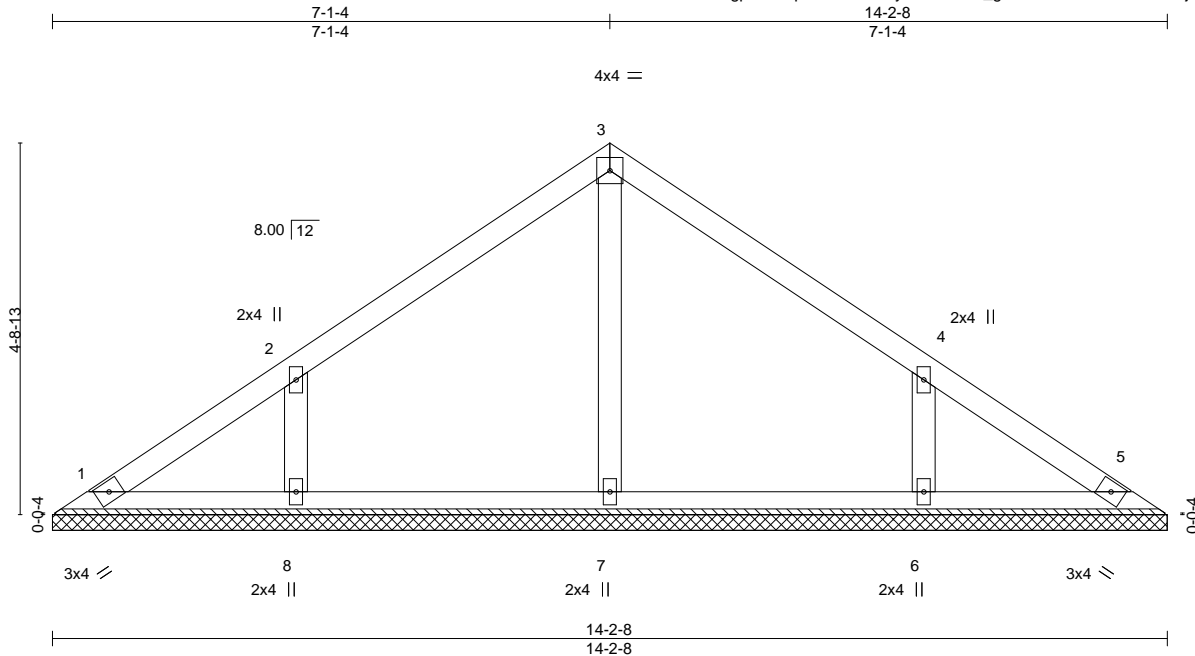
LOAD CASE(S) Standard

April 13,2023

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

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	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 55 lb	FT = 20%

LUMBER-
TOP CHORD   2x4 SP No.1
BOT CHORD   2x4 SP No.1
OTHERS   2x4 SP No.2

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

REACTIONS.   All bearings 14-2-8.
    (lb) - Max Horz 1=-106(LC 8)
            Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-104(LC 10), 6=-104(LC 11)
            Max Grav   All reactions 250 lb or less at joint(s) 1, 5 except 7=260(LC 1), 8=337(LC 17), 6=337(LC 18)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS   2-8=-289/209, 4-6=-289/209

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope)
   and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf 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 except (jt=lb)
   8=104, 6=104.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced
   standard ANSI/TPI 1.

LOAD CASE(S) Standard

April 13,2023

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LOADING (psf)	**SPACING-** 2-0-0	**CSI.**	**DEFL.** in (loc) l/defl L/d	**PLATES** **GRIP**
TCLL 20.0	Plate Grip DOL 1.15	TC 0.25	Vert(LL) n/a - n/a 999	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.17	Vert(CT) n/a - n/a 999	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.05	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.1
BOT CHORD   2x4 SP No.1
OTHERS   2x4 SP No.2

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

REACTIONS. (lb/size) 1=193/10-8-8 (min. 0-1-8), 3=193/10-8-8 (min. 0-1-8), 4=393/10-8-8 (min. 0-1-8)
Max Horz 1=-78(LC 6)
Max Uplift 1=-28(LC 10), 3=-35(LC 11), 4=-5(LC 10)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope)
   and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced
   standard ANSI/TPI 1.

LOAD CASE(S) Standard

SEAL
036322
ERIC A. GILBERT
NORTH CAROLINA
PROFESSIONAL ENGINEER

April 13,2023

ENGINEERING BY
TRENCO
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818 Soundside Road
Edenton, NC 27932

3-7-4
3-7-4
7-2-8
3-7-4

4x4 ═

Scale = 1:16.6

8.00 ⎡12

2-4-13

0-0-4

0-0-4

2x4 ⫽   2x4 ‖   2x4 ⟍

4

7-2-8
7-2-8

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	0.13	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	YES	WB	0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 24 lb	FT = 20%

LUMBER-
TOP CHORD   2x4 SP No.1
BOT CHORD   2x4 SP No.1
OTHERS   2x4 SP No.2

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

REACTIONS.   (lb/size)   1=136/7-2-8 (min. 0-1-8), 3=136/7-2-8 (min. 0-1-8), 4=228/7-2-8 (min. 0-1-8)
Max Horz   1=-50(LC 6)
Max Uplift   1=-24(LC 10), 3=-29(LC 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=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf 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.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

SEAL
036322
ERIC A. GILBERT
NORTH CAROLINA
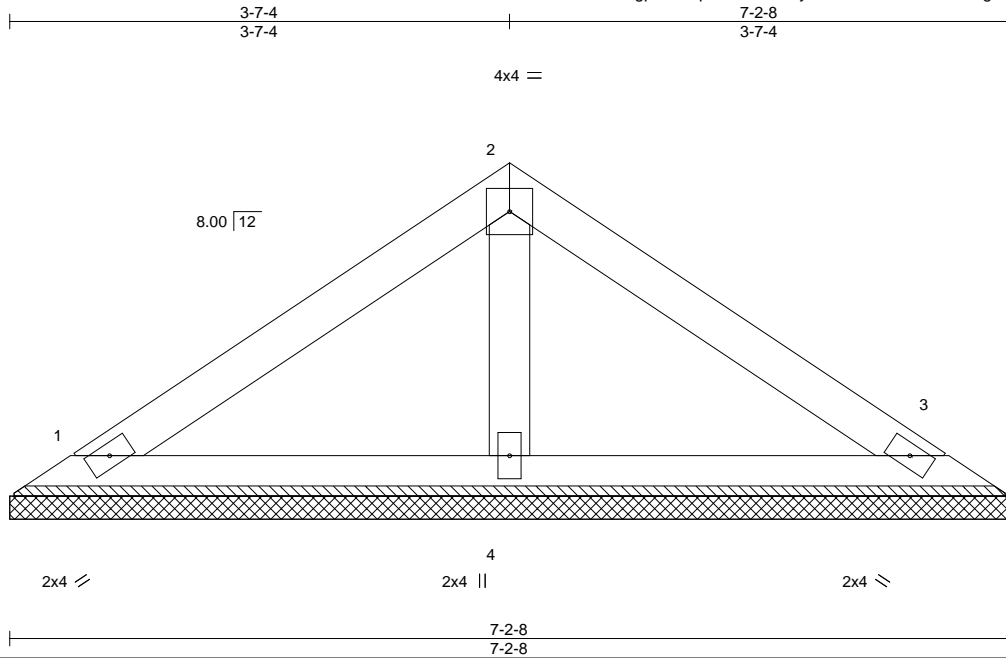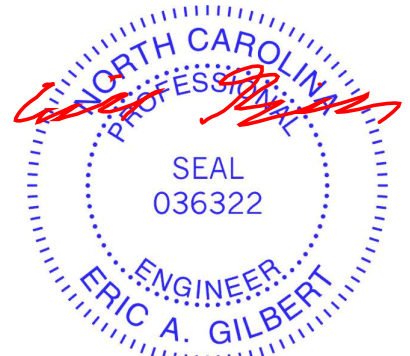PROFESSIONAL ENGINEER

April 13,2023

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 1 West Pointe III/Harnett	
J0923-5060	VC6	VALLEY	1	1		I57749362
					Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Apr 13 10:43:42 2023 Page 1
ID:nGEYJn1QAngpJfECepmG8Mz?may-_mJn4O8iEcw1UKRbBlBUjRCrVhKyO?8u6YktVfzR9JF
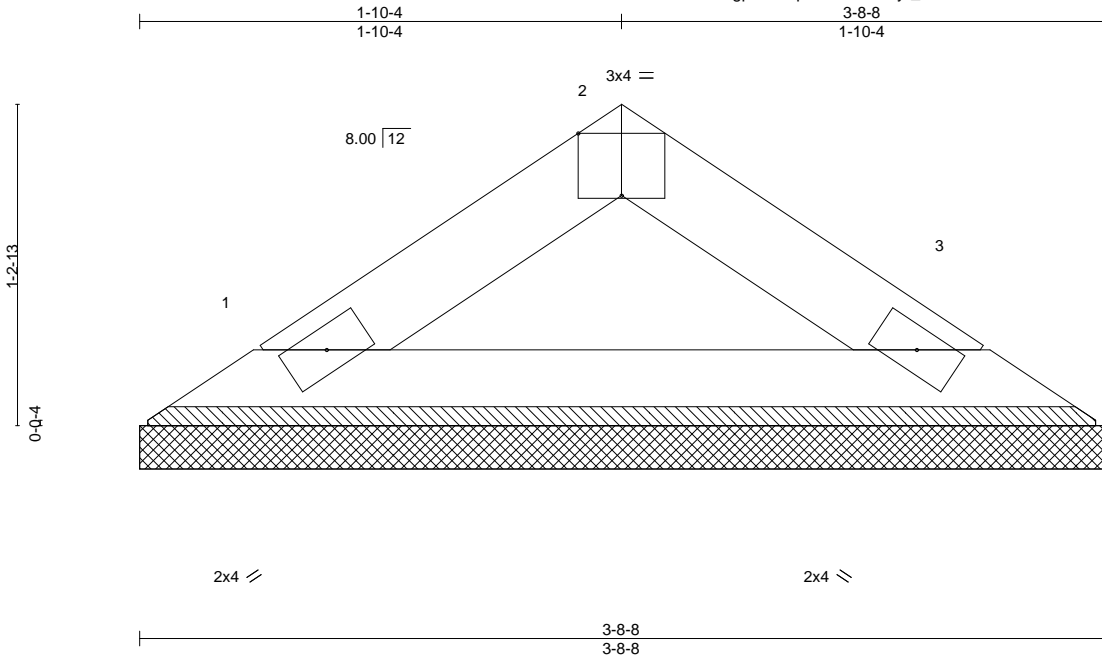
Scale = 1:8.9

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.02	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	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.1
BOT CHORD   2x4 SP No.1

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

REACTIONS.   (lb/size)   1=110/3-8-8 (min. 0-1-8), 3=110/3-8-8 (min. 0-1-8)
Max Horz 1=-22(LC 6)
Max Uplift 1=-9(LC 10), 3=-9(LC 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=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope)
   and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf 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.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced
   standard ANSI/TPI 1.

LOAD CASE(S) Standard

April 13,2023

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Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION

½"L
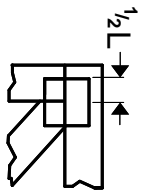
Center plate on joint unless x, y offsets are indicated.
Dimensions are in ft-in-sixteenths.
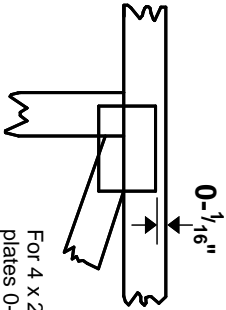Apply plates to both sides of truss and fully embed teeth.

0-¹⁄₁₆"

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

=

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

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

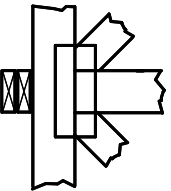## PLATE SIZE

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.
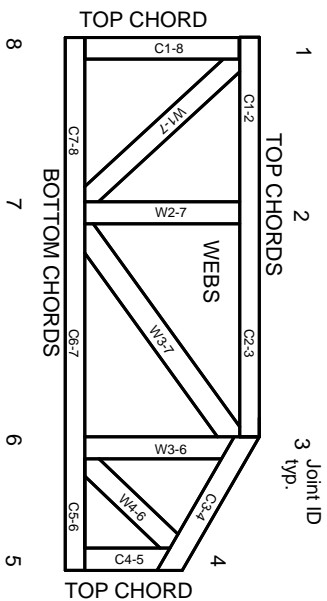
BEARING

Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter 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-22: Design Standard for Bracing.

BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

MiTek Engineering Reference Sheet: MII-7473 rev. 1/2/2023

Numbering System

6-4-8 **dimensions shown in ft-in-sixteenths**
(Drawings not to scale)

3 Joint ID typ.

TOP CHORD

C1-8

C1-2

W1-7

W2-7

TOP CHORDS

WEBS

BOTTOM CHORDS

W3-7

C2-3

C6-7

W3-6

C3-4

W4-6

C5-6

C4-5

TOP CHORD

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-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

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.