

RE: J0523-2061

Freedom / Lot 17 The Cape / Harnett

Trenco 818 Soundside Rd Edenton, NC 27932

Site Information:

Customer: Project Name: J0523-2061

Lot/Block: Model:
Address: Subdivision:
City: State:

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2015/TPl2014 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 31 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	155337270	A1	11/17/2022	21	155337290	VC1	11/17/2022
2	155337271	A2	11/17/2022	22	155337291	VD1	11/17/2022
3	155337272	A3	11/17/2022	23	155337292	VD2	11/17/2022
4	155337273	A4	11/17/2022	24	155337293	VD3	11/17/2022
5	155337274	A5	11/17/2022	25	155337294	VD4	11/17/2022
6	155337275	A6	11/17/2022	26	155337295	VD5	11/17/2022
7	155337276	A7	11/17/2022	27	155337296	VD6	11/17/2022
8	155337277	A7GE	11/17/2022	28	155337297	VD7	11/17/2022
9	155337278	B1	11/17/2022	29	155337298	VH1	11/17/2022
10	155337279	B1GE	11/17/2022	30	155337299	VH2	11/17/2022
11	155337280	C1	11/17/2022	31	155337300	VH3	11/17/2022
12	155337281	C1GE	11/17/2022				
13	155337282	C1GR	11/17/2022				
14	155337283	D1	11/17/2022				
15	155337284	D1GE	11/17/2022				
16	155337285	D1GR	11/17/2022				
17	155337286	H1	11/17/2022				
18	155337287	H1GE	11/17/2022				

11/17/2022

11/17/2022

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.

PΒ

PBGE

Truss Design Engineer's Name: Gilbert, Eric

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

North Carolina COA: C-0844

155337288

155337289

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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.



November 17, 2022

Job Truss Truss Type Qty Freedom / Lot 17 The Cape / Harnett 155337270 J0523-2061 A1 **GABLE** Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Nov 17 10:53:47 2022 Page 1 Fayetteville, NC - 28314, Comtech, Inc. ID:S?crwhY8I5GLeL8ytYDd1ayN?PA-xC6vLGDMhgevstHf?C?z9sfi?o1h_awbpn5U?VyIIZX 31-6-14 16-10-3 41-2-8 1-2-8 8-5-1 6-3-9 8-5-1 8-5-2 Scale = 1:82.5 6x6 =6x6 = 2x6 // 8.00 12 6 40 4x8 / 4x8 <> 20 5x12 = 4x4 4x4 > 2x6 8 2x6 2x6 || 38 18 4x8 // 5x12 || 2x6 II 4x6 = 17 14 42 43 13 12 44 45 11 16 15 4x6 = 2x6 / 2x6 || 4x8 =4x4 =4x4 = 4x8 = 14-10-4 33-10-4 40-0-0 6-1-12 6-1-12 10-3-8 Plate Offsets (X,Y)--[20:0-6-0,0-2-0] LOADING (psf) SPACING-2-0-0 CSI DEFL. in (loc) I/defl L/d **PLATES** GRIP TCLL 20.0 Plate Grip DOL 1.15 TC 0.41 Vert(LL) -0.23 13-14 >999 360 244/190 MT20 -0.32 13-14 TCDL 10.0 Lumber DOL 1.15 BC 0.53 Vert(CT) >999 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.43 Horz(CT) 0.04 n/a n/a Code IRC2015/TPI2014 **BCDL** 10.0 Wind(LL) 0.13 11-13 240 FT = 20%Matrix-S >999 Weight: 356 lb BRACING-2x6 SP No.1 TOP CHORD TOP CHORD Structural wood sheathing directly applied or 5-1-13 oc purlins, BOT CHORD 2x6 SP No.1 2-0-0 oc purlins (6-0-0 max.): 4-6.

BOT CHORD

WEBS

JOINTS

LUMBER-

2x4 SP No.2 *Except* **WEBS**

17-18,18-19,19-20,5-20: 2x6 SP No.1

OTHERS 2x4 SP No.2

REACTIONS. (size) 16=0-3-8, 9=0-3-8

Max Horz 16=-355(LC 10)

Max Uplift 16=-339(LC 12), 9=-292(LC 13) Max Grav 16=1926(LC 19), 9=1502(LC 20)

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

TOP CHORD 1-2=-199/760, 2-4=-788/396, 4-5=-544/424, 5-6=-1065/442, 6-8=-1605/459,

8-9=-2178/404

1-17=-531/251, 16-17=-326/296, 14-16=-125/756, 13-14=-38/1067, 11-13=-224/1591, **BOT CHORD**

WFBS 16-18=-1862/489, 2-18=-1716/477, 2-19=0/547, 14-19=0/563, 6-13=-156/915,

8-13=-709/435, 8-11=0/342, 17-18=-730/302, 18-19=-953/337, 19-20=-1034/338,

5-20=-1056/350

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) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 16-11-1, Exterior(2) 16-11-1 to 29-3-10, Interior(1) 29-3-10 to 41-0-9 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 339 lb uplift at joint 16 and 292 lb uplift at joint 9.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Rigid ceiling directly applied or 6-0-0 oc bracing.

14-20, 8-13, 19-20

1 Row at midpt

1 Brace at Jt(s): 18, 19, 20

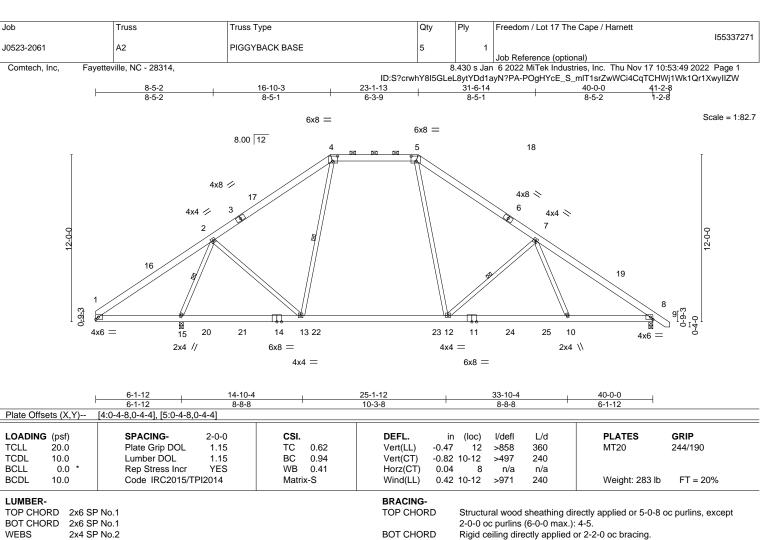
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a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





WEBS

1 Row at midpt

LUMBER-

WEBS 2x4 SP No.2

REACTIONS. (size) 15=0-3-8, 8=0-3-8 Max Horz 15=-284(LC 8)

Max Uplift 15=-85(LC 12), 8=-89(LC 13) Max Grav 15=2010(LC 2), 8=1528(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-358/628, 2-4=-1343/346, 4-5=-1025/392, 5-7=-1559/403, 7-8=-2308/385 **BOT CHORD** 1-15=-415/382, 13-15=-195/636, 12-13=0/1083, 10-12=-197/1624, 8-10=-186/1778 WFBS 2-15=-2038/692, 2-13=-75/922, 5-12=-59/758, 7-12=-818/367, 7-10=0/421

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 16-11-1, Exterior(2) 16-11-1 to 29-3-10, Interior(1) 29-3-10 to 41-0-9 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 85 lb uplift at joint 15 and 89 lb uplift at
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord



2-15, 4-13, 7-12





Job Truss Truss Type Qty Freedom / Lot 17 The Cape / Harnett 155337272 J0523-2061 **A3** PIGGYBACK BASE Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Nov 17 10:53:50 2022 Page 1 Fayetteville, NC - 28314, Comtech, Inc. ID:S?crwhY8I5GLeL8ytYDd1ayN?PA-ubDflxEdDluc5BR17d1REHl3hchtSVBuG4bb3MyIIZV 40-0-0 41-2-8 1-2-8 16-10-3 31-6-14 8-5-2 8-5-2 8-5-1 6-3-9 8-5-1 8-5-2 Scale = 1:82.5 6x6 =6x6 = 8.00 12 19 4x8 / 4x8 < 6 4x4 > 2 Ø าีร 14 21 22 24 12 16 13 23 11 25 26 10 $4x\overline{6} =$ 4x6 = 2x4 // 2x4 \\ 5x8 =4x4 =4x4 =5x8 =6-1-12 12-0-0 14-10-4 33-10-4 40-0-0 6-1-12 Plate Offsets (X,Y)--[1:0-0-0,0-1-1], [8:0-0-0,0-1-1] LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defI L/d **PLATES** GRIP TCLL 20.0 Plate Grip DOL 1.15 TC 0.34 Vert(LL) -0.23 12-13 >999 360 244/190 MT20 -0.34 12-13 TCDL 10.0 Lumber DOL 1.15 BC 0.68 Vert(CT) >984 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.32 Horz(CT) 0.07 8 n/a n/a Code IRC2015/TPI2014 **BCDL** 10.0 Wind(LL) 0.13 10-12 >999 240 FT = 20%Matrix-S Weight: 283 lb LUMBER-BRACING-2x6 SP No.1 TOP CHORD TOP CHORD Structural wood sheathing directly applied or 4-6-15 oc purlins, BOT CHORD 2x6 SP No.1 WEBS 2x4 SP No.2 2-0-0 oc purlins (6-0-0 max.): 4-5. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing **WEBS** 2-13, 7-12 1 Row at midpt REACTIONS. 1=0-3-8, 8=0-3-8, 15=0-3-8 (size)

Max Horz 1=-284(LC 10)

Max Uplift 1=-84(LC 13), 8=-126(LC 13), 15=-342(LC 9) Max Grav 1=1616(LC 2), 8=1830(LC 20), 15=379(LC 23)

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

TOP CHORD $1\hbox{-}2\hbox{--}2553/833, 2\hbox{-}4\hbox{--}2167/620, 4\hbox{-}5\hbox{--}1538/561, 5\hbox{-}7\hbox{--}2144/588, 7\hbox{-}8\hbox{--}2753/535}$

BOT CHORD 1-16=-525/1961, 15-16=-449/1904, 13-15=-449/1904, 12-13=-93/1474, 10-12=-334/2029,

2-16=-203/265, 2-13=-582/452, 4-13=-133/819, 5-12=-87/847, 7-12=-679/307, **WEBS**

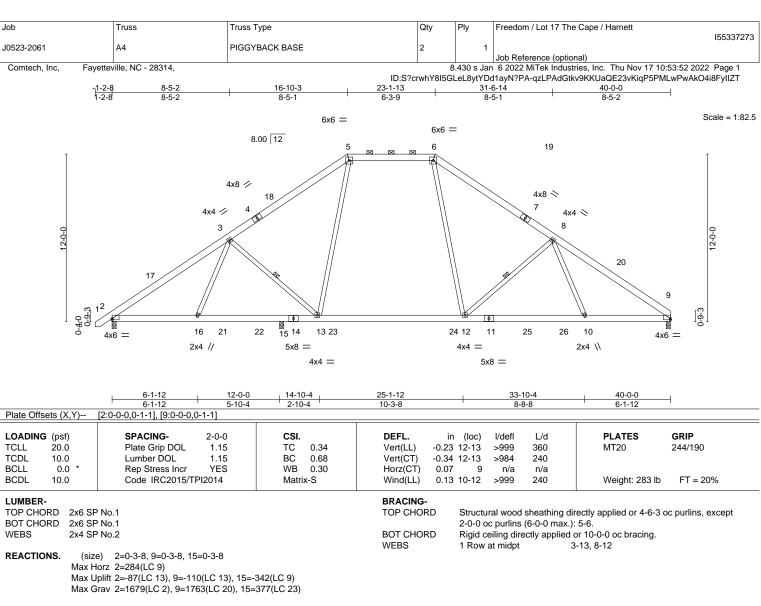
7-10=0/341

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 16-11-1, Exterior(2) 16-11-1 to 29-3-10, Interior(1) 29-3-10 to 41-0-9 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 84 lb uplift at joint 1, 126 lb uplift at joint 8 and 342 lb uplift at joint 15.
- 7) 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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FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-2558/826, 3-5=-2168/616, 5-6=-1540/559, 6-8=-2149/587, 8-9=-2754/531

BOT CHORD 2-16=-526/1959, 15-16=-449/1901, 13-15=-449/1901, 12-13=-105/1475, 10-12=-349/2040, 9-10=-318/2140

WEBS 3-16=-204/264, 3-13=-583/449, 5-13=-126/817, 6-12=-97/852, 8-12=-678/310,

8-10=0/342

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-0-9 to 3-4-4, Interior(1) 3-4-4 to 16-11-1, Exterior(2) 16-11-1 to 29-3-10, Interior(1) 29-3-10 to 39-10-4 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 87 lb uplift at joint 2, 110 lb uplift at joint 9 and 342 lb uplift at joint 15.
- 7) 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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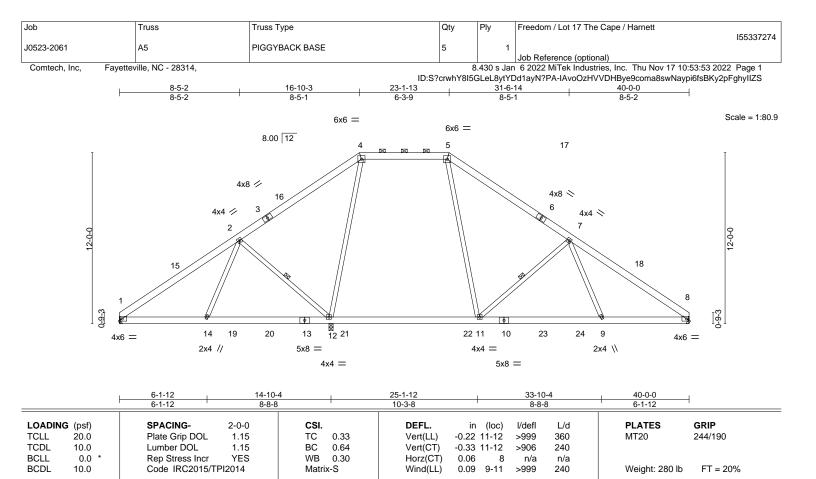


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ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





BRACING-TOP CHORD

BOT CHORD

WEBS

LUMBER-

REACTIONS.

TOP CHORD 2x6 SP No.1 2x6 SP No.1

BOT CHORD **WEBS** 2x4 SP No.2

1=Mechanical, 12=0-3-8, 8=Mechanical

(size) Max Horz 1=-277(LC 8)

Max Uplift 1=-102(LC 13), 12=-323(LC 9), 8=-134(LC 13) Max Grav 1=1674(LC 20), 12=527(LC 23), 8=1773(LC 20)

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

1-2=-2661/536, 2-4=-2191/600, 4-5=-1556/548, 5-7=-2172/573, 7-8=-2777/521 **BOT CHORD** $1-14 = -295/1926,\ 12-14 = -327/1854,\ 11-12 = -93/1435,\ 9-11 = -340/2062,\ 8-9 = -311/2162$ WFBS 2-14=0/307, 2-12=-635/306, 4-12=-126/832, 5-11=-84/866, 7-11=-696/316, 7-9=0/351

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-4 to 4-6-1, Interior(1) 4-6-1 to 16-11-1, Exterior(2) 16-11-1 to 29-3-10, Interior(1) 29-3-10 to 39-10-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 102 lb uplift at joint 1, 323 lb uplift at joint 12 and 134 lb uplift at joint 8.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied or 4-5-15 oc purlins,

2-12, 7-11

2-0-0 oc purlins (6-0-0 max.): 4-5.

1 Row at midpt

Rigid ceiling directly applied or 10-0-0 oc bracing.

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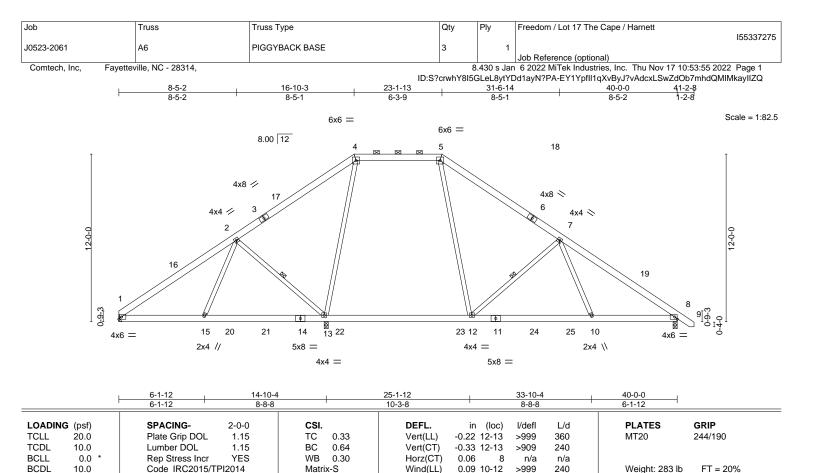


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LUMBER-

TOP CHORD 2x6 SP No.1

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

TOP CHORD Structural wood sheathing directly applied or 4-6-13 oc purlins,

2-0-0 oc purlins (6-0-0 max.): 4-5.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. **WEBS** 1 Row at midpt 2-13, 7-12

REACTIONS. 1=Mechanical, 13=0-3-8, 8=0-3-8 (size)

Max Horz 1=-284(LC 10)

Max Uplift 1=-101(LC 13), 13=-323(LC 9), 8=-150(LC 13) Max Grav 1=1669(LC 20), 13=529(LC 23), 8=1837(LC 20)

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

TOP CHORD 1-2=-2651/534, 2-4=-2181/598, 4-5=-1549/546, 5-7=-2159/569, 7-8=-2764/522 **BOT CHORD** 1-15=-280/1919, 13-15=-312/1847, 12-13=-78/1428, 10-12=-322/2040, 8-10=-294/2140 WFBS 2-15=0/307, 2-13=-636/307, 4-13=-126/827, 5-12=-80/855, 7-12=-690/311, 7-10=0/350

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-4 to 4-6-1, Interior(1) 4-6-1 to 16-11-1, Exterior(2) 16-11-1 to 29-3-10, Interior(1) 29-3-10 to 41-0-9 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 101 lb uplift at joint 1, 323 lb uplift at joint 13 and 150 lb uplift at joint 8.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 17,2022

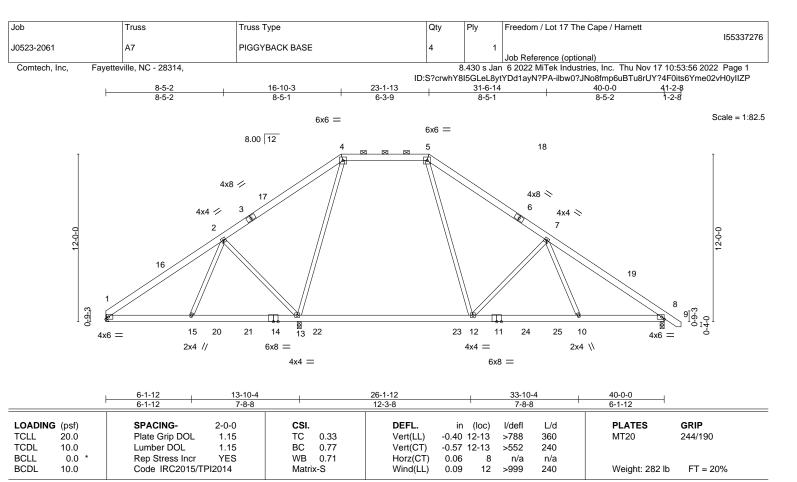


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BOT CHORD

LUMBER-BRACING-TOP CHORD

TOP CHORD 2x6 SP No.1

BOT CHORD 2x6 SP No.1

WEBS 2x4 SP No.2

REACTIONS. (size) 1=Mechanical, 13=0-3-8, 8=0-3-8

Max Horz 1=-284(LC 10)

Max Uplift 1=-114(LC 13), 13=-347(LC 9), 8=-150(LC 13) Max Grav 1=1695(LC 20), 13=558(LC 23), 8=1856(LC 20)

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

TOP CHORD 1-2=-2643/548, 2-4=-2308/619, 4-5=-1565/551, 5-7=-2297/587, 7-8=-2763/530

BOT CHORD 1-15=-291/1906, 13-15=-315/1867, 12-13=-83/1444, 10-12=-321/2075, 8-10=-301/2141

WEBS 2-13=-607/312, 4-13=-138/909, 5-12=-93/958, 7-12=-661/317, 7-10=0/281

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-4 to 4-6-1, Interior(1) 4-6-1 to 16-11-1, Exterior(2) 16-11-1 to 29-3-10, Interior(1) 29-3-10 to 41-0-9 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 114 lb uplift at joint 1, 347 lb uplift at joint 13 and 150 lb uplift at joint 8.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord



Structural wood sheathing directly applied or 4-6-12 oc purlins,

2-0-0 oc purlins (6-0-0 max.): 4-5.

Rigid ceiling directly applied or 10-0-0 oc bracing.

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 danage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

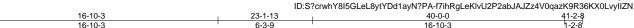
ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Freedom / Lot 17 The Cape / Harnett 155337277 J0523-2061 A7GE **GABLE** Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Nov 17 10:53:58 2022 Page 1

Scale = 1:77.0



4x8 =4x8 =8.00 12 13 14 11 12 15 10 16 17 4x8 / 4x8 < 18 48 19⁴⁸ 67 20 21 22 23₄₉ 24 4x6 = 27 4x6 = 42 40 35 32 30 8x8 = 8x8 =

40-0-0 40-0-0 [11:0-4-0 0-0-10] [15:0-4-0 0-0-10] [32:0-4-0 0-4-8] [40:0-4-0 0-4-8] Plate Offsets (X V)--

Tidle Ons	Cl3 (A, I)	[11.0-4-0,0-0-10], [13.0-4	0,0 0 10], [02	.0 + 0,0 + 0	, [+0.0 + 0,0	- 0j						
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	0.06	Vert(LL)	-0.00	25	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	25	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.01	25	n/a	n/a		
BCDL	10.0	Code IRC2015/TF	PI2014	Matri	x-S						Weight: 396 lb	FT = 20%

BRACING-LUMBER-

TOP CHORD 2x6 SP No.1 Structural wood sheathing directly applied or 6-0-0 oc purlins, except TOP CHORD **BOT CHORD** 2x6 SP No.1 2-0-0 oc purlins (6-0-0 max.): 11-15. **OTHERS** 2x4 SP No.2 **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing.

WEBS 13-36, 12-37, 10-38, 9-39, 14-35, 16-34, 1 Row at midpt 17-33

REACTIONS. All bearings 40-0-0.

Max Horz 1=-355(LC 8) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 25, 36, 37, 38, 39, 40, 41, 42, 43, 44, 35, 33, 32, 31, 30, 29,

28 except 1=-135(LC 10), 45=-140(LC 12), 27=-116(LC 13)

All reactions 250 lb or less at joint(s) 1, 25, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 35, 34, 33, Max Grav 32, 31, 30, 29, 28, 27

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

TOP CHORD 1-2=-378/302, 2-3=-270/251, 8-9=-218/276, 9-10=-281/321, 10-11=-274/293,

11-12=-267/292, 12-13=-267/292, 13-14=-267/292, 14-15=-267/292, 15-16=-274/289,

16-17=-281/292, 24-25=-274/193

BOT CHORD 1-45=-170/265, 44-45=-170/265, 43-44=-170/265, 42-43=-170/265, 41-42=-170/265,

40-41=-170/265, 39-40=-170/265, 38-39=-170/265, 37-38=-170/265, 36-37=-170/265, 35-36=-170/265, 34-35=-170/265, 33-34=-170/265, 32-33=-170/265, 31-32=-170/265, 30-31=-170/265, 29-30=-170/265, 28-29=-170/265, 27-28=-170/265, 25-27=-170/265

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) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 16-11-1, Exterior(2) 16-11-1 to 29-3-10, Interior(1) 29-3-10 to 41-0-9 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 25, 36, 37, 38, 39, 40, 41, 42, 43, 44, 35, 33, 32, 31, 30, 29, 28 except (jt=lb) 1=135, 45=140, 27=116.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 17,2022

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

AMSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Freedom / Lot 17 The Cape / Harnett 155337278 J0523-2061 **B1** COMMON 6 Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Nov 17 10:54:00 2022 Page 1 Fayetteville, NC - 28314, Comtech, Inc.

ID:S?crwhY8I5GLeL8ytYDd1ayN?PA-bWqRsMMusM9CljCyikDneO9nve5Ko0WMZe07QnyIIZL 29-10-11 36-0-0 18-0-0 24-1-12 37-2-8 1-2-8 5-8-15 6-1-12 6-1-12 5-8-15 6-1-5

> Scale = 1:81.4 5x8 =

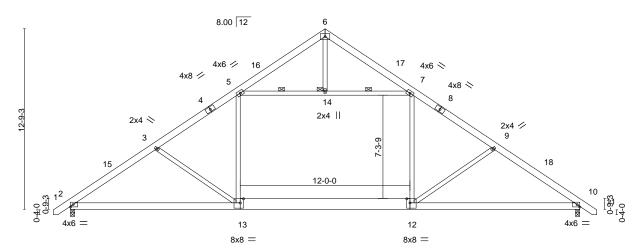
> > Structural wood sheathing directly applied or 5-0-3 oc purlins.

5-14, 7-14

Rigid ceiling directly applied or 10-0-0 oc bracing.

1 Row at midpt

1 Brace at Jt(s): 14



36-0-0 11-10-4 12-3-8 11-10-4

BRACING-

WEBS

JOINTS

TOP CHORD

BOT CHORD

Plate Offsets (X,Y)-- [12:0-2-12,0-3-8], [13:0-2-12,0-3-8]

LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.29 BC 0.67 WB 0.33	DEFL. in (loc) l/defl L/d Vert(LL) -0.42 10-12 >999 360 Vert(CT) -0.52 10-12 >826 240 Horz(CT) 0.05 10 n/a n/a	PLATES GRIP MT20 244/190
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.37 2-13 >999 240	Weight: 279 lb FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1 **BOT CHORD** 2x6 SP No.1 *Except*

12-13: 2x10 SP No.1

WEBS 2x4 SP No.2

REACTIONS. (size) 2=0-3-8, 10=0-3-8

Max Horz 2=-304(LC 10)

Max Uplift 2=-91(LC 12), 10=-91(LC 13) Max Grav 2=1664(LC 19), 10=1664(LC 20)

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

TOP CHORD 2-3=-2368/441, 3-5=-2168/409, 5-6=-481/191, 6-7=-481/191, 7-9=-2171/409,

9-10=-2366/441

BOT CHORD 2-13=-231/2087, 12-13=-64/1823, 10-12=-233/1858

WEBS 7-12=0/666, 9-12=-370/227, 5-13=0/666, 3-13=-370/226, 5-14=-1437/337,

7-14=-1437/337

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-0-9 to 3-4-4, Interior(1) 3-4-4 to 18-0-0, Exterior(2) 18-0-0 to 22-4-13, Interior(1) 22-4-13 to 37-0-9 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10



November 17,2022



Job Truss Truss Type Qty Freedom / Lot 17 The Cape / Harnett 155337279 J0523-2061 B1GE **GABLE** Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Nov 17 10:54:02 2022 Page 1 ID:S?crwhY8I5GLeL8ytYDd1ayN?PA-XuyBH2O8O_PvX1LLq8FFkpFB2RxsGzQf1yVDUgyIIZJ

18-0-0 18-0-0

5x8 =

Scale = 1:81.4

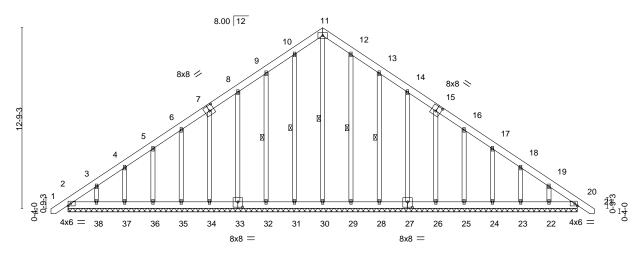


Plate Offsets (X,Y)--[7:0-4-0,0-4-8], [15:0-4-0,0-4-8], [27:0-4-0,0-4-8], [33:0-4-0,0-4-8] LOADING (psf) SPACING-DEFL. in (loc) I/defl L/d **PLATES** GRIP TCLL 20.0 Plate Grip DOL 1.15 TC 0.06 Vert(LL) -0.00 20 120 244/190 n/r MT20 TCDL 10.0 Lumber DOL 1.15 BC 0.03 Vert(CT) -0.00 20 n/r 120 **BCLL** 0.0 Rep Stress Incr YES WB 0.17 Horz(CT) 0.01 20 n/a n/a Code IRC2015/TPI2014 **BCDL** 10.0 Weight: 350 lb FT = 20%Matrix-S

36-0-0

LUMBER-**BRACING-**

TOP CHORD 2x6 SP No.1 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. 2x6 SP No.1 **BOT CHORD BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. **OTHERS** 2x4 SP No.2 **WEBS** 11-30, 10-31, 9-32, 12-29, 13-28 1 Row at midpt

REACTIONS. All bearings 36-0-0.

(lb) -Max Horz 2=-381(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 20, 31, 33, 34, 35, 36, 37, 29, 27, 26, 25, 24, 23 except

2=-112(LC 8), 32=-101(LC 12), 38=-128(LC 12), 28=-104(LC 13), 22=-120(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 2, 20, 31, 32, 33, 34, 35, 36, 37, 38, 29, 28, 27, 26, 25,

24, 23, 22 except 30=253(LC 13)

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

2-3=-407/296, 3-4=-304/251, 9-10=-254/299, 10-11=-284/324, 11-12=-284/324,

12-13=-254/284, 19-20=-317/219

2-38=-192/300, 37-38=-192/300, 36-37=-192/300, 35-36=-192/300, 34-35=-192/300, **BOT CHORD**

33-34=-195/301, 32-33=-195/301, 31-32=-195/301, 30-31=-195/301, 29-30=-195/301,

28-29=-195/301, 27-28=-195/301, 26-27=-195/301, 25-26=-192/299, 24-25=-192/299,

23-24=-192/299, 22-23=-192/299, 20-22=-192/299

- Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-0-9 to 3-4-4, Exterior(2) 3-4-4 to 18-0-0, Corner(3) 18-0-0 to 22-4-13, Exterior(2) 22-4-13 to 37-0-9 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 31, 33, 34, 35, 36, 37, 29, 27, 26, 25, 24, 23 except (jt=lb) 2=112, 32=101, 38=128, 28=104, 22=120.



November 17,2022



Job Truss Truss Type Qty Freedom / Lot 17 The Cape / Harnett 155337280 J0523-2061 C₁ Common 2 Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Nov 17 10:54:03 2022 Page 1 Comtech, Inc, Fayetteville, NC - 28314, ID:S?crwhY8I5GLeL8ytYDd1ayN?PA-?5WaUOOm9HXm9BwXNsmUG1nHZrFs?RFoFcEn06yIIZI 12-8-0 13-10-8 1-2-8 6-4-0 1-2-8 Scale = 1:24.7 4x4 = 3 6.00 12 10 8-9-0 5 6 2x4 || 3x4 / 3x4 ≥ 12-8-0 LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc) 20.0 Plate Grip DOL 1.15 -0.01 360 244/190 **TCLL** TC 0.33 Vert(LL) 2-6 >999 MT20 TCDL 10.0 Lumber DOL 1.15 ВС 0.17 Vert(CT) -0.03 2-6 >999 240

Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

0.01

0.01

4-6

n/a

>999

n/a

240

Rigid ceiling directly applied or 10-0-0 oc bracing.

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Weight: 59 lb

FT = 20%

LUMBER-

BCLL

BCDL

TOP CHORD 2x4 SP No.1 BOT CHORD 2x6 SP No.1

0.0

10.0

WEBS 2x4 SP No.2

REACTIONS. 2=0-3-8, 4=0-3-8 (size) Max Horz 2=-49(LC 10)

Max Uplift 2=-49(LC 12), 4=-49(LC 13) Max Grav 2=576(LC 1), 4=576(LC 1)

Rep Stress Incr

Code IRC2015/TPI2014

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

TOP CHORD 2-3=-679/213, 3-4=-679/213

BOT CHORD 2-6=-53/517, 4-6=-53/517

WEBS 3-6=0/313

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-2-8 to 3-2-5, Interior(1) 3-2-5 to 6-4-0, Exterior(2) 6-4-0 to 10-8-13, Interior(1) 10-8-13 to 13-10-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

WB

Matrix-S

0.07

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

YES

- 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.



November 17,2022

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

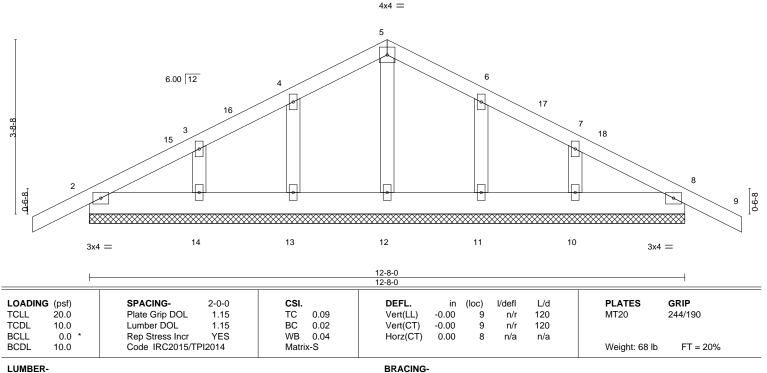
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chorembers 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, rerection and bracing of trusses and truss systems, see

ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Freedom / Lot 17 The Cape / Harnett 155337281 J0523-2061 C1GE COMMON SUPPORTED GAB Job Reference (optional) Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Nov 17 10:54:04 2022 Page 1 ID:S?crwhY8I5GLeL8ytYDd1ayN?PA-TH4yhkPPwbfdmKVjxZHjpEKW2FdTkv1yUG_KZYyllZH 13-10-8 12-8-0 1-2-8 6-4-0 6-4-0 1-2-8

Scale = 1:24.5



TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No 1 2x6 SP No.1 **BOT CHORD OTHERS** 2x4 SP No.2

REACTIONS. All bearings 12-8-0.

Max Horz 2=76(LC 12) (lb) -

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-

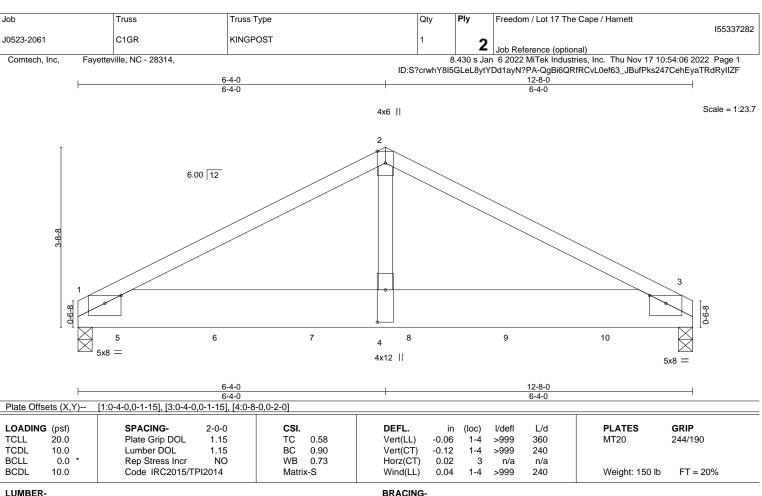
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-2-8 to 3-2-5, Exterior(2) 3-2-5 to 6-4-0, Corner(3) 6-4-0 to 10-8-13, Exterior(2) 10-8-13 to 13-10-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8, 13, 14, 11,
- 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 8.



Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.





TOP CHORD

BOT CHORD

LUMBER-

2x4 SP No.1 TOP CHORD BOT CHORD 2x10 SP No.1 WEBS 2x4 SP No.2

REACTIONS. (size) 1=0-3-8, 3=0-3-8

Max Horz 1=-41(LC 23)

Max Uplift 1=-491(LC 8), 3=-418(LC 9) Max Grav 1=5611(LC 2), 3=5005(LC 2)

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

1-2=-6961/612, 2-3=-6961/611 TOP CHORD **BOT CHORD** 1-4=-499/6154, 3-4=-499/6154

WFBS 2-4=-441/5953

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.

Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-2-0 oc.

Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=491, 3=418.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1623 lb down and 152 lb up at 0-11-4, 1621 lb down and 154 lb up at 2-11-4, 1621 lb down and 154 lb up at 4-11-4, 1621 lb down and 154 lb up at 6-11-4, and 1621 lb down and 154 lb up at 8-11-4, and 1645 lb down and 130 lb up at 10-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-3=-20, 1-2=-60, 2-3=-60



Structural wood sheathing directly applied or 4-6-6 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

November 17,2022

Continued on page 2

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

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Job Truss Truss Type Qty Ply Freedom / Lot 17 The Cape / Harnett 155337282 J0523-2061 C1GR KINGPOST

Comtech, Inc, Fayetteville, NC - 28314, Job Reference (optional)

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Nov 17 10:54:06 2022 Page 2
ID:S?crwhY8l5GLeL8ytYDd1ayN?PA-QgBi6QRfRCvL0ef63_JBufPks247CehEyaTRdRylIZF

LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 5=-1523(F) 6=-1521(F) 7=-1521(F) 8=-1521(F) 9=-1521(F) 10=-1531(F)



818 Soundside Road Edenton, NC 27932

Job Truss Truss Type Qty Freedom / Lot 17 The Cape / Harnett 155337283 J0523-2061 D1 QUEENPOST 5 Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

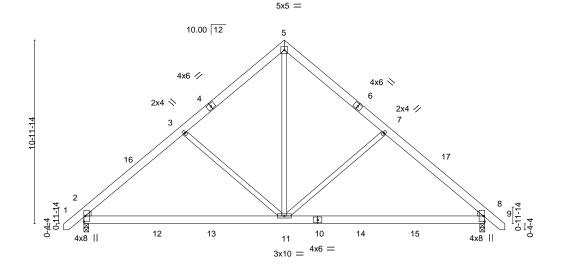
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Nov 17 10:54:07 2022 Page 1 ID:S?crwhY8I5GLeL8ytYDd1ayN?PA-usI4KISHCW2CdoElcirQRty08SWPxAUOAEC_AtyIIZE

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

12-0-0 17-11-8 24-0-0 25-2-8 1-2-8 6-0-8 5-11-8 5-11-8 6-0-8

Scale = 1:69.0



12-0-0 LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES GRIP** (loc) 2-11 20.0 Plate Grip DOL TC -0.13 360 244/190 **TCLL** 1.15 0.16 Vert(LL) >999 MT20 TCDL 10.0 Lumber DOL 1.15 ВС 0.52 Vert(CT) -0.24 2-11 >999 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.44 Horz(CT) 0.02 8 n/a n/a Code IRC2015/TPI2014 **BCDL** 10.0 Matrix-S Wind(LL) 0.02 2-11 >999 240 Weight: 176 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

24-0-0

LUMBER-

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

WEDGE

Left: 2x4 SP No.2, Right: 2x4 SP No.2

REACTIONS. (size) 8=0-3-8, 2=0-3-8 Max Horz 2=261(LC 11)

Max Uplift 8=-56(LC 13), 2=-56(LC 12)

Max Grav 8=1079(LC 20), 2=1079(LC 19)

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

 $2\hbox{-}3\hbox{--}1150/283,\ 3\hbox{-}5\hbox{--}955/297,\ 5\hbox{-}7\hbox{--}955/297,\ 7\hbox{-}8\hbox{--}1150/283}$ TOP CHORD

BOT CHORD 2-11=-91/961, 8-11=-74/830

WEBS 3-11=-397/266, 5-11=-183/805, 7-11=-397/266

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-0-12 to 3-4-1, Interior(1) 3-4-1 to 12-0-0, Exterior(2) 12-0-0 to 16-4-13, Interior(1) 16-4-13 to 25-0-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

12-0-0

- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 2.



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Job Truss Truss Type Qty Freedom / Lot 17 The Cape / Harnett 155337284 J0523-2061 D1GE **GABLE**

Comtech, Inc, Fayetteville, NC - 28314,

| Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Nov 17 10:54:09 2022 Page 1 ID:S?crwhY8I5GLeL8ytYDd1ayN?PA-qFtrlRTXk7lwt6Ohk7tuWI1ORGKSP7XheYh5EmylIZC

Structural wood sheathing directly applied or 6-0-0 oc purlins.

9-23, 8-24, 10-22

Rigid ceiling directly applied or 10-0-0 oc bracing.

1 Row at midpt

24-0-0 25-2-8 1-2-8 12-0-0 12-0-0

5x5 =

Scale = 1:69.0

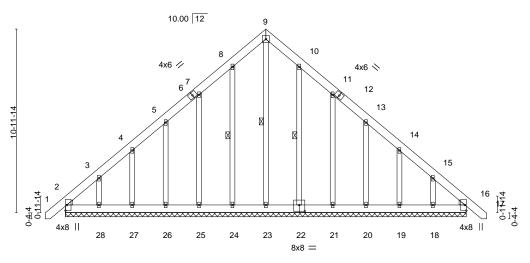


Plate Off	sets (X,Y)	[22:0-4-0,0-4-8]			
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.05	Vert(LL) -0.00 16 n/r 120	MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.03	Vert(CT) -0.00 16 n/r 120	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.15	Horz(CT) 0.01 16 n/a n/a	
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 228 lb FT = 20%

BRACING-

WEBS

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x6 SP No.1 BOT CHORD 2x6 SP No.1 **OTHERS** 2x4 SP No.2

WEDGE

Left: 2x4 SP No.2, Right: 2x4 SP No.2

REACTIONS. All bearings 24-0-0. Max Horz 2=326(LC 11) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 16, 24, 22 except 2=-107(LC 8),

25=-124(LC 12), 26=-110(LC 12), 27=-111(LC 12), 28=-181(LC 12), 21=-127(LC

13), 20=-110(LC 13), 19=-110(LC 13), 18=-172(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 16, 23, 24, 25, 26, 27, 28, 22,

21, 20, 19, 18 except 2=258(LC 21)

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

TOP CHORD 2-3=-396/261, 15-16=-333/226

BOT CHORD 2-28=-188/293, 27-28=-188/293, 26-27=-188/293, 25-26=-188/293, 24-25=-188/293,

23-24=-188/293, 22-23=-188/293, 21-22=-188/293, 20-21=-188/293, 19-20=-188/293,

18-19=-188/292, 16-18=-188/292

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-0-12 to 3-4-1, Exterior(2) 3-4-1 to 12-0-0, Corner(3) 12-0-0 to 16-4-13, Exterior(2) 16-4-13 to 25-0-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 24, 22 except (jt=lb) 2=107, 25=124, 26=110, 27=111, 28=181, 21=127, 20=110, 19=110, 18=172.



November 17,2022



 Job
 Truss
 Truss Type
 Qty
 Ply
 Freedom / Lot 17 The Cape / Harnett

 J0523-2061
 D1GR
 QUEENPOST
 1
 3
 Job Reference (optional)

5x8 ||

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Nov 17 10:54:10 2022 Page 1

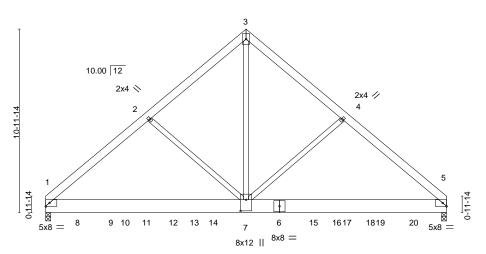
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12-0-0 17-9-4 24-0-0 5-9-4 5-9-4 6-2-12

Scale = 1:69.0

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.



12-0-0 24-0-0 12-0-0 12-0-0

BRACING-

TOP CHORD

BOT CHORD

Plate Offs	sets (X,Y)	[7:0-8-0,0-4-0]										
LOADING	· /		2-0-0	CSI.	0.07	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.17	1-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.33	5-7	>866	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.94	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2	2014	Matri	x-S	Wind(LL)	0.11	1-7	>999	240	Weight: 616 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1 BOT CHORD 2x10 SP 2400F 2.0E WEBS 2x4 SP No.2

REACTIONS. (size) 5=0-3-8, 1=0-3-8 Max Horz 1=247(LC 26)

Max Uplift 5=-671(LC 9), 1=-705(LC 8) Max Grav 5=9422(LC 2), 1=9502(LC 2)

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

TOP CHORD 1-2=-9464/744, 2-3=-9272/778, 3-4=-9272/777, 4-5=-9464/743

BOT CHORD 1-7=-572/7025, 5-7=-486/7025

WEBS 2-7=-318/362, 3-7=-875/11461, 4-7=-319/365

NOTES-

- 3-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc. Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-4-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

6-2-12

- 6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=671, 1=705.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1560 lb down and 134 lb up at 1-11-4, 1554 lb down and 134 lb up at 3-11-4, 1515 lb down and 134 lb up at 5-11-4, 1547 lb down and 134 lb up at 7-11-4, 1553 lb down and 121 lb up at 9-11-4, 1553 lb down and 121 lb up at 13-11-4, 1553 lb down and 121 lb up at 15-11-4, 1513 lb down and 122 lb up at 15-11-4, 1513 lb down and 122 lb up at 15-11-4, and 1549 lb down and 122 lb up at 19-11-4, and 1558 lb down and 122 lb up at 21-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Vert: 1-5=-20, 1-3=-60, 3-5=-60



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Continued on page 2



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818 Soundside Road Edenton, NC 27932 Job Truss Truss Type Qty Ply Freedom / Lot 17 The Cape / Harnett 155337285 D1GR QUEENPOST J0523-2061

Comtech, Inc, Fayetteville, NC - 28314,

| 3 | Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Nov 17 10:54:10 2022 Page 2 ID:S?crwhY8I5GLeL8ytYDd1ayN?PA-IRRDynU9VRQnVFytlqO72VaU7gVr8ORqsCRemCyllZB

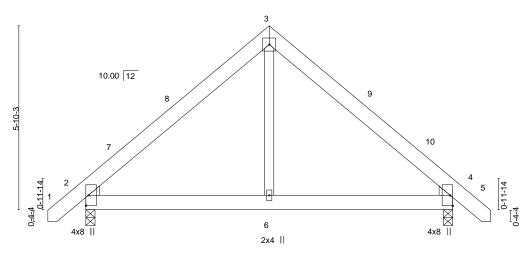
LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 6=-1457(B) 7=-1457(B) 8=-1451(B) 9=-1451(B) 11=-1451(B) 13=-1451(B) 14=-1457(B) 15=-1462(B) 17=-1462(B) 19=-1462(B) 20=-1462(B)



Job Truss Truss Type Qty Freedom / Lot 17 The Cape / Harnett 155337286 J0523-2061 H1 COMMON | Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Nov 17 10:54:11 2022 Page 1 Comtech, Inc, Fayetteville, NC - 28314, ID:S?crwhY8l5GLeL8ytYDd1ayN?PA-md?bA7VoGIYe6PX3rXvMbj6iG3ynt1lz5sACJeyIIZA 11-8-0 12-10-8 1-2-8 5-10-0 5-10-0 1-2-8 Scale = 1:36.6 5x5 =



		3-10-0	3-10-0	
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.15	Vert(LL) 0.02 4-6 >999 240	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.23	Vert(CT) -0.02 2-6 >999 240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.17	Horz(CT) 0.00 4 n/a n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 79 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

5-10-0

LUMBER-

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

WEDGE

Left: 2x4 SP No.2, Right: 2x4 SP No.2

REACTIONS. (size) 2=0-3-8, 4=0-3-8

Max Horz 2=-138(LC 10) Max Uplift 2=-51(LC 8), 4=-61(LC 8)

Max Grav 2=528(LC 1), 4=528(LC 1)

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

TOP CHORD 2-3=-489/445, 3-4=-489/445 **BOT CHORD** 2-6=-169/273, 4-6=-169/273

WEBS 3-6=-371/274

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-0-12 to 3-4-1, Interior(1) 3-4-1 to 5-10-0, Exterior(2) 5-10-0 to 10-2-13, Interior(1) 10-2-13 to 12-8-12 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.



Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

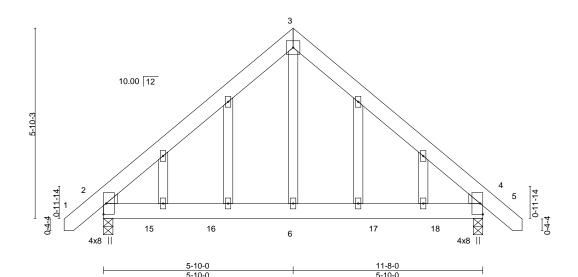
November 17,2022





Job Truss Truss Type Qty Freedom / Lot 17 The Cape / Harnett 155337287 J0523-2061 H1GE **GABLE** Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Nov 17 10:54:13 2022 Page 1 Comtech, Inc, Fayetteville, NC - 28314, ID:S?crwhY8I5GLeL8ytYDd1ayN?PA-i06LapW2oMoMMjhSzyxqg8C1pteMLxOGZ9fJNXyIIZ8 11-8-0 12-10-8 5-10-0 5-10-0 1-2-8

5x5 =



				0.00								
LOADING TCLL	i (psf) 20.0	SPACING- Plate Grip DOL	2-0-0 1.15	CSI.	0.15	DEFL. Vert(LL)	in 0.02	(loc) 4-6	l/defl >999	L/d 240	PLATES MT20	GRIP 244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.02	2-6	>999	240	25	2
BCLL BCDL	0.0 * 10.0	Rep Stress Incr Code IRC2015/TPI	YES 2014	WB Matri	0.16 x-S	Horz(CT)	0.00	4	n/a	n/a	Weight: 94 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

5-10-0

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

LUMBER-

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

WEDGE

Left: 2x4 SP No.2, Right: 2x4 SP No.2

REACTIONS. (size) 2=0-3-8, 4=0-3-8

Max Horz 2=-172(LC 10)

Max Uplift 2=-111(LC 12), 4=-111(LC 13) Max Grav 2=528(LC 1), 4=528(LC 1)

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

TOP CHORD 2-3=-489/432, 3-4=-489/432 **BOT CHORD** 2-6=-161/276, 4-6=-161/276

WEBS 3-6=-349/274

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-0-12 to 3-4-1, Exterior(2) 3-4-1 to 5-10-0, Corner(3) 5-10-0 to 10-2-13, Exterior(2) 10-2-13 to 12-8-12 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOI = 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=111. 4=111.



Scale = 1:35.4

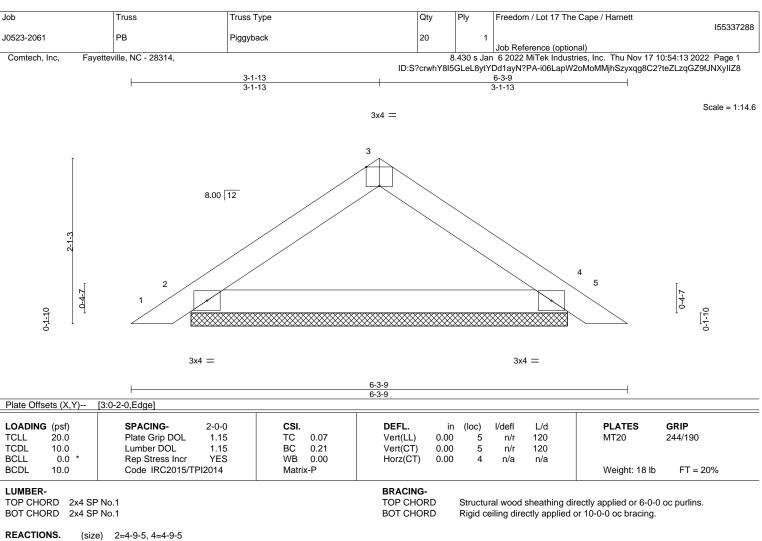
November 17,2022

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ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





Max Horz 2=-46(LC 10) Max Uplift 2=-17(LC 12), 4=-17(LC 13) Max Grav 2=221(LC 1), 4=221(LC 1)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.





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AMSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



155337289 J0523-2061 **PBGE GABLE** 2 Job Reference (optional) Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Nov 17 10:54:15 2022 Page 1 ID:S?crwhY8I5GLeL8ytYDd1ayN?PA-fPE6?UYIKz23b1rr4N_IIZHOVhNgpt7Z0T8PSQyIIZ6 6-3-9 3-1-13 3-1-12 Scale = 1:14.7 4x4 =3 8.00 12 2-1-3 0-4-7 0-1-10 0-1-10 6 2x4 || 3x4 =3x4 =LOADING (psf) SPACING-CSI. DEFL. L/d **PLATES** GRIP 2-0-0 (loc) I/def 20.0 Plate Grip DOL TC Vert(LL) 0.00 120 244/190 **TCLL** 1.15 0.07 5 n/r MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.04 Vert(CT) 0.00 5 n/r 120 **BCLL** 0.0 Rep Stress Incr YES WB 0.01 Horz(CT) 0.00 n/a n/a Code IRC2015/TPI2014 BCDL 10.0 Matrix-P Weight: 20 lb FT = 20% **BRACING-**LUMBER-

TOP CHORD

BOT CHORD

Qty

Freedom / Lot 17 The Cape / Harnett

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

TOP CHORD

Job

2x4 SP No.1 2x4 SP No.1 **BOT CHORD**

OTHERS 2x4 SP No.2

REACTIONS.

2=4-9-5, 4=4-9-5, 6=4-9-5 (size)

Max Horz 2=58(LC 11)

Truss

Truss Type

Max Uplift 2=-51(LC 12), 4=-58(LC 13), 6=-2(LC 12)

Max Grav 2=136(LC 1), 4=136(LC 1), 6=169(LC 1)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4, 6.
- 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building



November 17,2022

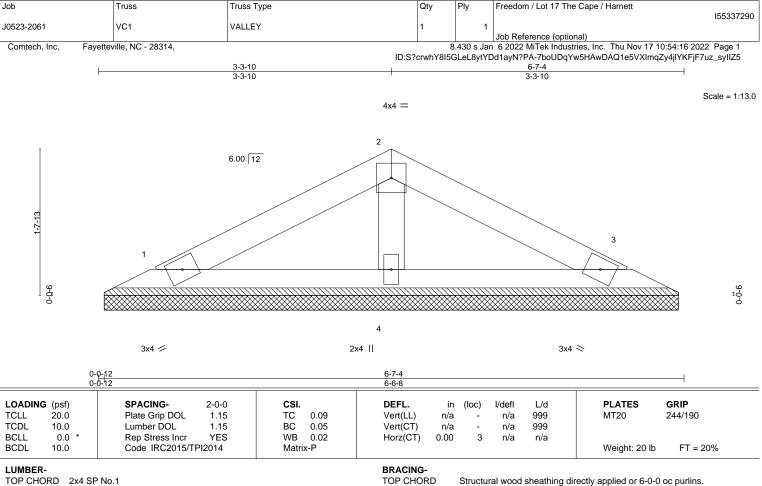


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BOT CHORD

Rigid ceiling directly applied or 10-0-0 oc bracing.

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

OTHERS 2x4 SP No.2

REACTIONS. 1=6-5-12, 3=6-5-12, 4=6-5-12 (size) Max Horz 1=-17(LC 10)

Max Uplift 1=-17(LC 12), 3=-20(LC 13)

Max Grav 1=108(LC 1), 3=108(LC 1), 4=208(LC 1)

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

NOTES-

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





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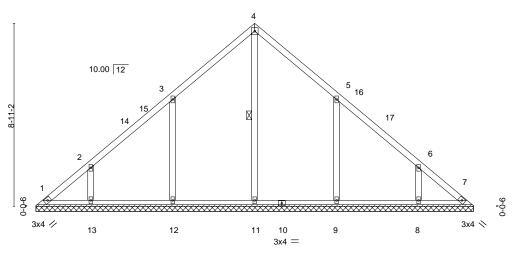


Job Truss Truss Type Qty Freedom / Lot 17 The Cape / Harnett 155337291 J0523-2061 VD1 VALLEY Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Nov 17 10:54:17 2022 Page 1

ID:S?crwhY8I5GLeL8ytYDd1ayN?PA-bnMsQAZYsbInqK?DCo0mq_MjiU1sHlCsTndWWIyIIZ4 10-8-9 10-8-9

> Scale = 1:56.2 4x4 =



21-4-11

Plate Offs	sets (X,Y)	<u>[5:0-0-0,0-0-0], [6:0-0-0,0</u>)-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	0.19	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TF	PI2014	Matri	x-S						Weight: 104 lb	FT = 20%

LUMBER-

2x4 SP No.1 TOP CHORD BOT CHORD 2x4 SP No.1 **OTHERS** 2x4 SP No.2 BRACING-

TOP CHORD **BOT CHORD WEBS**

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

1 Row at midpt 4-11

REACTIONS. All bearings 21-4-4.

(lb) -Max Horz 1=206(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 12=-140(LC 12), 13=-107(LC 12), 9=-140(LC 13),

8=-107(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 11=445(LC 22), 12=472(LC 19), 13=294(LC 19),

9=472(LC 20), 8=294(LC 20)

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

WFBS 3-12=-356/253, 2-13=-283/214, 5-9=-356/253, 6-8=-283/214

NOTES-

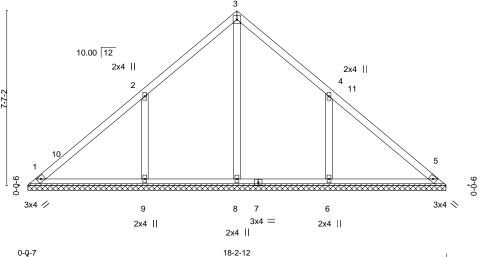
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-13 to 4-9-10, Interior(1) 4-9-10 to 10-8-9, Exterior(2) 10-8-9 to 15-1-6, Interior(1) 15-1-6 to 21-0-5 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7 except (jt=lb) 12=140, 13=107, 9=140, 8=107.



November 17,2022



Job Truss Truss Type Qty Freedom / Lot 17 The Cape / Harnett 155337292 J0523-2061 VD2 VALLEY Job Reference (optional) Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Nov 17 10:54:18 2022 Page 1 ID:S?crwhY8l5GLeL8ytYDd1ayN?PA-3zwEeWaBduQeSUaQmWX?NBvtVuME0C3?iRN42kyIIZ3 18-2-12 9-1-6 9-1-6 Scale = 1:50.0 4x4 =3



LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	n (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.22	Vert(LL) n/	a `-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.18	Vert(CT) n/	a -	n/a	999		
3CLL 0.0 *	Rep Stress Incr YES	WB 0.13	Horz(CT) 0.0	0 5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 82 lb	FT = 20%

18-2-5

LUMBER-

TOP CHORD 2x4 SP No.1 **BOT CHORD** 2x4 SP No.1 **OTHERS** 2x4 SP No.2

Plate Offsets (X V)-- [4:0-0-0 0-0-0]

BRACING-

TOP CHORD **BOT CHORD** Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 18-1-13.

Max Horz 1=-174(LC 8) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1 except 9=-169(LC 12), 6=-168(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=413(LC 22), 9=551(LC 19), 6=550(LC 20)

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

2-9=-420/286, 4-6=-420/287

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-13 to 4-9-10, Interior(1) 4-9-10 to 9-1-6, Exterior(2) 9-1-6 to 13-6-3, Interior(1) 13-6-3 to 17-9-15 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 9=169, 6=168
- 6) Non Standard bearing condition. Review required.





Job Truss Truss Type Qty Freedom / Lot 17 The Cape / Harnett 155337293 J0523-2061 VD3 VALLEY Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Nov 17 10:54:19 2022 Page 1 Comtech, Inc, Fayetteville, NC - 28314, ID:S?crwhY8I5GLeL8ytYDd1ayN?PA-XAUdrsbpNCYV4e8cJD2EwPS3PlipIgs9x56dbByIIZ2 7-6-3 7-6-3 15-0-5 7-6-2 Scale = 1:39.7 4x4 = 3 10.00 12 11 10 2x4 || 2x4 || 4 12 9 5 3x4 // 3x4 N 7 6 8 13 14 2x4 || 2x4 || 2x4 ||

Plate Off	Plate Offsets (X,Y) [4:0-0-0,0-0-0]											
LOADIN	\(\(\)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2015/Ti	PI2014	Matri	x-S						Weight: 65 lb	FT = 20%

14-11-14

LUMBER-

2x4 SP No.1 TOP CHORD BOT CHORD 2x4 SP No.1 **OTHERS** 2x4 SP No.2 BRACING-

TOP CHORD **BOT CHORD** Structural wood sheathing directly applied or 6-0-0 oc purlins.

15-0-5 0-0-7

Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 14-11-7.

(lb) -Max Horz 1=-142(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-137(LC 12), 6=-137(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=403(LC 19), 8=401(LC 19), 6=400(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-8=-342/248, 4-6=-342/248 WEBS

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-13 to 4-9-10, Interior(1) 4-9-10 to 7-6-3, Exterior(2) 7-6-3 to 11-11-0, Interior(1) 11-11-0 to 14-7-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=137, 6=137,





Job Truss Truss Type Qty Freedom / Lot 17 The Cape / Harnett 155337294 J0523-2061 VD4 VALLEY Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Nov 17 10:54:20 2022 Page 1 Comtech, Inc, Fayetteville, NC - 28314, ID:S?crwhY8I5GLeL8ytYDd1ayN?PA-?M1?2CcR8WgMhojotwZTSc_ELi34U8gIAlsA7dyIIZ1 5-11-0 5-10-15 Scale = 1:31.3 4x4 = 3 11 10.00 12 2x4 || 4^{2x4} || 12 3x4 / 3x4 N 8 7 6 2x4 || 2x4 || 2x4 || 11-9-15 0-0-7 11-9-8 11-9-8 LOADING (psf) SPACING-2-0-0 CSI. DEFL. L/d **PLATES** GRIP (loc) I/defI 20.0 Plate Grip DOL 999 244/190 **TCLL** 1.15 TC 0.13 Vert(LL) n/a n/a MT20 TCDL 10.0 Lumber DOL 1.15 ВС 0.09 Vert(CT) n/a 999 n/a **BCLL** 0.0 Rep Stress Incr YES WB 0.06 Horz(CT) 0.00 5 n/a n/a Code IRC2015/TPI2014 **BCDL** 10.0 Matrix-S Weight: 48 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

OTHERS 2x4 SP No.2

REACTIONS. All bearings 11-9-1.

Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-124(LC 12), 6=-124(LC 13) Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=325(LC 19), 6=325(LC 20)

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

2-8=-316/248, 4-6=-316/248 WEBS

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-13 to 4-9-10, Interior(1) 4-9-10 to 5-11-0, Exterior(2) 5-11-0 to 10-3-12, Interior(1) 10-3-12 to 11-5-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=124, 6=124.



Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.



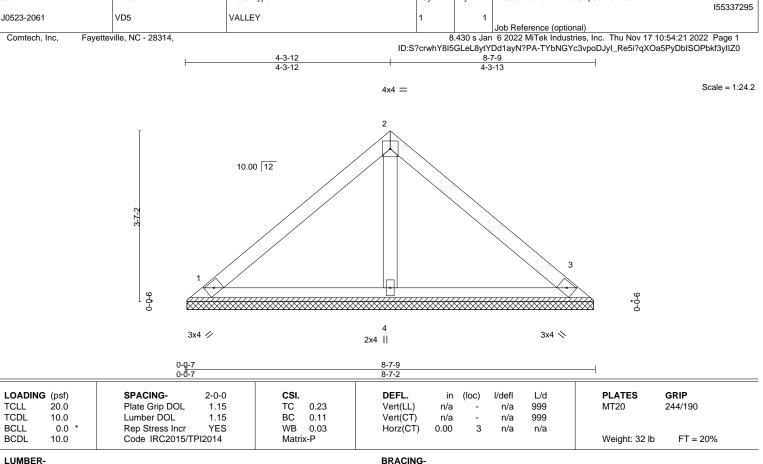


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TOP CHORD

BOT CHORD

Qty

Freedom / Lot 17 The Cape / Harnett

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

LUMBER-

Job

Truss

Truss Type

TOP CHORD 2x4 SP No.1 BOT CHORD 2x4 SP No.1 **OTHERS** 2x4 SP No.2

REACTIONS.

1=8-6-10, 3=8-6-10, 4=8-6-10 (size) Max Horz 1=-78(LC 8) Max Uplift 1=-27(LC 13), 3=-34(LC 13)

Max Grav 1=181(LC 1), 3=181(LC 1), 4=264(LC 1)

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

NOTES-

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





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AMSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



155337296 J0523-2061 VD6 VALLEY Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Nov 17 10:54:22 2022 Page 1 Comtech, Inc, Fayetteville, NC - 28314, ID:S?crwhY8I5GLeL8ytYDd1ayN?PA-yI9ITudhg7w4x5tB?LcxX14biVmKy2sbd3LHBWyIIZ? 2-8-9 2-8-9 Scale = 1:16.4 4x4 =2 10.00 12 3 9-0-0 9-0-0 3x4 // 2x4 || 3x4 💉 5-5-2 0-0-7 LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc) 20.0 Plate Grip DOL TC Vert(LL) 999 244/190 **TCLL** 1.15 0.07 n/a n/a MT20 TCDL 10.0 Lumber DOL 1.15 ВС 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 Code IRC2015/TPI2014 BCDL 10.0 Matrix-P Weight: 19 lb FT = 20% LUMBER-**BRACING-**

TOP CHORD

BOT CHORD

Qty

Freedom / Lot 17 The Cape / Harnett

Structural wood sheathing directly applied or 5-5-2 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

Job

Truss

Truss Type

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

OTHERS 2x4 SP No.2

> 1=5-4-4, 3=5-4-4, 4=5-4-4 (size) Max Horz 1=46(LC 11)

Max Uplift 1=-16(LC 13), 3=-20(LC 13)

Max Grav 1=107(LC 1), 3=107(LC 1), 4=156(LC 1)

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

NOTES-

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





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 chorembers 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, rerection and bracing of trusses and truss systems, see

ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Freedom / Lot 17 The Cape / Harnett 155337297 VALLEY J0523-2061 VD7 Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Nov 17 10:54:23 2022 Page 1 Comtech, Inc, Fayetteville, NC - 28314, ID:S?crwhY8I5GLeL8ytYDd1ayN?PA-Qxj7hEeJRR3xYFSNY37A4FcnVv6xhVlksj4rkyyIIZ_ 2-2-12 1-1-6 1-1-6 Scale = 1:7.4 3x4 =2 10.00 12 3 9-0-0 9-0-0 3x4 // 3x4 💉 0₇0₇7 0-0-7 Plate Offsets (X,Y)--[2:0-2-0,Edge] SPACING-DEFL. GRIP LOADING (psf) 2-0-0 CSI. in (loc) I/defI L/d **PLATES** Plate Grip DOL TCLL 20.0 1.15 TC 0.01 Vert(LL) 999 MT20 244/190 n/a n/a TCDL 10.0 Lumber DOL 1.15 BC 0.02 Vert(CT) n/a n/a 999 BCLL 0.0 Rep Stress Incr YES WB 0.00 0.00 3 Horz(CT) n/a n/a Code IRC2015/TPI2014 FT = 20% **BCDL** 10.0 Matrix-P Weight: 6 lb LUMBER-**BRACING-**TOP CHORD 2x4 SP No.1 TOP CHORD Structural wood sheathing directly applied or 2-2-12 oc purlins. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing.

BOT CHORD 2x4 SP No.1

> 1=2-1-13, 3=2-1-13 (size) Max Horz 1=14(LC 11)

Max Uplift 1=-2(LC 12), 3=-3(LC 13) Max Grav 1=57(LC 1), 3=57(LC 1)

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

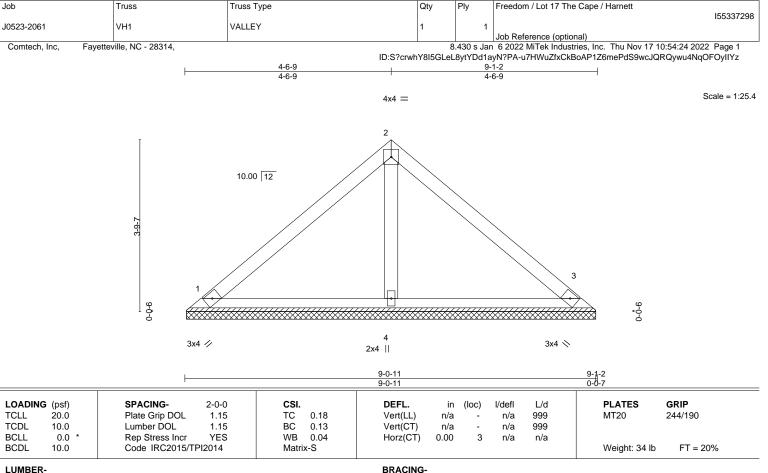
NOTES-

REACTIONS.

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







TOP CHORD

BOT CHORD

LUMBER-

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

OTHERS 2x4 SP No.2

REACTIONS. 1=9-0-4, 3=9-0-4, 4=9-0-4 (size) Max Horz 1=-83(LC 8)

Max Uplift 1=-19(LC 13), 3=-27(LC 13)

Max Grav 1=177(LC 1), 3=177(LC 1), 4=309(LC 1)

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

NOTES-

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



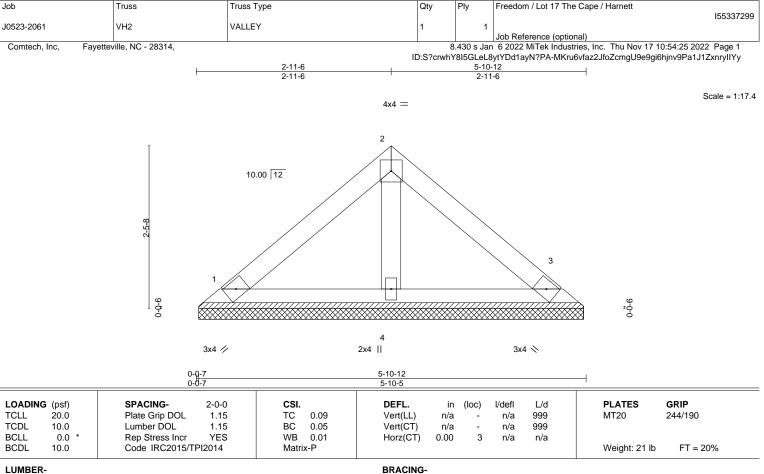
Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.









TOP CHORD

BOT CHORD

REACTIONS.

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

OTHERS 2x4 SP No.2

> 1=5-9-13, 3=5-9-13, 4=5-9-13 (size) Max Horz 1=-51(LC 8)

Max Uplift 1=-18(LC 13), 3=-22(LC 13)

Max Grav 1=118(LC 1), 3=118(LC 1), 4=172(LC 1)

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

NOTES-

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



Structural wood sheathing directly applied or 5-10-12 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.



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AMSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Freedom / Lot 17 The Cape / Harnett 155337300 J0523-2061 VH3 VALLEY Job Reference (optional) 8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Nov 17 10:54:26 2022 Page 1 Comtech, Inc, Fayetteville, NC - 28314, ID:S?crwhY8I5GLeL8ytYDd1ayN?PA-qWPGJFgCkMRWPjByEBgtitElf67Rur2BYhJVJHyIIYx 2-8-5 1-4-3 1-4-2 Scale = 1:8.4 3x4 =10.00 12 3 0-0-6 9-0-0 3x4 // 3x4 × Plate Offsets (X,Y)--[2:0-2-0,Edge] SPACING-**PLATES** GRIP LOADING (psf) 2-0-0 CSI. DEFL. in (loc) I/defI L/d Plate Grip DOL TCLL 20.0 1.15 TC 0.01 Vert(LL) 999 MT20 244/190 n/a n/a TCDL 10.0 Lumber DOL 1.15 BC 0.03 Vert(CT) n/a n/a 999 BCLL 0.0 Rep Stress Incr YES WB 0.00 0.00 3 Horz(CT) n/a n/a Code IRC2015/TPI2014 FT = 20% **BCDL** 10.0 Matrix-P Weight: 8 lb

LUMBER-

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

TOP CHORD **BOT CHORD** Structural wood sheathing directly applied or 2-8-5 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-7-7, 3=2-7-7

Max Horz 1=19(LC 11) Max Uplift 1=-3(LC 12), 3=-3(LC 13)

Max Grav 1=75(LC 1), 3=75(LC 1)

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

NOTES-

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



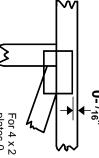


Symbols

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- $\frac{1}{16}$ 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 × 4

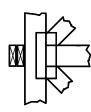
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



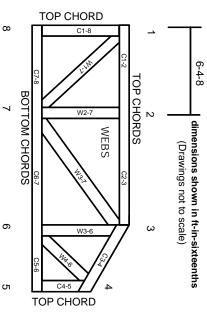
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only

Industry Standards:

National Design Specification for Metal Plate Connected Wood Truss Construction. Design Standard for Bracing. Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

ANSI/TPI1: DSB-89:

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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MITER Engineering Reference Sheet: MII-7473 rev. 5/19/2020

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- 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.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.

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

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- Cut members to bear tightly against each other.
- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.

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- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

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- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- 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
- Do not cut or alter truss member or plate without prior approval of an engineer.
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- 21. The design does not take into account any dynamic or other loads other than those expressly stated.