

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: J0523-2757  
Southern Touch/ 22 West Preserve/ Harnett

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

Pages or sheets covered by this seal: I58612754 thru I58612773

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

North Carolina COA: C-0844



May 30, 2023

Johnson, Andrew

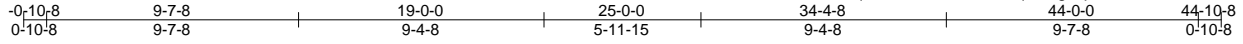
**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes),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

Job J0523-2757	Truss A1	Truss Type PIGGYBACK BASE	Qty 1	Ply 1	Southern Touch/ 22 West Preserve/ Harnett 158612754
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Comtech, Inc. Fayetteville, NC - 28314,

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Scale = 1:88.0

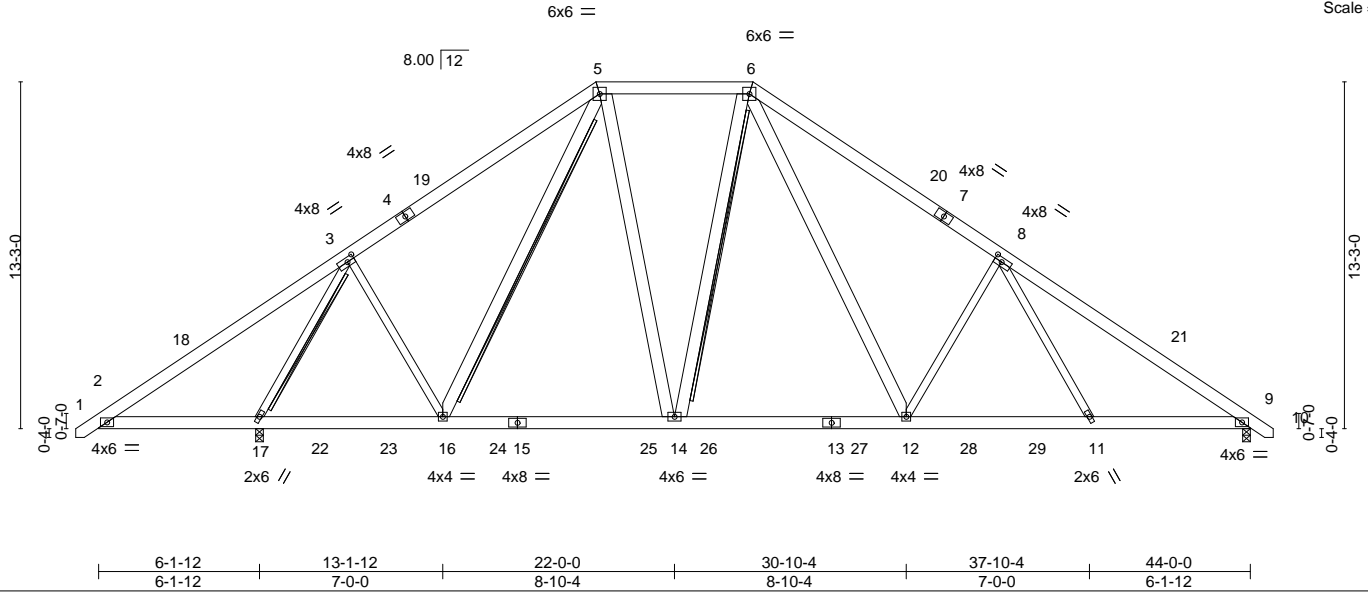


Plate Offsets (X, Y)--	[3:0-3-6,0-2-1], [8:0-3-6,0-2-0]
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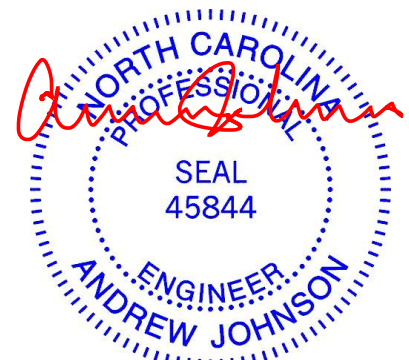
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.47	Vert(LL)	-0.10	12-14	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.45	Vert(CT)	-0.17	12-14	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.68	Horz(CT)	0.05	9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.04	12	>999	240		
									Weight: 394 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-7-4 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-17.
WEBS 2x6 SP No.1 *Except* 3-17,3-16,8-12,8-11: 2x4 SP No.2	WEBS T-Brace: 2x4 SPF No.2 - 3-17, 6-14 2x6 SPF No.2 - 5-16 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

REACTIONS.
(size) 17=0-3-8, 9=0-3-8
Max Horz 17=-316(LC 10)
Max Uplift 17=-107(LC 12), 9=-93(LC 13)
Max Grav 17=2255(LC 2), 9=1722(LC 20)

FORCES.
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-406/690, 3-5=-1437/385, 5-6=-1265/435, 6-8=-2194/565, 8-9=-2621/429
BOT CHORD 2-17=-460/457, 16-17=-180/960, 14-16=-13/1234, 12-14=0/1320, 11-12=-220/1919, 9-11=-192/2035
WEBS 3-17=-2289/707, 3-16=-21/658, 8-12=-735/361, 8-11=0/310, 5-16=-283/132, 6-14=-277/181, 5-14=-69/680, 6-12=-230/1021

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-9 to 3-8-4, Interior(1) 3-8-4 to 19-0-14, Exterior(2) 19-0-14 to 31-1-13, Interior(1) 31-1-13 to 44-8-9 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 107 lb uplift at joint 17 and 93 lb uplift at joint 9.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



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Job	Truss	Truss Type	Qty	Ply	Southern Touch/ 22 West Preserve/ Harnett
J0523-2757	A1SE	GABLE	1	1	I58612755

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0-10-8	9-7-8	19-0-0	19-3-0	24-9-0	25-0-0	34-4-8	44-0-0	44-10-8
0-10-8	9-7-8	9-4-8	0-3-0	5-5-15	0-3-0	9-4-8	9-7-8	0-10-8

Scale = 1:88.0

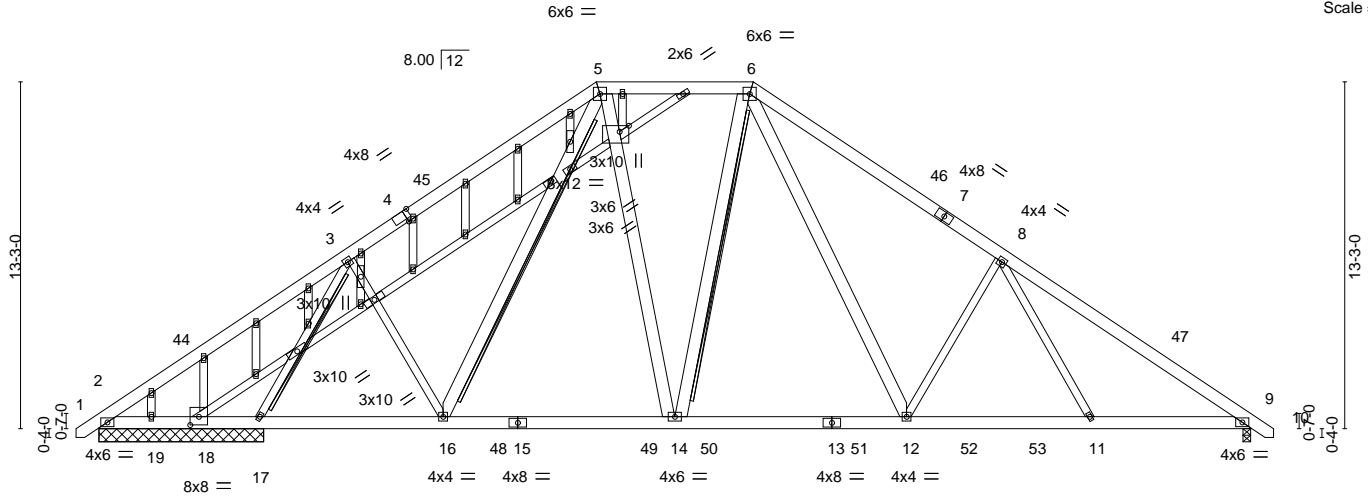


Plate Offsets (X,Y)--	[4:0-2-3,Edge], [18:0-4-0,0-3-12], [21:0-4-4,0-2-12]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.40	Vert(LL)	-0.10 12-14	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.46	Vert(CT)	-0.17 12-14	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.67	Horz(CT)	0.05 9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.05 12	>999	240		

Weight: 453 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-7-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except*	WEBS T-Brace: 2x4 SPF No.2 - 3-17, 6-14 2x6 SPF No.2 - 5-16
OTHERS 6-14,5-14,5-16,6-12: 2x6 SP No.1 2x4 SP No.2	Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

**REACTIONS.** All bearings 6-3-8 except (jt=length) 9=0-3-8.  
 (lb) - Max Horz 2=395(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 2 except 17=357(LC 12), 9=323(LC 13), 18=122(LC 1), 19=205(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 18 except 17=1932(LC 19), 9=1730(LC 20), 19=356(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-166/359, 3-5=-1479/491, 5-6=-1302/477, 6-8=-2198/608, 8-9=-2625/471  
 BOT CHORD 2-19=-269/294, 18-19=-269/294, 17-18=-269/294, 16-17=-222/1055, 14-16=-87/1245, 12-14=0/1312, 11-12=-269/1935, 9-11=-241/2044  
 WEBS 3-17=-2044/465, 3-16=-30/583, 8-12=-734/479, 8-11=0/310, 6-14=-266/214, 5-16=-259/135, 5-14=-103/681, 6-12=-342/1042

- 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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-8-9 to 3-8-4, Interior(1) 3-8-4 to 19-0-14, Exterior(2) 19-0-14 to 31-1-13, Interior(1) 31-1-13 to 44-8-9 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) Provide adequate drainage to prevent water ponding.
  - 5) All plates are 2x4 MT20 unless otherwise indicated.
  - 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, with BCDL = 10.0psf.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 17=357, 9=323, 18=122, 19=205.
  - 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 11) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



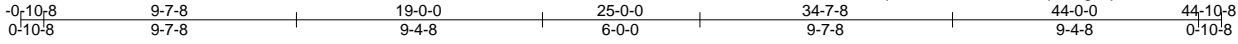
May 30, 2023

Job	Truss	Truss Type	Qty	Ply	Southern Touch/ 22 West Preserve/ Harnett	158612756
J0523-2757	A2	PIGGYBACK BASE	5	1	Job Reference (optional)	

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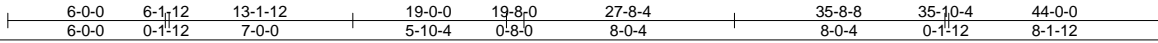
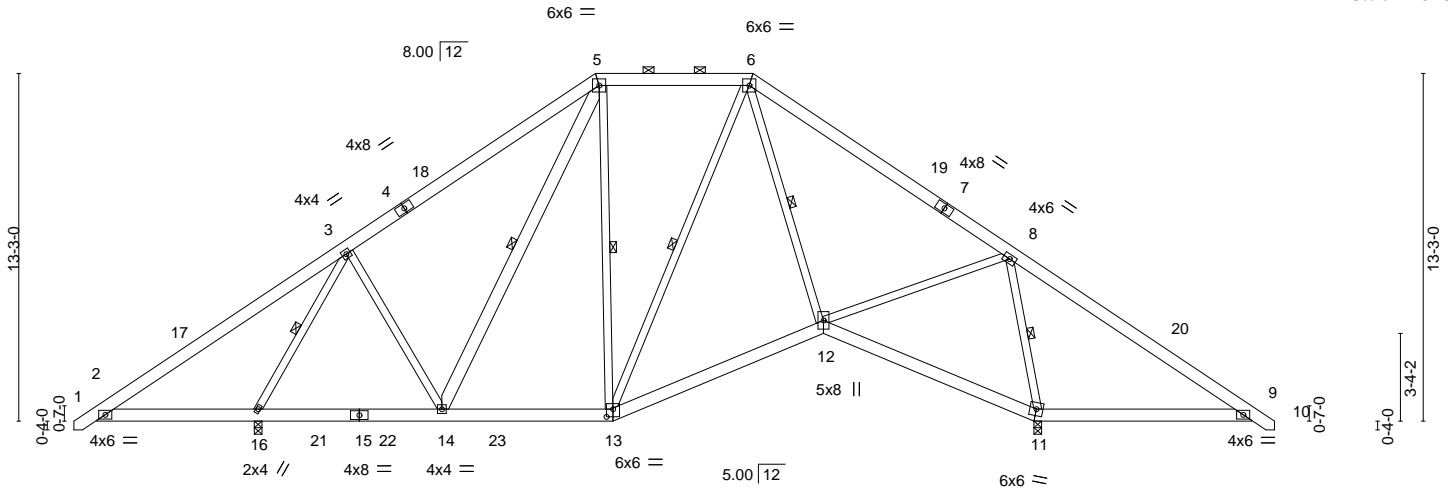


Plate Offsets (X,Y)--	[13:0-3-0,0-3-8]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.50	Vert(LL) -0.04 12-13 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.21	Vert(CT) -0.10 12-13 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.41	Horz(CT) 0.03 11 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.02 13-14 >999 240	Weight: 358 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 5-14: 2x6 SP No.1

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-6.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS 1 Row at midpt 3-16, 6-12, 8-11, 5-14, 6-13, 5-13

**REACTIONS.** (size) 11=0-3-8, 16=0-3-8  
 Max Horz 16=-316(LC 10)  
 Max Uplift 11=-118(LC 13), 16=-111(LC 12)  
 Max Grav 11=1938(LC 1), 16=1684(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-408/689, 3-5=-895/254, 5-6=-700/287, 6-8=-873/97, 8-9=-478/752  
 BOT CHORD 2-16=-461/458, 14-16=-210/657, 13-14=-63/686, 12-13=-30/746, 11-12=-353/495,  
 9-11=-497/510  
 WEBS 3-16=-1653/575, 8-12=-6/867, 6-12=-69/440, 3-14=-38/368, 8-11=-1658/536

- 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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-8-9 to 3-8-4, Interior(1) 3-8-4 to 19-0-13, Exterior(2) 19-0-13 to 31-1-13, Interior(1) 31-1-13 to 44-8-9 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 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) except (jt=lb) 11=118, 16=111.
  - 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 30, 2023

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



Job J0523-2757	Truss A3	Truss Type PIGGYBACK BASE	Qty 2	Ply 1	Southern Touch/ 22 West Preserve/ Harnett 158612757
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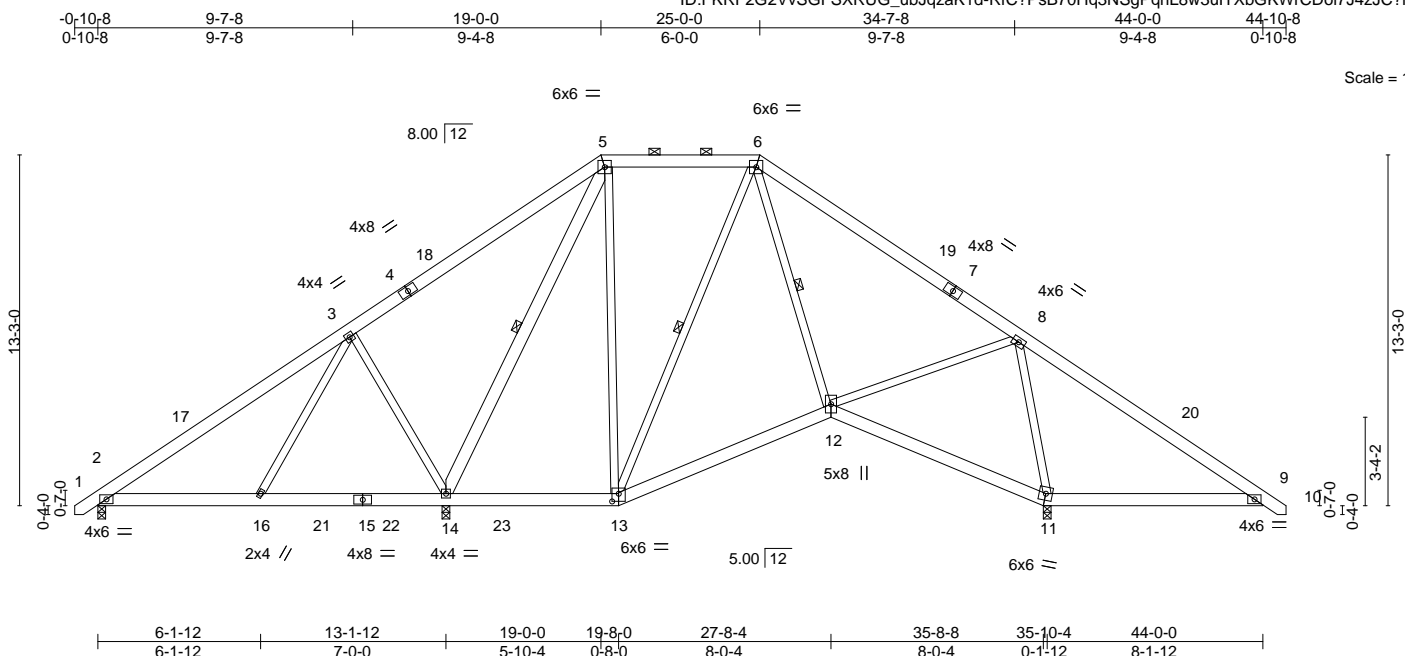


Plate Offsets (X,Y)--	[13:0-3:0,0-3:8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.50	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.20	Vert(LL) -0.04 12-13 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.91	Vert(CT) -0.09 12-13 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.02 11 n/a n/a		
	Code IRC2015/TP12014		Wind(LL) 0.02 2-16 >999 240	Weight: 358 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except
BOT CHORD 2x6 SP No.1	2-0-0 oc purlins (6-0-0 max.): 5-6.
WEBS 2x4 SP No.2 *Except* 5-14: 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
	WEBS 1 Row at midpt 6-12, 5-14, 6-13

**REACTIONS.** (size) 2=0-3-8, 11=0-3-8, 14=0-3-8  
 Max Horz 2=-316(LC 10)  
 Max Uplift 2=-66(LC 8), 11=-131(LC 13), 14=-209(LC 9)  
 Max Grav 2=493(LC 23), 11=1683(LC 1), 14=1535(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-471/240, 3-5=-135/350, 5-6=-386/206, 6-8=-507/50, 8-9=-478/752  
 BOT CHORD 2-16=-183/343, 14-16=-132/269, 13-14=-112/315, 12-13=-112/446, 11-12=-393/506,  
 9-11=-497/510  
 WEBS 3-16=-293/330, 8-12=0/582, 6-12=-100/447, 3-14=-738/529, 8-11=-1387/461,  
 5-14=-838/146, 6-13=-252/11, 5-13=-5/355

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-9 to 3-8-4, Interior(1) 3-8-4 to 19-0-13, Exterior(2) 19-0-13 to 31-1-13, Interior(1) 31-1-13 to 44-8-9 zone; cantilever right exposed ; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 11=131, 14=209.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

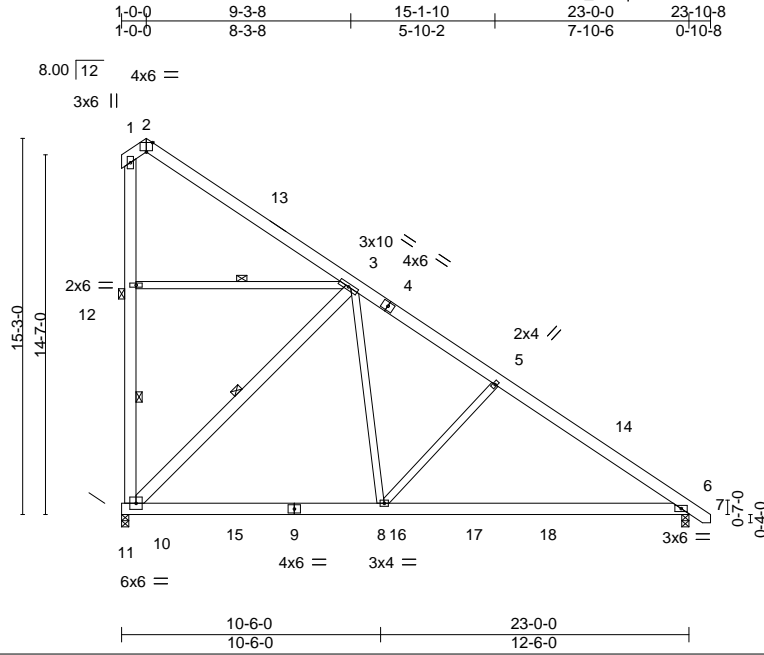


Job	Truss	Truss Type	Qty	Ply	Southern Touch/ 22 West Preserve/ Harnett	158612758
J0523-2757	A4	ROOF SPECIAL	2	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

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Scale = 1:93.4

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

LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.29	Vert(LL) -0.13	6-8	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.56	Vert(CT) -0.28	6-8	>970	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.45	Horz(CT) 0.02	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.03	6-8	>999	240		
							Weight: 219 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.2 \*Except\*  
1-10,3-10: 2x6 SP No.1

**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.  
WEBS 1 Row at midpt 10-12, 3-10, 3-12  
JOINTS 1 Brace at Jt(s): 12

**REACTIONS.**

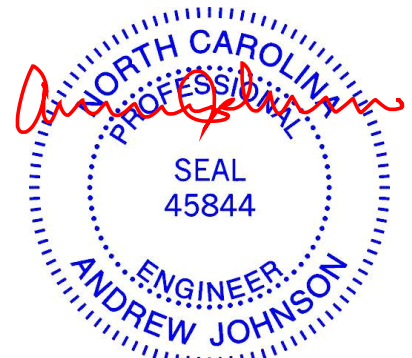
(size) 10=0-3-8, 6=0-3-8  
Max Horz 10=-482(LC 13)  
Max Uplift 10=-236(LC 13)  
Max Grav 10=1177(LC 20), 6=1071(LC 20)

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

TOP CHORD 3-5=-1052/0, 5-6=-1298/0, 10-12=-259/166, 1-12=-259/166  
BOT CHORD 8-10=0/743, 6-8=0/987  
WEBS 5-8=-424/234, 3-10=-1116/335, 3-8=-26/850

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 5-4-13, Interior(1) 5-4-13 to 23-8-9 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=236.



May 30, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
Edenton, NC 27932

Job J0523-2757	Truss A5	Truss Type ROOF SPECIAL	Qty 1	Ply 1	Southern Touch/ 22 West Preserve/ Harnett I58612759
					Job Reference (optional)

Comtech, Inc. Fayetteville, NC - 28314,

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ID:FKRF2G2VvSGFSXRUG\_ubJqzaK1d-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcD0i7J4zJC?f

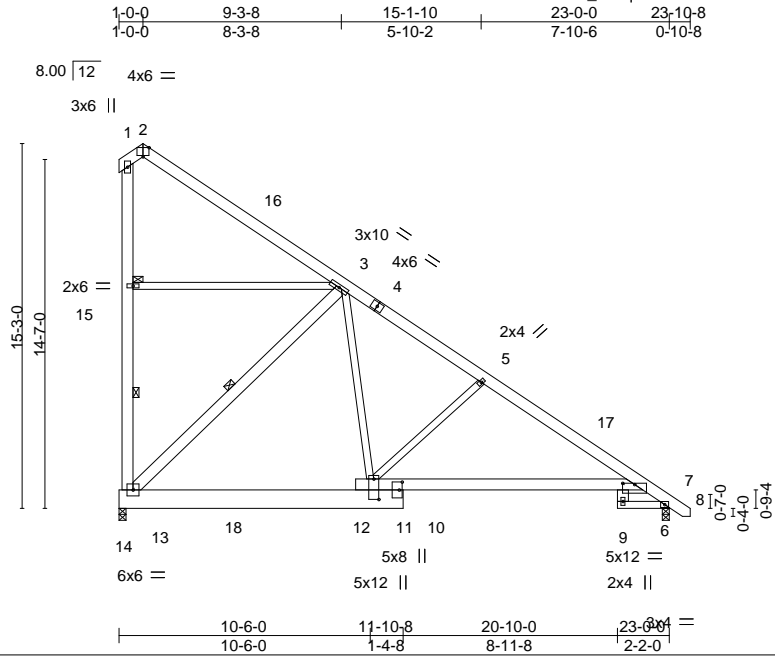


Plate Offsets (X,Y)-- [2:0-3-0,Edge], [6:0-6-0,0-0-10], [10:0-4-0,0-1-8], [11:0-10-4,0-2-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.53	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.34	Vert(LL) -0.11 6-11 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.44	Vert(CT) -0.27 6-11 >986 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.13 7 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.06 9 >999 240	Weight: 241 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1 \*Except\*  
10-14: 2x10 SP No.1, 7-9: 2x4 SP No.1  
WEBS 2x6 SP No.1 \*Except\*  
5-11,3-11,3-15: 2x4 SP No.2

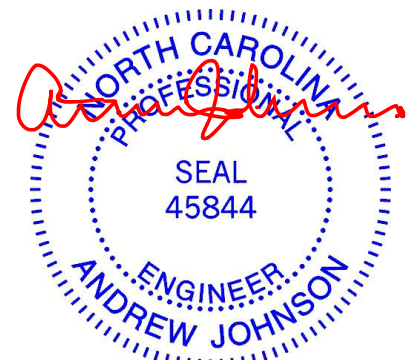
**REACTIONS.** (size) 7=0-3-8, 13=0-3-8  
Max Horz 13=482(LC 13)  
Max Uplift 13=232(LC 13)  
Max Grav 7=996(LC 20), 13=1128(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 3-5=-1070/0, 5-6=-1331/0, 6-7=-629/36, 13-15=-258/165, 1-15=-258/166  
BOT CHORD 11-13=0/809, 6-11=0/1074  
WEBS 5-11=-480/199, 3-13=-1123/302, 3-11=0/867

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-4-14 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 7-9.  
WEBS 1 Row at midpt 13-15, 3-13  
JOINTS 1 Brace at Jt(s): 15

**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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 5-4-13, Interior(1) 5-4-13 to 23-8-9 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) except (jt=lb) 13=232.



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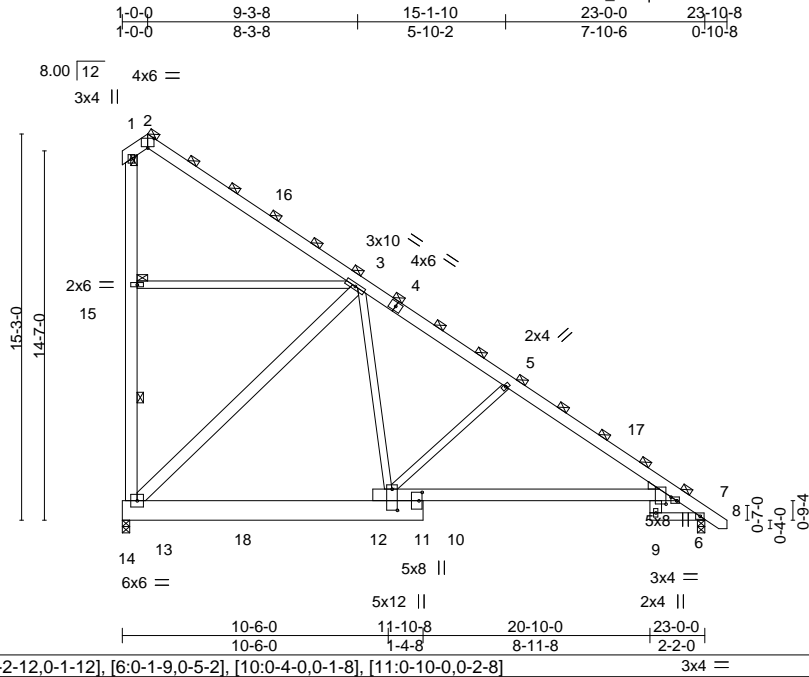
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>818 Soundside Road Edenton, NC 27932</p>
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Job J0523-2757	Truss A6	Truss Type ROOF SPECIAL	Qty 1	Ply 2	Southern Touch/ 22 West Preserve/ Harnett 158612760
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Scale = 1:91.0

Plate Offsets (X, Y)--	[2:0-3-0,Edge], [6:0-2-12,0-1-12], [6:0-1-9,0-5-2], [10:0-4-0,0-1-8], [11:0-10-0,0-2-8]	3x4 =
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<b>LOADING</b> (psf)	<b>SPACING-</b>	3-6-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.54	Vert(LL)	-0.10	6-11	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.33	Vert(CT)	-0.24	6-11	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.63	Horz(CT)	0.11	7	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.05	9	>999		
								Weight: 483 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals
BOT CHORD 2x6 SP No.1 *Except* 10-14: 2x10 SP No.1, 7-9: 2x4 SP No.1	(Switched from sheeted: Spacing > 2-8-0).
WEBS 2x6 SP No.1 *Except* 5-11,3-11,3-15: 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 7-9.
WEDGE Right: 2x4 SP No.3	WEBS 1 Row at midpt 13-15
	JOINTS 1 Brace at Jt(s): 2, 1, 15

<b>REACTIONS.</b>	(size) 7=0-3-8, 13=0-3-8
	Max Horz 13=844(LC 13)
	Max Uplift 13=406(LC 13)
	Max Grav 7=1743(LC 20), 13=1973(LC 20)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-335/222, 2-3=-377/108, 3-5=-1872/0, 5-6=-2330/0, 6-7=-1101/63, 13-15=-451/290, 1-15=-452/290
BOT CHORD	11-13=0/1415, 6-11=0/1879
WEBS	5-11=-841/349, 3-13=-1966/528, 3-11=0/1517

- NOTES-**
- 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: 2x10 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
  - 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.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 5-4-13, Interior(1) 5-4-13 to 23-8-9 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=406.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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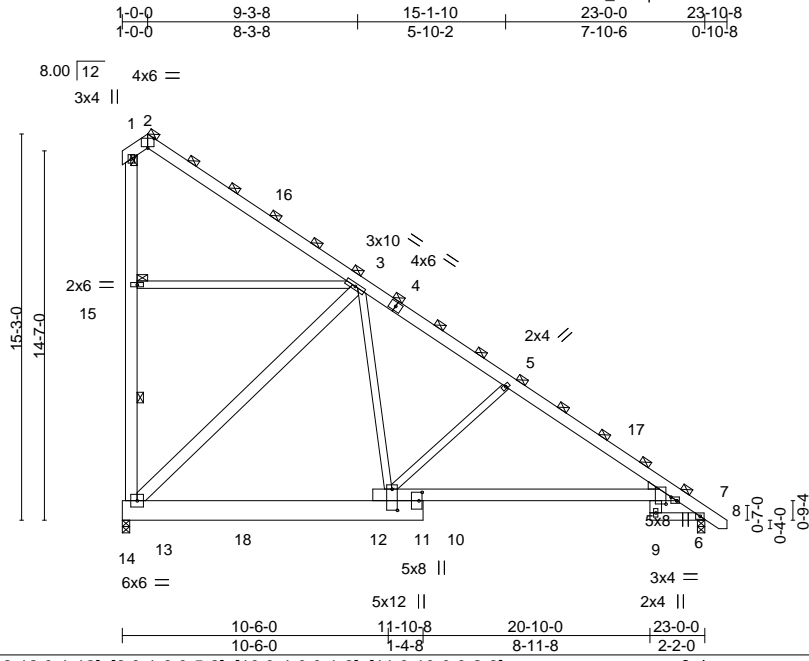


Job J0523-2757	Truss A7	Truss Type ROOF SPECIAL	Qty 1	Ply 2	Southern Touch/ 22 West Preserve/ Harnett 158612761
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Scale = 1:91.0

Plate Offsets (X,Y)--	[2:0-3-0,Edge], [6:0-2-12,0-1-12], [6:0-1-9,0-5-2], [10:0-4-0,0-1-8], [11:0-10-0,0-2-8]	3x4 =
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<b>LOADING</b> (psf)	<b>SPACING-</b>	3-6-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.54	Vert(LL)	-0.10	6-11	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.33	Vert(CT)	-0.24	6-11	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.63	Horz(CT)	0.11	7	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.05	9	>999	Weight: 483 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals
BOT CHORD 2x6 SP No.1 *Except* 10-14: 2x10 SP No.1, 7-9: 2x4 SP No.1	(Switched from sheeted: Spacing > 2-8-0).
WEBS 2x6 SP No.1 *Except* 5-11,3-11,3-15: 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 7-9.
WEDGE Right: 2x4 SP No.3	WEBS 1 Row at midpt 13-15
	JOINTS 1 Brace at Jt(s): 2, 1, 15

**REACTIONS.** (size) 7=0-3-8, 13=0-3-8  
 Max Horz 13=844(LC 13)  
 Max Uplift 13=406(LC 13)  
 Max Grav 7=1743(LC 20), 13=1973(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-335/222, 2-3=-377/108, 3-5=-1872/0, 5-6=-2330/0, 6-7=-1101/63, 13-15=-451/290,  
 1-15=-452/290  
 BOT CHORD 11-13=0/1415, 6-11=0/1879  
 WEBS 5-11=-841/349, 3-13=-1966/528, 3-11=0/1517

- NOTES-**
- 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: 2x10 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
  - 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.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 5-4-13, Interior(1) 5-4-13 to 23-8-9 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=406.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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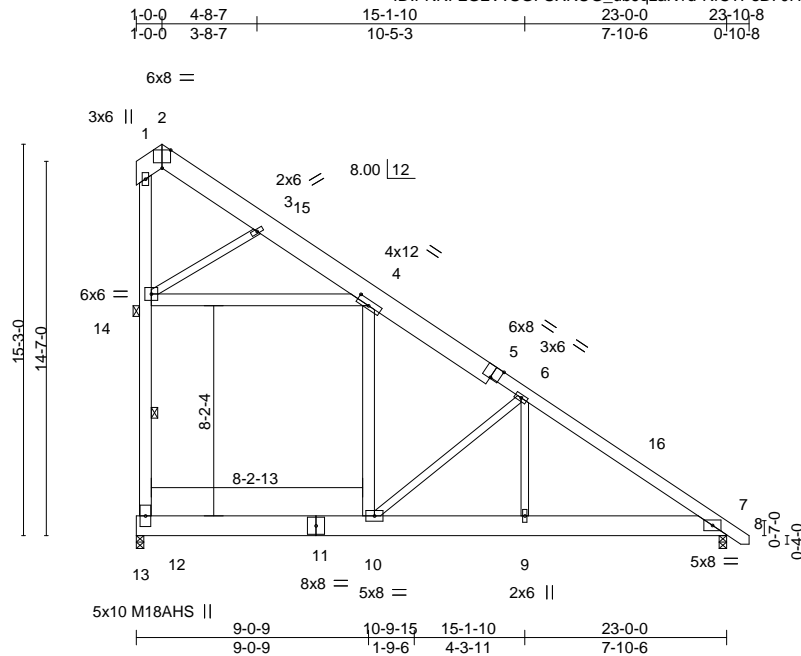
<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>ENGINEERING BY  <b>TRENCO</b>          A MiTek Affiliate</p> <p>818 Soundside Road          Edenton, NC 27932</p>
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Job J0523-2757	Truss A8	Truss Type ROOF TRUSS	Qty 1	Ply 2	Southern Touch/ 22 West Preserve/ Harnett 158612762
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Comtech, Inc. Fayetteville, NC - 28314,

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Scale = 1:89.8

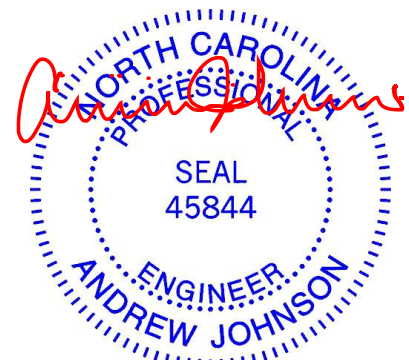
LOADING (psf)	SPACING-	2-8-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.73	Vert(LL)	-0.21	10	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.33	Vert(CT)	-0.46	10	>587	M18AHS	186/179
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.48	Horz(CT)	0.01	7	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.17	10	>999		
								Weight: 563 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x10 SP No.1 *Except* 5-8: 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x10 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x6 SP No.1 *Except* 6-9,6-10,3-14: 2x4 SP No.2	WEBS 1 Row at midpt 12-14 1 Brace at Jt(s): 14
	JOINTS

**REACTIONS.** (size) 12=0-3-8, 7=0-3-8  
 Max Horz 12=-633(LC 13)  
 Max Uplift 12=-7(LC 13)  
 Max Grav 12=2288(LC 21), 7=1482(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 3-4=-808/104, 4-6=-829/128, 6-7=-2233/92, 12-14=-1091/133  
 BOT CHORD 10-12=-119/629, 9-10=0/1720, 7-9=0/1720  
 WEBS 4-14=-184/957, 6-9=0/1086, 4-10=0/833, 6-10=-2198/295, 3-14=-1790/225

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
  - 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.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 5-4-13, Interior(1) 5-4-13 to 23-8-9 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - All plates are MT20 plates unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* 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.
  - Ceiling dead load (10.0 psf) on member(s). 4-14; Wall dead load (5.0psf) on member(s).4-10
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 10-12
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12.
  - Attic room checked for L/360 deflection.



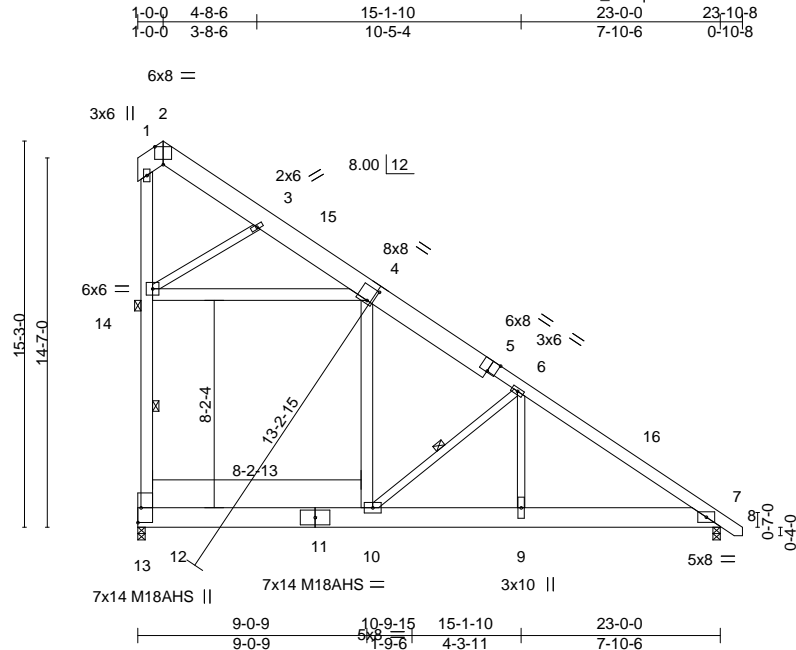
May 30, 2023

Job J0523-2757	Truss A9	Truss Type ROOF TRUSS	Qty 3	Ply 1	Southern Touch/ 22 West Preserve/ Harnett I58612763
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Comtech, Inc. Fayetteville, NC - 28314,

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Scale = 1:91.0

Plate Offsets (X,Y)--	[2:0-4-0,Edge], [4:0-2-12,0-6-8], [5:0-4-0,Edge]
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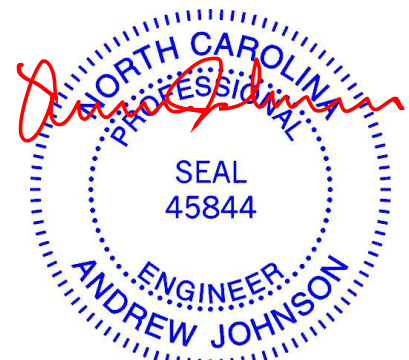
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.96	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.45	Vert(LL) -0.32 10 >844 360	M18AHS	186/179
BCLL 0.0 *	Lumber DOL 1.15	WB 0.60	Vert(CT) -0.69 10 >392 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 7 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.26 10 >999 240	Weight: 282 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x10 SP No.1 *Except* 5-8: 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x10 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 8-6-0 oc bracing.
WEBS 2x6 SP No.1 *Except* 6-9,6-10,3-14: 2x4 SP No.2	WEBS 1 Row at midpt 12-14, 6-10
	JOINTS 1 Brace at Jt(s): 14

**REACTIONS.** (size) 12=0-3-8, 7=0-3-8  
 Max Horz 12=-475(LC 13)  
 Max Uplift 12=-5(LC 13)  
 Max Grav 12=1716(LC 21), 7=1111(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 3-4=-606/78, 4-6=-622/96, 6-7=-1675/69, 12-14=-818/100  
 BOT CHORD 10-12=-89/471, 9-10=0/1290, 7-9=0/1290  
 WEBS 4-14=-138/718, 6-9=0/815, 4-10=0/624, 6-10=-1648/221, 3-14=-1342/169

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 5-4-13, Interior(1) 5-4-13 to 23-8-9 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) All plates are MT20 plates unless otherwise indicated.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 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) Ceiling dead load (10.0 psf) on member(s). 4-14; Wall dead load (5.0psf) on member(s). 4-10
  - 7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 10-12
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12.
  - 9) Attic room checked for L/360 deflection.



May 30, 2023

Job J0523-2757	Truss A9GE	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	Southern Touch/ 22 West Preserve/ Harnett 158612764
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon May 29 10:28:22 2023 Page 1

ID:FKRF2G2VvSGFSXRUG\_ubJqzaK1d-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f

1-0-0 23-0-0 23-10-8  
1-0-0 22-0-0 0-10-8

8.00  $\sqrt{12}$  5x5 =

Scale = 1:89.2

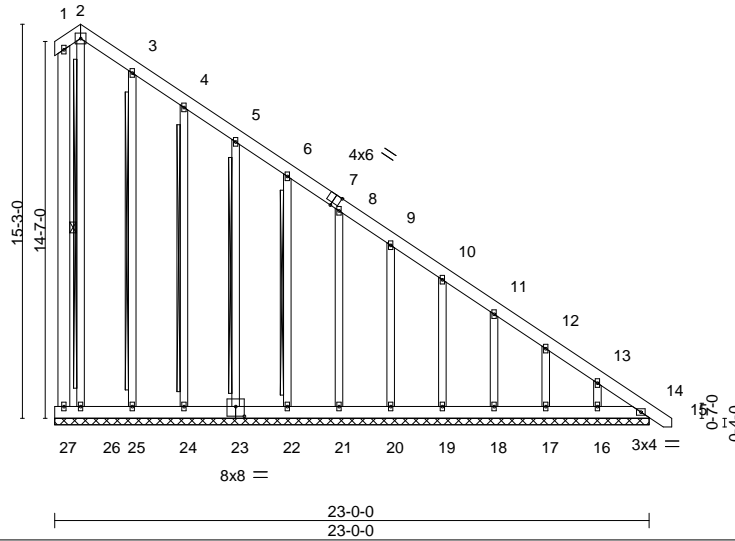


Plate Offsets (X,Y)--	[7:0-3-0,Edge], [23:0-4-0,0-4-8]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.06	Vert(LL) 0.00 14 n/r 120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.06	Vert(CT) 0.00 14 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.16	Horz(CT) 0.01 14 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 280 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x6 SP No.1	WEBS 1 Row at midpt 1-27
OTHERS 2x4 SP No.2	T-Brace: 2x4 SPF No.2 - 3-25, 4-24, 5-23, 6-22 2x6 SPF No.2 - 2-26
	Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

**REACTIONS.** All bearings 23-0-0.  
(lb) - Max Horz 27=695(LC 13)  
Max Uplift All uplift 100 lb or less at joint(s) 27, 26, 25, 24, 23, 22, 21, 20, 19, 18, 17 except 16=116(LC 13), 14=100(LC 11)  
Max Grav All reactions 250 lb or less at joint(s) 27, 26, 25, 24, 23, 22, 21, 20, 19, 18, 17, 16 except 14=414(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 5-6=-254/197, 6-8=-329/256, 8-9=-404/314, 9-10=-479/373, 10-11=-554/432, 11-12=-629/491, 12-13=-705/550, 13-14=-794/626  
BOT CHORD 26-27=-536/694, 25-26=-536/694, 24-25=-536/694, 23-24=-536/694, 22-23=-536/694, 21-22=-536/694, 20-21=-536/694, 19-20=-536/694, 18-19=-536/694, 17-18=-536/694, 16-17=-536/694, 14-16=-536/694

- 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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-4-4 to 5-4-13, Exterior(2) 5-4-13 to 23-8-9 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) 27, 26, 25, 24, 23, 22, 21, 20, 19, 18, 17 except (jt=lb) 16=116, 14=100.
  - 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



Job	Truss	Truss Type	Qty	Ply	Southern Touch/ 22 West Preserve/ Harnett	158612765
J0523-2757	B1	PIGGYBACK BASE	5	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Tue May 30 07:29:10 2023 Page 1  
 ID:FKRF2G2VvSGFSXRUG\_ubJqzaK1d-\_jwNffflHjVX7woodjIR4x2XYzsjkXmU1yED7zBYCd

0-10-8	7-2-2	14-0-0	18-0-0	22-0-0	26-0-0	32-9-15	40-0-0	40-10-8
0-10-8	7-2-2	6-9-14	4-0-0	4-0-0	4-0-0	6-9-15	7-2-1	0-10-8

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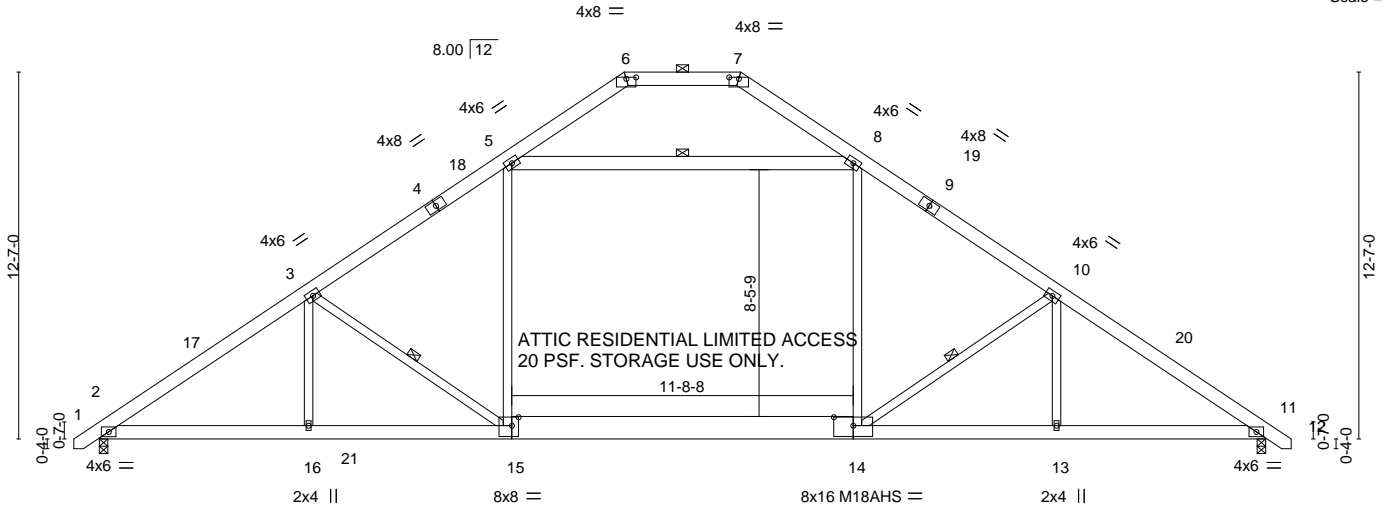


Plate Offsets (X,Y)--	[6:0-4-0,0-0-10], [7:0-4-0,0-0-10], [14:0-8-0,0-3-8], [15:0-2-12,0-3-8]
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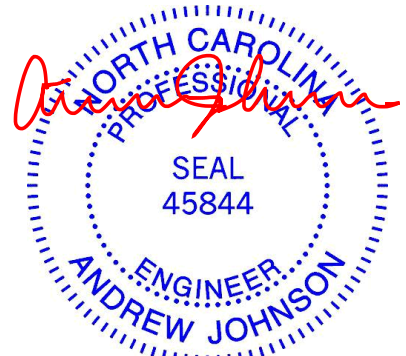
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.32	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.66	Vert(LL) -0.49 15-16 >973 360	M18AHS	186/179
BCLL 0.0 *	Lumber DOL 1.15	WB 0.64	Vert(CT) -0.54 15-16 >876 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.07 11 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.30 15-16 >999 240		
				Weight: 319 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-4-14 oc purlins, except
BOT CHORD 2x6 SP No.1 *Except*	2-0-0 oc purlins (6-0-0 max.): 6-7.
11-14: 2x6 SP 2400F 2.0E, 14-15: 2x10 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except*	WEBS 1 Row at midpt 3-15, 10-14, 5-8
5-8: 2x6 SP No.1	

**REACTIONS.** (size) 2=0-3-8, 11=0-3-8  
 Max Horz 2=300(LC 11)  
 Max Uplift 2=89(LC 12), 11=89(LC 13)  
 Max Grav 2=1948(LC 19), 11=1836(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3065/502, 3-5=-2470/527, 5-6=-459/219, 6-7=-311/210, 7-8=-459/219,  
 8-10=-2452/528, 10-11=-2797/502  
 BOT CHORD 2-16=-296/2651, 15-16=-296/2652, 14-15=-112/2051, 13-14=-298/2204, 11-13=-298/2202  
 WEBS 3-16=-30/344, 3-15=-744/237, 5-15=-21/918, 8-14=-20/822, 10-13=-111/266,  
 10-14=-651/246, 5-8=-1736/391

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-9 to 3-8-4, Interior(1) 3-8-4 to 18-0-13, Exterior(2) 18-0-13 to 28-1-13, Interior(1) 28-1-13 to 40-8-9 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 89 lb uplift at joint 2 and 89 lb uplift at joint 11.
  - 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.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 30, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



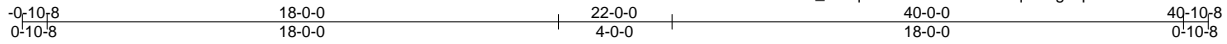
818 Soundside Road  
 Edenton, NC 27932

Job J0523-2757	Truss B1GE	Truss Type GABLE	Qty 1	Ply 1	Southern Touch/ 22 West Preserve/ Harnett 158612766
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon May 29 10:28:25 2023 Page 1

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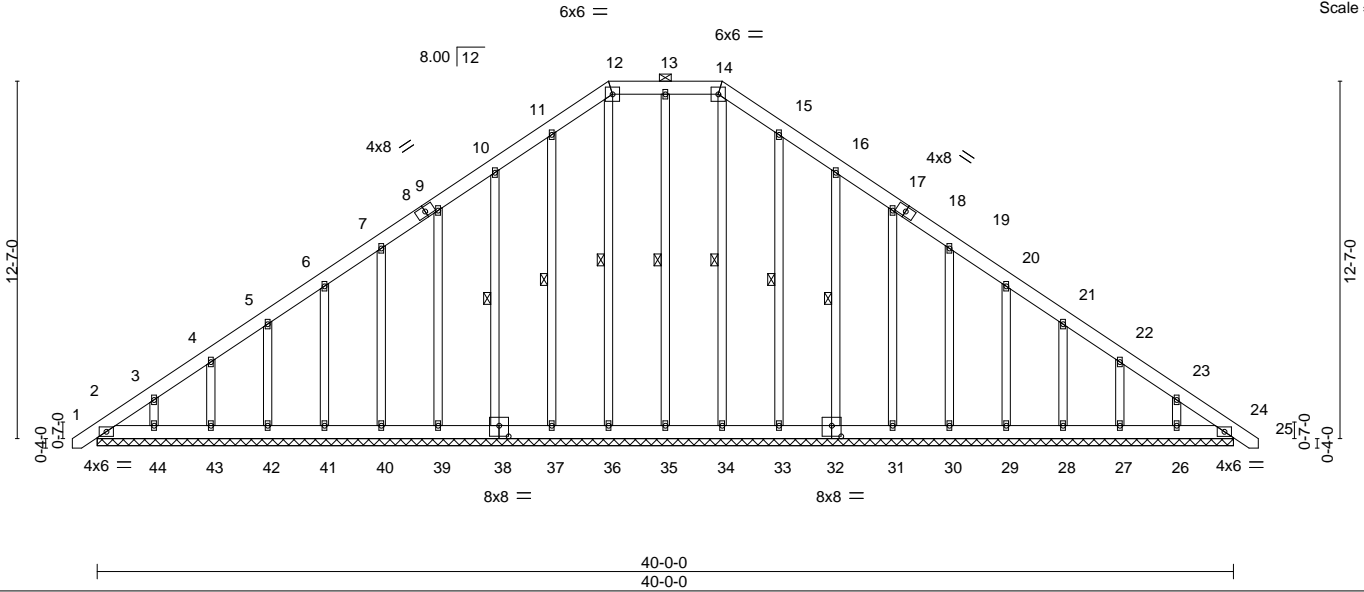


Plate Offsets (X, Y)--	[32:0-4-0,0-4-8], [38:0-4-0,0-4-8]
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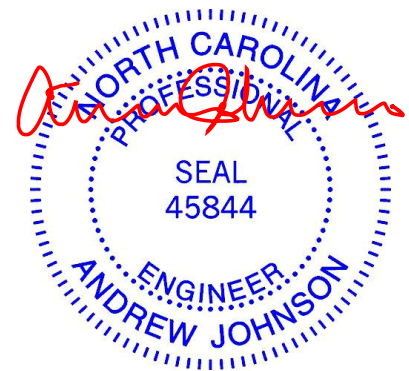
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	0.00	24	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	0.00	24	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.16	Horz(CT)	0.01	24	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 397 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 12-14.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.2	WEBS 1 Row at midpt 13-35, 12-36, 11-37, 10-38, 14-34, 15-33, 16-32

**REACTIONS.** All bearings 40-0-0.  
 (lb) - Max Horz 2--375(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 38, 32, 24, 35, 36, 37, 39, 40, 41, 42, 43, 33, 31, 30, 29, 28, 27, 26 except 2--115(LC 8), 44--103(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 38, 32, 24, 35, 36, 37, 39, 40, 41, 42, 43, 44, 34, 33, 31, 30, 29, 28, 27, 26

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3--369/305, 3-4--287/270, 9-10--212/285, 10-11--274/330, 11-12--321/373, 12-13--289/343, 13-14--289/343, 14-15--321/373, 15-16--274/316, 23-24--267/183  
 BOT CHORD 2-44--165/263, 43-44--165/263, 42-43--165/263, 41-42--165/263, 40-41--165/263, 39-40--165/263, 38-39--165/263, 37-38--168/263, 36-37--168/263, 35-36--168/264, 34-35--168/264, 33-34--168/264, 32-33--168/264, 31-32--165/262, 30-31--165/262, 29-30--165/262, 28-29--165/262, 27-28--165/262, 26-27--165/262, 24-26--165/262

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-8-9 to 3-8-4, Exterior(2) 3-8-4 to 18-0-13, Corner(3) 18-0-13 to 26-3-15, Exterior(2) 26-3-15 to 40-8-9 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - Provide adequate drainage to prevent water ponding.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 38, 32, 24, 35, 36, 37, 39, 40, 41, 42, 43, 33, 31, 30, 29, 28, 27, 26 except (jt=lb) 2=115, 44=103.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

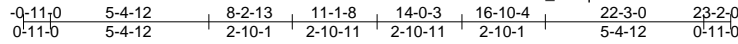


Job J0523-2757	Truss C1	Truss Type ATTIC	Qty 1	Ply 1	Southern Touch/ 22 West Preserve/ Harnett 158612767
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon May 29 10:28:27 2023 Page 1

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6x8 =

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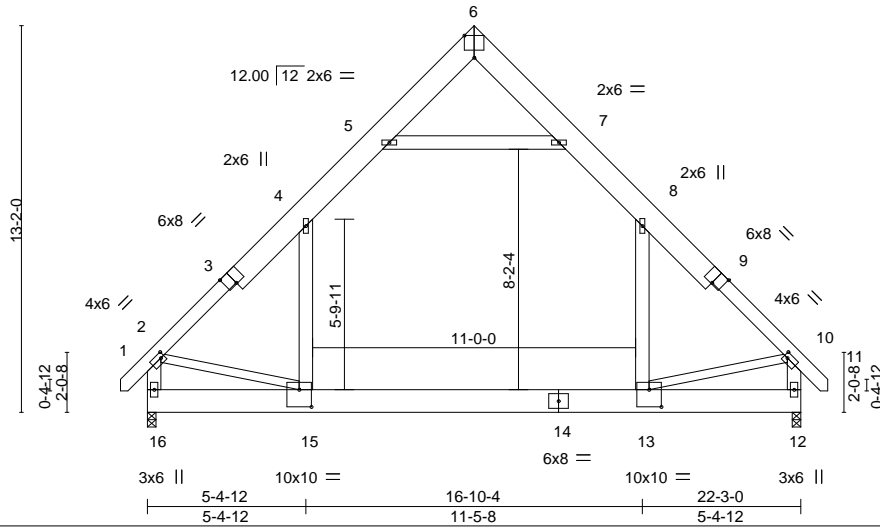


Plate Offsets (X,Y)--	[2:0-1-8,0-2-0], [3:0-4-0,Edge], [6:0-4-0,Edge], [9:0-4-0,Edge], [10:0-1-8,0-2-0], [13:0-5-0,0-7-0], [15:0-5-0,0-7-0]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.33	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.58	Vert(LL) -0.12 13-15 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.31	Vert(CT) -0.19 13-15 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 12 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.05 15 >999 240	Weight: 267 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x10 SP No.1 *Except* 1-3,9-11: 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-9-4 oc purlins, except end verticals.
BOT CHORD 2x10 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x6 SP No.1 *Except* 2-15,10-13: 2x4 SP No.2	

**REACTIONS.** (size) 16=0-3-8, 12=0-3-8  
 Max Horz 16=-419(LC 10)  
 Max Grav 16=1469(LC 21), 12=1469(LC 20)

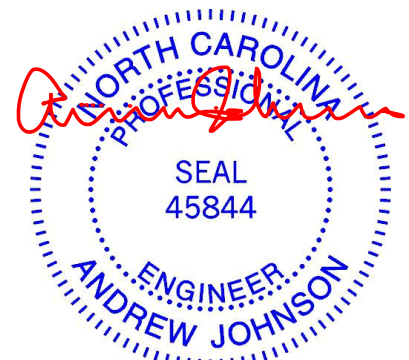
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-4=-1676/22, 4-5=-1046/187, 7-8=-1045/187, 8-10=-1675/22, 2-16=-1615/65, 10-12=-1616/65

BOT CHORD 15-16=-426/556, 13-15=0/1123

WEBS 5-7=-1196/266, 4-15=0/744, 8-13=0/744, 2-15=-2/1037, 10-13=-11/1043

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-9-0 to 3-7-13, Exterior(2) 3-7-13 to 11-2-0, Corner(3) 11-2-0 to 15-6-13, Exterior(2) 15-6-13 to 23-1-0 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* 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.
  - Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s). 4-15, 8-13
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-15
  - Attic room checked for L/360 deflection.



May 30, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

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

**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate

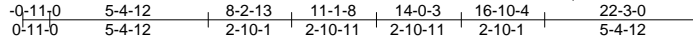
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Southern Touch/ 22 West Preserve/ Harnett	158612768
J0523-2757	C2	ATTIC	8	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon May 29 10:28:28 2023 Page 1

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6x8 =

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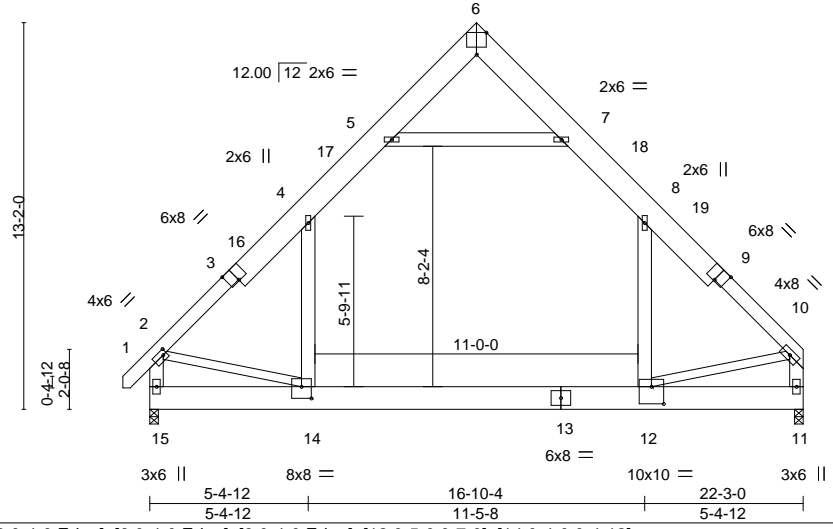


Plate Offsets (X,Y)-- [2:0-1-8,0-2-0], [3:0-4-0,Edge], [6:0-4-0,Edge], [9:0-4-0,Edge], [12:0-5-0,0-7-0], [14:0-4-0,0-4-12]

<b>LOADING</b> (psf)	<b>SPACING</b> -	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.34	Vert(LL)	-0.12 12-14	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.58	Vert(CT)	-0.19 12-14	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.31	Horz(CT)	0.01 11	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.04 12	>999	240	Weight: 265 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x10 SP No.1 *Except* 1-3,9-10: 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-8-7 oc purlins, except end verticals.
BOT CHORD 2x10 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x6 SP No.1 *Except* 2-14,10-12: 2x4 SP No.2	

**REACTIONS.** (size) 15=0-3-8, 11=0-3-8  
Max Horz 15=272(LC 9)  
Max Grav 15=1475(LC 21), 11=1433(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-1666/0, 4-5=-1039/147, 7-8=-1042/152, 8-10=-1651/0, 2-15=-1611/29,  
10-11=-1562/0  
BOT CHORD 14-15=-307/417, 12-14=0/1076  
WEBS 5-7=-1217/194, 4-14=0/749, 8-12=0/724, 2-14=0/997, 10-12=0/1033

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-0 to 3-7-13, Interior(1) 3-7-13 to 11-2-0, Exterior(2) 11-2-0 to 15-6-13, Interior(1) 15-6-13 to 22-0-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* 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.
  - Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s). 4-14, 8-12
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-14
  - Attic room checked for L/360 deflection.



May 30, 2023



Job J0523-2757	Truss C3	Truss Type ATTIC	Qty 1	Ply 2	Southern Touch/ 22 West Preserve/ Harnett 158612769
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Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Mon May 29 10:28:29 2023 Page 1

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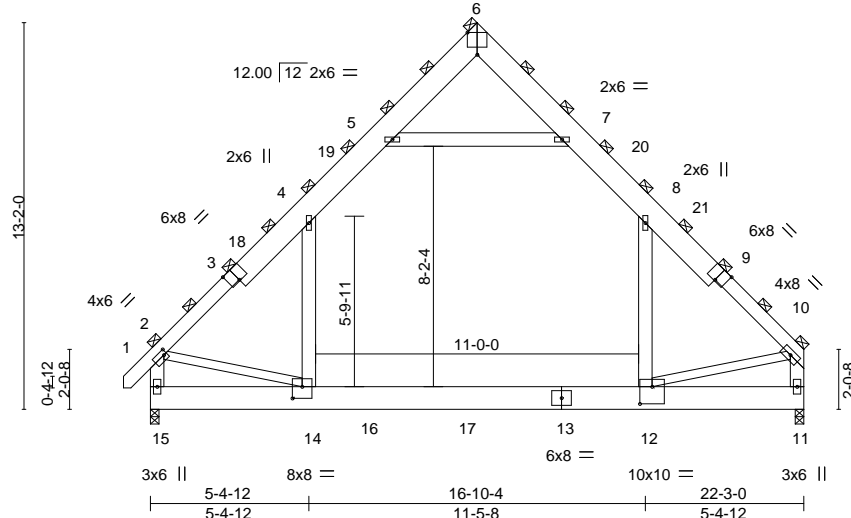
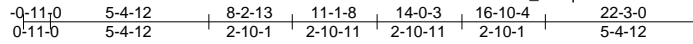


Plate Offsets (X,Y)-- [2:0-1-4,0-2-0], [3:0-4-0,Edge], [6:0-4-0,Edge], [9:0-4-0,Edge], [12:0-5-0,0-7-0], [14:0-4-0,0-4-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	3-0-0	TC 0.45	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.76	Vert(LL) -0.13 12-14 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.24	Vert(CT) -0.21 12-14 >999 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.01 11 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.04 12-14 >999 240	Weight: 530 lb	FT = 20%

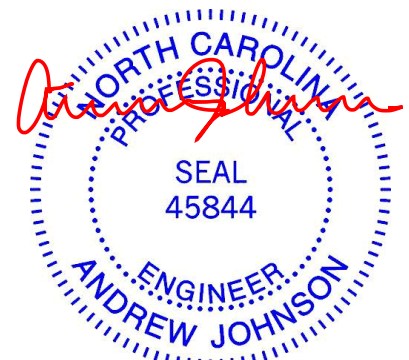
LUMBER-	BRACING-
TOP CHORD 2x10 SP No.1 *Except* 1-3,9-10: 2x6 SP No.1	TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals (Switched from sheeted: Spacing > 2-8-0).
BOT CHORD 2x10 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x6 SP No.1 *Except* 2-14,10-12: 2x4 SP No.2	

**REACTIONS.** (size) 15=0-3-8, 11=0-3-8  
 Max Horz 15=-461(LC 10)  
 Max Grav 15=2877(LC 20), 11=2607(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-3274/63, 4-5=-1852/261, 5-6=-58/490, 6-7=-72/405, 7-8=-1953/285,  
 8-10=-3208/49, 2-15=-3160/153, 10-11=-3041/60  
 BOT CHORD 14-15=-482/759, 12-14=0/2113  
 WEBS 5-7=-2537/394, 4-14=0/1708, 8-12=0/1470, 2-14=0/1866, 10-12=0/2104

- NOTES-**
- 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, 2x10 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
  - 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.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-0 to 3-7-13, Interior(1) 3-7-13 to 11-2-0, Exterior(2) 11-2-0 to 15-6-13, Interior(1) 15-6-13 to 22-0-12 zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* 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.
  - Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s). 4-14, 8-12
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-14
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 565 lb down and 76 lb up at 7-4-8, and 565 lb down and 76 lb up at 10-8-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard



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Continued on page 2

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

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

Job J0523-2757	Truss C3	Truss Type ATTIC	Qty 1	Ply <b>2</b>	Southern Touch/ 22 West Preserve/ Harnett I58612769 Job Reference (optional)
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8.430 s Jan 6 2022 MiTek Industries, Inc. Mon May 29 10:28:29 2023 Page 2  
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**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 14-15=-30, 12-14=-60, 11-12=-30, 1-2=-90, 2-4=-90, 4-5=-120, 5-6=-90, 6-7=-90, 7-8=-120, 8-10=-90, 5-7=-30

Drag: 4-14=-15, 8-12=-15

Concentrated Loads (lb)

Vert: 16=-300(B) 17=-300(B)

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

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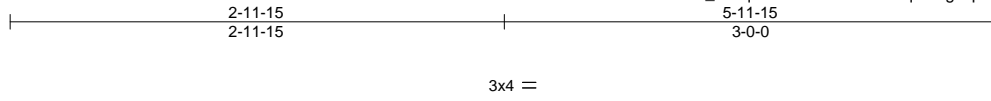
818 Soundside Road  
Edenton, NC 27932

Job J0523-2757	Truss PB	Truss Type PIGGYBACK	Qty 8	Ply 1	Southern Touch/ 22 West Preserve/ Harnett 158612770
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8.430 s Jan 6 2022 MiTek Industries, Inc. Mon May 29 10:28:30 2023 Page 1

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Scale = 1:14.0

Plate Offsets (X,Y)--	[3:0-2-0,Edge]					PLATES	GRIP
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	
TCLL 20.0	Plate Grip DOL 1.15	TC 0.06	Vert(LL) 0.00	5	n/r	120	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.18	Vert(CT) 0.00	5	n/r	120	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00	4	n/a	n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P					Weight: 17 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 5-11-15 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=4-5-11, 4=4-5-11  
Max Horz 2=44(LC 11)  
Max Uplift 2=-17(LC 12), 4=-17(LC 13)  
Max Grav 2=209(LC 1), 4=209(LC 1)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; 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) 2, 4.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



May 30, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



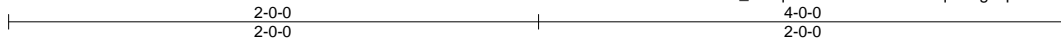
818 Soundside Road  
Edenton, NC 27932

Job J0523-2757	Truss PB2	Truss Type PIGGYBACK	Qty 5	Ply 1	Southern Touch/ 22 West Preserve/ Harnett 158612771
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8.430 s Jan 6 2022 MiTek Industries, Inc. Mon May 29 10:28:31 2023 Page 1

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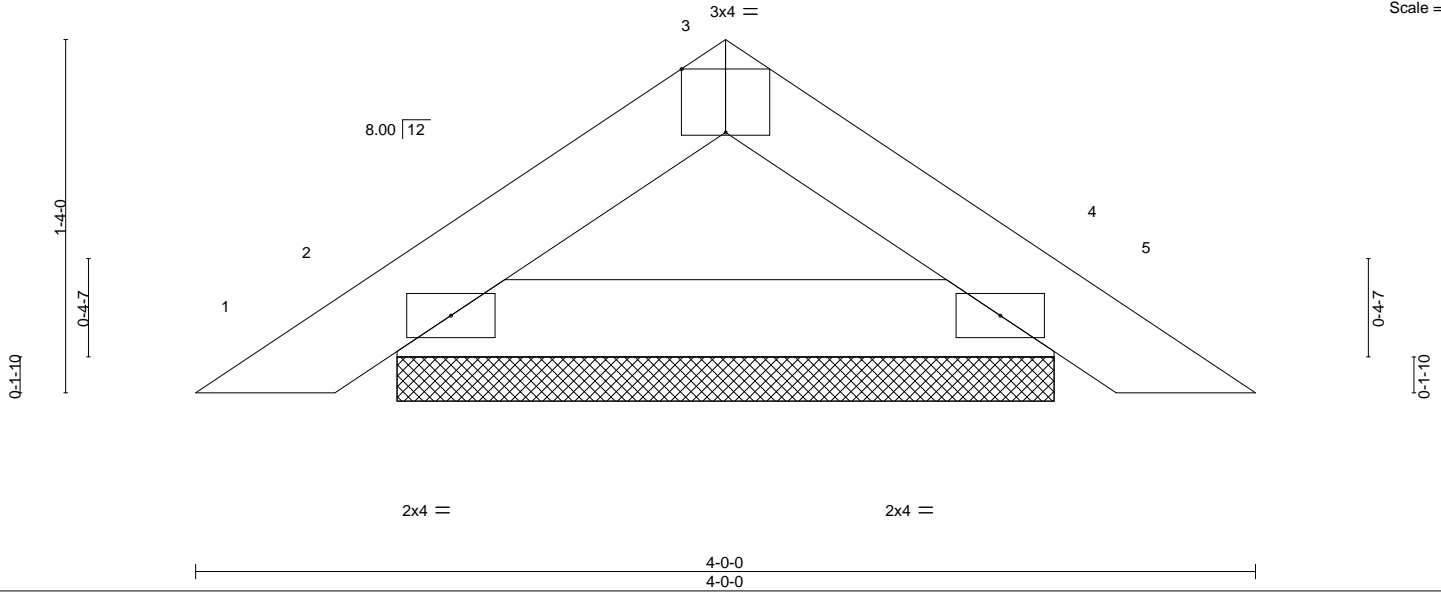


Plate Offsets (X,Y)--	[3:0-2-0,Edge]							
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.02	Vert(LL)	0.00	4	n/r	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	0.00	4	n/r	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	4	n/a	
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P					Weight: 11 lb
								FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 4-0-0 oc purlins.
BOT CHORD	2x4 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=2-5-12, 4=2-5-12  
 Max Horz 2=-28(LC 10)  
 Max Uplift 2=-13(LC 12), 4=-13(LC 13)  
 Max Grav 2=129(LC 1), 4=129(LC 1)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; 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) 2, 4.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



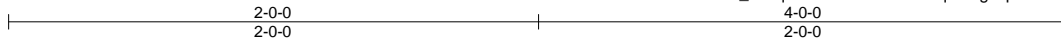
May 30, 2023

Job J0523-2757	Truss PB2GE	Truss Type GABLE	Qty 1	Ply 1	Southern Touch/ 22 West Preserve/ Harnett 158612772
					Job Reference (optional)

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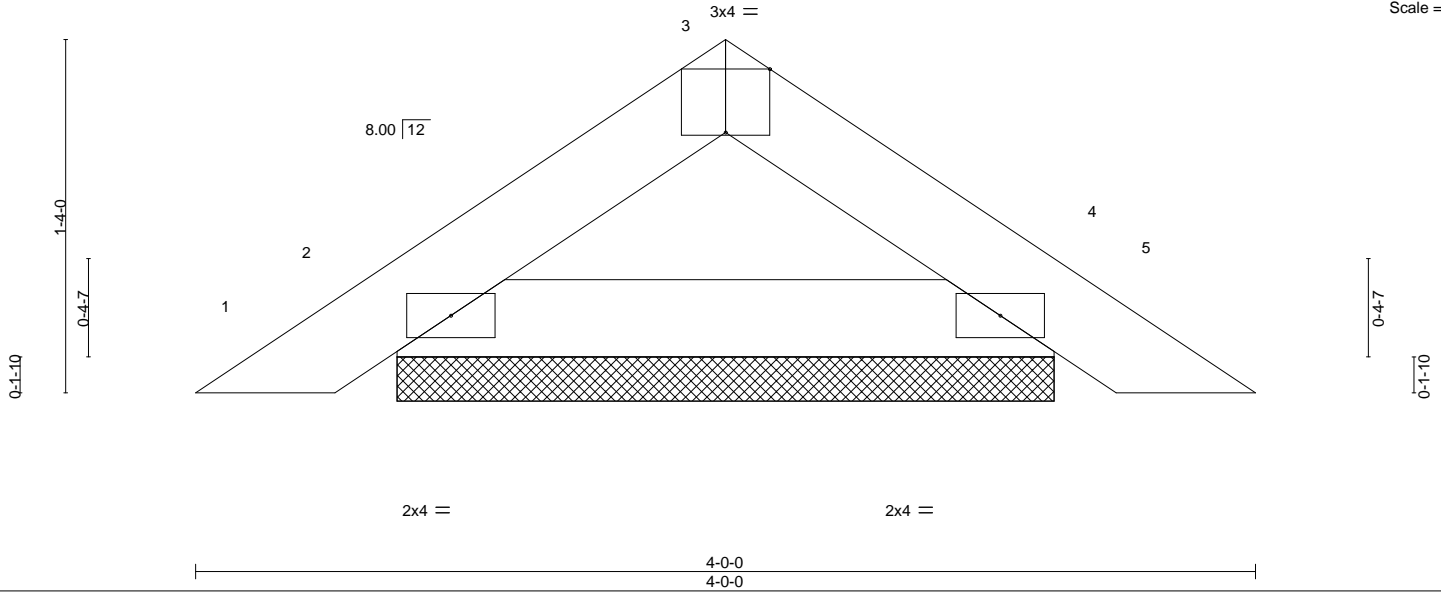


Plate Offsets (X,Y)--	[3:0-2-0,Edge]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15		TC 0.02	Vert(LL) 0.00	4	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15		BC 0.05	Vert(CT) 0.00	4	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES		WB 0.00	Horz(CT) 0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P					Weight: 11 lb	FT = 20%

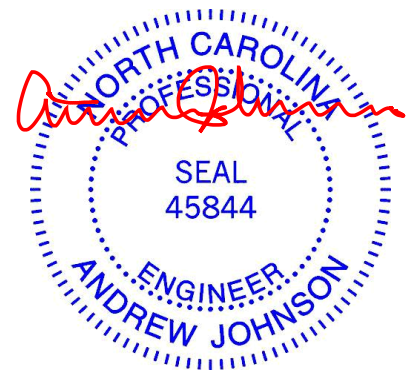
<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD 2x4 SP No.1		TOP CHORD	Structural wood sheathing directly applied or 4-0-0 oc purlins.
BOT CHORD 2x4 SP No.1		BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=2-5-12, 4=2-5-12  
 Max Horz 2=-35(LC 10)  
 Max Uplift 2=-34(LC 12), 4=-34(LC 13)  
 Max Grav 2=129(LC 1), 4=129(LC 1)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 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.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

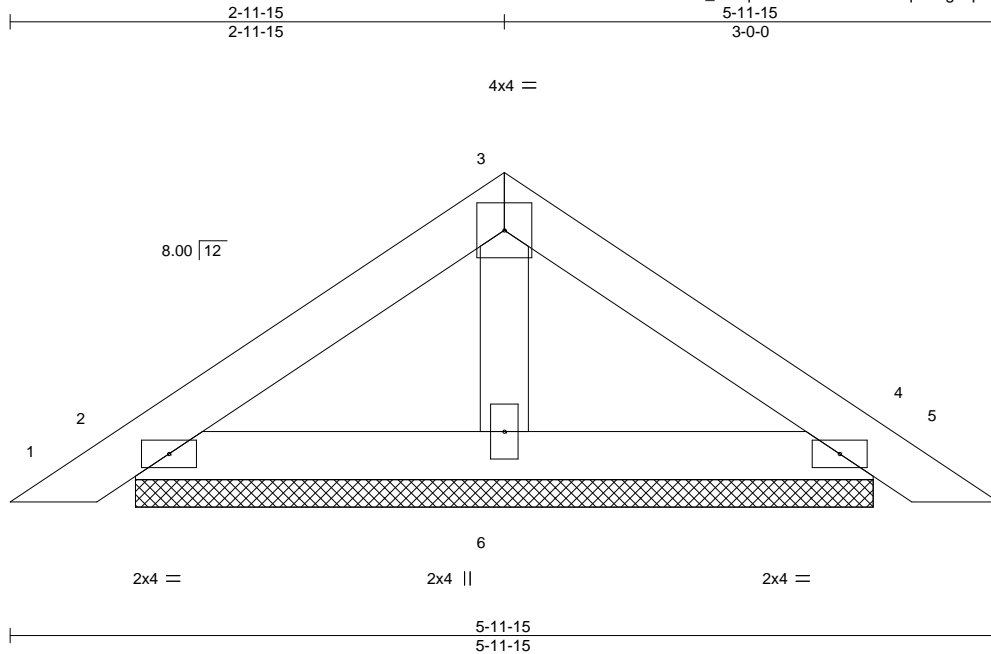


Job J0523-2757	Truss PBGE	Truss Type GABLE	Qty 1	Ply 1	Southern Touch/ 22 West Preserve/ Harnett 158612773
					Job Reference (optional)

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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.06	Vert(LL)	0.00	5	n/r	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.04	Vert(CT)	0.00	5	n/r		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.01	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 19 lb	FT = 20%
	Code IRC2015/TPI2014							

**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 5-11-15 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=4-5-11, 4=4-5-11, 6=4-5-11  
 Max Horz 2=55(LC 11)  
 Max Uplift 2=-49(LC 12), 4=-56(LC 13), 6=-1(LC 12)  
 Max Grav 2=130(LC 1), 4=130(LC 1), 6=158(LC 1)

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 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) Gable requires continuous bottom chord bearing.
  - 5) Gable studs spaced at 2-0-0 oc.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 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.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4, 6.
  - 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



May 30, 2023

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

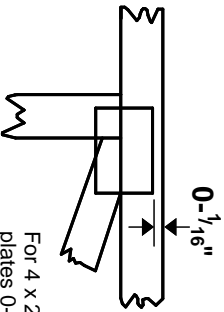
ENGINEERING BY  
**TRENCO**  
 A MiTek Affiliate  
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 Edenton, NC 27932

# Symbols

## PLATE LOCATION AND ORIENTATION



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



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



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

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

## PLATE SIZE

**4 X 4**

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

## LATERAL BRACING LOCATION



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

## BEARING



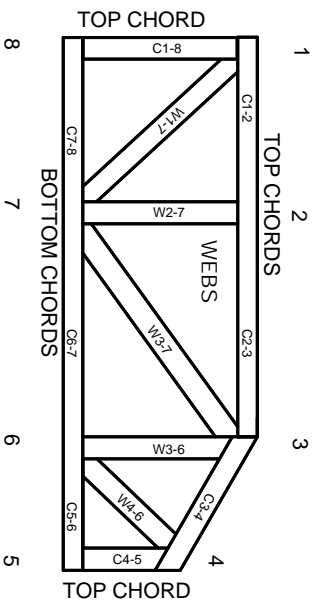
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

### Industry Standards:

ANSI/TPI 1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing, Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System

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



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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MITek Engineering Reference Sheet: MI1-7473 rev. 5/19/2020



# General Safety Notes

## Failure to Follow Could Cause Property Damage or Personal Injury

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