

RE: J0322-1383  
 Southern Touch/Lot 14 Michell Manor

Trenco  
 818 Soundside Rd  
 Edenton, NC 27932

**Site Information:**

Customer: Project Name: J0322-1383  
 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 29 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I50575528	A1	3/4/2022	21	I50575548	VA7	3/4/2022
2	I50575529	A1A	3/4/2022	22	I50575549	VA8	3/4/2022
3	I50575530	A1GE	3/4/2022	23	I50575550	VA9	3/4/2022
4	I50575531	A2	3/4/2022	24	I50575551	VA10	3/4/2022
5	I50575532	A3	3/4/2022	25	I50575552	VA11	3/4/2022
6	I50575533	A4	3/4/2022	26	I50575553	VP1	3/4/2022
7	I50575534	A4A	3/4/2022	27	I50575554	VP2	3/4/2022
8	I50575535	A4GE	3/4/2022	28	I50575555	VP3	3/4/2022
9	I50575536	G1	3/4/2022	29	I50575556	VP4	3/4/2022
10	I50575537	G1GE	3/4/2022				
11	I50575538	P1	3/4/2022				
12	I50575539	P1GE	3/4/2022				
13	I50575540	PB1	3/4/2022				
14	I50575541	PB1GE	3/4/2022				
15	I50575542	VA1	3/4/2022				
16	I50575543	VA2	3/4/2022				
17	I50575544	VA3	3/4/2022				
18	I50575545	VA4	3/4/2022				
19	I50575546	VA5	3/4/2022				
20	I50575547	VA6	3/4/2022				

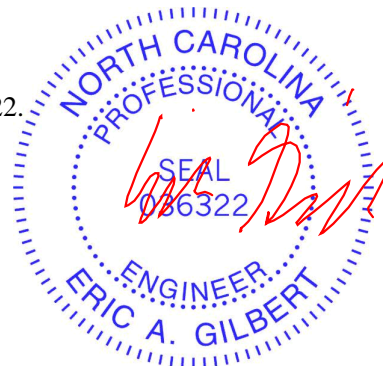
The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Truss Design Engineer's Name: Gilbert, Eric

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

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.



March 04, 2022

Job	Truss	Truss Type	Qty	Ply	Southern Touch/Lot 14 Michell Manor	150575528
J0322-1383	A1	PIGGYBACK BASE	5	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

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ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-d4TzEchElayNv?\_TZ\_U4TDPOGqqVITNrOwedAuzecgP

0-10-8	10-4-12	21-9-0	29-6-0	37-3-0	47-6-0	55-0-0	61-6-0	62-4-8
0-10-8	10-4-12	11-4-4	7-9-0	7-9-0	10-3-0	7-6-0	6-6-0	0-10-8

Scale = 1:114.6

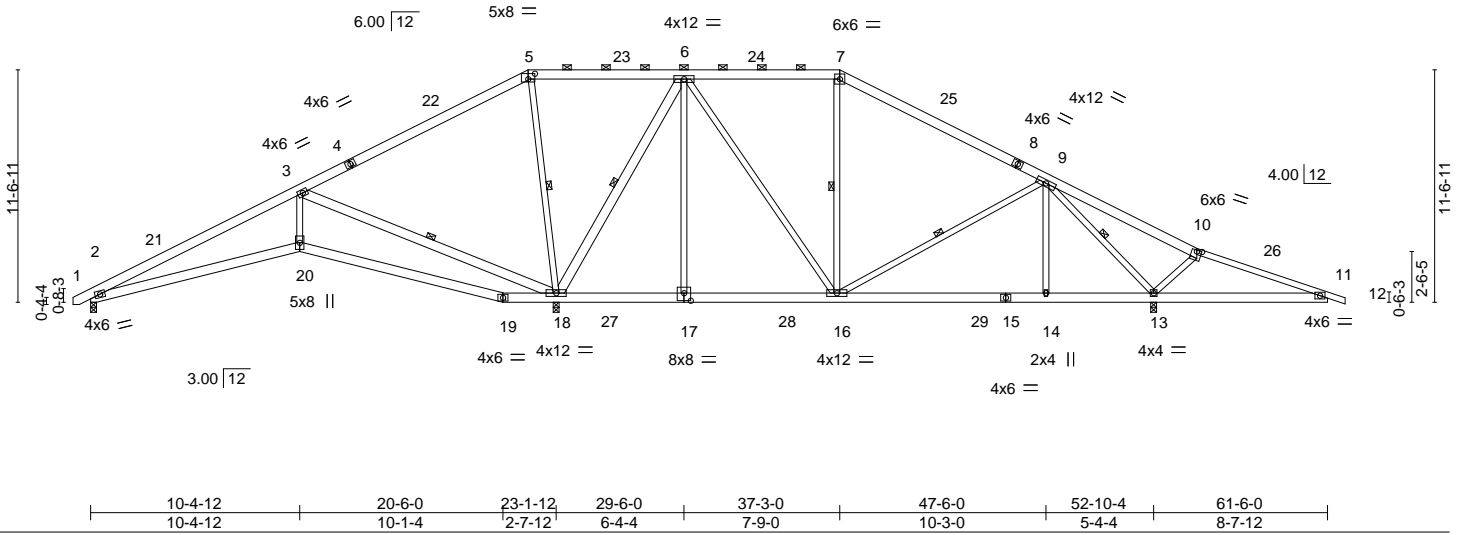


Plate Offsets (X,Y)--	[5:0-4-0,0-3-4], [10:0-3-0,0-0-12], [17:0-4-0,0-4-8]
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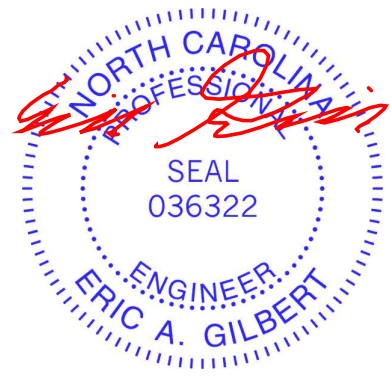
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.63	Vert(LL) -0.12 19-20 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.35	Vert(CT) -0.24 19-20 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.67	Horz(CT) 0.04 18 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.05 2-20 >999 240		
				Weight: 471 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1 *Except* 10-12: 2x4 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.): 5-7.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 6-18,3-18: 2x6 SP No.1	WEBS 1 Row at midpt 5-18, 6-18, 9-16, 7-16, 3-18, 9-13

**REACTIONS.** (size) 2=0-3-8, 18=0-3-8, 13=0-3-8  
 Max Horz 2=-149(LC 10)  
 Max Uplift 2=-13(LC 13), 18=-237(LC 12), 13=-203(LC 13)  
 Max Grav 2=495(LC 23), 18=2864(LC 1), 13=1867(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-623/0, 3-5=-195/1123, 5-6=-90/1009, 6-7=-456/253, 7-9=-637/247,  
 9-10=-854/1241, 10-11=-844/958  
 BOT CHORD 2-20=0/602, 19-20=0/601, 18-19=0/530, 17-18=-338/345, 16-17=-338/345,  
 14-16=-10/496, 13-14=-10/496, 11-13=-846/853  
 WEBS 5-18=-971/342, 6-18=-1481/300, 9-14=0/288, 6-17=0/365, 6-16=-117/779,  
 7-16=-427/228, 3-18=-1394/284, 3-20=0/712, 9-13=-1997/730

- 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) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 21-9-0, Exterior(2) 21-9-0 to 26-1-13, Interior(1) 26-1-13 to 37-3-0, Exterior(2) 37-3-0 to 41-7-12, Interior(1) 41-7-12 to 62-4-8 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - WARNING:** This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
  - 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 18=237, 13=203.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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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/TPI 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/Lot 14 Michell Manor
J0322-1383	A1	PIGGYBACK BASE	5	1	I50575528

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Mar 3 13:41:24 2022 Page 2  
 ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-d4TzEchElayNv?\_TZ\_U4TDP0GqqVITNr0wedAuzecgP

**NOTES-**

10) 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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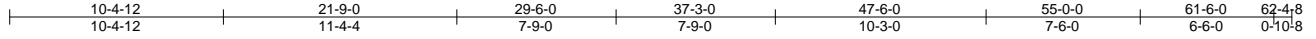
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Southern Touch/Lot 14 Michell Manor	150575529
J0322-1383	A1A	PIGGYBACK BASE	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

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ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-5H1LSyhsWu4EW9Zg7i?J0QyBxD9cRwb?FaNBjLzecgO



Scale = 1:112.1

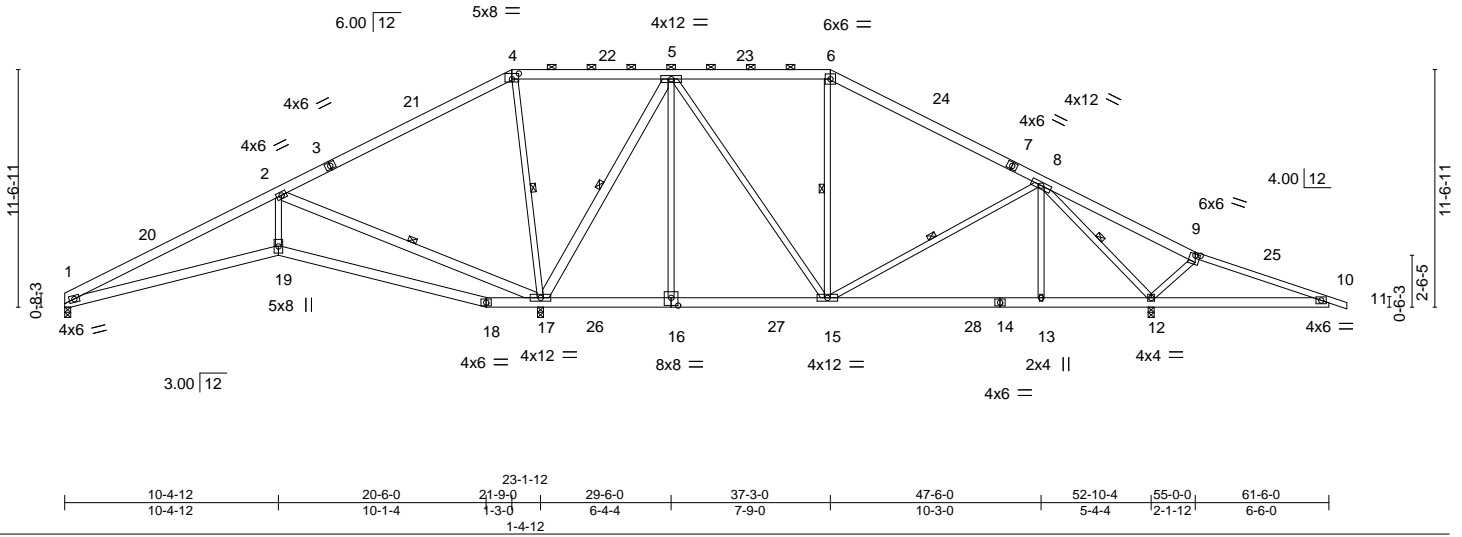


Plate Offsets (X,Y)-- [4:0-4-0,0-3-4], [9:0-3-0,0-0-12], [16:0-4-0,0-4-8]

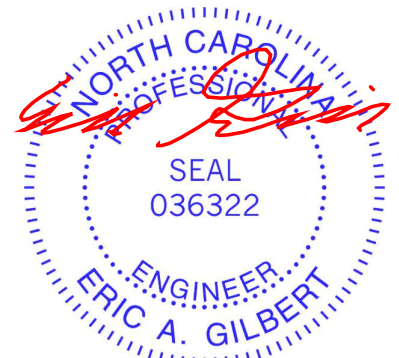
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.63	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.36	Vert(LL) -0.12 18-19 >999 360		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.68	Vert(CT) -0.24 18-19 >999 240		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Horz(CT) 0.04 17 n/a n/a		
			Wind(LL) 0.05 1-19 >999 240	Weight: 469 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1 *Except* 9-11: 2x4 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.): 4-6.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 5-17,2-17: 2x6 SP No.1	WEBS 1 Row at midpt 4-17, 5-17, 8-15, 6-15, 2-17, 8-12

**REACTIONS.** (size) 1=0-3-8, 17=0-3-8, 12=0-3-8  
 Max Horz 1=149(LC 10)  
 Max Uplift 1=-12(LC 13), 17=-238(LC 12), 12=-203(LC 13)  
 Max Grav 1=440(LC 23), 17=2868(LC 1), 12=1866(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-622/0, 2-4=-195/1126, 4-5=-91/1012, 5-6=-455/252, 6-8=-637/246, 8-9=-854/1241, 9-10=-844/958  
 BOT CHORD 1-19=0/601, 18-19=0/600, 17-18=0/529, 16-17=-340/345, 15-16=-340/345, 13-15=-10/496, 12-13=-10/496, 10-12=-846/853  
 WEBS 4-17=-971/341, 5-17=-1482/307, 8-13=0/288, 5-16=0/365, 5-15=-122/780, 6-15=-428/231, 2-17=-1399/287, 2-19=0/714, 8-12=-1997/730

- 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) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 21-9-0, Exterior(2) 21-9-0 to 26-1-13, Interior(1) 26-1-13 to 37-3-0, Exterior(2) 37-3-0 to 41-7-12, Interior(1) 41-7-12 to 62-4-8 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - WARNING:** This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
  - 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 17=238, 12=203.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 4, 2022

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818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Southern Touch/Lot 14 Michell Manor	150575530
J0322-1383	A1GE	GABLE	1	1	Job Reference (optional)	

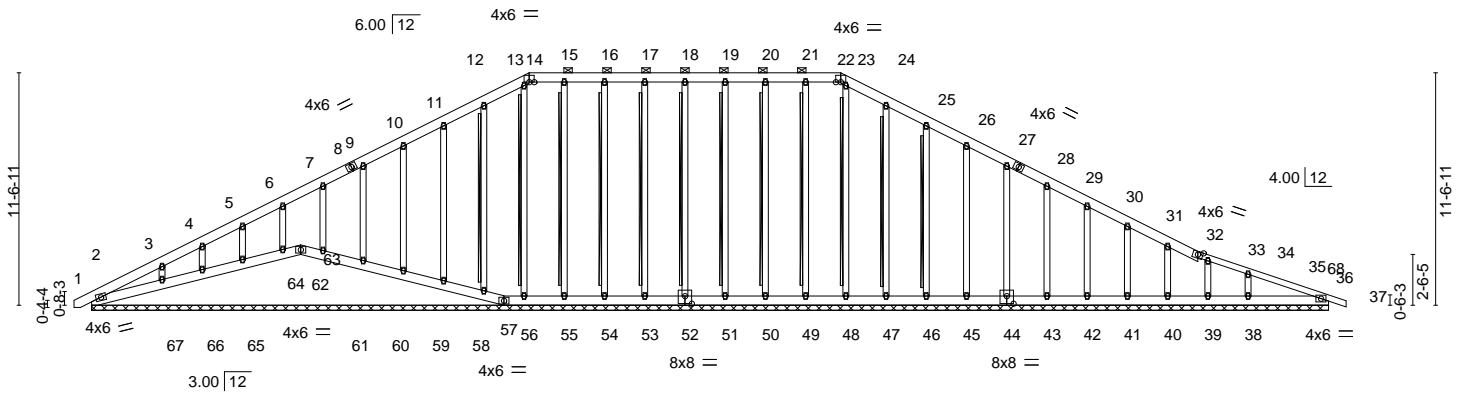
Comtech, Inc., Fayetteville, NC - 28314,

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ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-WrjU4\_klppTpNdlEoqY0e3apORGBePnRxYcrJfzcgL

0-10-8 22-7-8 38-1-8 55-10-8 62-4-8 63-3-0  
 0-10-8 21-9-0 15-5-15 17-9-0 6-6-0 0-10-8

Scale = 1:114.6



0-10-8 11-3-4 21-4-8 62-4-8 63-3-0  
 0-10-8 10-4-12 10-1-4 41-0-0 0-10-8

Plate Offsets (X,Y)-- [44:0-4-0,0-4-8], [52:0-4-0,0-4-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.11	Vert(LL) 0.00	37	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.05	Vert(CT) 0.00	37	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.14	Horz(CT) 0.01	36	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S						
							Weight: 574 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1 *Except* 33-37: 2x4 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.): 14-22.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.2	WEBS T-Brace: 2x4 SPF No.2 - 18-52, 17-53, 16-54, 15-55, 13-56, 12-58, 19-51, 20-50, 21-49, 23-48, 24-47, 25-46
	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 61-6-0.  
 (lb) - Max Horz 2=228(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 57, 52, 53, 54, 55, 58, 59, 60, 61, 62, 64, 65, 66, 51, 50, 49, 47, 46, 45, 44, 43, 42, 41, 40, 39, 36 except 67=142(LC 12), 38=117(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 63, 57, 52, 53, 54, 55, 56, 58, 59, 60, 61, 62, 64, 65, 66, 51, 50, 49, 48, 47, 46, 45, 44, 43, 42, 41, 40, 39, 36 except 67=274(LC 23), 38=316(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=308/128, 9-10=90/270, 10-11=110/328, 11-12=131/388, 12-13=150/441, 13-14=141/400, 14-15=138/425, 15-16=138/425, 16-17=138/425, 17-18=138/425, 18-19=138/425, 19-20=138/425, 20-21=138/425, 21-22=138/425, 22-23=141/400, 23-24=150/429, 24-25=131/376, 25-26=110/316, 26-27=90/258  
 WEBS 3-67=194/267

- 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) gable end zone and C-C Corner(3) 0-8-10 to 3-6-0, Exterior(2) 3-6-0 to 21-9-0, Corner(3) 21-9-0 to 26-1-13, Exterior(2) 26-1-13 to 37-3-0, Corner(3) 37-3-0 to 41-6-0, Exterior(2) 41-6-0 to 62-4-8 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.
  - WARNING:** This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
  - Provide adequate drainage to prevent water ponding.



March 4, 2022

Consult page 2 MT20 unless otherwise indicated.

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**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



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 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Southern Touch/Lot 14 Michell Manor
J0322-1383	A1GE	GABLE	1	1	I50575530

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Mar 3 13:41:28 2022 Page 2  
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**NOTES-**

- 7) Gable requires continuous bottom chord bearing.
- 8) Gable studs spaced at 2-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 57, 52, 53, 54, 55, 58, 59, 60, 61, 62, 64, 65, 66, 51, 50, 49, 47, 46, 45, 44, 43, 42, 41, 40, 39, 36 except (jt=lb) 67=142, 38=117.
- 12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 14) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

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



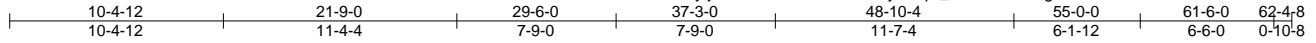
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Southern Touch/Lot 14 Michell Manor	150575531
J0322-1383	A2	PIGGYBACK BASE	3	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

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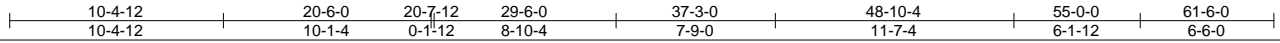
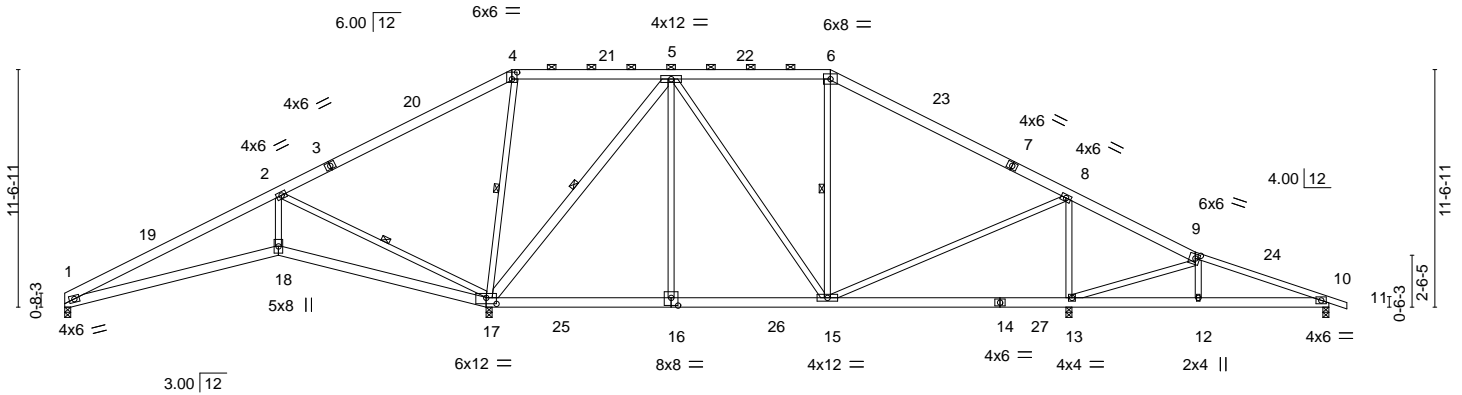


Plate Offsets (X,Y)-- [4:0-3-0,0-4-0], [9:0-2-8,0-2-8], [16:0-4-0,0-4-8], [17:0-6-0,0-3-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.63	Vert(LL) -0.10	1-18	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.33	Vert(CT) -0.21	1-18	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.69	Horz(CT) 0.03	10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.04	1-18	>999	240		
							Weight: 455 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1 *Except* 9-11: 2x4 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.): 4-6.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 5-17: 2x6 SP No.1	WEBS 1 Row at midpt 4-17, 5-17, 6-15, 2-17

**REACTIONS.** All bearings 0-3-8.  
 (lb) - Max Horz 1=149(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 10 except 17=172(LC 12), 13=161(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) except 1=366(LC 23), 17=2672(LC 1), 13=1624(LC 24), 10=446(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-261/110, 2-4=-105/1120, 4-5=0/774, 5-6=-506/333, 6-8=-710/264, 8-9=0/303, 9-10=-515/100  
 BOT CHORD 16-17=-88/387, 15-16=-88/387, 12-13=-13/413, 10-12=-10/421  
 WEBS 4-17=-971/305, 5-17=-1386/264, 5-15=-92/461, 8-15=-6/654, 8-13=-1220/387, 5-16=0/485, 6-15=-393/196, 2-17=-1160/324, 2-18=0/455, 9-13=-560/150

- 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) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 21-9-0, Exterior(2) 21-9-0 to 26-1-13, Interior(1) 26-1-13 to 37-3-0, Exterior(2) 37-3-0 to 41-7-12, Interior(1) 41-7-12 to 62-4-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - WARNING:** This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
  - 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 10 except (jt=lb) 17=172, 13=161.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 4, 2022

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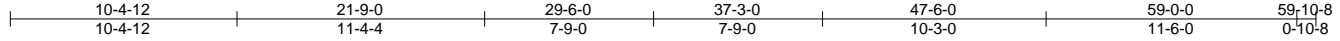
**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Southern Touch/Lot 14 Michell Manor	150575532
J0322-1383	A3	PIGGYBACK BASE	4	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

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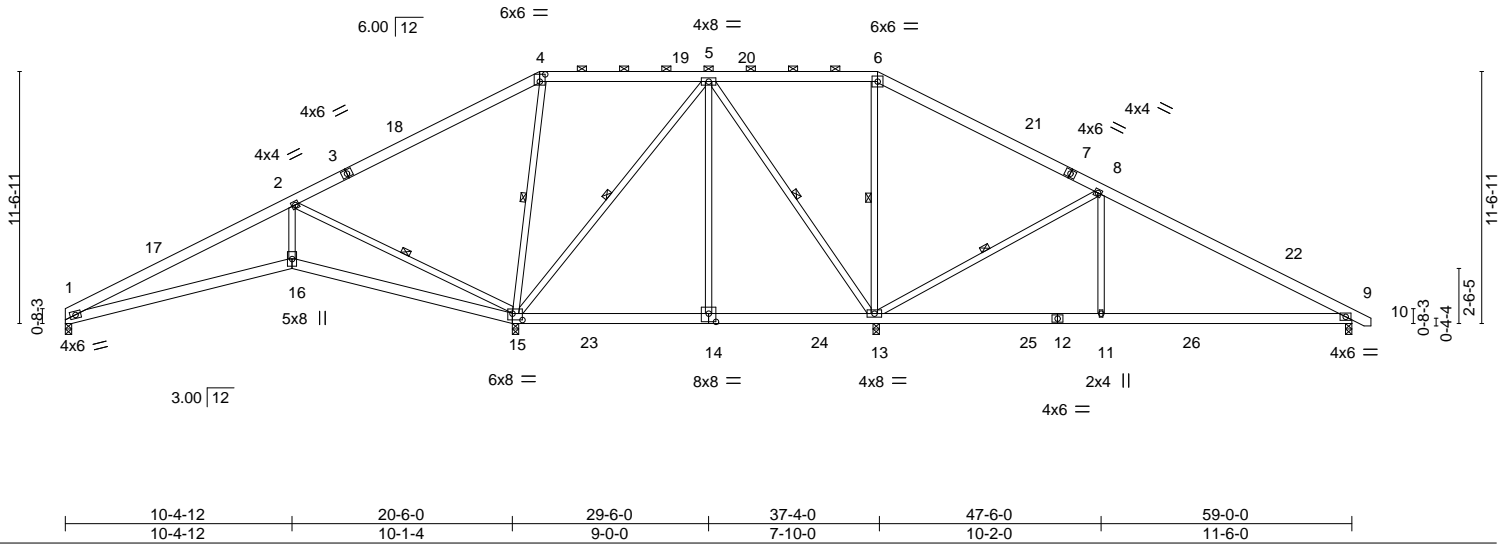


Plate Offsets (X,Y)-- [4:0-3-0,0-4-0], [14:0-4-0,0-4-8], [15:0-5-8,0-3-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.63	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.38	Vert(LL) -0.10 9-11 >999 360		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.77	Vert(CT) -0.23 9-11 >999 240		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Horz(CT) 0.04 9 n/a n/a		
			Wind(LL) 0.06 9-11 >999 240	Weight: 426 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 (10-0-0 max.): 4-6.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 2-15, 4-15, 5-15, 5-13, 6-13, 8-13

**REACTIONS.** All bearings 0-3-8.  
 (lb) - Max Horz 1=147(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 1 except 15=219(LC 12), 13=111(LC 13), 9=102(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) except 1=389(LC 23), 15=2162(LC 23), 13=1918(LC 26), 9=691(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=351/92, 2-4=107/1077, 4-5=0/739, 5-6=0/573, 6-8=0/708, 8-9=740/169  
 BOT CHORD 1-16=60/274, 15-16=59/269, 14-15=392/261, 13-14=392/261, 11-13=17/558, 9-11=17/558  
 WEBS 2-16=0/481, 2-15=1200/354, 4-15=948/323, 5-15=690/107, 5-14=0/496, 5-13=620/139, 6-13=730/252, 8-13=1215/356, 8-11=0/523

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; 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 21-9-0, Exterior(2) 21-9-0 to 27-11-11, Interior(1) 27-11-11 to 37-3-0, Exterior(2) 37-3-0 to 43-5-10, Interior(1) 43-5-10 to 59-8-10 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.
  - 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 15=219, 13=111, 9=102.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 4, 2022

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818 Soundside Road  
Edenton, NC 27932





Job	Truss	Truss Type	Qty	Ply	Southern Touch/Lot 14 Michell Manor	150575534
J0322-1383	A4A	PIGGYBACK BASE	5	1	Job Reference (optional)	

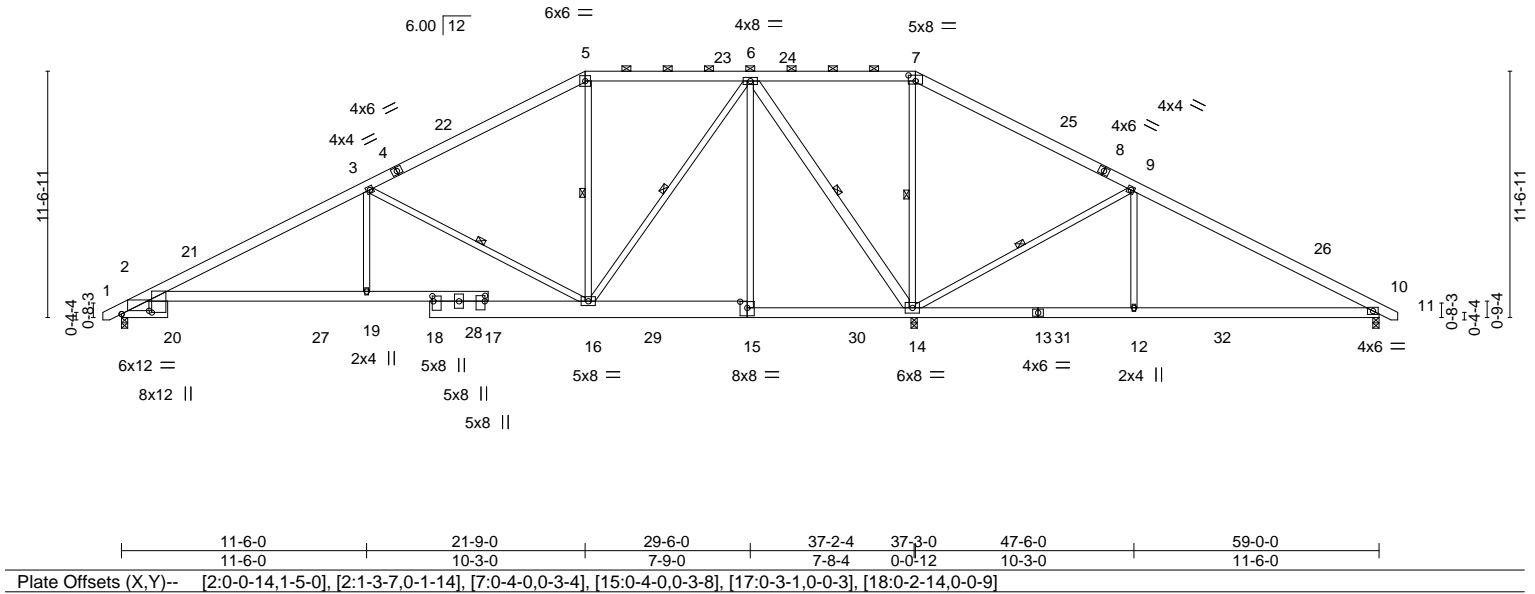
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Mar 3 13:41:33 2022 Page 1

ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-spWN7hotdL55UOACbN8BL6HX3SqhJUTA5qJc?tzecgG

0-10-8	11-6-0	21-9-0	29-6-0	37-3-0	47-6-0	59-0-0	59-10-8
0-10-8	11-6-0	10-3-0	7-9-0	7-9-0	10-3-0	11-6-0	0-10-8

Scale = 1:108.1



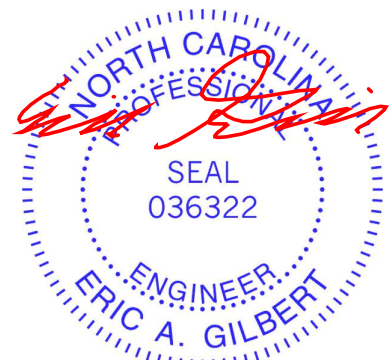
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.69	Vert(LL) -0.19 2-19 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.61	Vert(CT) -0.40 2-19 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.94	Horz(CT) 0.10 14 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.15 2-19 >999 240	Weight: 474 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-8-13 oc purlins, except
BOT CHORD 2x6 SP 2400F 2.0E *Except*	2-0-0 oc purlins (6-0-0 max.): 5-7.
WEBS 2x4 SP No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
6-14: 2x6 SP No.1	WEBS 1 Row at midpt 3-16, 5-16, 6-16, 6-14, 7-14, 9-14

**REACTIONS.** (size) 2=0-3-8, 14=0-3-8, 10=0-3-8  
 Max Horz 2=148(LC 11)  
 Max Uplift 2=90(LC 12), 14=57(LC 12), 10=226(LC 23)  
 Max Grav 2=1131(LC 23), 14=3662(LC 2), 10=402(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1905/437, 3-5=-636/300, 5-6=-421/358, 6-7=-45/1494, 7-9=-172/1731, 9-10=-173/976  
 BOT CHORD 2-19=-281/1609, 16-19=-263/1609, 15-16=-379/255, 14-15=-381/254, 12-14=-809/202, 10-12=-809/202  
 WEBS 3-19=0/635, 3-16=-1395/403, 5-16=-294/156, 6-16=-250/1159, 6-15=0/444, 6-14=-2089/461, 7-14=-1175/339, 9-14=-1232/361, 9-12=0/522

- 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) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 21-9-0, Exterior(2) 21-9-0 to 27-11-11, Interior(1) 27-11-11 to 37-3-0, Exterior(2) 37-3-0 to 43-5-10, Interior(1) 43-5-10 to 59-8-10 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.
  - 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 14 except (jt=lb) 10=226.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 4, 2022

Job	Truss	Truss Type	Qty	Ply	Southern Touch/Lot 14 Michell Manor	150575535
J0322-1383	A4GE	GABLE	1	1	Job Reference (optional)	

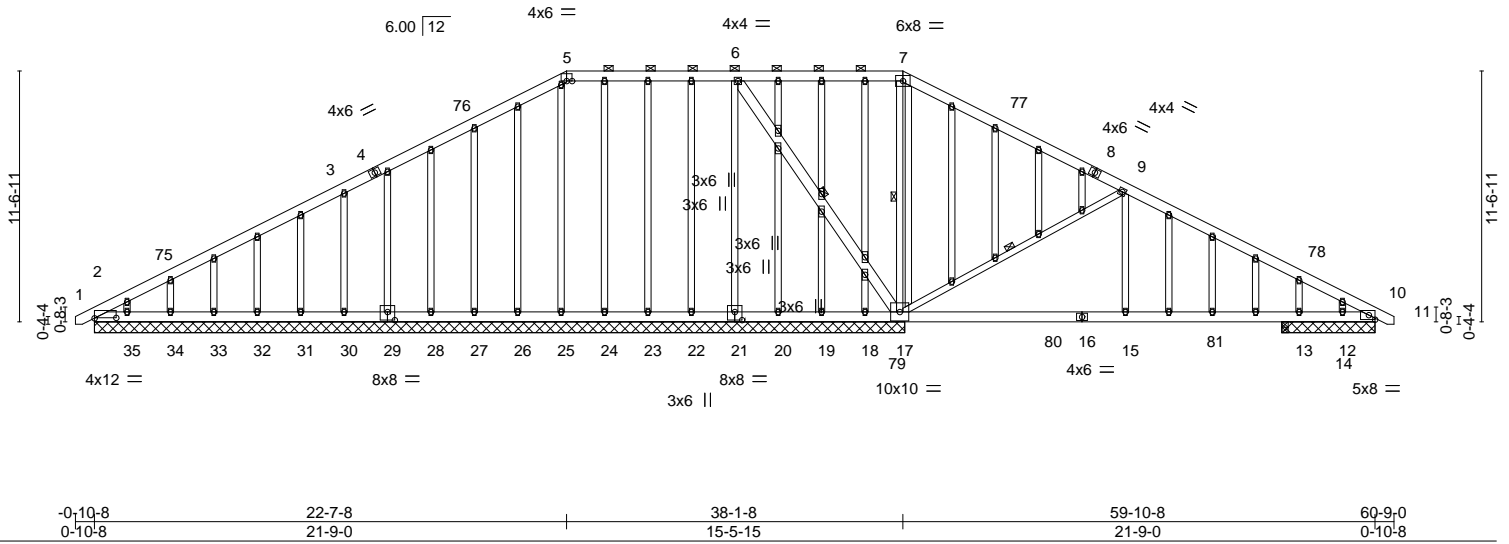
Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Mar 3 13:41:35 2022 Page 1

ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-pCe7YNp89yLpjikBioAfQXMvFYInSYTY8oi3IzccgE

0-10-8 22-7-8 38-1-8 59-10-8 60-9-0  
 0-10-8 21-9-0 15-5-15 21-9-0 0-10-8

Scale = 1:106.2



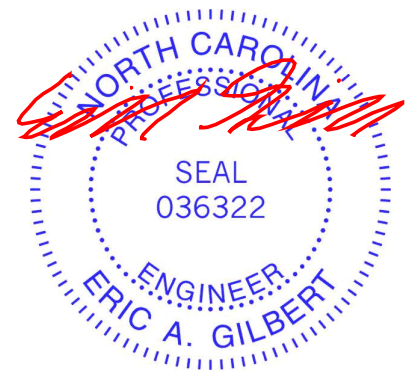
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.54	Vert(LL) -0.05 15-17 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.50	Vert(CT) -0.11 15-17 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.65	Horz(CT) 0.05 10 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.03 15 >999 240	Weight: 628 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.): 5-7.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 6-17: 2x6 SP No.1	WEBS 1 Row at midpt 6-17, 7-17, 9-17
OTHERS 2x4 SP No.2	

**REACTIONS.** All bearings 37-4-0 except (jt=length) 10=4-3-8, 13=4-3-8, 12=4-3-8, 14=0-3-8.  
 (lb) - Max Horz 2=228(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 34, 14 except 30=-526(LC 12), 21=-365(LC 19), 17=-416(LC 13), 35=-374(LC 12), 18=-271(LC 3), 13=-453(LC 2), 12=-396(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 21, 22, 23, 24, 25, 26, 27, 28, 31, 32, 33, 34, 20, 19, 13 except 2=411(LC 1), 30=797(LC 1), 17=2054(LC 1), 10=448(LC 1), 35=521(LC 23), 12=603(LC 1), 14=497(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1111/538, 3-5=-1123/904, 5-6=-855/947, 6-7=-304/535, 7-9=-398/499, 9-10=-1283/682  
 BOT CHORD 2-35=-301/855, 34-35=-301/855, 33-34=-301/855, 32-33=-301/855, 31-32=-301/855, 30-31=-301/855, 28-30=-301/855, 27-28=-301/855, 26-27=-301/855, 25-26=-301/855, 24-25=-301/855, 23-24=-301/855, 22-23=-301/855, 21-22=-301/855, 20-21=-301/855, 19-20=-301/855, 18-19=-301/855, 17-18=-301/855, 15-17=-361/1003, 14-15=-361/1003, 13-14=-361/1003, 12-13=-361/1003, 10-12=-361/1003  
 WEBS 3-30=-728/686, 6-21=-304/468, 6-17=-1142/728, 7-17=-451/294, 9-17=-991/579, 9-15=0/421

- 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) 0-8-10 to 3-8-3, Exterior(2) 3-8-3 to 21-9-0, Corner(3) 21-9-0 to 26-1-13, Exterior(2) 26-1-13 to 37-3-0, Corner(3) 37-3-0 to 41-7-12, Exterior(2) 41-7-12 to 59-8-10 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 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.



March 4, 2022

Continued on page 2

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

Job	Truss	Truss Type	Qty	Ply	Southern Touch/Lot 14 Michell Manor	I50575535
J0322-1383	A4GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Mar 3 13:41:35 2022 Page 2  
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- NOTES-**
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10, 34, 14 except (jt=lb) 30=526, 21=365, 17=416, 35=374, 18=271, 13=453, 12=396.
  - 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**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	Truss	Truss Type	Qty	Ply	Southern Touch/Lot 14 Michell Manor	150575536
J0322-1383	G1	QUEENPOST	6	1	Job Reference (optional)	

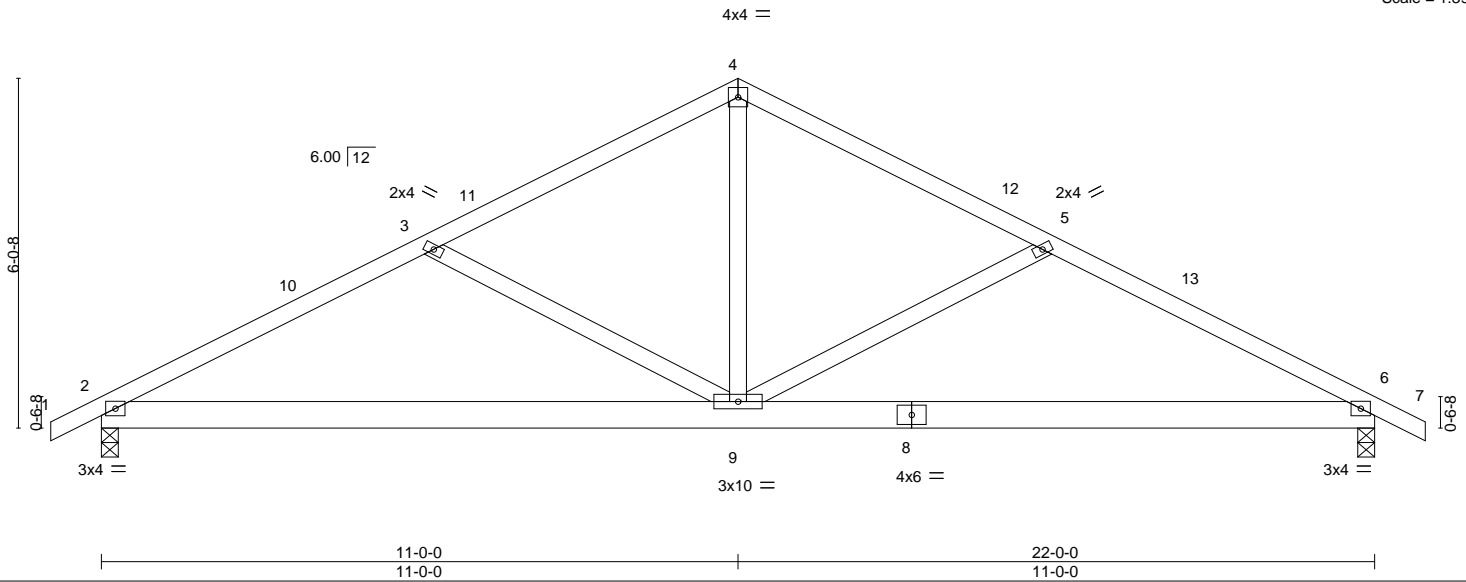
Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Mar 3 13:41:36 2022 Page 1

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Scale = 1:39.8



<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 0.29	Vert(LL)	-0.08	2-9	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.43	Vert(CT)	-0.18	2-9	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.23	Horz(CT)	0.02	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.03	2-9	>999	240		
									Weight: 117 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 5-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

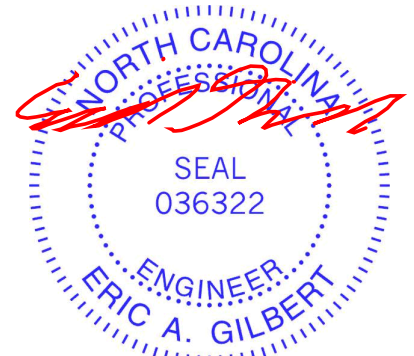
(size) 6=0-3-8, 2=0-3-8  
 Max Horz 2=77(LC 11)  
 Max Uplift 6=66(LC 13), 2=66(LC 12)  
 Max Grav 6=930(LC 1), 2=930(LC 1)

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

TOP CHORD 2-3=-1425/377, 3-4=-1076/286, 4-5=-1076/286, 5-6=-1425/377  
 BOT CHORD 2-9=-249/1194, 6-9=-258/1194  
 WEBS 3-9=-365/248, 4-9=-76/632, 5-9=-365/248

**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) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 11-0-0, Exterior(2) 11-0-0 to 15-4-13, Interior(1) 15-4-13 to 22-10-8 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2.



March 4, 2022

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**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



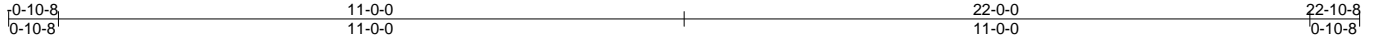
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Southern Touch/Lot 14 Michell Manor	150575537
J0322-1383	G1GE	GABLE	1	1	Job Reference (optional)	

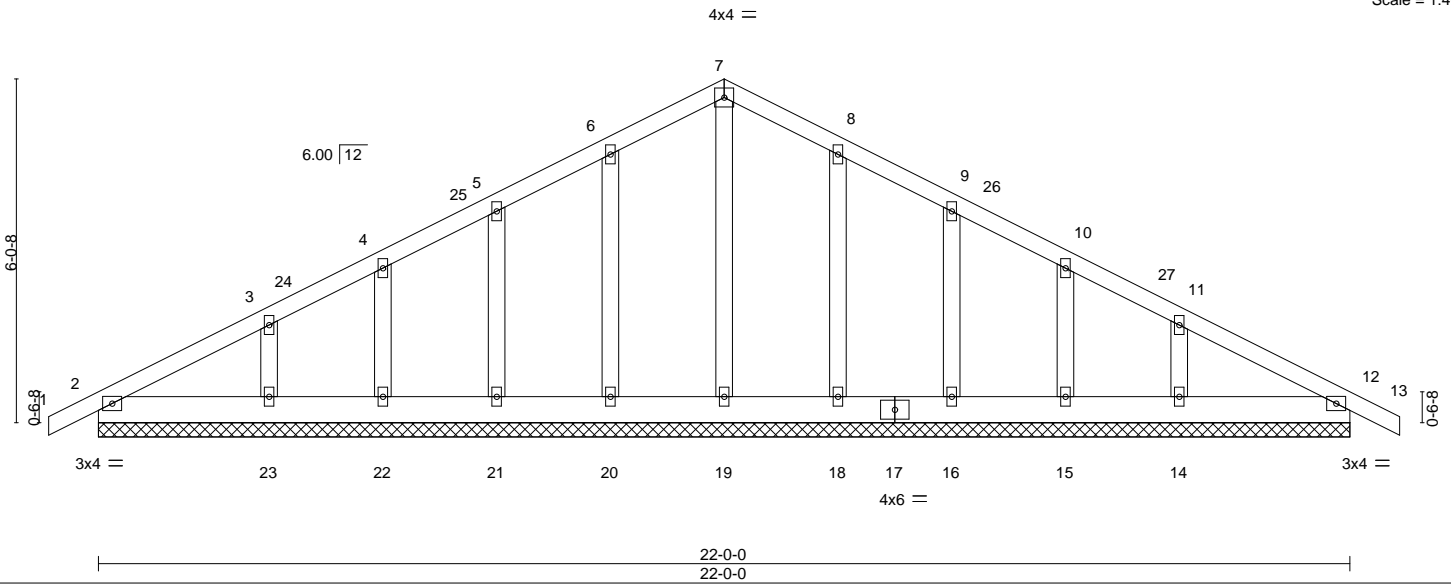
Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Mar 3 13:41:37 2022 Page 1

ID:dhHEZ215oL5z5GSxlo92CzmGVH-lamtz3rOhabXy?UzqDD7VyRmB3LcFVcm?SHp8ezecgC



Scale = 1:40.5



<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 0.08	Vert(LL)	0.00	12	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	0.00	12	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	12	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 133 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.

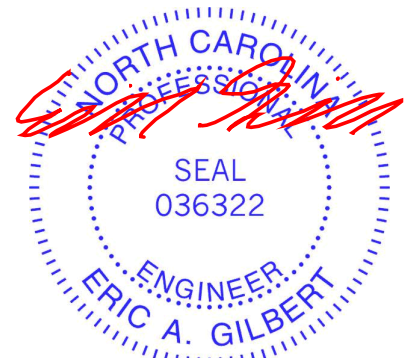
**REACTIONS.**

All bearings 22-0-0.  
 (lb) - Max Horz 2=120(LC 16)  
 Max Uplift All uplift 100 lb or less at joint(s) 12, 2, 20, 21, 22, 18, 16, 15 except 23=108(LC 12),  
 14=106(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 12, 2, 19, 20, 21, 22, 23, 18, 16, 15, 14

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

**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) gable end zone and C-C Corner(3) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 11-0-0, Corner(3) 11-0-0 to 15-4-13, Exterior(2) 15-4-13 to 22-10-8 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.
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 2, 20, 21, 22, 18, 16, 15 except (jt=lb) 23=108, 14=106.



March 4, 2022

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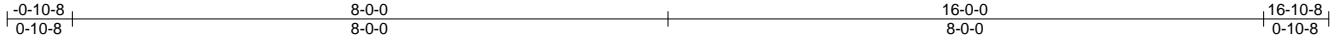
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Southern Touch/Lot 14 Michell Manor	150575538
J0322-1383	P1	COMMON	4	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Mar 3 13:41:38 2022 Page 1

ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-DnJGBPr0StjOa939NwkM2A\_U0Tdc\_wJvE51Ng4zcegB



Scale = 1:30.9

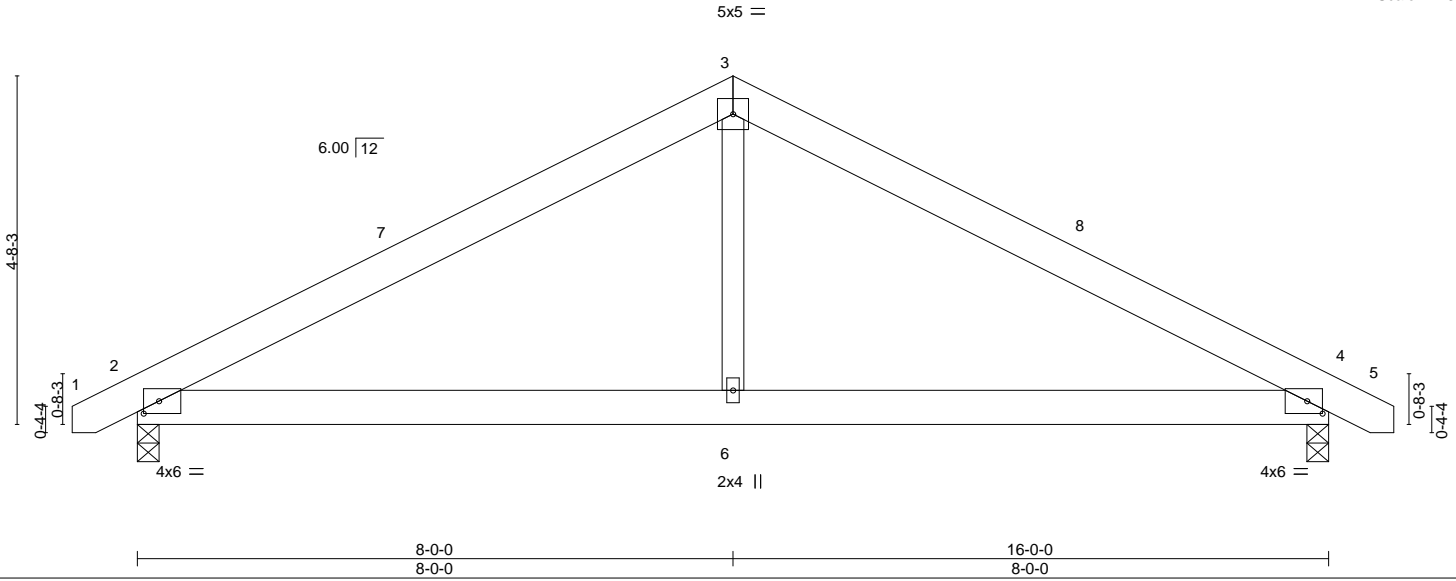


Plate Offsets (X,Y)-- [2:0-2-8,0-2-0], [4:0-2-8,0-2-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.29	Vert(LL) 0.06	4-6	>999	240		MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.24	Vert(CT) -0.05	4-6	>999	240			
BCLL 0.0 *	Rep Stress Incr YES	WB 0.13	Horz(CT) 0.01	4	n/a	n/a			
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S							
								Weight: 90 lb	FT = 20%

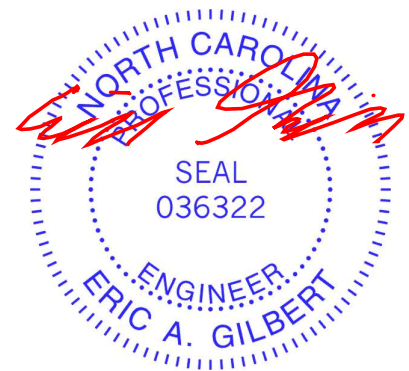
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 9-5-12 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 4=0-3-8  
 Max Horz 2=-57(LC 10)  
 Max Uplift 2=-142(LC 9), 4=-142(LC 8)  
 Max Grav 2=680(LC 1), 4=680(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-876/845, 3-4=-876/843  
 BOT CHORD 2-6=-619/679, 4-6=-619/679  
 WEBS 3-6=-478/381

- 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) 0-8-10 to 3-8-3, Interior(1) 3-8-3 to 8-0-0, Exterior(2) 8-0-0 to 12-4-13, Interior(1) 12-4-13 to 16-8-10 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=142, 4=142.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



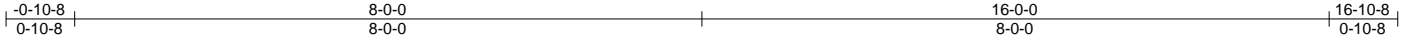
March 4, 2022

Job	Truss	Truss Type	Qty	Ply	Southern Touch/Lot 14 Michell Manor	150575539
J0322-1383	P1GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Mar 3 13:41:39 2022 Page 1

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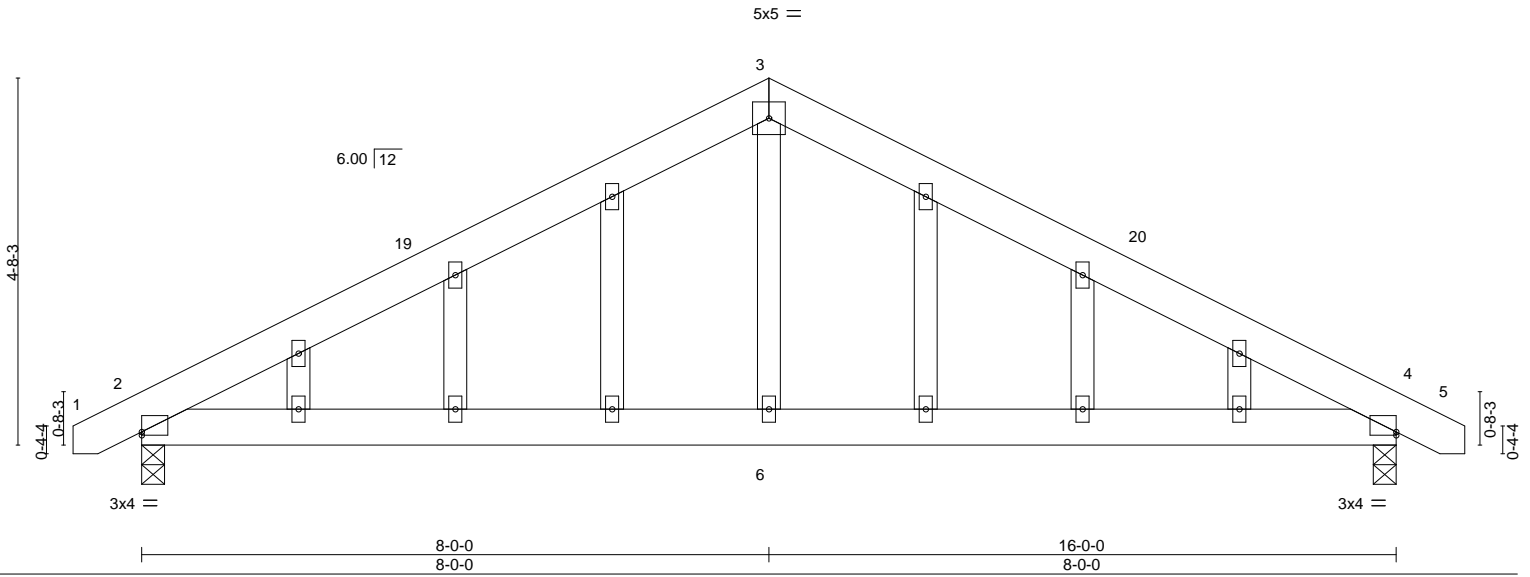


Plate Offsets (X,Y)-- [2:0-0-0,0-0-8], [4:0-0-0,0-0-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.29	Vert(LL) -0.02	4-6	>999	360		MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.24	Vert(CT) -0.05	4-6	>999	240			
BCLL 0.0 *	Rep Stress Incr YES	WB 0.09	Horz(CT) 0.01	4	n/a	n/a			
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.03	2-6	>999	240			
								Weight: 106 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 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.  
 BOT CHORD Rigid ceiling directly applied or 10'-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 4=0-3-8  
 Max Horz 2=-88(LC 13)  
 Max Uplift 2=-153(LC 12), 4=-153(LC 13)  
 Max Grav 2=680(LC 1), 4=680(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-876/238, 3-4=-876/237  
 BOT CHORD 2-6=-78/679, 4-6=-78/679  
 WEBS 3-6=0/381

- 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) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 8-0-0, Exterior(2) 8-0-0 to 12-4-13, Interior(1) 12-4-13 to 16-8-10 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 studs spaced at 2'-0-0 oc.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-6-0 tall by 2'-0-0 wide will fit between the bottom chord and any other members.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=153, 4=153.
  - 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



March 4, 2022

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



818 Soundside Road  
 Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	Southern Touch/Lot 14 Michell Manor	150575540
J0322-1383	PB1	PIGGYBACK	20	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

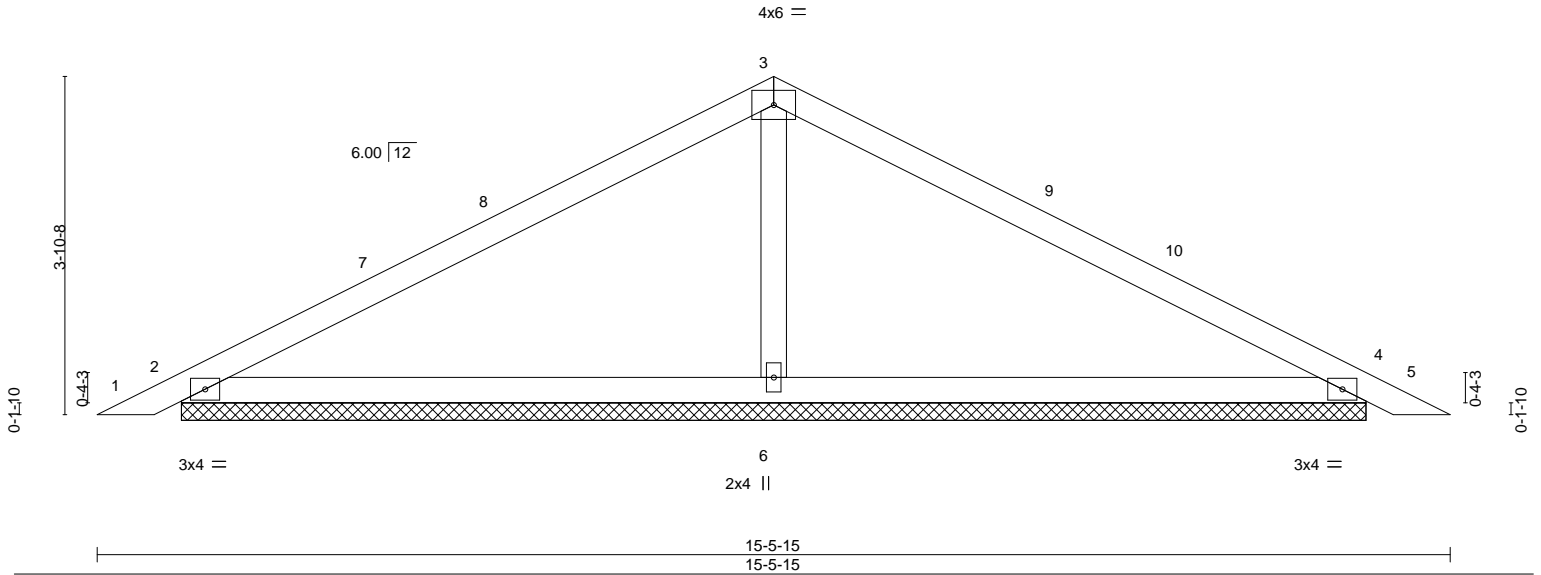
8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Mar 3 13:41:40 2022 Page 1

ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-99R0b5tG\_Vz6qTCYVLMq7b3nYGHdSrZCiPWtlzsecg9

7-9-0  
7-9-0

15-5-15  
7-8-15

Scale = 1:26.4



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.48	Vert(LL) 0.03	5	n/r	120	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.33	Vert(CT) 0.05	5	n/r	120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.08	Horz(CT) 0.00	4	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 51 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 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

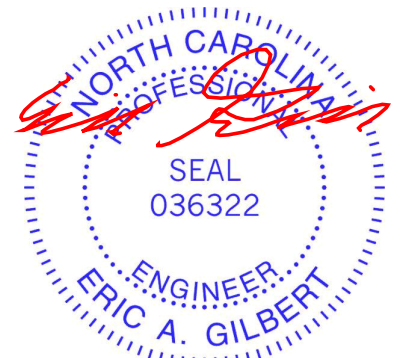
**REACTIONS.**

(size) 2=13-6-13, 4=13-6-13, 6=13-6-13  
Max Horz 2=-48(LC 10)  
Max Uplift 2=-42(LC 12), 4=-51(LC 13)  
Max Grav 2=291(LC 23), 4=291(LC 24), 6=586(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 3-6=-379/187

**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) 0-3-15 to 4-8-11, Interior(1) 4-8-11 to 7-9-0, Exterior(2) 7-9-0 to 12-1-12, Interior(1) 12-1-12 to 15-2-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



March 4, 2022

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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Southern Touch/Lot 14 Michell Manor	I50575541
J0322-1383	PB1GE	GABLE	2	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Mar 3 13:41:41 2022 Page 1  
 ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-dM?OpQuulo6zRdnk33H3goc2ggiOBJRMw3F1HPzecz8  
 15-5-15  
 7-8-15

Scale = 1:26.1

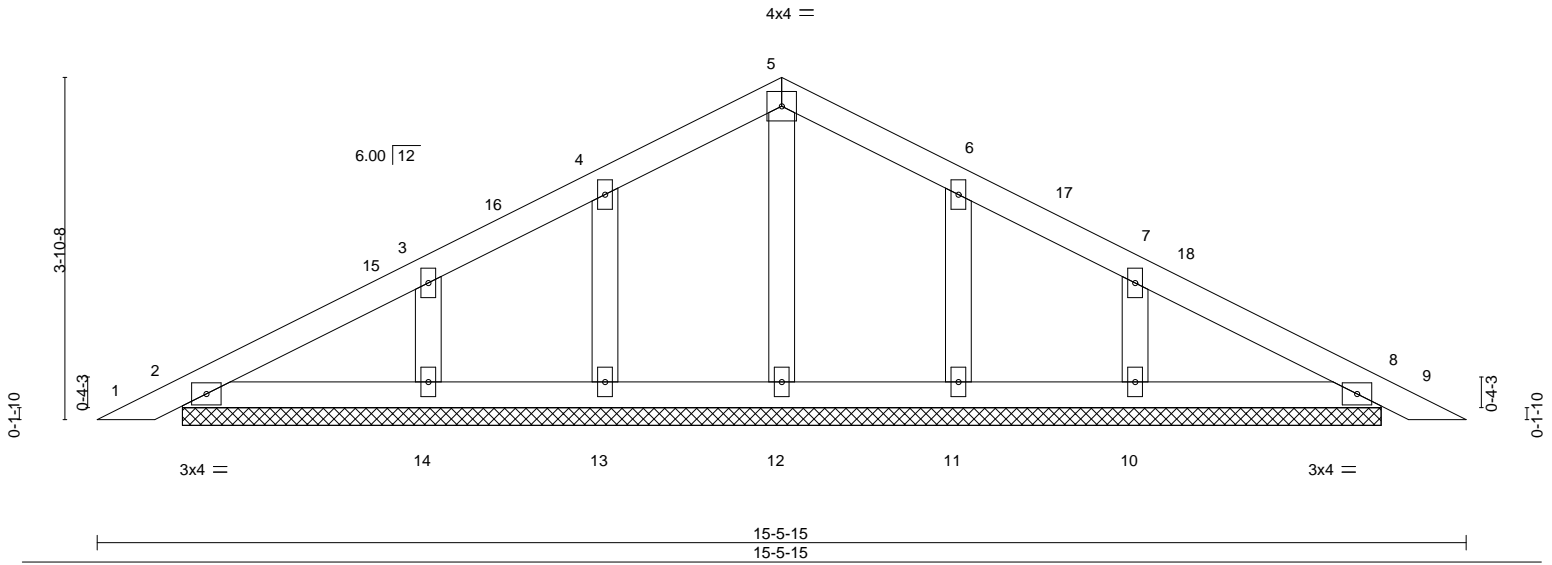


Plate Offsets (X,Y)-- [6:0-0-0,0-0-0], [7:0-0-0,0-0-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.07	Vert(LL) 0.00	8	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(CT) 0.00	9	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.04	Horz(CT) 0.00	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 61 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 13-6-13.  
 (lb) - Max Horz 2=75(LC 16)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 13, 14, 11, 10  
 Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

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

- NOTES-**
- 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) gable end zone and C-C Corner(3) 0-3-15 to 4-8-11, Exterior(2) 4-8-11 to 7-9-0, Corner(3) 7-9-0 to 12-1-12, Exterior(2) 12-1-12 to 15-2-0 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.
  - 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 20.0psf on the bottom chord in all areas where a rectangle 3'-6-0 tall by 2'-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8, 13, 14, 11, 10.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



March 4, 2022

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**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

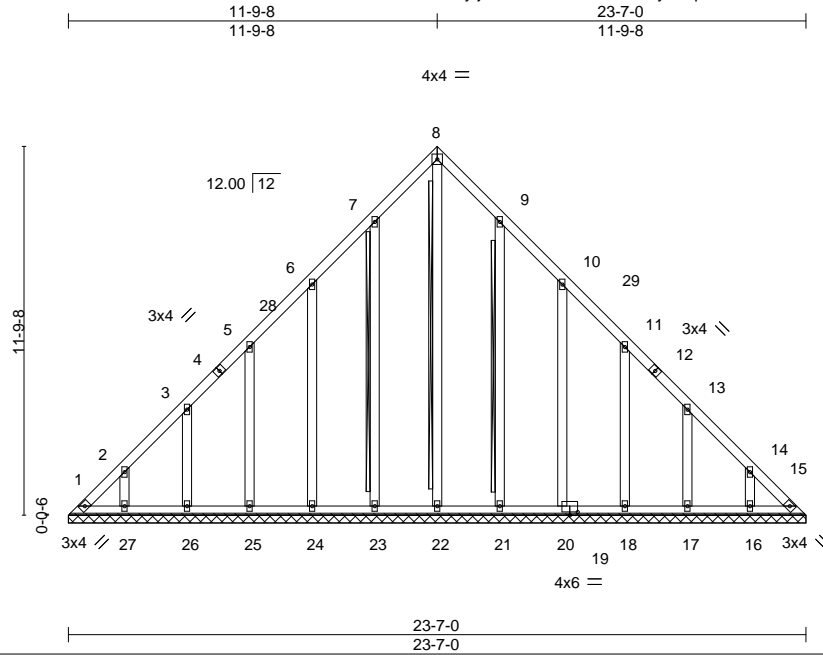


818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Southern Touch/Lot 14 Michell Manor	150575542
J0322-1383	VA1	GABLE	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Mar 3 13:41:42 2022 Page 1  
 ID:Jh9BfyfjRPPU?mMRDxzGWXKyZ53p-6YZm0mvXW6Eq3mMxcplC09Eb42cwj9V9j?aprzec97



Scale = 1:73.7

Plate Offsets (X,Y)-- [9:0-0-0,0-0-0], [10:0-0-0,0-0-0], [11:0-0-0,0-0-0], [12:0-0-0,0-0-0], [13:0-0-0,0-0-0], [14:0-0-0,0-0-0], [19:0-3-0,0-1-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.06	Vert(LL) n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(CT) n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.21	Horz(CT) 0.01	15	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S						
							Weight: 178 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.  
 WEBS T-Brace: 2x4 SPF No.2 - 8-22, 7-23, 9-21  
 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 23-7-0.  
 (lb) - Max Horz 1=-343(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 22 except 1=-167(LC 10), 23=-132(LC 12), 24=-145(LC 12), 25=-138(LC 12), 26=-141(LC 12), 27=-133(LC 12), 21=-128(LC 13), 20=-147(LC 13), 18=-137(LC 13), 17=-141(LC 13), 16=-133(LC 13), 15=-109(LC 11)  
 Max Grav All reactions 250 lb or less at joint(s) 23, 24, 25, 26, 27, 21, 20, 18, 17, 16 except 1=327(LC 12), 22=306(LC 13), 15=288(LC 13)

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

TOP CHORD 1-2=-480/290, 2-3=-362/246, 7-8=-246/261, 13-14=-307/196, 14-15=-425/290  
 BOT CHORD 1-27=-217/324, 26-27=-217/324, 25-26=-217/324, 24-25=-217/324, 23-24=-217/324, 22-23=-217/324, 21-22=-217/324, 20-21=-217/324, 18-20=-217/324, 17-18=-217/324, 16-17=-217/324, 15-16=-217/324  
 WEBS 8-22=-282/209

**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) gable end zone and C-C Exterior(2) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 11-9-8, Exterior(2) 11-9-8 to 16-2-5, Interior(1) 16-2-5 to 23-2-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 22 except (jt=lb) 1=167, 23=132, 24=145, 25=138, 26=141, 27=133, 21=128, 20=147, 18=137, 17=141, 16=133, 15=109.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



March 4, 2022

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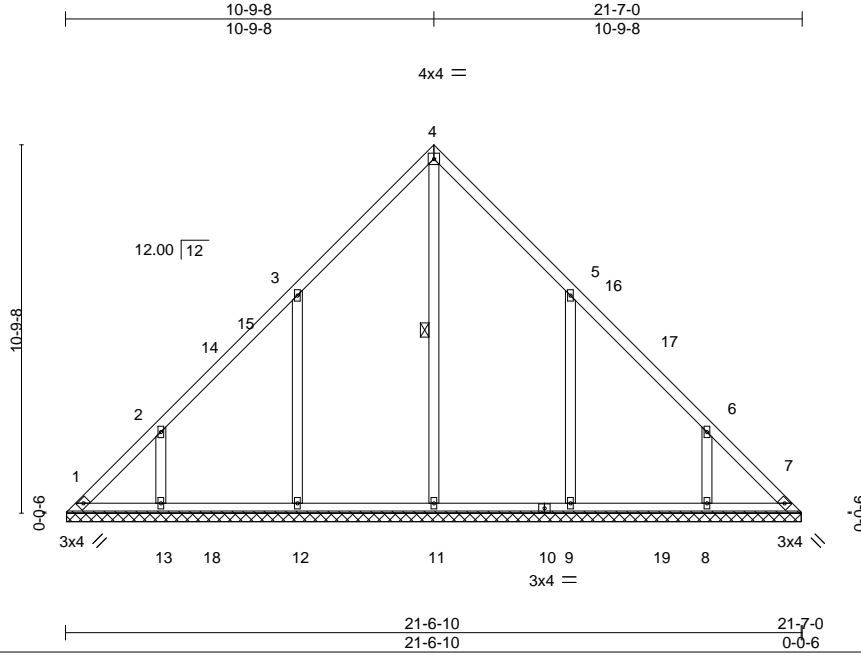
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Southern Touch/Lot 14 Michell Manor
J0322-1383	VA2	VALLEY	1	1	150575543

Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Mar 3 13:41:44 2022 Page 1

ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-2whXRSw1jUYI4WJkBrmHREXYuirOcPoc1UhuKzeg5



Scale = 1:67.5

Plate Offsets (X,Y)-- [5:0-0-0,0-0-0], [6:0-0-0,0-0-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.16	Vert(LL) n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.12	Vert(CT) n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.29	Horz(CT) 0.01	7	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S						
							Weight: 116 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.  
 WEBS 1 Row at midpt 4-11

**REACTIONS.** All bearings 21-6-4.  
 (lb) - Max Horz 1=-250(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 12=-183(LC 12), 13=-144(LC 12), 9=-183(LC 13), 8=-144(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 11=362(LC 22), 12=518(LC 19), 13=347(LC 19), 9=518(LC 20), 8=347(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-273/217, 6-7=-250/217  
 WEBS 3-12=-403/307, 2-13=-326/262, 5-9=-403/307, 6-8=-326/262

**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) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 10-9-8, Exterior(2) 10-9-8 to 15-2-5, Interior(1) 15-2-5 to 21-2-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7 except (jt=lb) 12=183, 13=144, 9=183, 8=144.



March 4, 2022

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**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



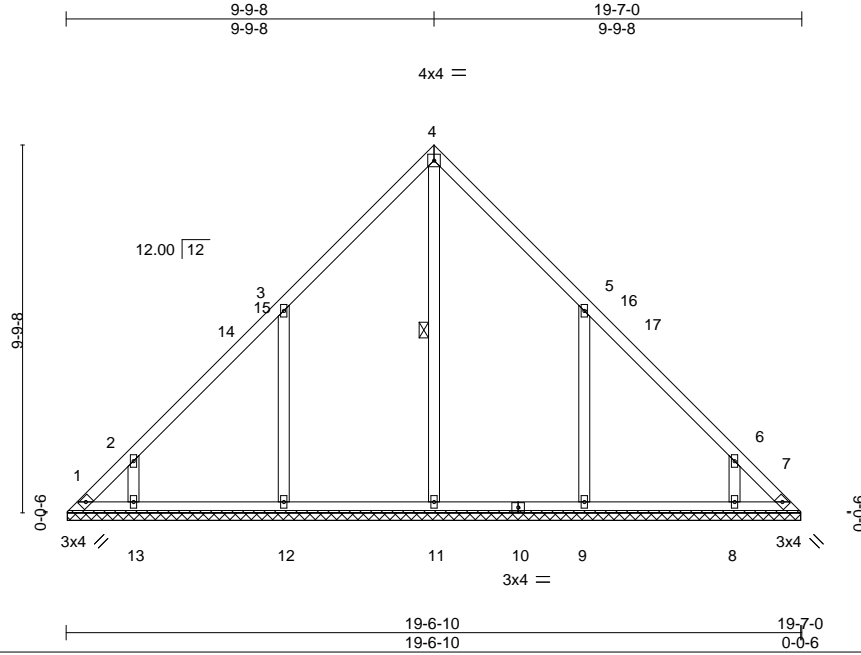
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Southern Touch/Lot 14 Michell Manor
J0322-1383	VA3	VALLEY	1	1	I50575544

Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Mar 3 13:41:45 2022 Page 1

ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-W7FvfoxPo1cOwE5WluM?qeniDH1p74wxrhDEQAzecg4



Scale = 1:61.3

Plate Offsets (X,Y)-- [5:0-0-0,0-0-0], [6:0-0-0,0-0-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.16	Vert(LL) n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.14	Vert(CT) n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.20	Horz(CT) 0.00	7	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S						
							Weight: 102 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.  
 WEBS 1 Row at midpt 4-11

**REACTIONS.**

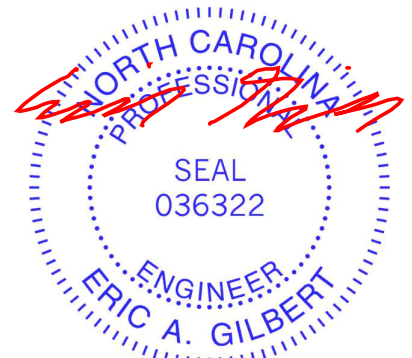
All bearings 19-6-4.  
 (lb) - Max Horz 1=-226(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 7 except 1=-125(LC 10), 12=-185(LC 12), 13=-132(LC 12), 9=-185(LC 13), 8=-132(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 11=368(LC 22), 12=461(LC 19), 13=286(LC 19), 9=460(LC 20), 8=286(LC 20)

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

TOP CHORD 1-2=-267/225, 6-7=-259/225  
 WEBS 3-12=-406/309, 2-13=-307/258, 5-9=-406/309, 6-8=-307/259

**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) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 9-9-8, Exterior(2) 9-9-8 to 14-2-5, Interior(1) 14-2-5 to 19-2-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- 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 20.0psf on the bottom chord in all areas where a rectangle 3'-6-0 tall by 2'-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 1=125, 12=185, 13=132, 9=185, 8=132.



March 4, 2022

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

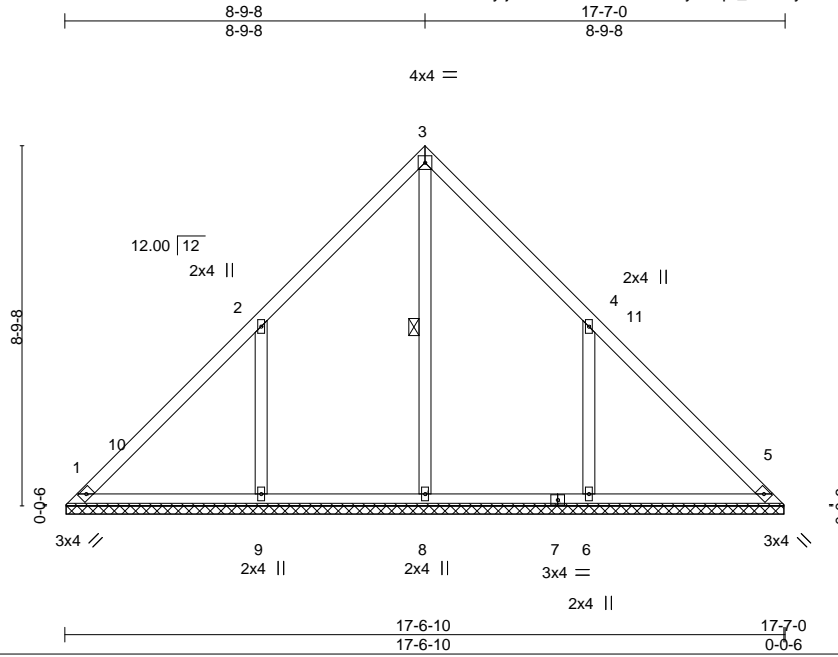


818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Southern Touch/Lot 14 Michell Manor	150575545
J0322-1383	VA4	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Mar 3 13:41:46 2022 Page 1  
 ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-JoHs8y1ZLkFYOgirtENsJsAhN9sY\_54Lzoydzecg3



Scale = 1:56.2

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 0.22	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.15	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S					Weight: 86 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" oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10'-0" oc bracing.  
 WEBS 1 Row at midpt 3-8

**REACTIONS.**

All bearings 17-6-4.  
 (lb) - Max Horz 1=-202(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 1 except 9=-213(LC 12), 6=-213(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=345(LC 22), 9=523(LC 19), 6=522(LC 20)

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

WEBS 2-9=-457/338, 4-6=-457/338

**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) 0-4-4 to 4-9-8, Interior(1) 4-9-8 to 8-9-8, Exterior(2) 8-9-8 to 13-2-5, Interior(1) 13-2-5 to 17-2-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 9=213, 6=213.



March 4, 2022

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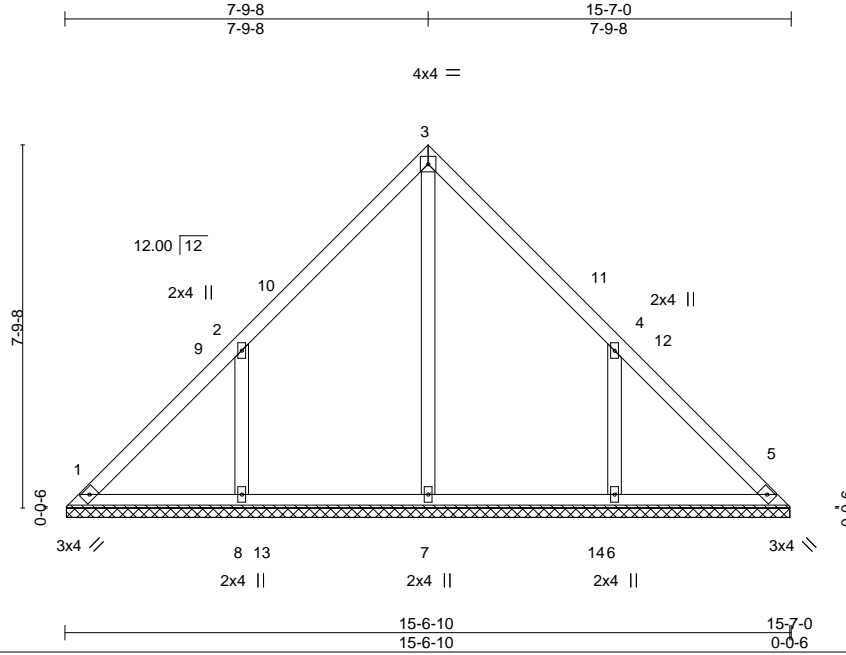


818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Southern Touch/Lot 14 Michell Manor	150575546
J0322-1383	VA5	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Mar 3 13:41:47 2022 Page 1  
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Scale = 1:49.4

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 0.16	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.13	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S						Weight: 75 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 15-6-4.  
 (lb) - Max Horz 1=178(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=186(LC 12), 6=186(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=348(LC 22), 8=449(LC 19), 6=449(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-8=-403/309, 4-6=-403/309

- 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) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 7-9-8, Exterior(2) 7-9-8 to 12-2-5, Interior(1) 12-2-5 to 15-2-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Gable requires continuous bottom chord bearing.
  - 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=186, 6=186.



March 4, 2022

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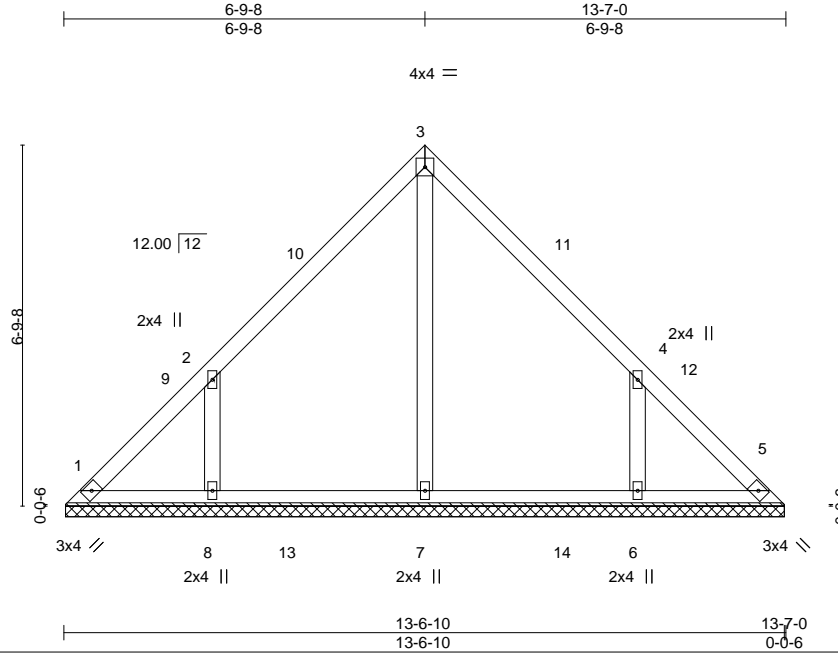


818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Southern Touch/Lot 14 Michell Manor	150575547
J0322-1383	VA6	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Mar 3 13:41:48 2022 Page 1  
ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-wiw2HqzI5y\_zniq4z1viSHPDrV4IKTJOXfSu1Vzecg1



Scale = 1:43.3

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.14	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.12	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.10	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 63 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 13-6-4.  
(lb) - Max Horz 1=154(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=166(LC 12), 6=166(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=335(LC 19), 8=379(LC 19), 6=379(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 2-8=-364/291, 4-6=-364/292

- 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) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 6-9-8, Exterior(2) 6-9-8 to 11-2-5, Interior(1) 11-2-5 to 13-2-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Gable requires continuous bottom chord bearing.
  - 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=166, 6=166.



March 4, 2022

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**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  
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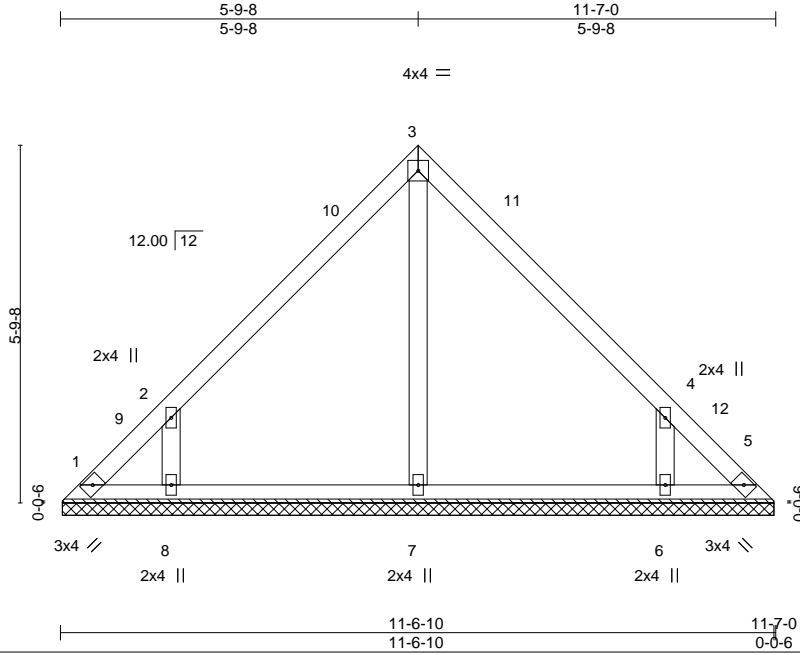


Job	Truss	Truss Type	Qty	Ply	Southern Touch/Lot 14 Michell Manor	150575548
J0322-1383	VA7	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

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ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-OuUQUA\_wsG6qPrOHXkRx\_UxOYvQU3w0XmJBSZzxecg0



Scale = 1:37.3

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

LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.14	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.07	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S						
	Code IRC2015/TPI2014						Weight: 51 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 11-6-4.  
 (lb) - Max Horz 1=130(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=162(LC 12), 6=161(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=339(LC 19), 6=339(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-8=-361/303, 4-6=-361/303

- 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) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 5-9-8, Exterior(2) 5-9-8 to 10-2-5, Interior(1) 10-2-5 to 11-2-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Gable requires continuous bottom chord bearing.
  - 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=162, 6=161.



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

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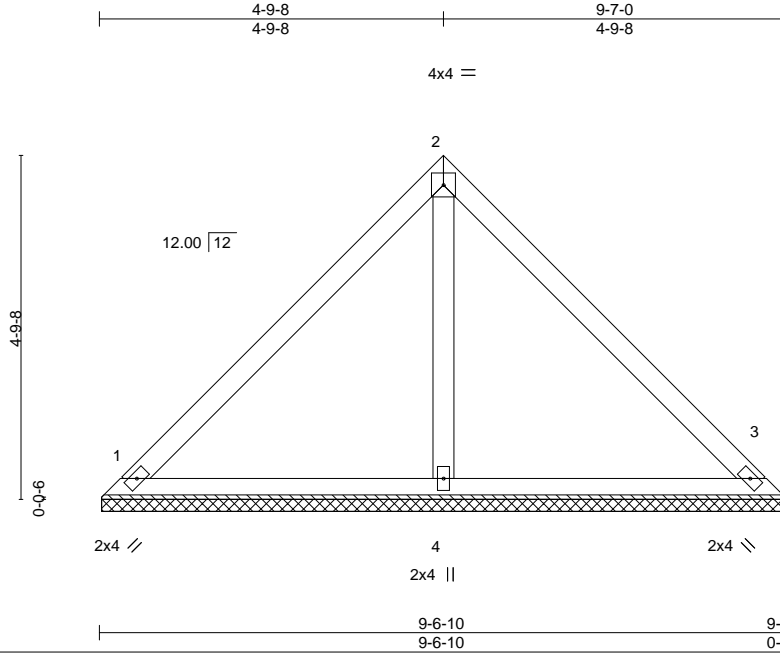


818 Soundside Road  
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Job	Truss	Truss Type	Qty	Ply	Southern Touch/Lot 14 Michell Manor	150575549
J0322-1383	VA8	VALLEY	1	1	Job Reference (optional)	

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8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Mar 3 13:41:50 2022 Page 1  
ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-t42oiV?YdZEh0?zT4SyAXiUY9llroOQg?zx?5Ozecg?



Scale: 3/8"=1'

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.22	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.15	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.06	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S						Weight: 39 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 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

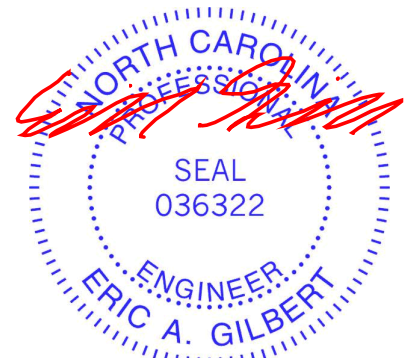
**REACTIONS.**

(size) 1=9-6-4, 3=9-6-4, 4=9-6-4  
Max Horz 1=106(LC 8)  
Max Uplift 1=-26(LC 13), 3=-26(LC 13)  
Max Grav 1=201(LC 1), 3=201(LC 1), 4=308(LC 1)

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

**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) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



March 4, 2022

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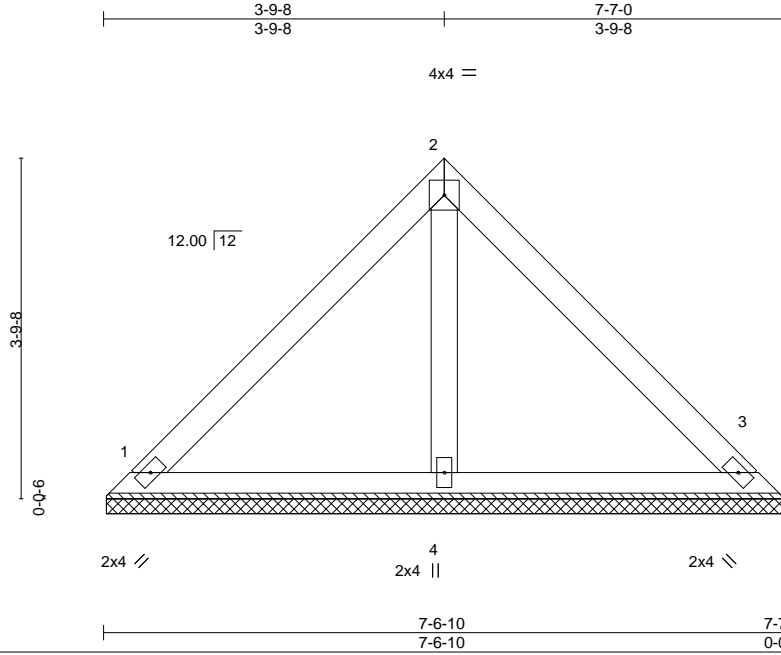


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Job	Truss	Truss Type	Qty	Ply	Southern Touch/Lot 14 Michell Manor	150575550
J0322-1383	VA9	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Mar 3 13:41:51 2022 Page 1  
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.20	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.03	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 30 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 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 1=7-6-4, 3=7-6-4, 4=7-6-4  
 Max Horz 1=82(LC 9)  
 Max Uplift 1=-30(LC 13), 3=-30(LC 13)  
 Max Grav 1=168(LC 1), 3=168(LC 1), 4=215(LC 1)

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

**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) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



March 4, 2022

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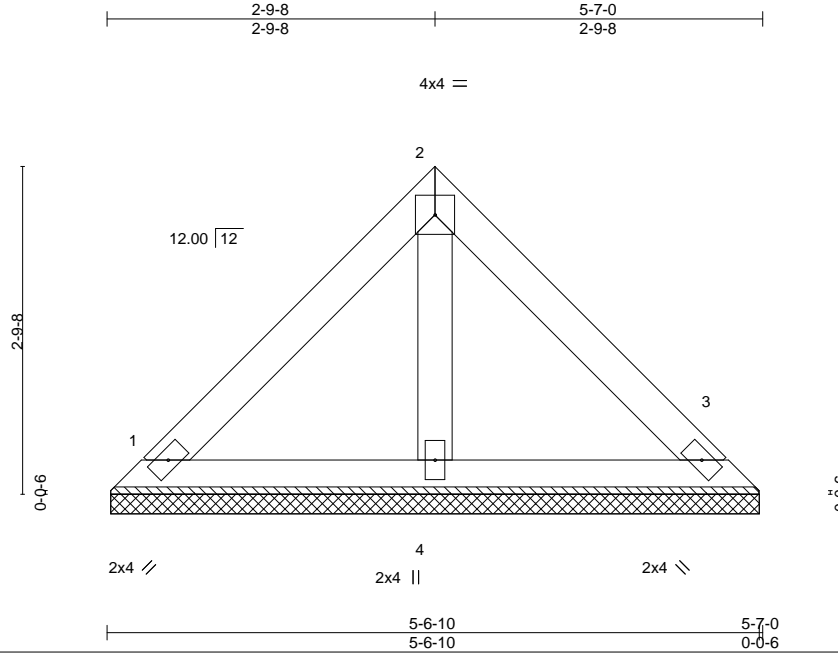
818 Soundside Road  
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Job	Truss	Truss Type	Qty	Ply	Southern Touch/Lot 14 Michell Manor	150575551
J0322-1383	VA10	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Mar 3 13:41:43 2022 Page 1

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Scale = 1:19.6

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.01	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P						Weight: 22 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 5-7-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 1=5-6-4, 3=5-6-4, 4=5-6-4  
 Max Horz 1=58(LC 8)  
 Max Uplift 1=21(LC 13), 3=21(LC 13)  
 Max Grav 1=119(LC 1), 3=119(LC 1), 4=153(LC 1)

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

**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) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



March 4, 2022

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

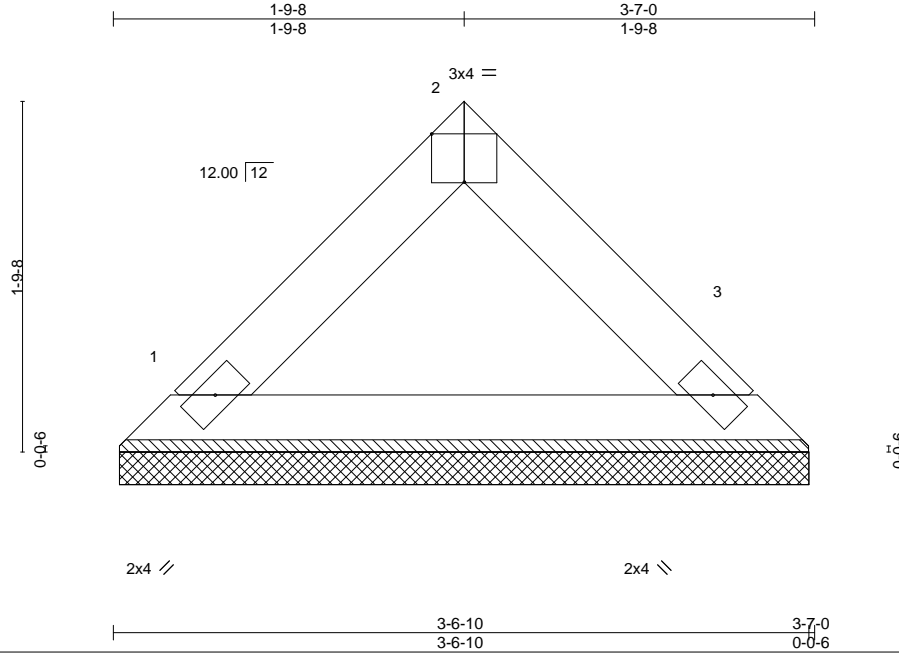


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Job	Truss	Truss Type	Qty	Ply	Southern Touch/Lot 14 Michell Manor	150575552
J0322-1383	VA11	VALLEY	1	1	Job Reference (optional)	

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8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Mar 3 13:41:43 2022 Page 1  
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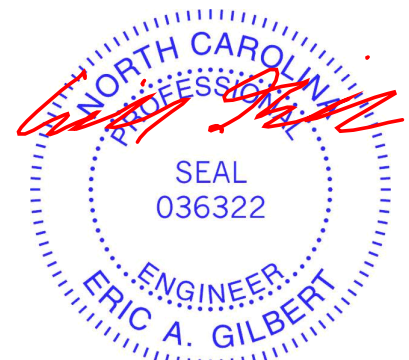
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.03	Vert(LL) n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.07	Vert(CT) n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P					Weight: 11 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 3-7-0 oc purlins.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=3-6-4, 3=3-6-4  
 Max Horz 1=35(LC 11)  
 Max Uplift 1=4(LC 12), 3=-4(LC 12)  
 Max Grav 1=115(LC 1), 3=115(LC 1)

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

- 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) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Gable requires continuous bottom chord bearing.
  - 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

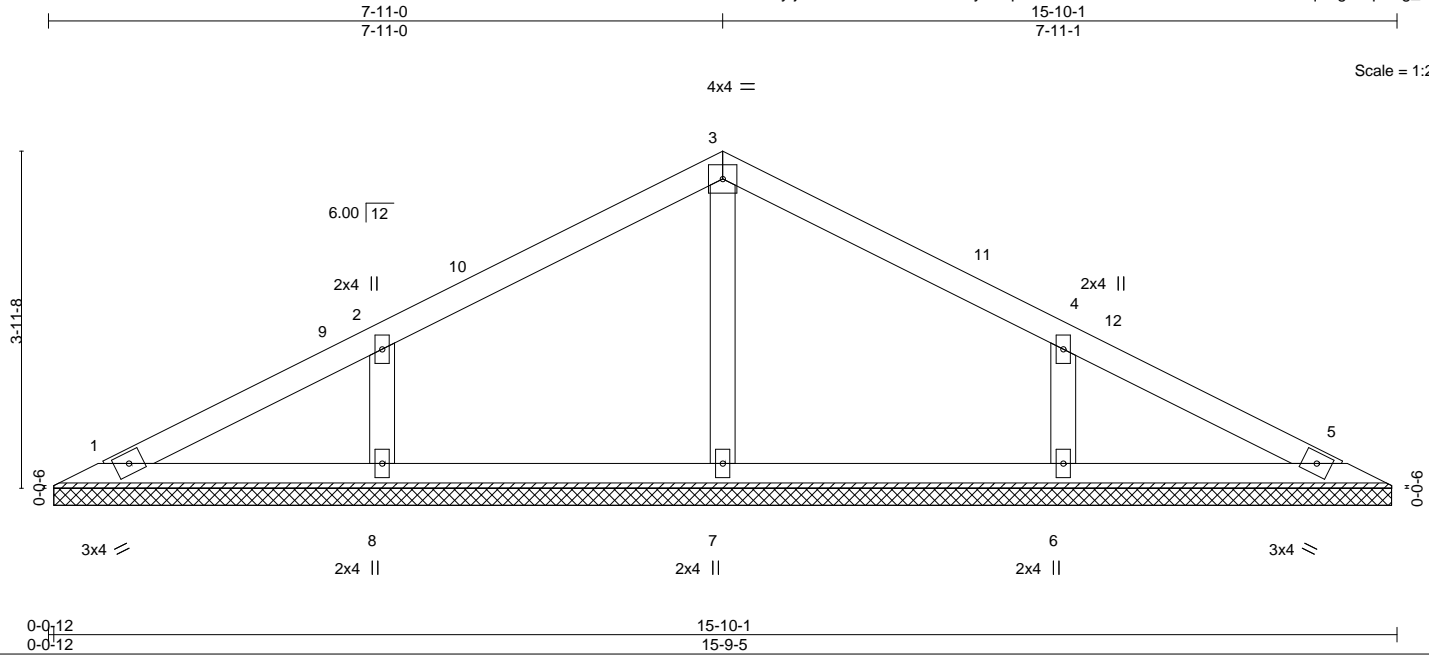


March 4, 2022

Job	Truss	Truss Type	Qty	Ply	Southern Touch/Lot 14 Michell Manor	150575553
J0322-1383	VP1	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Mar 3 13:41:51 2022 Page 1  
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Scale = 1:27.1

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.15	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.08	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.05	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 57 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 15-8-9.  
(lb) - Max Horz 1=48(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 8, 6  
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=272(LC 1), 8=344(LC 23), 6=344(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 2-8=-260/202, 4-6=-260/202

- 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) 0-7-13 to 5-0-10, Interior(1) 5-0-10 to 7-11-0, Exterior(2) 7-11-0 to 12-3-13, Interior(1) 12-3-13 to 15-2-4 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 8, 6.
  - Non Standard bearing condition. Review required.



March 4, 2022

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**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

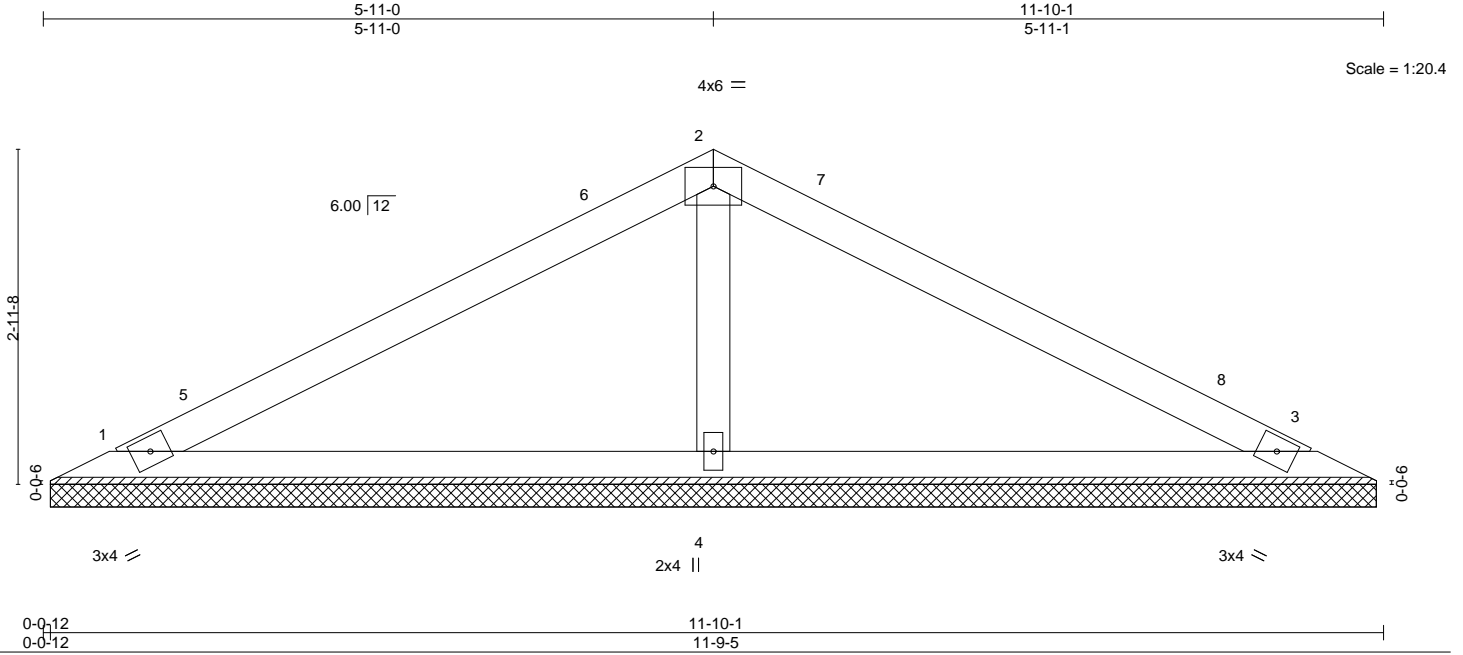
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Southern Touch/Lot 14 Michell Manor	150575554
J0322-1383	VP2	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Mar 3 13:41:52 2022 Page 1

ID:Jh9ByfjRPPU?mMRDxzGWXKyZ53p-pTAY7B0o9BUPGJ7sCt\_ec7ZtR6PSGI5zSHQ69Gzecz



0-0-12	11-10-1									
0-0-12	11-9-5									
<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 0.29	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.20	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	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.**

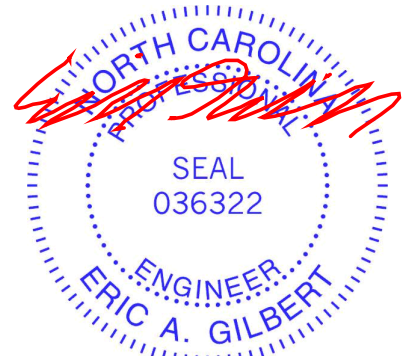
(size) 1=11-8-9, 3=11-8-9, 4=11-8-9  
 Max Horz 1=-35(LC 10)  
 Max Uplift 1=-26(LC 12), 3=-32(LC 13)  
 Max Grav 1=195(LC 23), 3=195(LC 24), 4=456(LC 1)

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

WEBS 2-4=-302/187

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCCL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-7-13 to 5-0-10, Interior(1) 5-0-10 to 5-11-0, Exterior(2) 5-11-0 to 10-3-13, Interior(1) 10-3-13 to 11-2-4 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- Non Standard bearing condition. Review required.



March 4, 2022

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

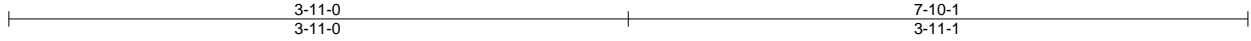


818 Soundside Road  
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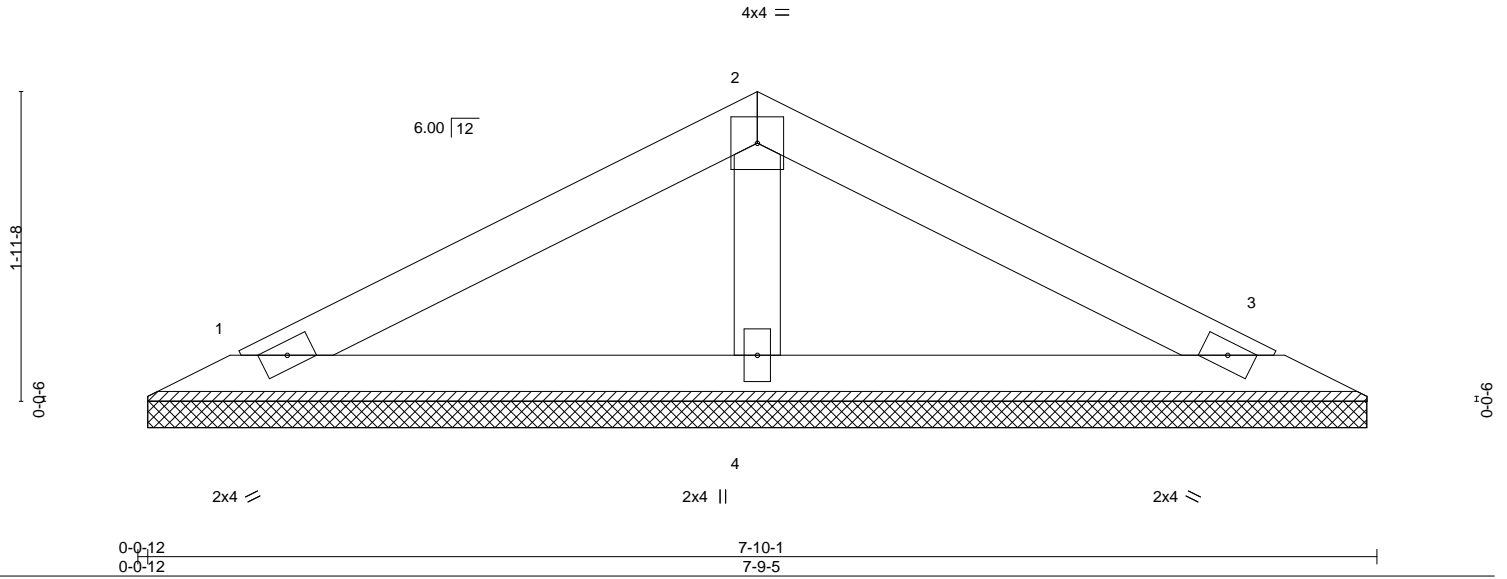
Job	Truss	Truss Type	Qty	Ply	Southern Touch/Lot 14 Michell Manor	150575555
J0322-1383	VP3	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Mar 3 13:41:53 2022 Page 1  
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Scale = 1:14.6



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.14	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.08	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.02	Horz(CT)	0.00	3	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.

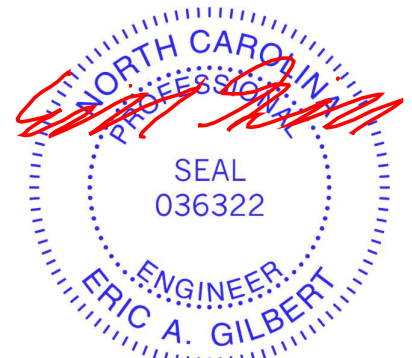
**REACTIONS.**

(size) 1=7-8-9, 3=7-8-9, 4=7-8-9  
Max Horz 1=-21(LC 8)  
Max Uplift 1=-21(LC 12), 3=-25(LC 13)  
Max Grav 1=133(LC 1), 3=133(LC 1), 4=256(LC 1)

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

**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) 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- Non Standard bearing condition. Review required.



March 4, 2022

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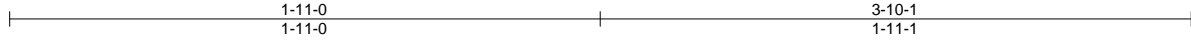
818 Soundside Road  
Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	Southern Touch/Lot 14 Michell Manor	150575556
J0322-1383	VP4	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Mar 3 13:41:53 2022 Page 1  
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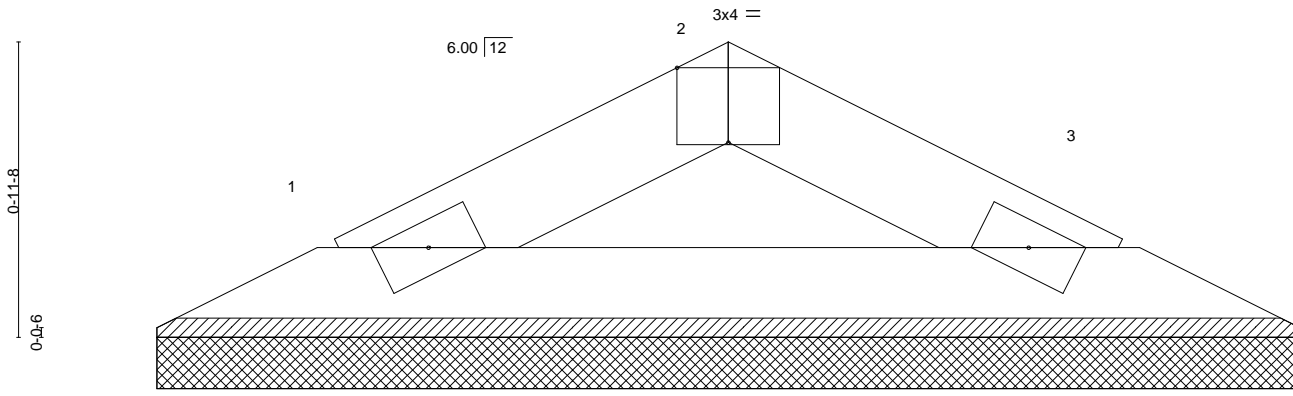


Plate Offsets (X,Y)--	[2:0-2:0,Edge]
-----------------------	----------------

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.03	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.06	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 10 lb	FT = 20%
	Code IRC2015/TPI2014							

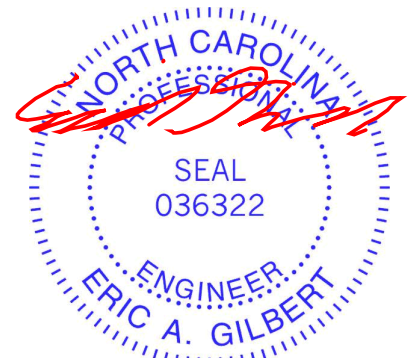
**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 3-10-1 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=3-8-9, 3=3-8-9  
 Max Horz 1=8(LC 9)  
 Max Uplift 1=6(LC 12), 3=6(LC 13)  
 Max Grav 1=101(LC 1), 3=101(LC 1)

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

- 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) 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
  - Non Standard bearing condition. Review required.



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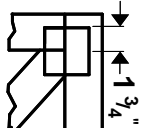
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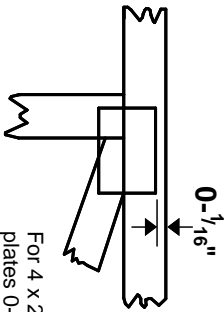
818 Soundside Road  
 Edenton, NC 27932

# Symbols

## PLATE LOCATION AND ORIENTATION



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



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



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

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

## PLATE SIZE

4 X 4

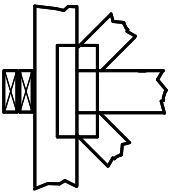
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

## BEARING



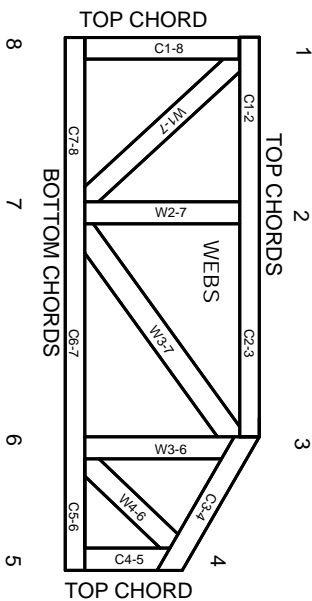
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

### Industry Standards:

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

# Numbering System

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/TFP 1 section 6.3 These truss designs rely on lumber values established by others.

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MITek Engineering Reference Sheet: Mill-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/TFP 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TFP 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. Rewriting pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TFP 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.