



**ROOF & FLOOR TRUSSES & BEAMS**

Reilly Road Industrial Park  
 Fayetteville, N.C. 28309  
 Phone: (910) 864-8787  
 Fax: (910) 864-4444

Bearing reactions less than or equal to 3000# are deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables ( derived from the prescriptive Code requirements ) to determine the minimum foundation size and number of wood studs required to support reactions greater than 3000# but not greater than 15000#. A registered design professional shall be retained to design the support system for any reaction that exceeds those specified in the attached Tables. A registered design professional shall be retained to design the support system for all reactions that exceed 15000#.

Signature David Landry  
 David Landry

**LOAD CHART FOR JACK STUDS**  
(BASED ON TABLES MODEL: S 103)

NUMBER OF JACK STUDS REQUIRED BY EACH OF HEADS/HEIGHTS		NUMBER OF JACK STUDS REQUIRED BY EACH OF HEADS/HEIGHTS	
REACTION (LBS)	REQ. STUDS PER 10' SPACING	REACTION (LBS)	REQ. STUDS PER 10' SPACING
1700	1	2550	1
3400	2	5100	2
5100	3	7650	3
6800	4	10200	4
8500	5	12750	5
10200	6	15300	6
11900	7		
13600	8		
15300	9		

**Dimension Notes**

- All exterior wall to wall dimensions are to face of sheathing unless noted otherwise
- All interior wall dimensions are to face of frame wall unless noted otherwise
- All exterior wall to truss dimensions are to face of frame wall unless noted otherwise

**All Walls Shown Are Considered Load Bearing**

Roof Area = 2064.51 sq.ft.  
 Ridge Line = 72.42 ft.  
 Hip Line = 0 ft.  
 Horiz. OH = 166.92 ft.  
 Raked OH = 207.07 ft.  
 Decking = 71 sheets

**Hatch Legend**

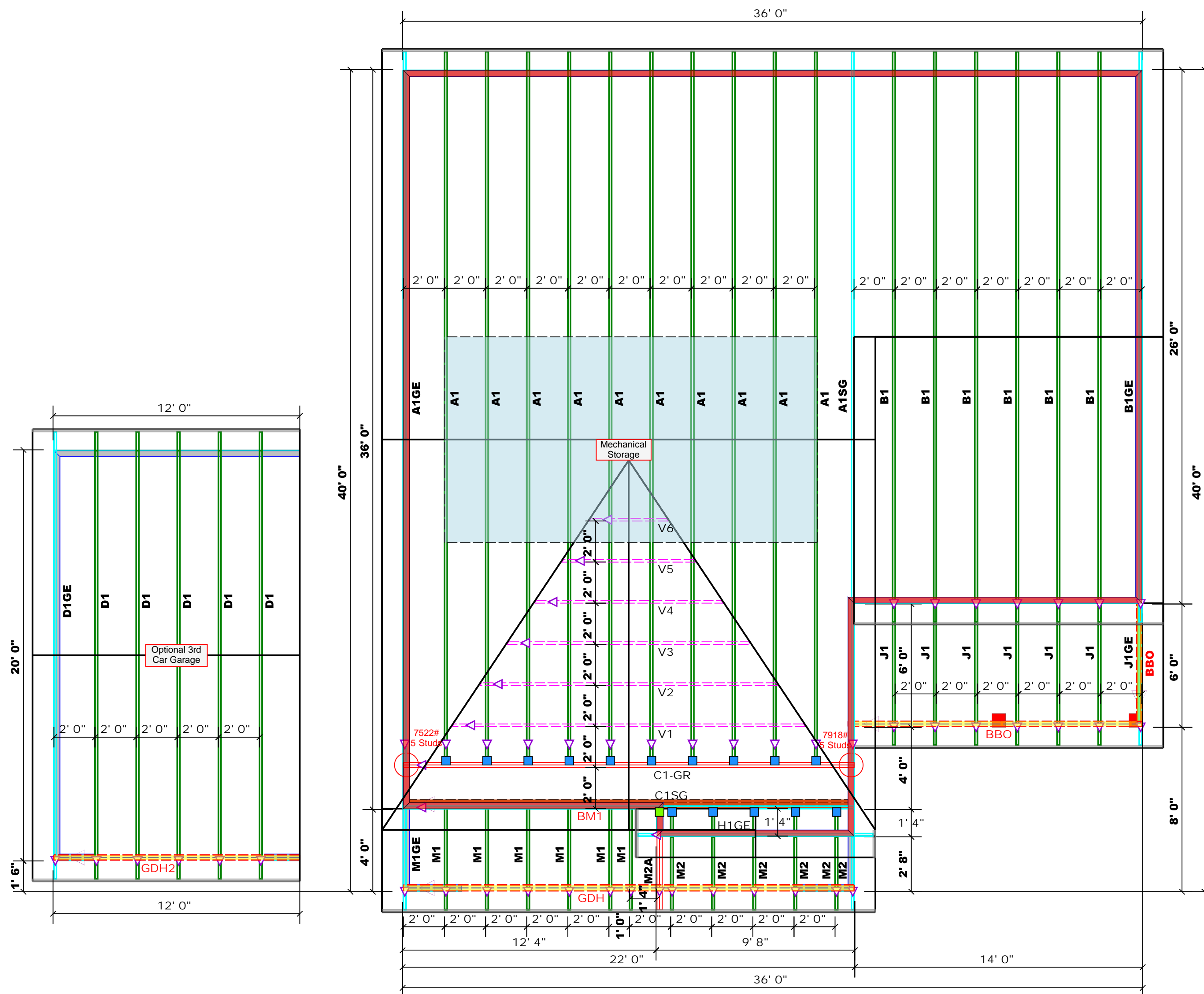
- Mechanical Storage
- Padded HVAC
- 2nd Floor Walls
- Drop Beam

Connector Information					Nail Information	
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
■	HUS26	USP	15	NA	16d/3-1/2"	16d/3-1/2"
■	THD26-2	USP	1	NA	16d/3-1/2"	10d/3"

**Products**

PlotID	Length	Product	Plies	Net Qty
BM1	22' 0"	1-3/4"x 16" LVL Kerto-S	3	3
BM2	15' 0"	1-3/4"x 16" LVL Kerto-S	3	3
BM3	7' 0"	1-3/4"x 9-1/4" LVL Kerto-S	2	2
GDH	22' 0"	1-3/4"x 11-7/8" LVL Kerto-S	2	2
GDH2	12' 0"	2x12 SPF No.2	2	2

1 Truss Placement Plan  
 Scale: 1/4"=1'



BUILDER	Regency Homes	CITY / CO.	Erwin / Harnett
JOB NAME	Lot 5 Avery Pointe	ADDRESS	430 Josey Williams Rd.
PLAN	Brinkley "B" / 3GLF	MODEL	Roof
SEAL DATE	N/A	DATE REV.	02/14/22
QUOTE #		DRAWN BY	David Landry
JOB #	J0222-0764	SALES REP.	Bob Lewis

THIS IS A TRUSS PLACEMENT DIAGRAM ONLY. These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult BCSI-B1 and BCSI-B3 provided with the truss delivery package or online @ sbcindustry.com

▲ = Indicates Left End of Truss  
 ( Reference Engineered Truss Drawing )  
 Do NOT Erect Truss Backwards



RE: J0222-0764  
Lot 5 Avery Pointe

Trenco  
818 Soundside Rd  
Edenton, NC 27932

**Site Information:**

Customer: Regency Homes Project Name: J0222-0764  
Lot/Block: 5 Model: Brinkley  
Address: 430 Josey Williams Road Subdivision: Avery Pointe  
City: Erwin State: NC

**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: 150 mph  
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 24 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	E16467258	A1	12/2/2021	21	E16467278	V3	12/2/2021
2	E16467259	A1GE	12/2/2021	22	E16467279	V4	12/2/2021
3	E16467260	A1SG	12/2/2021	23	E16467280	V5	12/2/2021
4	E16467261	B1	12/2/2021	24	E16467281	V6	12/2/2021
5	E16467262	B1GE	12/2/2021				
6	E16467263	C1-GR	12/2/2021				
7	E16467264	C1SG	12/2/2021				
8	E16467265	D1	12/2/2021				
9	E16467266	D1GE	12/2/2021				
10	E16467267	G1	12/2/2021				
11	E16467268	G1GE	12/2/2021				
12	E16467269	H1GE	12/2/2021				
13	E16467270	J1	12/2/2021				
14	E16467271	J1GE	12/2/2021				
15	E16467272	M1	12/2/2021				
16	E16467273	M1GE	12/2/2021				
17	E16467274	M2	12/2/2021				
18	E16467275	M2A	12/2/2021				
19	E16467276	V1	12/2/2021				
20	E16467277	V2	12/2/2021				

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: Strzyzewski, Marvin

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.



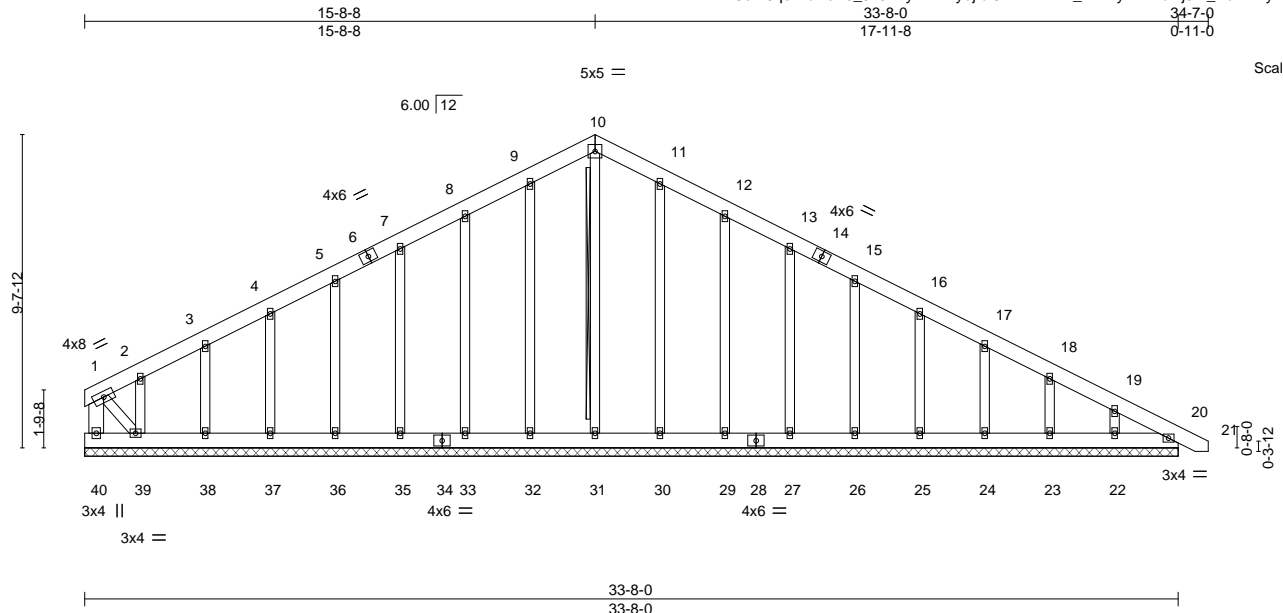
December 02, 2021



Job J0222-0764	Truss A1GE	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	Lot 5 Avery Pointe Job Reference (optional)	E16467259
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Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 09:38:20 2021 Page 1  
 ID:I4HRAT3elT9qRldAoEs\_5z0Axy-zKhTydjlul3kBkw4KW\_KmDyKWNuRj01L\_Vu2EwyD2AH  
 15-8-8 15-8-8 33-8-0 17-11-8 34-7-0 0-11-0



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.06	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.03	Vert(LL) 0.00 20 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.14	Vert(CT) 0.00 20 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 20 n/a n/a		
	Code IRC2015/TPI2014			Weight: 288 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x6 SP No.1 \*Except\*  
 1-39: 2x4 SP No.2  
 OTHERS 2x4 SP No.2

**REACTIONS.** All bearings 33-8-0.  
 (lb) - Max Horz 40=-309(LC 13)  
 Max Uplift All uplift 100 lb or less at joint(s) 32, 30, 20 except 40=-119(LC 17),  
 33=-119(LC 12), 35=-108(LC 12), 36=-107(LC 12), 37=-108(LC 12), 38=-110(LC  
 12), 39=-341(LC 12), 29=-122(LC 13), 27=-108(LC 13), 26=-107(LC 13),  
 25=-108(LC 13), 24=-108(LC 13), 23=-107(LC 13), 22=-134(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 31, 32, 33, 35, 36, 37, 38, 39,  
 30, 29, 27, 26, 25, 24, 23, 22, 20 except 40=328(LC 12)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-40=-306/120, 7-8=-109/273, 8-9=-138/357, 9-10=-158/412, 10-11=-158/412,  
 11-12=-138/357, 12-13=-109/273, 19-20=-254/80  
 BOT CHORD 39-40=-159/298, 38-39=-73/258, 37-38=-73/258, 36-37=-73/258, 35-36=-73/258,  
 33-35=-73/258, 32-33=-73/258, 31-32=-73/258, 30-31=-73/258, 29-30=-73/258,  
 27-29=-73/258, 26-27=-73/258, 25-26=-73/258, 24-25=-73/258, 23-24=-73/258,  
 22-23=-73/258, 20-22=-73/258  
 WEBS 1-39=-102/304

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS T-Brace: 2x4 SPF No.2 - 10-31  
 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.



- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCCL=6.0psf; BCCL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 32, 30, 20 except (jt=lb) 40=119, 33=119, 35=108, 36=107, 37=108, 38=110, 39=341, 29=122, 27=108, 26=107, 25=108, 24=108, 23=107, 22=134.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and

December 2, 2021

Continue on page standard ANSI/TPI 1.

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

818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 Avery Pointe	E16467259
J0222-0764	A1GE	COMMON SUPPORTED GAB	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 09:38:21 2021 Page 2  
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**NOTES-**

11) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

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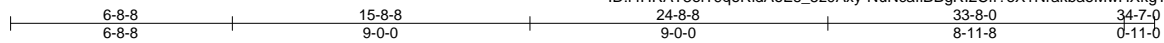


818 Soundside Road  
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Job J0222-0764	Truss A1SG	Truss Type GABLE	Qty 1	Ply 1	Lot 5 Avery Pointe Job Reference (optional)	E16467260
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5x12 ||

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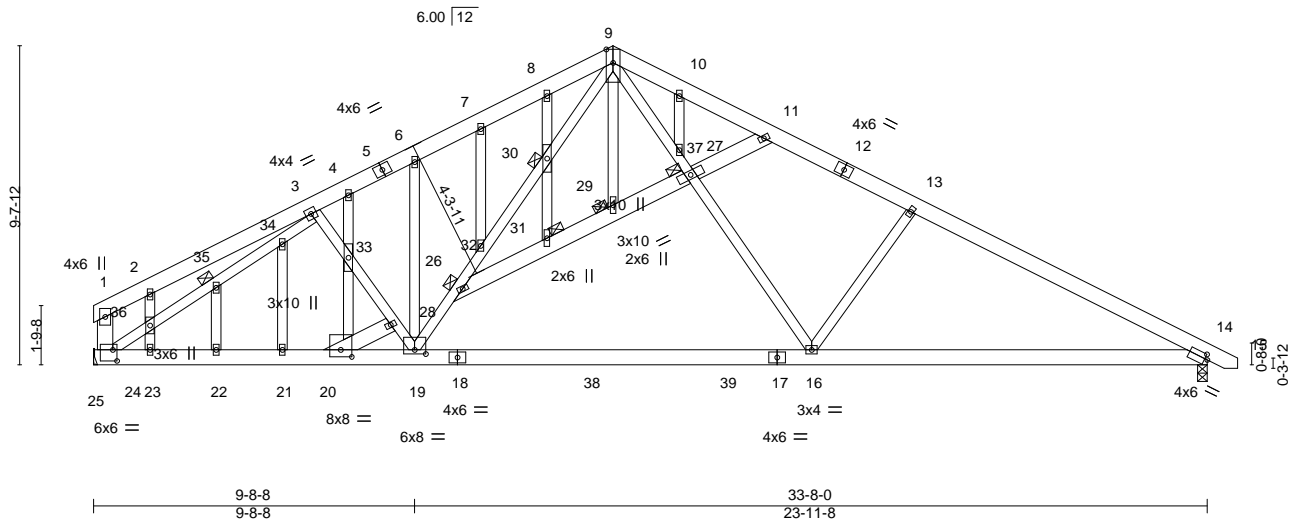


Plate Offsets (X,Y)-- [14:0-1-0,0-1-12], [19:0-4-0,0-1-8], [20:0-4-0,0-2-8], [24:0-1-8,0-4-0]

<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 0.39	Vert(LL)	-0.20 16-19	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.53	Vert(CT)	-0.32 16-19	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.47	Horz(CT)	0.05 14	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.11 14-16	>999	240	Weight: 306 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.2 \*Except\*  
1-24,26-27,11-27,20-28: 2x6 SP No.1  
OTHERS 2x4 SP No.2

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-6-15 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 7-10-14 oc bracing.  
JOINTS 1 Brace at Jt(s): 26, 27, 29, 30, 31, 35

**REACTIONS.** (size) 24=Mechanical, 14=0-3-8  
Max Horz 24=-307(LC 13)  
Max Uplift 24=-470(LC 12), 14=-543(LC 13)  
Max Grav 24=1333(LC 1), 14=1379(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-618/333, 2-3=-573/426, 3-4=-1783/1116, 4-6=-1640/1055, 6-7=-1691/1168,  
7-8=-1670/1236, 8-9=-1665/1293, 9-10=-1684/1188, 10-11=-1759/1143,  
11-13=-1973/1243, 13-14=-2241/1285, 1-24=-462/238  
BOT CHORD 23-24=-665/1468, 22-23=-665/1468, 21-22=-665/1468, 20-21=-665/1468,  
19-20=-625/1432, 16-19=-471/1279, 14-16=-955/1908  
WEBS 19-26=-306/562, 26-32=-420/615, 30-32=-526/632, 9-30=-549/671, 9-37=-389/794,  
27-37=-325/792, 16-27=-347/805, 13-16=-420/519, 24-36=-1222/651, 35-36=-1218/638,  
34-35=-1242/654, 3-34=-1417/759, 6-19=-315/262, 4-33=-162/262, 21-34=-273/162

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCCL=6.0psf; BCCL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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 studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCCL = 10.0psf.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 24=470, 14=543.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 2, 2021

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



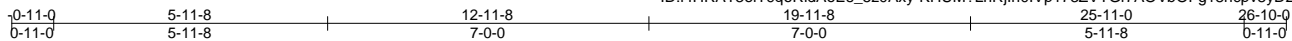
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Job	Truss	Truss Type	Qty	Ply	Lot 5 Avery Pointe	E16467261
J0222-0764	B1	COMMON	6	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

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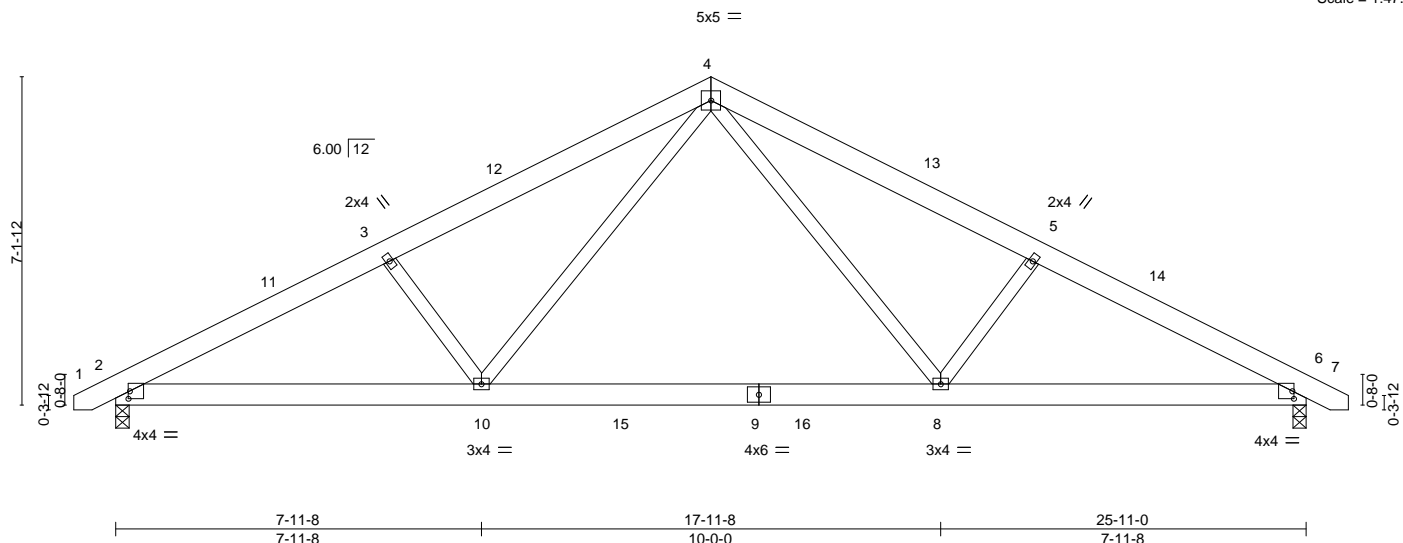


Plate Offsets (X,Y)-- [2:0-0-6,0-2-0], [6:0-0-6,0-2-0]

<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 0.19	Vert(LL) -0.13 8-10 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.41	Vert(CT) -0.21 8-10 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.24	Horz(CT) 0.03 6 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.04 8-10 >999 240	Weight: 167 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 5-9-8 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 6=0-3-8  
Max Horz 2=119(LC 11)  
Max Uplift 2=203(LC 12), 6=203(LC 13)  
Max Grav 2=1077(LC 1), 6=1077(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1786/716, 3-4=-1619/715, 4-5=-1619/715, 5-6=-1786/716  
BOT CHORD 2-10=-525/1569, 8-10=-220/1003, 6-8=-532/1522  
WEBS 3-10=-347/336, 4-10=-202/674, 4-8=-202/674, 5-8=-347/336

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph Vasd=119mph; 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 12-11-8, Exterior(2) 12-11-8 to 17-4-5, Interior(1) 17-4-5 to 26-7-10 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=203, 6=203.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



December 2, 2021

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



818 Soundside Road  
Edenton, NC 27932

Job J0222-0764	Truss B1GE	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	Lot 5 Avery Pointe Job Reference (optional)	E16467262
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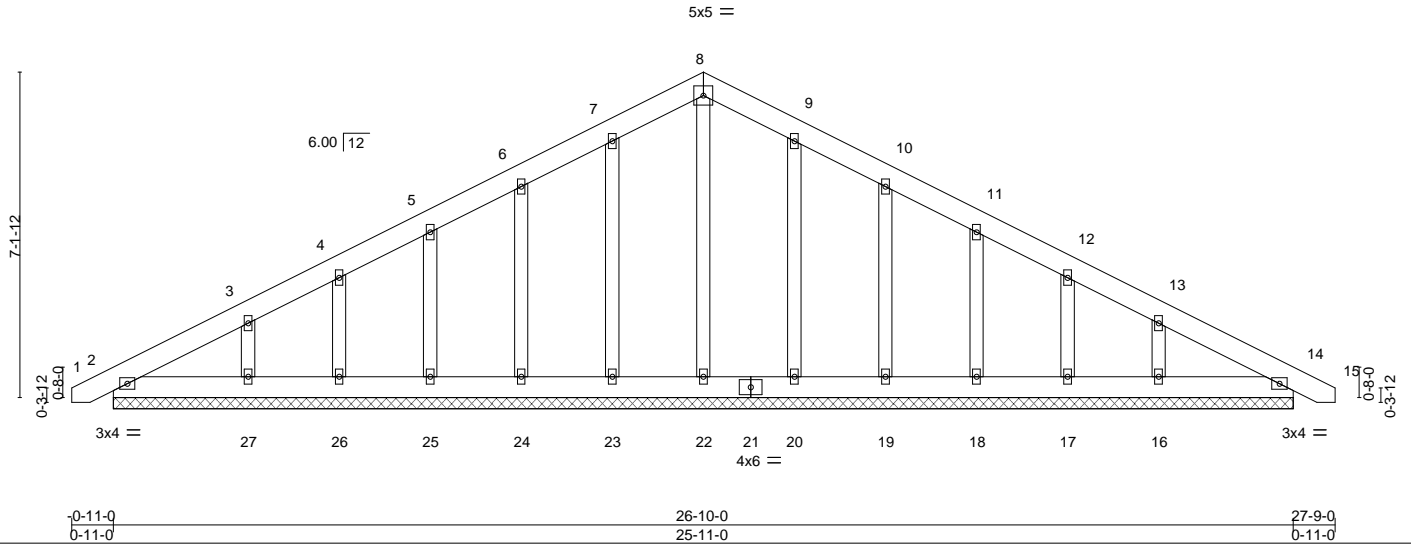
Comtech, Inc. Fayetteville, NC - 28314,

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ID:14HRAT3eIT9qRIdAoEs\_5z0Axy-ksAVdMpJ?D3b9zXcoB7C4vHhmbdKbedTqQTWTyD2A9

0-11-0 13-10-8 26-10-0 27-9-0  
0-11-0 12-11-8 12-11-8 0-11-0

Scale: 1/4"=1'



<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 0.04	Vert(LL) 0.00 14 n/r 120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.03	Vert(CT) 0.00 14 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.10	Horz(CT) 0.00 14 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S			
				Weight: 191 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

All bearings 25-11-0.  
(lb) - Max Horz 2=184(LC 16)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 23, 26, 20, 17, 14 except 24=-115(LC 12), 25=-110(LC 12), 27=-171(LC 12), 19=-118(LC 13), 18=-109(LC 13), 16=-167(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 2, 22, 23, 24, 25, 26, 27, 20, 19, 18, 17, 16, 14

**FORCES.**

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

TOP CHORD 7-8=-120/304, 8-9=-120/304

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph Vasd=119mph; 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 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 23, 26, 20, 17, 14 except (jt=lb) 24=115, 25=110, 27=171, 19=118, 18=109, 16=167.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



December 2, 2021

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

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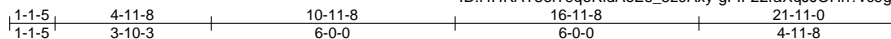
818 Soundside Road  
Edenton, NC 27932



Job J0222-0764	Truss C1-GR	Truss Type Roof Special Girder	Qty 1	Ply 2	Lot 5 Avery Pointe Job Reference (optional)	E16467263
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Comtech, Inc. Fayetteville, NC - 28314.

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 09:38:30 2021 Page 1  
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5x8 ||

Scale = 1:53.4

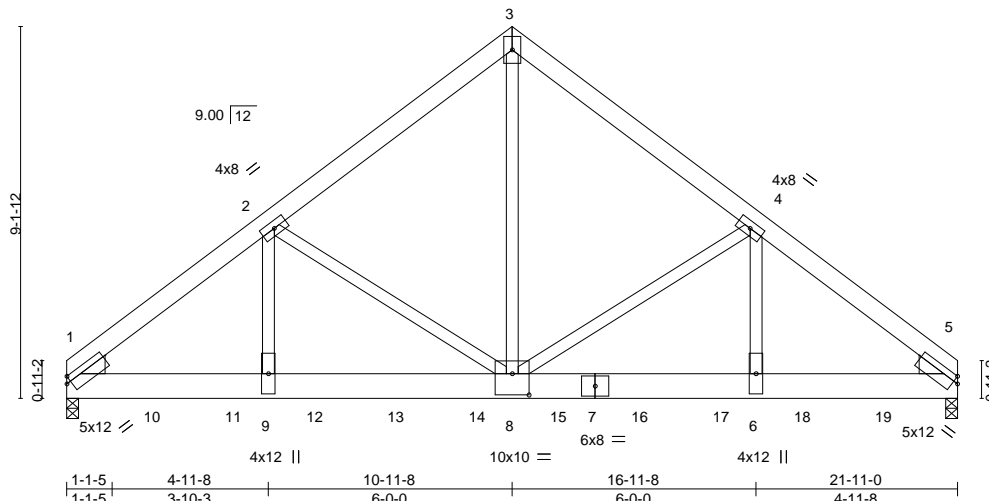


Plate Offsets (X,Y)-- [1:Edge,0-1-13], [5:Edge,0-1-13], [8:0-5-0,0-6-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.29	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.96	Vert(LL) -0.10 8-9 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.92	Vert(CT) -0.19 8-9 >999 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.06 5 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.09 8-9 >999 240	Weight: 357 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.1  
BOT CHORD 2x8 SP No.1  
WEBS 2x4 SP No.2  
WEDGE  
Left: 2x6 SP No.2 , Right: 2x6 SP No.2

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

**REACTIONS.** (size) 1=0-3-8 (req. 0-4-6), 5=0-3-8 (req. 0-4-7)  
Max Horz 1=273(LC 7)  
Max Uplift 1=1299(LC 8), 5=1321(LC 9)  
Max Grav 1=7367(LC 1), 5=7494(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-10009/1768, 2-3=-6697/1289, 3-4=-6697/1289, 4-5=-10033/1773  
BOT CHORD 1-9=-1399/7605, 8-9=-1399/7605, 6-8=-1285/7626, 5-6=-1285/7626  
WEBS 2-9=-574/3685, 2-8=-2794/670, 4-6=-580/3712, 3-8=-1361/7519, 4-8=-2819/676

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-7-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCCL=6.0psf; BCCL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- WARNING: Required bearing size at joint(s) 1, 5 greater than input bearing size.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=1299, 5=1321.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1313 lb down and 242 lb up at 2-0-12, 1313 lb down and 242 lb up at 4-0-12, 1313 lb down and 242 lb up at 6-0-12, 1313 lb down and 242 lb up at 8-0-12, 1313 lb down and 242 lb up at 10-0-12, 1313 lb down and 242 lb up at 12-0-12, 1313 lb down and 242 lb up at 14-0-12, 1313 lb down and 242 lb up at 16-0-12, and 1313 lb down and 242 lb up at 18-0-12, and 1313 lb down and 242 lb up at 20-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



December 2,2021

**LOAD CASE(S) Standard**

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818 Soundside Road  
Edenton, NC 27932

Job J0222-0764	Truss C1-GR	Truss Type Roof Special Girder	Qty 1	Ply <b>2</b>	Lot 5 Avery Pointe E16467263 Job Reference (optional)
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8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 09:38:30 2021 Page 2  
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**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 10=-1313(B) 11=-1313(B) 12=-1313(B) 13=-1313(B) 14=-1313(B) 15=-1313(B) 16=-1313(B) 17=-1313(B) 18=-1313(B) 19=-1313(B)

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

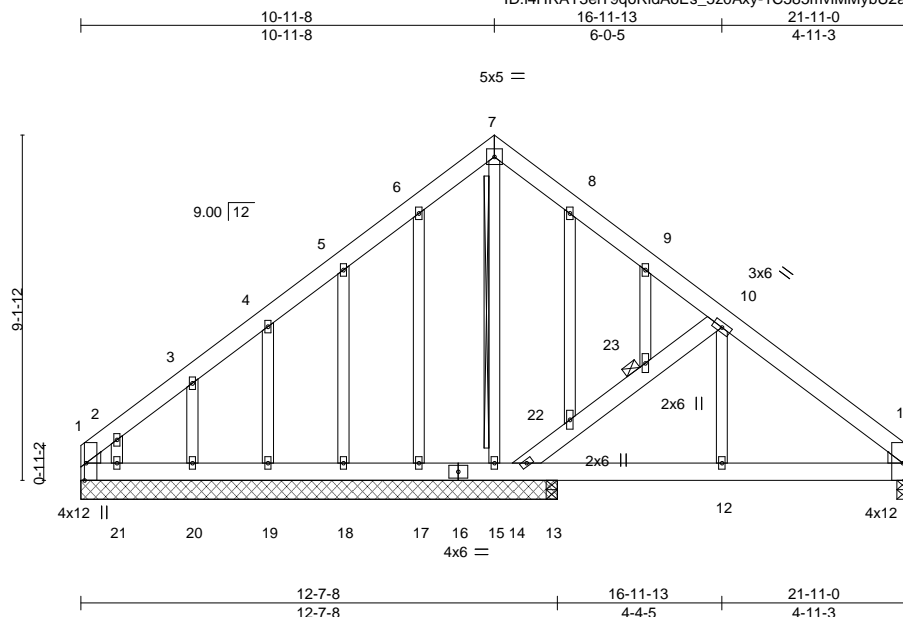


818 Soundside Road  
Edenton, NC 27932

Job J0222-0764	Truss C1SG	Truss Type GABLE	Qty 1	Ply 1	Lot 5 Avery Pointe Job Reference (optional)	E16467264
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8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 09:38:35 2021 Page 1  
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Scale = 1:57.5

Plate Offsets (X,Y)-- [1:0-5-8,Edge], [11:0-5-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.14	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.12	Vert(LL) -0.00 11-12 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.12	Vert(CT) -0.01 11-12 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 11 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.01 11-12 >999 240	Weight: 191 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x6 SP No.1 \*Except\*  
 10-12: 2x4 SP No.2  
 OTHERS 2x4 SP No.2  
 WEDGE  
 Left: 2x4 SP No.2, Right: 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except:  
 10-0-0 oc bracing: 13-14,12-13,11-12.  
 WEBS T-Brace: 2x4 SPF No.2 - 7-15  
 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.  
 JOINTS 1 Brace at Jt(s): 23

**REACTIONS.**

All bearings 12-7-8 except (jt=length) 11=0-3-8, 13=0-3-8.  
 (lb) - Max Horz 1=344(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) except 1=222(LC 10), 11=139(LC 13),  
 14=335(LC 13), 17=108(LC 12), 18=159(LC 12), 19=144(LC 12), 20=157(LC  
 12), 21=257(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 17, 18, 19, 20, 21, 13 except  
 1=369(LC 12), 11=390(LC 1), 14=281(LC 20), 15=257(LC 1)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=492/348, 2-3=311/231, 10-11=423/170  
 BOT CHORD 1-21=247/331, 20-21=247/331, 19-20=247/331, 18-19=247/331, 17-18=247/331,  
 15-17=247/331, 14-15=247/331, 13-14=12/279, 12-13=12/279, 11-12=12/279  
 WEBS 14-22=618/439, 22-23=539/373, 10-23=542/374, 2-21=236/254

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 222 lb uplift at joint 1, 139 lb uplift at joint 11, 335 lb uplift at joint 14, 108 lb uplift at joint 17, 159 lb uplift at joint 18, 144 lb uplift at joint 19, 157 lb uplift at joint 20 and 257 lb uplift at joint 21.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



December 2,2021

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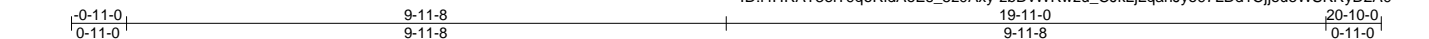
818 Soundside Road  
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Job	Truss	Truss Type	Qty	Ply	Lot 5 Avery Pointe	E16467265
J0222-0764	D1	COMMON	5	1	Job Reference (optional)	

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Scale = 1:36.0

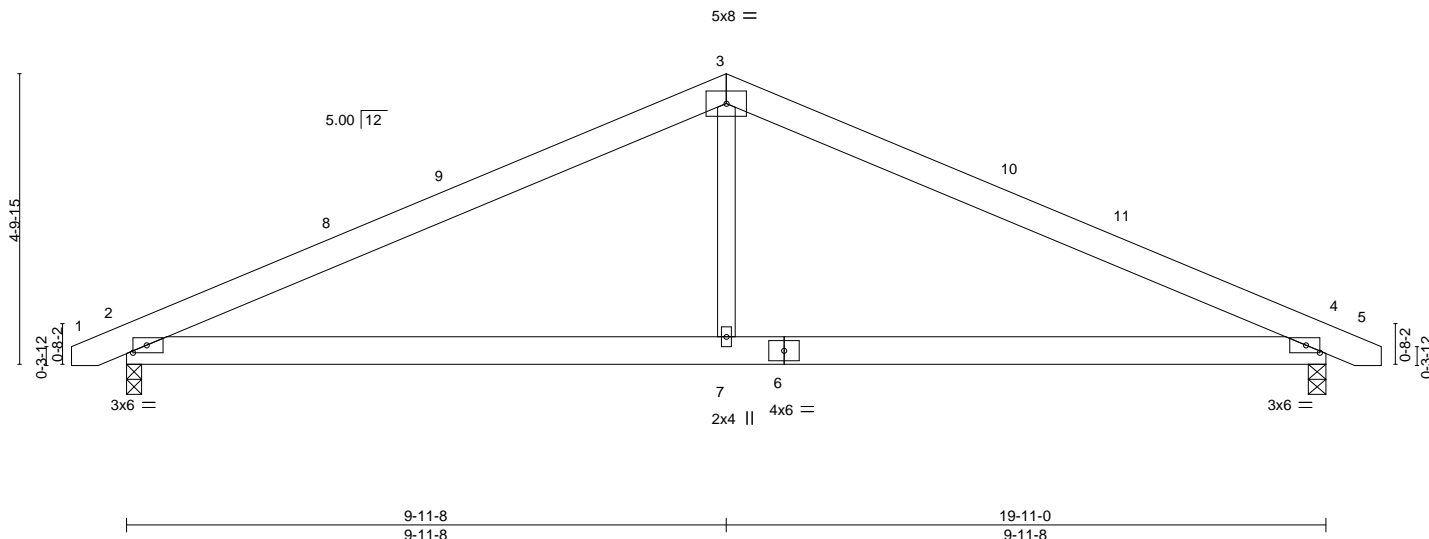


Plate Offsets (X,Y)-- [2:0-2-12,0-1-8], [4:0-2-12,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.50	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.37	Vert(LL) -0.05 2-7 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.11	Vert(CT) -0.13 2-7 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.02 4 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.05 2-7 >999 240	Weight: 108 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 5-10-8 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 4=0-3-8, 2=0-3-0  
 Max Horz 2=-71(LC 17)  
 Max Uplift 4=-163(LC 13), 2=-162(LC 12)  
 Max Grav 4=836(LC 1), 2=835(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1239/498, 3-4=-1240/498  
 BOT CHORD 2-7=-293/1030, 4-7=-293/1030  
 WEBS 3-7=0/477

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-6 to 3-8-7, Interior(1) 3-8-7 to 9-11-8, Exterior(2) 9-11-8 to 14-4-5, Interior(1) 14-4-5 to 20-7-6 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 163 lb uplift at joint 4 and 162 lb uplift at joint 2.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 2, 2021

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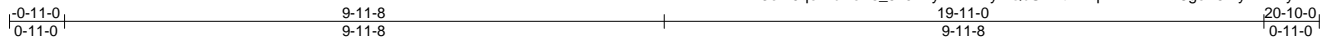


Job J0222-0764	Truss D1GE	Truss Type GABLE	Qty 1	Ply 1	Lot 5 Avery Pointe Job Reference (optional)	E16467266
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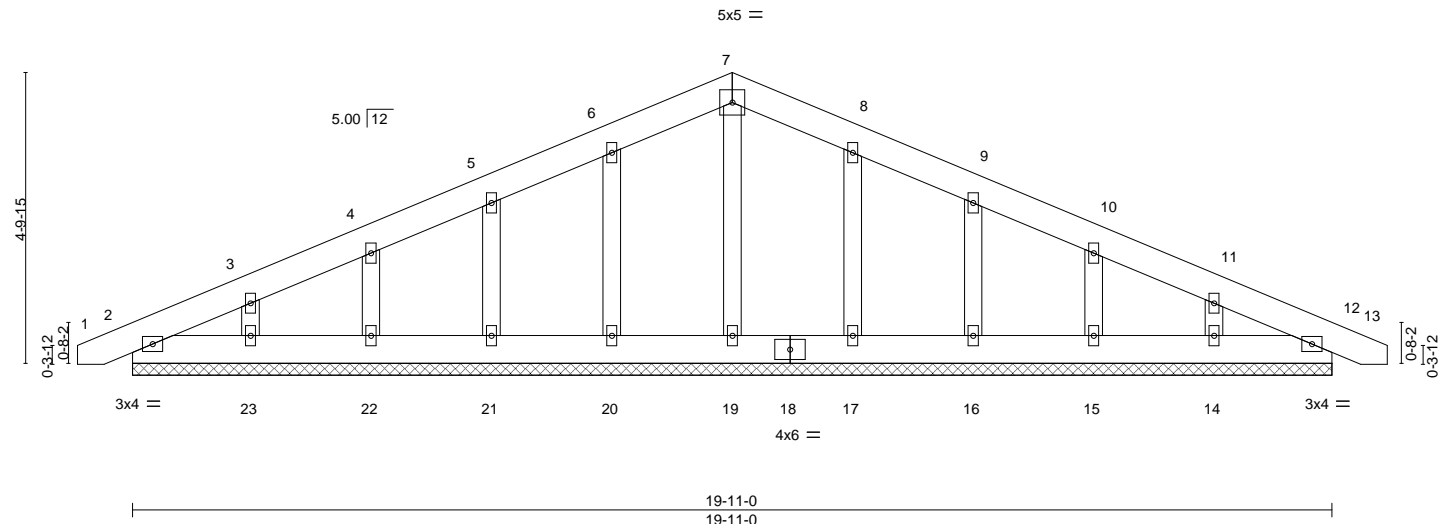
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Scale = 1:36.0



<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 0.03	Vert(LL) 0.00 12 n/r 120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.01	Vert(CT) 0.00 12 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.03	Horz(CT) 0.00 12 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S			
				Weight: 130 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

All bearings 19-11-0.  
 (lb) - Max Horz 2=-120(LC 13)  
 Max Uplift All uplift 100 lb or less at joint(s) 12, 2, 20, 22, 17, 15 except 21=-102(LC 12), 23=-116(LC 12), 16=-103(LC 13), 14=-112(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 12, 2, 19, 20, 21, 22, 23, 17, 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=150mph Vasd=119mph; 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 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 2, 20, 22, 17, 15 except (jt=lb) 21=102, 23=116, 16=103, 14=112.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 2, 2021

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

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

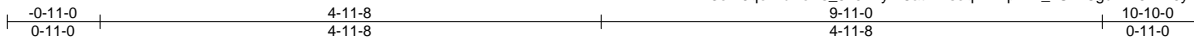


818 Soundside Road  
 Edenton, NC 27932

Job J0222-0764	Truss G1	Truss Type COMMON	Qty 4	Ply 1	Lot 5 Avery Pointe E16467267
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Comtech, Inc., Fayetteville, NC 28309

8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Dec 2 14:43:42 2021 Page 1  
ID:I4HRAT3eIT9qoRIdAoEs\_5z0Axy-28atW2seq77kvprlx4\_vU1h8guMH6LxFJy73ydyD\_aF



Scale = 1:21.5

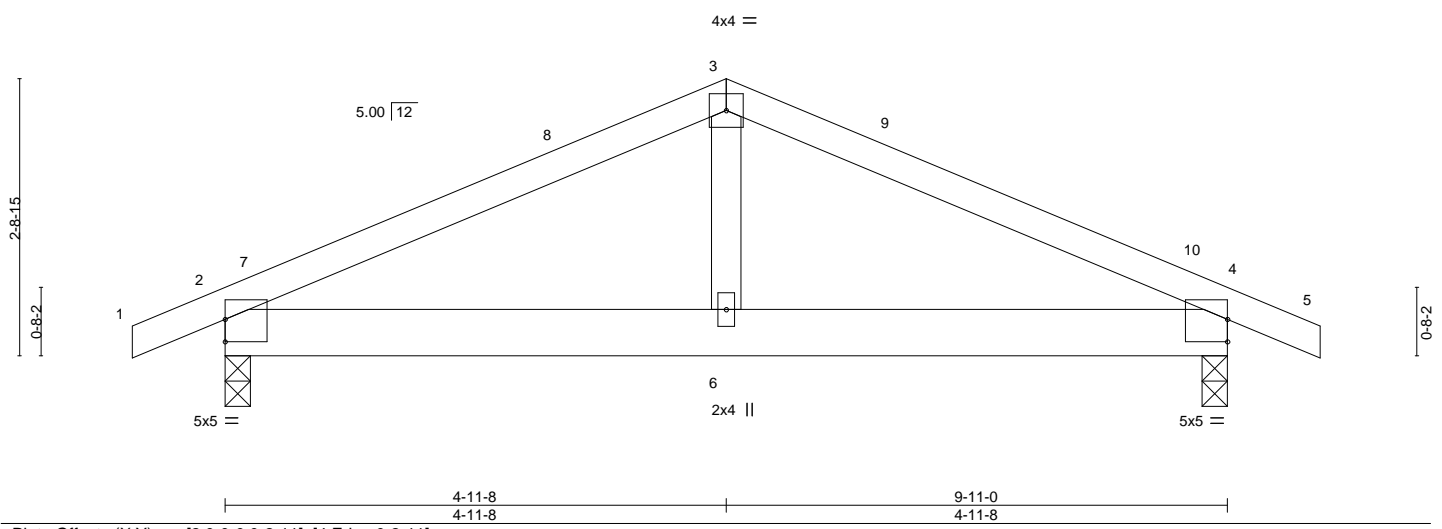


Plate Offsets (X,Y)--	[2:0-0-0,0-2-11], [4:Edge,0-2-11]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.29	Vert(LL) 0.03	2-6	>999	240	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.57	Vert(CT) -0.01	4-6	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.05	Horz(CT) -0.00	4	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 45 lb	FT = 20%
	Code IRC2015/TPI2014							

**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 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 9-2-9 oc bracing.

**REACTIONS.** (lb/size) 2=449/0-3-0 (min. 0-1-8), 4=449/0-3-0 (min. 0-1-8)  
 Max Horz 2=-39(LC 17)  
 Max Uplift 2=-225(LC 8), 4=-225(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-7=-554/846, 7-8=-542/859, 3-8=-465/872, 3-9=-465/872, 9-10=-542/859, 4-10=-554/846  
 BOT CHORD 2-6=-667/437, 4-6=-667/437  
 WEBS 3-6=-461/239

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCCL=6.0psf; BCCL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-0 to 3-5-13, Interior(1) 3-5-13 to 4-11-8, Exterior(2) 4-11-8 to 9-4-5, Interior(1) 9-4-5 to 10-10-0 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 225 lb uplift at joint 2 and 225 lb uplift at joint 4.

**LOAD CASE(S)** Standard



December 2, 2021

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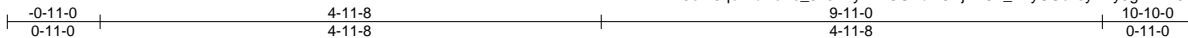


Job J0222-0764	Truss G1GE	Truss Type GABLE	Qty 1	Ply 1	Lot 5 Avery Pointe E16467268
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Comtech, Inc., Fayetteville, NC 28309

8.430 s Mar 22 2021 MiTek Industries, Inc. Thu Dec 2 14:44:10 2021 Page 1

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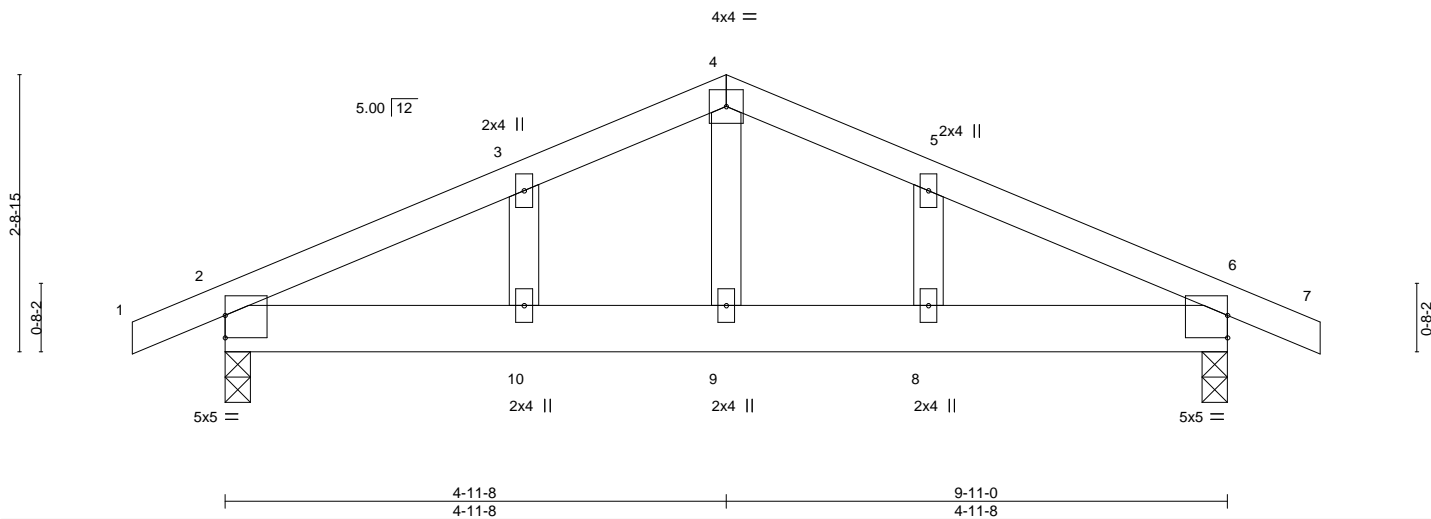


Plate Offsets (X,Y)-- [2:0-0-0,0-2-11], [6:Edge,0-2-11]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.23	Vert(LL)	-0.01	8	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.42	Vert(CT)	-0.02	8	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.06	Horz(CT)	-0.01	6	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.02	8	>999		
	Code IRC2015/TPI2014						Weight: 49 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 9-1-14 oc bracing.

**REACTIONS.** (lb/size) 2=449/0-3-0 (min. 0-1-8), 6=449/0-3-0 (min. 0-1-8)  
 Max Horz 2=66(LC 13)  
 Max Uplift 2=297(LC 8), 6=297(LC 9)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-541/873, 3-4=-494/920, 4-5=-494/920, 5-6=-541/873  
 BOT CHORD 2-10=-688/437, 9-10=-688/437, 8-9=-688/437, 6-8=-688/437  
 WEBS 4-9=-534/232

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCCL=6.0psf; BCCL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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
- 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.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 297 lb uplift at joint 2 and 297 lb uplift at joint 6.

**LOAD CASE(S)** Standard



December 2, 2021

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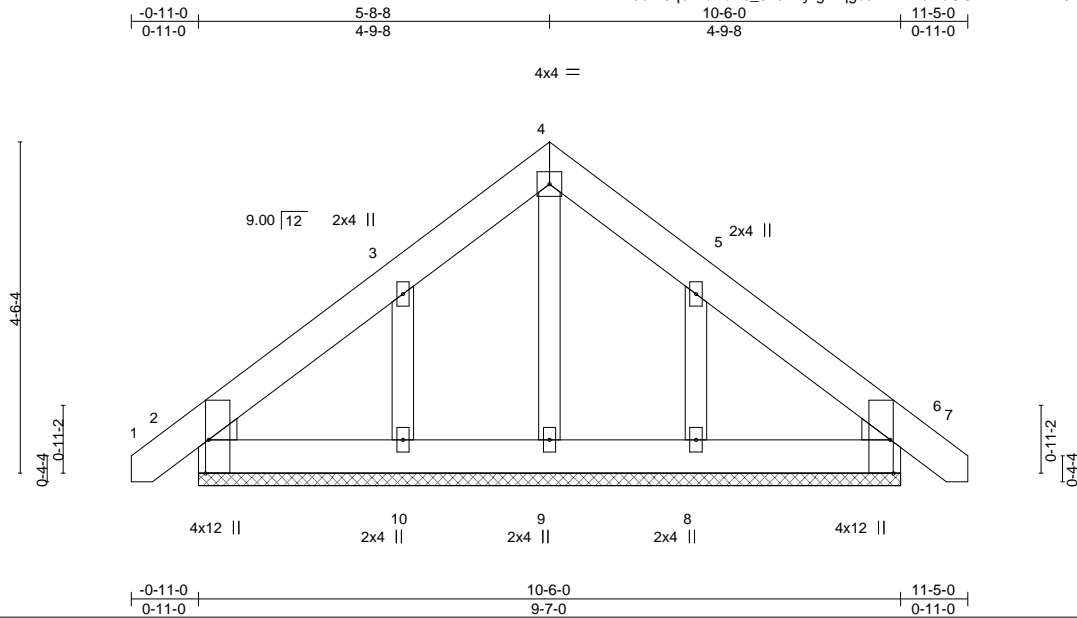


818 Soundside Road  
 Edenton, NC 27932

Job J0222-0764	Truss H1GE	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	Lot 5 Avery Pointe Job Reference (optional)	E16467269
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Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 09:38:47 2021 Page 1  
ID:I4HRAT3eiT9qoRldAoEs\_5z0Axy-gWqgs2EX2TuwuUGPhzfMvZx4F6lYFCGCCxzgsyD29s



Scale = 1:29.6

Plate Offsets (X,Y)--	[2:0-5-8,Edge], [6:0-5-8,Edge]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.04	Vert(LL) 0.00 6 n/r 120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.03	Vert(CT) 0.00 6 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.04	Horz(CT) 0.00 6 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 69 lb	FT = 20%

**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

**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 9-7-0.  
(lb) - Max Horz 2=166(LC 11)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 10=229(LC 12), 8=223(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9 except 10=283(LC 19), 8=277(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 3-10=279/241, 5-8=280/237

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCCL=6.0psf; BCCL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6 except (jt=lb) 10=229, 8=223.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



December 2, 2021

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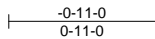




Job	Truss	Truss Type	Qty	Ply	Lot 5 Avery Pointe	E16467271
J0222-0764	J1GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314.

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 09:38:54 2021 Page 1  
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 6-0-0  
 6-0-0



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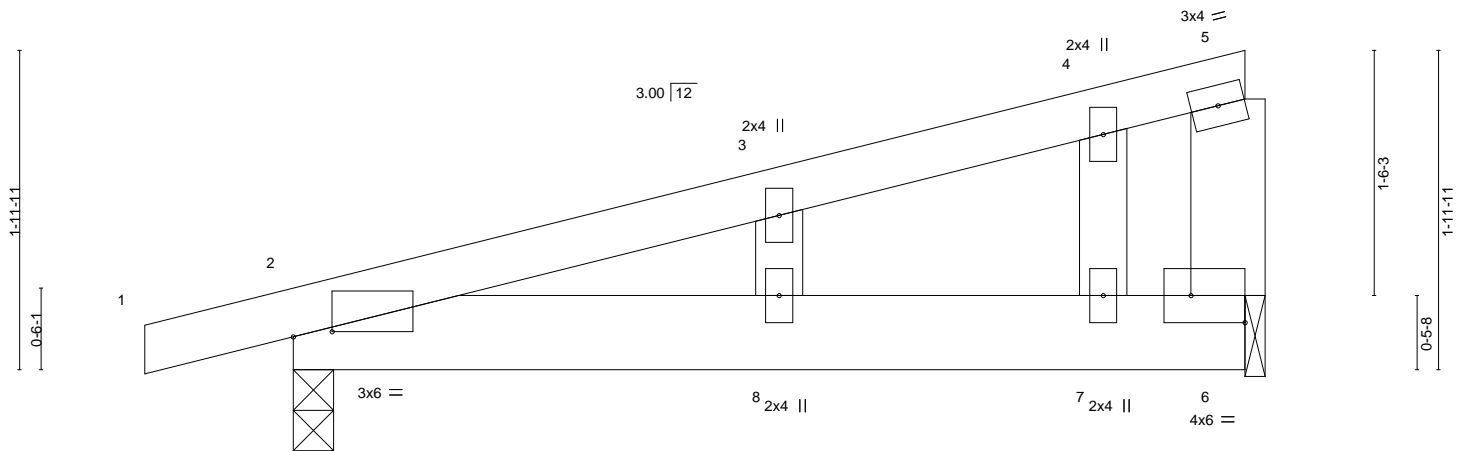


Plate Offsets (X,Y)-- [2:0-2-14,0-0-6], [6:Edge,0-2-0]

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.19	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.18	Vert(LL) 0.04 8 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.02	Vert(CT) -0.02 8 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) -0.00 6 n/a n/a		
	Code IRC2015/TPI2014			Weight: 29 lb	FT = 20%

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

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

**REACTIONS.** (size) 2=0-3-0, 6=0-1-8  
 Max Horz 2=106(LC 8)  
 Max Uplift 2=259(LC 8), 6=199(LC 8)  
 Max Grav 2=294(LC 1), 6=220(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 BOT CHORD 2-8=-275/133, 7-8=-275/133, 6-7=-275/133

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) 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.
  - 3) Gable studs spaced at 2-0-0 oc.
  - 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) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 6.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=259, 6=199.
  - 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 2, 2021

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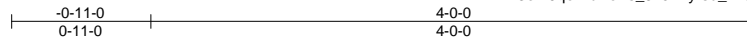


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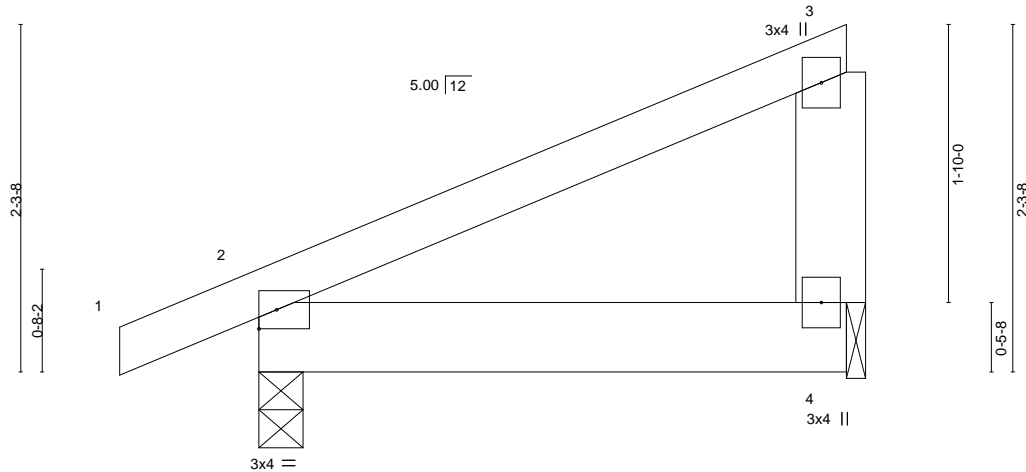
Job J0222-0764	Truss M1	Truss Type MONOPITCH	Qty 6	Ply 1	Lot 5 Avery Pointe Job Reference (optional)	E16467272
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Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 09:38:58 2021 Page 1  
ID:14HRAT3eIT9qoRldAoEs\_5z0Axy-sd\_rwdA8xRrLlaqNYUfFIEXmfhpPdDaujP53ZkyD29h



Scale = 1:14.3



<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 0.21	Vert(LL) -0.00 2-4 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.21	Vert(CT) -0.00 2-4 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P	Wind(LL) 0.00 2 **** 240	Weight: 20 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 2=0-3-8, 4=0-1-8  
Max Horz 2=84(LC 12)  
Max Uplift 2=-48(LC 8), 4=-52(LC 12)  
Max Grav 2=218(LC 1), 4=136(LC 1)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 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.
- 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 2, 2021

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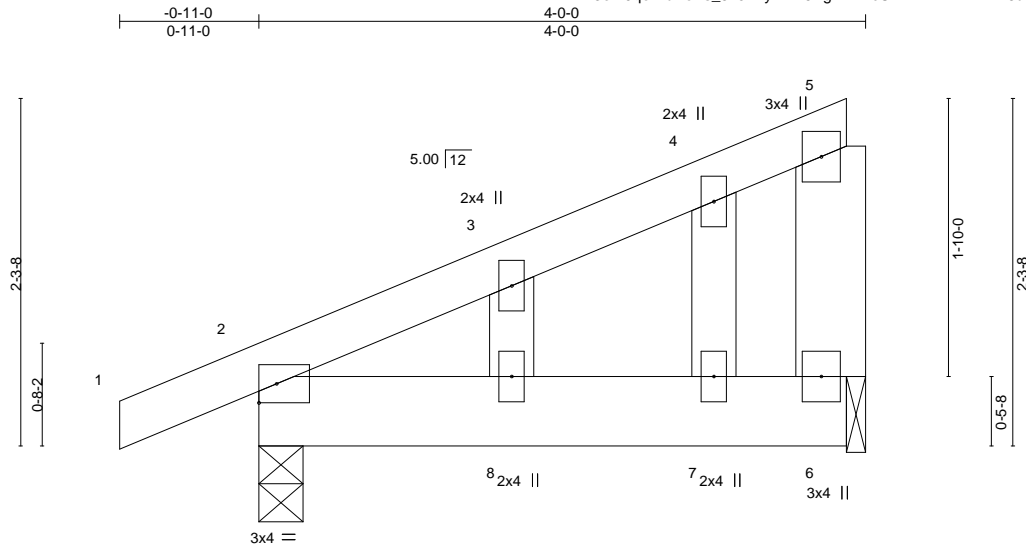
818 Soundside Road  
Edenton, NC 27932

Job J0222-0764	Truss M1GE	Truss Type GABLE	Qty 1	Ply 1	Lot 5 Avery Pointe Job Reference (optional)	E16467273
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Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 09:39:04 2021 Page 1

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Scale = 1:14.3

<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.06	Vert(LL) 0.00 8 >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.10	Vert(CT) -0.00 8 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.02	Horz(CT) -0.00 6 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 23 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x6 SP No.1 \*Except\*  
 3-8: 2x4 SP No.2  
 OTHERS 2x4 SP No.2

**BRACING-**

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

**REACTIONS.**

(size) 2=0-3-8, 6=0-1-8  
 Max Horz 2=121(LC 12)  
 Max Uplift 2=90(LC 12), 6=93(LC 12)  
 Max Grav 2=218(LC 1), 6=136(LC 1)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCCL=6.0psf; BCCL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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.
- 3) Gable studs spaced at 2-0-0 oc.
- 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) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 6.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
- 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 2, 2021

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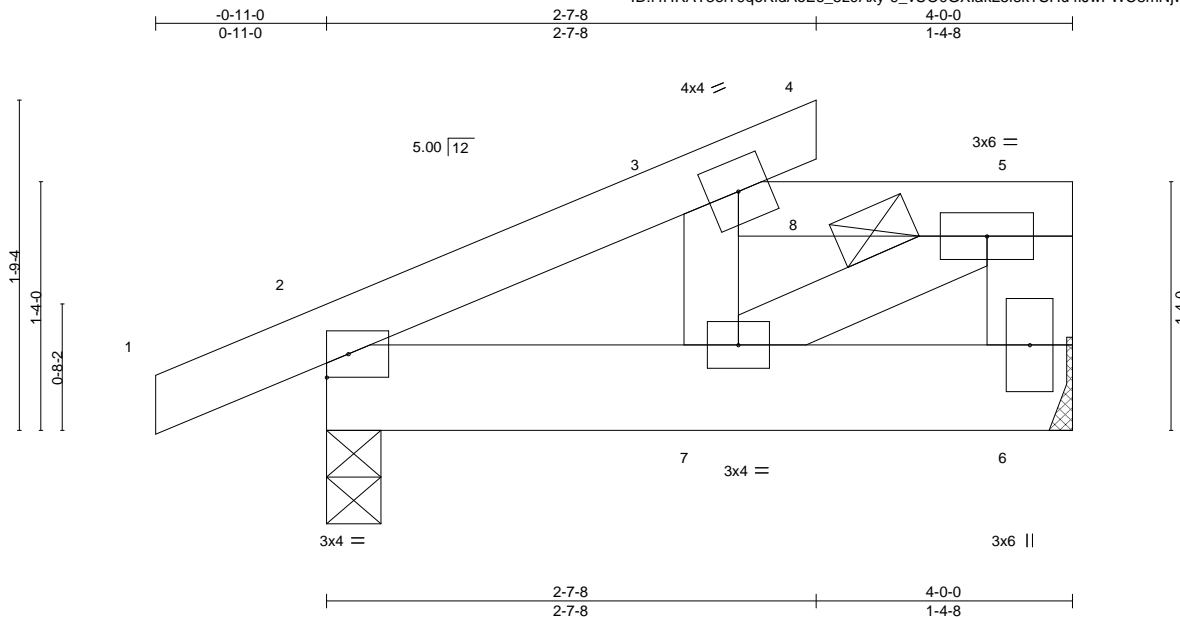


818 Soundside Road  
 Edenton, NC 27932

Job J0222-0764	Truss M2	Truss Type HALF HIP	Qty 6	Ply 1	Lot 5 Avery Pointe Job Reference (optional)	E16467274
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Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 09:39:05 2021 Page 1  
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Scale = 1:11.6

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.44	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.21	Vert(LL) -0.00 7 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.10	Vert(CT) -0.00 7 >999 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-P	Horz(CT) -0.00 6 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.01 7 >999 240	Weight: 23 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 5-6: 2x6 SP No.1

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-5.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 6=Mechanical, 2=0-3-8  
 Max Horz 2=59(LC 12)  
 Max Uplift 6=112(LC 9), 2=93(LC 8)  
 Max Grav 6=546(LC 22), 2=387(LC 1)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-470/402, 3-5=-366/461, 5-6=-489/492  
 BOT CHORD 2-7=-492/386  
 WEBS 3-7=-245/382, 5-7=-528/420

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCCL=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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 6=112.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) . The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-3=-60, 3-4=-60, 3-8=-40, 5-8=-80, 2-6=-20  
 Concentrated Loads (lb)  
 Vert: 8=500



December 2, 2021

Continued on page 2

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818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 Avery Pointe	E16467274
J0222-0764	M2	HALF HIP	6	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

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**LOAD CASE(S)** Standard

- 2) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-3=-50, 3-4=-50, 3-8=-100, 5-8=-130, 2-6=-20  
 Concentrated Loads (lb)  
 Vert: 8=-438
- 3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25  
 Uniform Loads (plf)  
 Vert: 1-3=-20, 3-4=-20, 3-5=-40, 2-6=-40  
 Concentrated Loads (lb)  
 Vert: 8=-375
- 4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=98, 2-3=82, 3-4=207, 3-5=67, 2-6=-12  
 Horz: 1-2=-110, 2-3=-94, 3-4=-219  
 Concentrated Loads (lb)  
 Vert: 8=467
- 5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=73, 2-3=82, 3-4=73, 3-5=67, 2-6=-12  
 Horz: 1-2=-85, 2-3=-94, 3-4=-85  
 Concentrated Loads (lb)  
 Vert: 8=467
- 6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=5, 2-3=-54, 3-4=30, 3-5=-64, 2-6=-20  
 Horz: 1-2=-25, 2-3=34, 3-4=-50  
 Concentrated Loads (lb)  
 Vert: 8=-462
- 7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=-45, 2-3=-54, 3-4=-45, 3-5=-64, 2-6=-20  
 Horz: 1-2=25, 2-3=34, 3-4=25  
 Concentrated Loads (lb)  
 Vert: 8=-462
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=40, 2-3=20, 3-4=11, 3-5=11, 2-6=-12  
 Horz: 1-2=-52, 2-3=-32, 3-4=-23  
 Concentrated Loads (lb)  
 Vert: 8=121
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=11, 2-3=20, 3-4=41, 3-5=11, 2-6=-12  
 Horz: 1-2=-23, 2-3=-32, 3-4=-53  
 Concentrated Loads (lb)  
 Vert: 8=121
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=3, 2-3=-6, 3-4=3, 3-5=-15, 2-6=-20  
 Horz: 1-2=-23, 2-3=-14, 3-4=-23  
 Concentrated Loads (lb)  
 Vert: 8=-306
- 11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=3, 2-3=-6, 3-4=3, 3-5=-15, 2-6=-20  
 Horz: 1-2=-23, 2-3=-14, 3-4=-23  
 Concentrated Loads (lb)  
 Vert: 8=-306
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=22, 2-3=31, 3-4=22, 3-5=-5, 2-6=-12  
 Horz: 1-2=-34, 2-3=-43, 3-4=-34  
 Concentrated Loads (lb)  
 Vert: 8=121
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=6, 2-3=15, 3-4=6, 3-5=-5, 2-6=-12  
 Horz: 1-2=-18, 2-3=-27, 3-4=-18  
 Concentrated Loads (lb)  
 Vert: 8=21
- 14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
 Uniform Loads (plf)  
 Vert: 1-2=22, 2-3=31, 3-4=22, 3-5=-5, 2-6=-12  
 Horz: 1-2=-34, 2-3=-43, 3-4=-34  
 Concentrated Loads (lb)  
 Vert: 8=121

Continued on page 3

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818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 Avery Pointe	E16467274
J0222-0764	M2	HALF HIP	6	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

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**LOAD CASE(S)** Standard

- 15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=6, 2-3=15, 3-4=6, 3-5=-5, 2-6=-12  
Horz: 1-2=-18, 2-3=-27, 3-4=-18  
Concentrated Loads (lb)  
Vert: 8=21
- 16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=14, 2-3=5, 3-4=14, 3-5=-31, 2-6=-20  
Horz: 1-2=-34, 2-3=-25, 3-4=-34  
Concentrated Loads (lb)  
Vert: 8=-306
- 17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-2, 2-3=-11, 3-4=-2, 3-5=-31, 2-6=-20  
Horz: 1-2=-18, 2-3=-9, 3-4=-18  
Concentrated Loads (lb)  
Vert: 8=-306
- 18) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90  
Uniform Loads (plf)  
Vert: 1-3=-20, 3-4=-20, 3-5=-120, 2-6=-20  
Concentrated Loads (lb)  
Vert: 8=-250
- 19) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-33, 2-3=-40, 3-4=-33, 3-8=-81, 5-8=-111, 2-6=-20  
Horz: 1-2=-17, 2-3=-10, 3-4=-17  
Concentrated Loads (lb)  
Vert: 8=-480
- 20) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-33, 2-3=-39, 3-4=-33, 3-8=-81, 5-8=-111, 2-6=-20  
Horz: 1-2=-17, 2-3=-11, 3-4=-17  
Concentrated Loads (lb)  
Vert: 8=-480
- 21) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-24, 2-3=-31, 3-4=-24, 3-8=-93, 5-8=-123, 2-6=-20  
Horz: 1-2=-26, 2-3=-19, 3-4=-26  
Concentrated Loads (lb)  
Vert: 8=-480
- 22) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-36, 2-3=-43, 3-4=-36, 3-8=-93, 5-8=-123, 2-6=-20  
Horz: 1-2=-14, 2-3=-7, 3-4=-14  
Concentrated Loads (lb)  
Vert: 8=-480
- 23) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-60, 3-4=-60, 3-8=-40, 5-8=-80, 2-6=-20  
Concentrated Loads (lb)  
Vert: 8=-500
- 24) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-20, 3-4=-20, 3-8=-40, 5-8=-80, 2-6=-20  
Concentrated Loads (lb)  
Vert: 8=-500
- 25) 3rd Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-50, 3-4=-50, 3-8=-100, 5-8=-130, 2-6=-20  
Concentrated Loads (lb)  
Vert: 8=-438
- 26) 4th Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-20, 3-4=-20, 3-8=-100, 5-8=-130, 2-6=-20  
Concentrated Loads (lb)  
Vert: 8=-438

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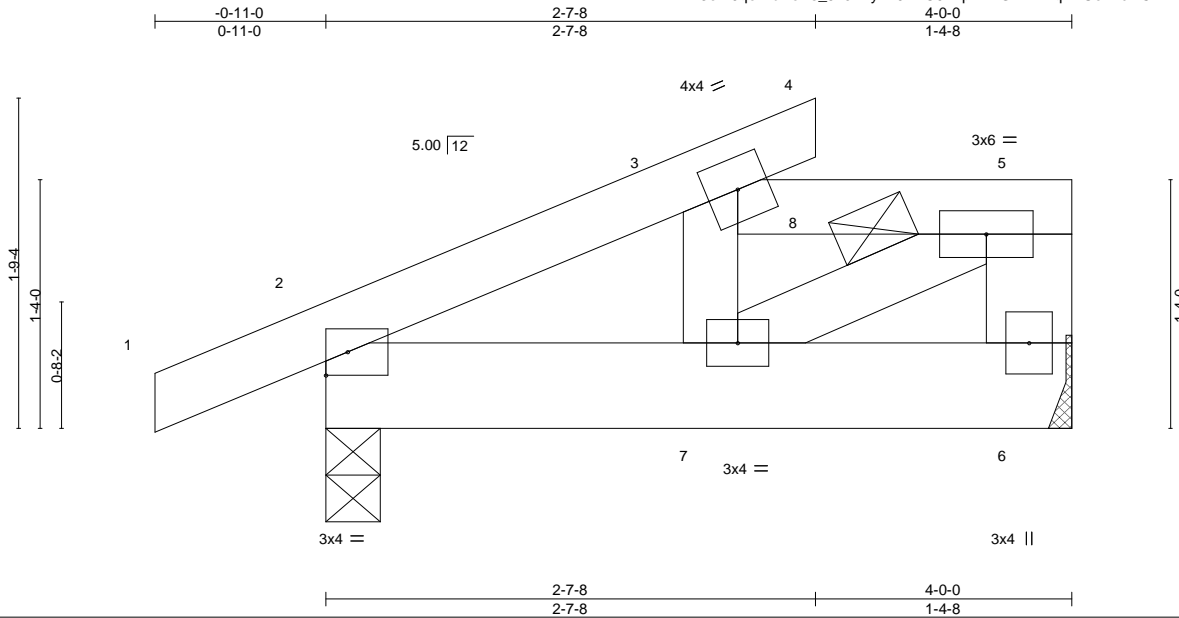


818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 Avery Pointe	E16467275
J0222-0764	M2A	HALF HIP	1	2	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

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Scale = 1:11.6

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.26	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.09	Vert(LL) -0.00 2 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.06	Vert(CT) -0.00 7 >999 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-P	Horz(CT) 0.00 6 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.00 7 >999 240	Weight: 45 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 5-6: 2x6 SP No.1

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-5.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 6=Mechanical, 2=0-3-8  
 Max Horz 2=59(LC 8)  
 Max Uplift 2=40(LC 4)  
 Max Grav 6=708(LC 18), 2=439(LC 1)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-565/0, 3-5=-445/17, 5-6=-641/0  
 BOT CHORD 2-7=-20/471  
 WEBS 3-7=-308/37, 5-7=-19/511

**NOTES-**

- 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, 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) . The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard



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Continued on page 2

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818 Soundside Road  
 Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	Lot 5 Avery Pointe	E16467275
J0222-0764	M2A	HALF HIP	1	2	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 09:39:09 2021 Page 2  
ID:I4HRAT3eIT9qRIdAoEs\_5z0Axy-1I9?EOJ1LpEnZGAVIIqFYUe47c?ICLVFdG8SbyD29W

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-60, 3-4=-60, 3-8=-160, 5-8=-200, 2-6=-20  
Concentrated Loads (lb)  
Vert: 8=-500
- 2) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-50, 3-4=-50, 3-8=-220, 5-8=-250, 2-6=-20  
Concentrated Loads (lb)  
Vert: 8=-438
- 3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-3=-20, 3-4=-20, 3-5=-160, 2-6=-40  
Concentrated Loads (lb)  
Vert: 8=-375
- 4) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=40, 2-3=20, 3-4=11, 3-5=-109, 2-6=-12  
Horz: 1-2=-52, 2-3=-32, 3-4=-23  
Concentrated Loads (lb)  
Vert: 8=121
- 5) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=11, 2-3=20, 3-4=41, 3-5=-109, 2-6=-12  
Horz: 1-2=-23, 2-3=-32, 3-4=-53  
Concentrated Loads (lb)  
Vert: 8=121
- 6) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=3, 2-3=-6, 3-4=3, 3-5=-135, 2-6=-20  
Horz: 1-2=-23, 2-3=-14, 3-4=-23  
Concentrated Loads (lb)  
Vert: 8=-306
- 7) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=3, 2-3=-6, 3-4=3, 3-5=-135, 2-6=-20  
Horz: 1-2=-23, 2-3=-14, 3-4=-23  
Concentrated Loads (lb)  
Vert: 8=-306
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=22, 2-3=31, 3-4=22, 3-5=-125, 2-6=-12  
Horz: 1-2=-34, 2-3=-43, 3-4=-34  
Concentrated Loads (lb)  
Vert: 8=121
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=6, 2-3=15, 3-4=6, 3-5=-125, 2-6=-12  
Horz: 1-2=-18, 2-3=-27, 3-4=-18  
Concentrated Loads (lb)  
Vert: 8=21
- 10) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=22, 2-3=31, 3-4=22, 3-5=-125, 2-6=-12  
Horz: 1-2=-34, 2-3=-43, 3-4=-34  
Concentrated Loads (lb)  
Vert: 8=121
- 11) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=6, 2-3=15, 3-4=6, 3-5=-125, 2-6=-12  
Horz: 1-2=-18, 2-3=-27, 3-4=-18  
Concentrated Loads (lb)  
Vert: 8=21
- 12) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=14, 2-3=5, 3-4=14, 3-5=-151, 2-6=-20  
Horz: 1-2=-34, 2-3=-25, 3-4=-34  
Concentrated Loads (lb)  
Vert: 8=-306
- 13) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-2, 2-3=-11, 3-4=-2, 3-5=-151, 2-6=-20  
Horz: 1-2=-18, 2-3=-9, 3-4=-18  
Concentrated Loads (lb)  
Vert: 8=-306

Continued on page 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 chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 Avery Pointe	E16467275
J0222-0764	M2A	HALF HIP	1	2	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 09:39:09 2021 Page 3  
ID:I4HRAT3eIT9qoRIdAoEs\_5z0Axy-1I9?EOJ1LpEnZGAViIMqFYUe47c?iCLVFdG8SbyD29W

**LOAD CASE(S)** Standard

- 14) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90  
Uniform Loads (plf)  
Vert: 1-3=-20, 3-4=-20, 3-5=-240, 2-6=-20  
Concentrated Loads (lb)  
Vert: 8=-250
- 15) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-33, 2-3=-40, 3-4=-33, 3-8=-201, 5-8=-231, 2-6=-20  
Horz: 1-2=-17, 2-3=-10, 3-4=-17  
Concentrated Loads (lb)  
Vert: 8=-480
- 16) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-33, 2-3=-39, 3-4=-33, 3-8=-201, 5-8=-231, 2-6=-20  
Horz: 1-2=-17, 2-3=-11, 3-4=-17  
Concentrated Loads (lb)  
Vert: 8=-480
- 17) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-24, 2-3=-31, 3-4=-24, 3-8=-213, 5-8=-243, 2-6=-20  
Horz: 1-2=-26, 2-3=-19, 3-4=-26  
Concentrated Loads (lb)  
Vert: 8=-480
- 18) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-36, 2-3=-43, 3-4=-36, 3-8=-213, 5-8=-243, 2-6=-20  
Horz: 1-2=-14, 2-3=-7, 3-4=-14  
Concentrated Loads (lb)  
Vert: 8=-480
- 19) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-60, 3-4=-60, 3-8=-160, 5-8=-200, 2-6=-20  
Concentrated Loads (lb)  
Vert: 8=-500
- 20) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-20, 3-4=-20, 3-8=-160, 5-8=-200, 2-6=-20  
Concentrated Loads (lb)  
Vert: 8=-500
- 21) 3rd Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-50, 3-4=-50, 3-8=-220, 5-8=-250, 2-6=-20  
Concentrated Loads (lb)  
Vert: 8=-438
- 22) 4th Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-20, 3-4=-20, 3-8=-220, 5-8=-250, 2-6=-20  
Concentrated Loads (lb)  
Vert: 8=-438

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

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

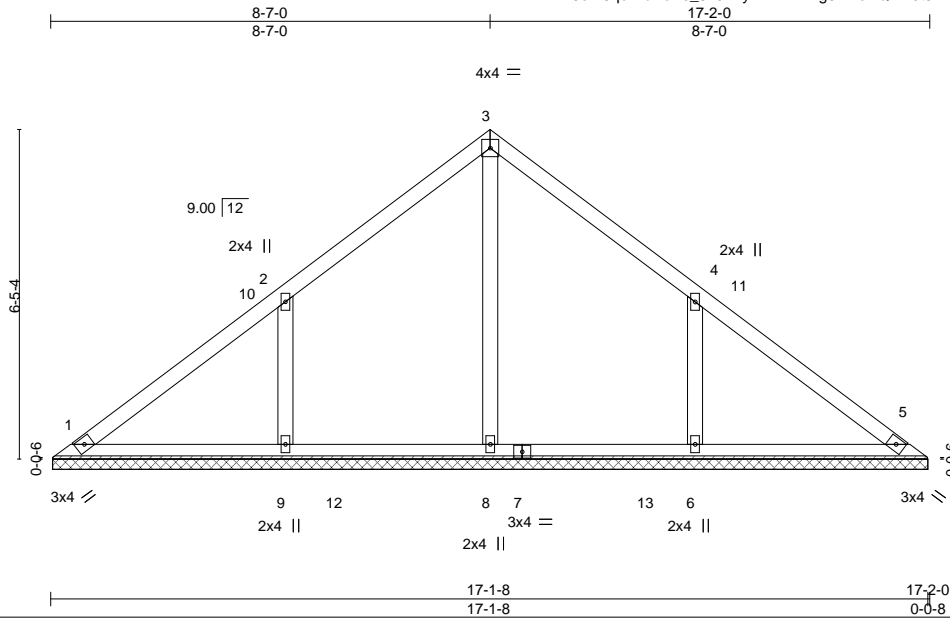


818 Soundside Road  
Edenton, NC 27932

Job J0222-0764	Truss V1	Truss Type VALLEY	Qty 1	Ply 1	Lot 5 Avery Pointe Job Reference (optional)	E16467276
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Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 09:39:10 2021 Page 1  
ID:14HRAT3eIT9qoRIdAoEs\_5z0Axy-VxiNRkKg67MeBQlhF0t3nm0qIXwwRe1fUH?h\_1yD29V



Scale = 1:42.3

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

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.20	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.17	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.10	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 5 n/a n/a		
	Code IRC2015/TPI2014			Weight: 73 lb	FT = 20%

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

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

**REACTIONS.** All bearings 17-1-0.  
(lb) - Max Horz 1=195(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 1 except 9=218(LC 12), 6=218(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=418(LC 19), 9=496(LC 19), 6=496(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 2-9=455/344, 4-6=455/345

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-5 to 4-7-0, Interior(1) 4-7-0 to 8-7-0, Exterior(2) 8-7-0 to 12-11-13, Interior(1) 12-11-13 to 16-8-11 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 9=218, 6=218.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 2,2021

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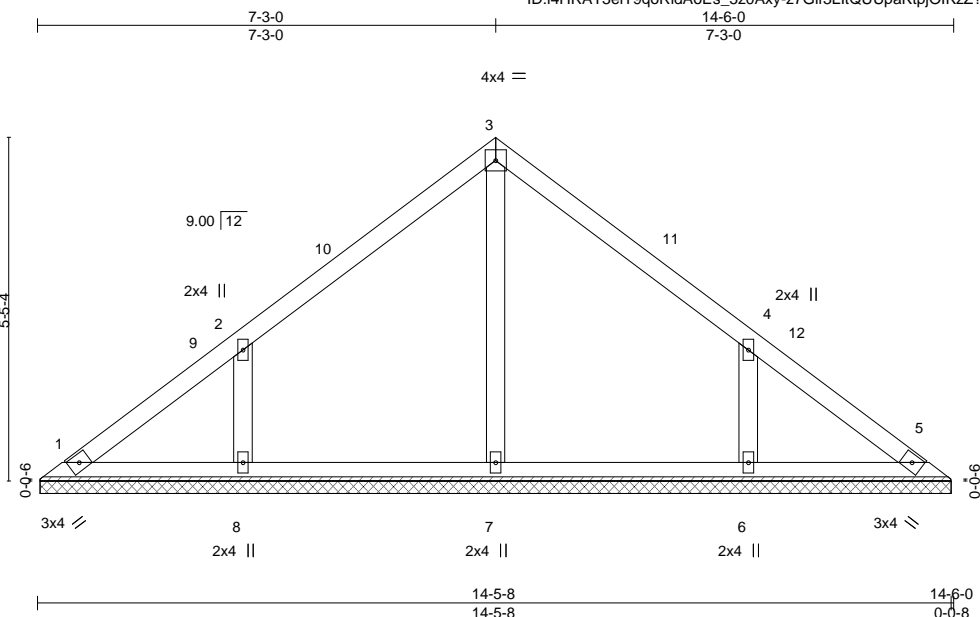


818 Soundside Road  
Edenton, NC 27932

Job J0222-0764	Truss V2	Truss Type VALLEY	Qty 1	Ply 1	Lot 5 Avery Pointe Job Reference (optional)	E16467277
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Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 09:39:11 2021 Page 1  
ID:I4HRAT3elT9qoRIdAoEs\_5z0Axy-z7Glf3LtQUUpaktjOIKzZ?lwHUA5dojxIFWYd29U



Scale = 1:34.3

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

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.15	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.08	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.08	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 5 n/a n/a		
	Code IRC2015/TPI2014			Weight: 60 lb	FT = 20%

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

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

**REACTIONS.** All bearings 14-5-0.  
(lb) - Max Horz 1=163(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=184(LC 12), 6=184(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=375(LC 19), 6=375(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 2-8=388/310, 4-6=388/310

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-5 to 4-10-1, Interior(1) 4-10-1 to 7-3-0, Exterior(2) 7-3-0 to 11-7-13, Interior(1) 11-7-13 to 14-0-11 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 30.0psf on the bottom chord in all areas where a rectangle 3'-6"-0 tall by 2'-0"-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=184, 6=184.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 2, 2021

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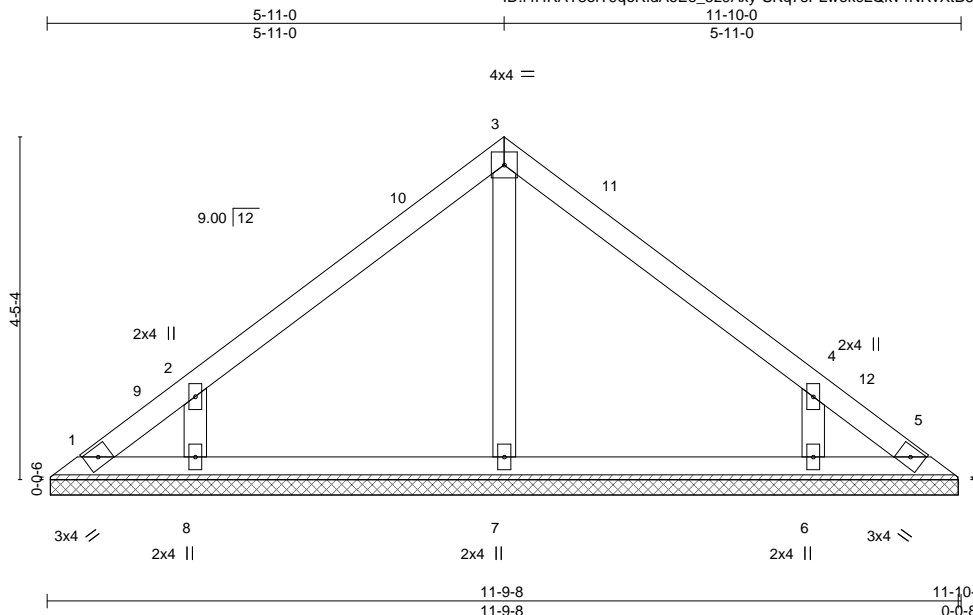


818 Soundside Road  
Edenton, NC 27932

Job J0222-0764	Truss V3	Truss Type VALLEY	Qty 1	Ply 1	Lot 5 Avery Pointe Job Reference (optional)	E16467278
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Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 09:39:12 2021 Page 1  
ID:I4HRAT3elT9qoRldAoEs\_5z0Axy-SKq7sPLwekLQkv4NRvXtB6A6KdevZByxbUo2wyD29T



Scale = 1:28.1

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

<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 0.14	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 0.06	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 46 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.**

All bearings 11-9-0.  
(lb) - Max Horz 1=131(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=172(LC 12), 6=171(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=253(LC 1), 8=343(LC 19), 6=342(LC 20)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 2-8=-372/316, 4-6=-372/316

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-5 to 4-10-1, Interior(1) 4-10-1 to 5-11-0, Exterior(2) 5-11-0 to 10-3-13, Interior(1) 10-3-13 to 11-4-11 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=172, 6=171.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 2, 2021

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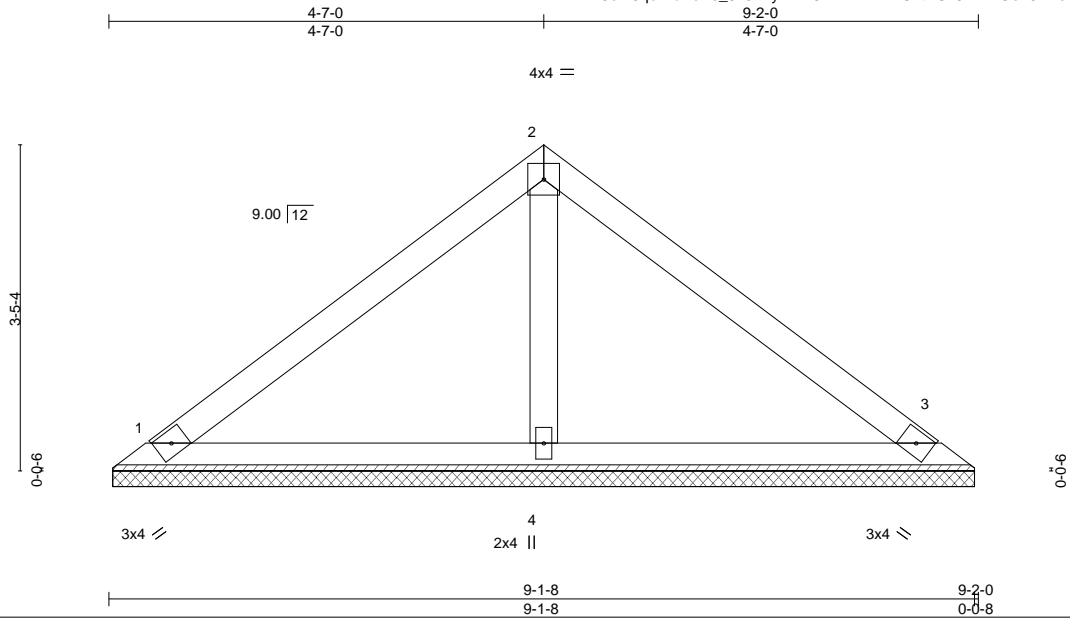


818 Soundside Road  
Edenton, NC 27932

Job J0222-0764	Truss V4	Truss Type VALLEY	Qty 1	Ply 1	Lot 5 Avery Pointe Job Reference (optional)	E16467279
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Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 09:39:13 2021 Page 1  
ID:I4HRAT3elT9qoRIdAoEs\_5z0Axy-wWOW4IMYP2kC2tGx8RmPOeL6kzle0j5AFEMbMyD29S



Scale = 1:22.9

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.19	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.13	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.04	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2015/TPI2014			Weight: 33 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=9-1-0, 3=9-1-0, 4=9-1-0  
Max Horz 1=99(LC 11)  
Max Uplift 1=42(LC 12), 3=52(LC 13), 4=-24(LC 12)  
Max Grav 1=171(LC 1), 3=172(LC 20), 4=321(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=150mph Vasd=119mph; TCCL=6.0psf; BCCL=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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 2, 2021

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

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



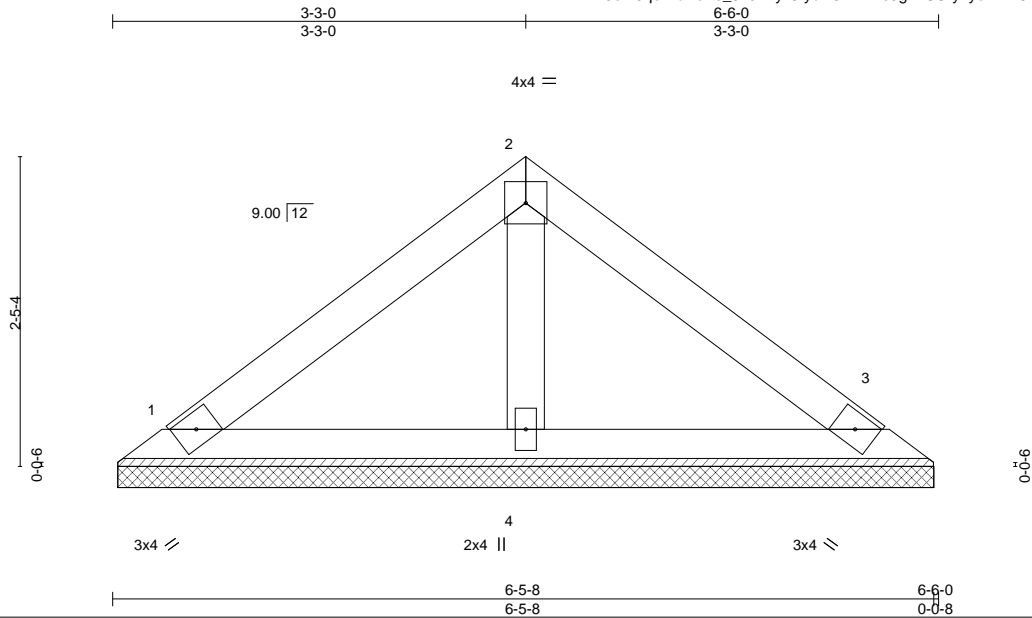
818 Soundside Road  
Edenton, NC 27932

Job J0222-0764	Truss V5	Truss Type VALLEY	Qty 1	Ply 1	Lot 5 Avery Pointe Job Reference (optional)	E16467280
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Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 09:39:14 2021 Page 1

ID:4HRAT3eIT9qoRldAoEs\_5z0Axy-OiyuH5NAALs3g12SUry?yCBWn8KbNTIEPvzv7oyD29R



Scale = 1:17.1

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.13	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.06	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.02	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2015/TPI2014			Weight: 23 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=6-5-0, 3=6-5-0, 4=6-5-0  
 Max Horz 1=67(LC 8)  
 Max Uplift 1=37(LC 12), 3=44(LC 13)  
 Max Grav 1=126(LC 1), 3=126(LC 1), 4=197(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=150mph Vasd=119mph; TCCL=6.0psf; BCCL=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.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 2, 2021

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

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

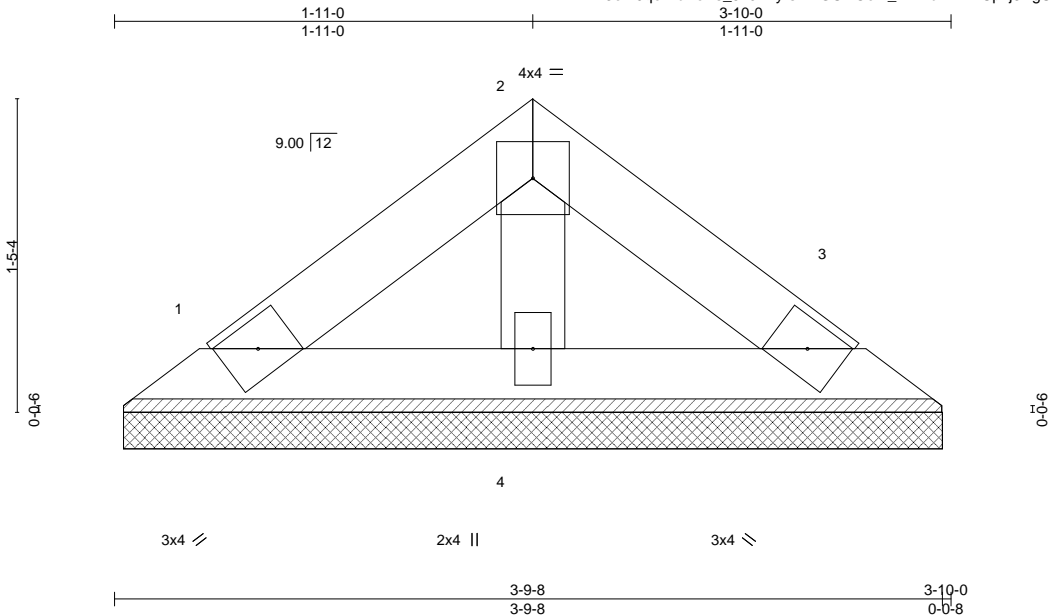


818 Soundside Road  
 Edenton, NC 27932

Job J0222-0764	Truss V6	Truss Type VALLEY	Qty 1	Ply 1	Lot 5 Avery Pointe Job Reference (optional)	E16467281
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Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 2 09:39:15 2021 Page 1  
ID:I4HRAT3eIT9qoRIdAoEs\_5z0Axy-svWGUR0oxf\_wHBdf2ZTEUpkj3YgU6wgOeZsEYD29Q



Scale = 1:9.9

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.03	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.02	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.01	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2015/TPI2014			Weight: 12 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 3-10-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 1=3-9-0, 3=3-9-0, 4=3-9-0  
Max Horz 1=35(LC 8)  
Max Uplift 1=20(LC 12), 3=23(LC 13)  
Max Grav 1=66(LC 1), 3=66(LC 1), 4=104(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=150mph Vasd=119mph; TCCL=6.0psf; BCCL=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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 2, 2021

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

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

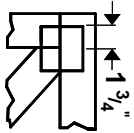


818 Soundside Road  
Edenton, NC 27932

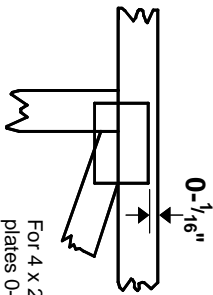


# Symbols

## 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 X 4

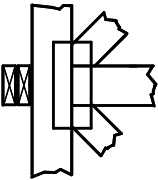
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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



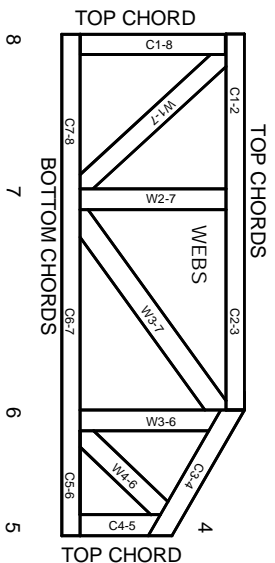
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TP1: 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

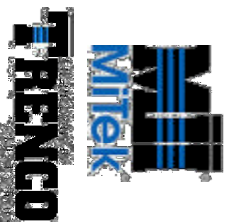
ICC-ES Reports:

ESR-1311, ESR-1352, ESR 1988  
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/TP1 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/TP1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.



# ROOF & FLOOR TRUSSES & BEAMS

Reilly Road Industrial Park  
Fayetteville, N.C. 28309  
Phone: (910) 864-8787  
Fax: (910) 864-4444

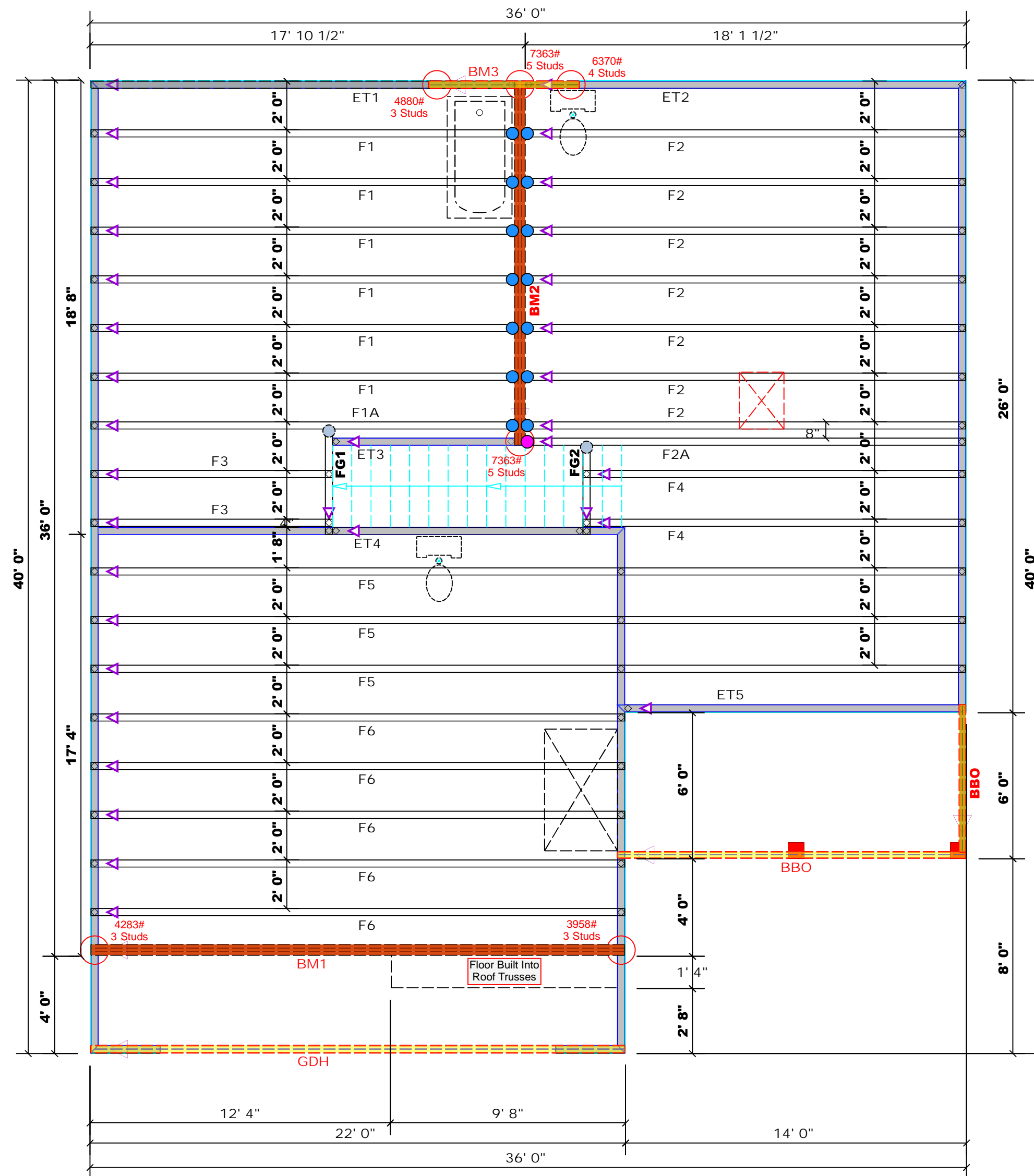
Bearing reactions less than or equal to 3000# are deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables ( derived from the prescriptive Code requirements ) to determine the minimum foundation size and number of wood studs required to support reactions greater than 3000# but not greater than 15000#. A registered design professional shall be retained to design the support system for any reaction that exceeds those specified in the attached Tables. A registered design professional shall be retained to design the support system for all reactions that exceed 15000#.

Signature David Landry  
David Landry

### LOAD CHART FOR JACK STUDS

(BASED ON TABLES MODEL: 6/03)

REACTION (LBS)	NUMBER OF JACK STUDS REQUIRED PER EACH END OF HEADERS/BEAMS	REQ. STUDS PER JACK STUD	
		END REACTION (LBS)	REQ. STUDS PER JACK STUD
1700	1	2550	3400
3400	2	5100	6800
5100	3	7650	10200
6800	4	10200	13600
8500	5	12750	17000
10200	6	15300	
11900	7		
13600	8		
15300	9		



**Dimension Notes**

- All exterior wall to wall dimensions are to face of sheathing unless noted otherwise
- All interior wall dimensions are to face of frame wall unless noted otherwise
- All exterior wall to truss dimensions are to face of frame wall unless noted otherwise

**All Walls Shown Are Considered Load Bearing**

**Plumbing Drop Notes**

- Plumbing drop locations shown are NOT exact.
- Contractor to verify ALL plumbing drop locations prior to setting Floor Trusses.
- Adjust spacing as needed not to exceed 24"oc.

Connector Information					Nail Information	
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
●	HUS410	USP	14	NA	16d/3-1/2"	16d/3-1/2"
●	MSH422	USP	2	Varies	10d/3"	10d/3"
●	HD410F	USP	1	NA	16d/3-1/2"	10d/3"

Products					
PlotID	Length	Product	Plies	Net Qty	
BM1	22' 0"	1-3/4" x 16" LVL Kerto-S	3	3	
BM2	15' 0"	1-3/4" x 16" LVL Kerto-S	3	3	
BM3	7' 0"	1-3/4" x 9-1/4" LVL Kerto-S	2	2	
GDH	22' 0"	1-3/4" x 11-7/8" LVL Kerto-S	2	2	
GDH2	12' 0"	2x12 SPF No.2	2	2	

1 Truss Placement Plan  
Scale: 1/4"=1'

CITY / CO.	Erwin / Harnett	ADDRESS	430 Josey Williams Road	MODEL	Floor	DATE REV.	02/14/22	DRAWN BY	David Landry	SALES REP.	Bob Lewis
BUILDER	Regency Homes	JOB NAME	Lot 5 Avery Pointe	PLAN	Brinkley "B" / 3GLF	SEAL DATE	N/A	QUOTE #		JOB #	J0222-0765

▲ = Indicates Left End of Truss  
( Reference Engineered Truss Drawing )  
Do NOT Erect Truss Backwards

THIS IS A TRUSS PLACEMENT DIAGRAM ONLY. These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult BCSI-B1 and BCSI-B3 provided with the truss delivery package or online @ sbcindustry.com

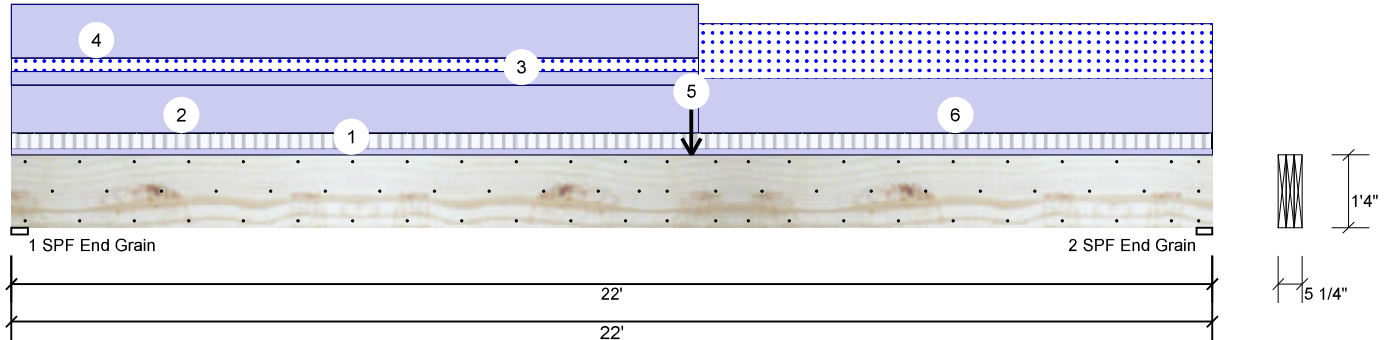


Client: Regency Homes  
 Project: Brinkley  
 Address: 430 Josey Williams Road  
 Erwin, NC 28339

Date: 2/14/2022  
 Input by: David Landry  
 Job Name: Lot 5 Avery Pointe  
 Project #: J0222-0765

**BM1 Kerto-S LVL 1.750" X 16.000" 3-Ply - PASSED**

Level: Level



**Member Information**

Type:	Girder
Plies:	3
Moisture Condition:	Dry
Deflection LL:	480
Deflection TL:	360
Importance:	Normal
Temperature:	Temp <= 100°F

Application:	Floor
Design Method:	ASD
Building Code:	IBC/IRC 2015
Load Sharing:	Yes
Deck:	Not Checked
Ceiling:	Gypsum 1/2"

**Reactions UNPATTERNED lb (Uplift)**

Brg	Live	Dead	Snow	Wind	Const
1	440	3406	729	0	0
2	440	2616	1342	0	0

**Bearings**

Bearing	Length	Cap. React	D/L lb	Total Ld.	Case	Ld. Comb.
1 - SPF End Grain	3.625"	26%	3406 / 877	4283	L	D+0.75(L+S)
2 - SPF End Grain	3.500"	25%	2616 / 1342	3958	L	D+S

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	23283 ft-lb	11'3 7/8"	62010 ft-lb	0.375 (38%)	D+0.75(L+S)	L
Unbraced	23283 ft-lb	11'3 7/8"	23318 ft-lb	0.999 (100%)	D+0.75(L+S)	L
Shear	4012 lb	1'6 3/4"	20608 lb	0.195 (19%)	D+0.75(L+S)	L
LL Defl inch	0.150 (L/1723)	11'6 1/16"	0.539 (L/480)	0.280 (28%)	0.75(L+S)	L
TL Defl inch	0.566 (L/457)	11'	0.718 (L/360)	0.790 (79%)	D+0.75(L+S)	L

**Design Notes**

- 1 Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Concentrated load fastener specification is in addition to hanger fasteners if a hanger is present.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be laterally braced at a maximum of 7'7 1/2" o.c.
- 7 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Tie-In	0-0-0 to 22-0-0	1-0-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	0 PSF	Floor
2	Part. Uniform	0-0-0 to 12-7-0		Top	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall
3	Part. Uniform	0-0-0 to 12-7-0		Near Face	34 PLF	0 PLF	34 PLF	0 PLF	0 PLF	M1
4	Part. Uniform	0-0-0 to 12-7-0		Top	135 PLF	0 PLF	0 PLF	0 PLF	0 PLF	C1GE
5	Point	12-5-8		Near Face	354 lb	0 lb	354 lb	0 lb	0 lb	M2A

Continued on page 2...

**Notes**

Calculated Structural Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

**Lumber**

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

**Handling & Installation**

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

**Manufacturer Info**

Metsä Wood  
 301 Merritt 7 Building, 2nd Floor  
 Norwalk, CT 06851  
 (800) 622-5850  
[www.metsawood.com/us](http://www.metsawood.com/us)  
 ICC-ES: ESR-3633

Comtech, Inc.  
 1001 S. Reilly Road, Suite #639  
 Fayetteville, NC  
 USA  
 28314  
 910-864-TRUS



This design is valid until 4/24/2023

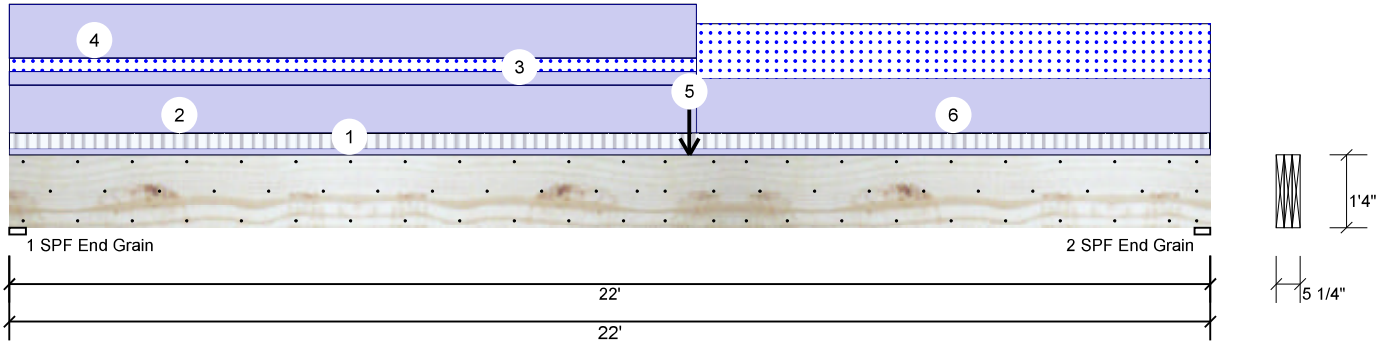


Client: Regency Homes  
 Project: Brinkley  
 Address: 430 Josey Williams Road  
 Erwin, NC 28339

Date: 2/14/2022  
 Input by: David Landry  
 Job Name: Lot 5 Avery Pointe  
 Project #: J0222-0765

**BM1 Kerto-S LVL 1.750" X 16.000" 3-Ply - PASSED**

Level: Level



...Continued from page 1

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
6	Part. Uniform	12-7-0 to 22-0-0		Near Face	137 PLF	0 PLF	137 PLF	0 PLF	0 PLF	M2
	Self Weight				19 PLF					

**Notes**

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

**Lumber**

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

**Handling & Installation**

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/24/2023

**Manufacturer Info**

Metsä Wood  
 301 Merritt 7 Building, 2nd Floor  
 Norwalk, CT 06851  
 (800) 622-5850  
[www.metsawood.com/us](http://www.metsawood.com/us)  
 ICC-ES: ESR-3633

Comtech, Inc.  
 1001 S. Reilly Road, Suite #639  
 Fayetteville, NC  
 USA  
 28314  
 910-864-TRUS



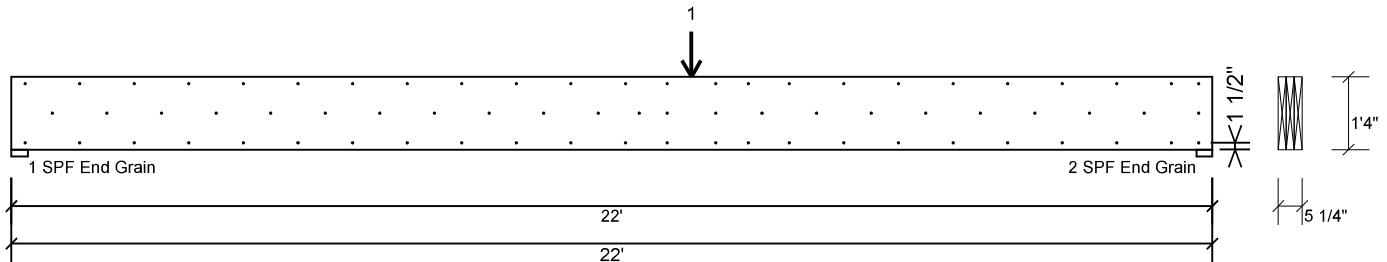


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Date: 2/14/2022  
 Input by: David Landry  
 Job Name: Lot 5 Avery Pointe  
 Project #: J0222-0765

**BM1 Kerto-S LVL 1.750" X 16.000" 3-Ply - PASSED**

Level: Level



**Multi-Ply Analysis**

Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c.. except for regions covered by concentrated load fastening. Nail from both sides. Maximum end distance not to exceed 6"

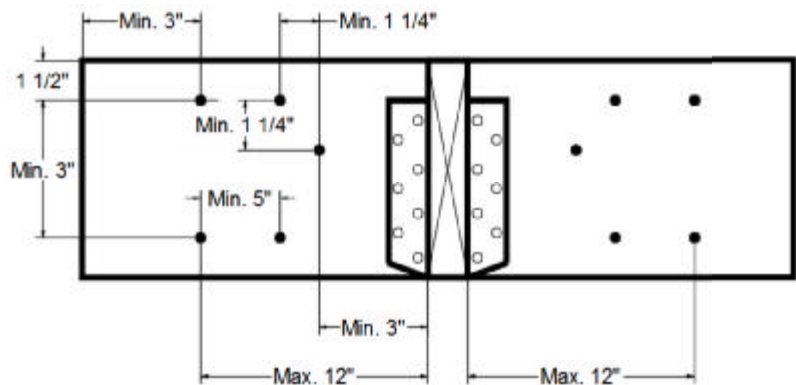
Capacity	64.7 %
Load	182.7 PLF
Yield Limit per Foot	282.4 PLF
Yield Limit per Fastener	94.1 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	D+S
Duration Factor	1.15

**Concentrated Load**

Fasten at concentrated side load at 12-5-8 with a minimum of (6) – 10d Box nails (.128x3") in the pattern shown. Repeat fasteners on both sides.

Capacity	83.6 %
Load	472.0lb.
Total Yield Limit	564.7 lb.
Cg	0.9998
Yield Limit per Fastener	94.1 lb.
Yield Mode	IV
Load Combination	D+S
Duration Factor	1.15

**Min/Max fastener distances for Concentrated Side Loads**



**Notes**  
 Calculated Structural Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

**Lumber**  
 1. Dry service conditions, unless noted otherwise  
 2. LVL not to be treated with fire retardant or corrosive

**Handling & Installation**

- LVL beams must not be cut or drilled
- Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
- Damaged Beams must not be used
- Design assumes top edge is laterally restrained
- Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/24/2023

**Manufacturer Info**  
 Metsä Wood  
 301 Merritt 7 Building, 2nd Floor  
 Norwalk, CT 06851  
 (800) 622-5850  
[www.metsawood.com/us](http://www.metsawood.com/us)  
 ICC-ES: ESR-3633

Comtech, Inc.  
 1001 S. Reilly Road, Suite #639  
 Fayetteville, NC  
 USA  
 28314  
 910-864-TRUS

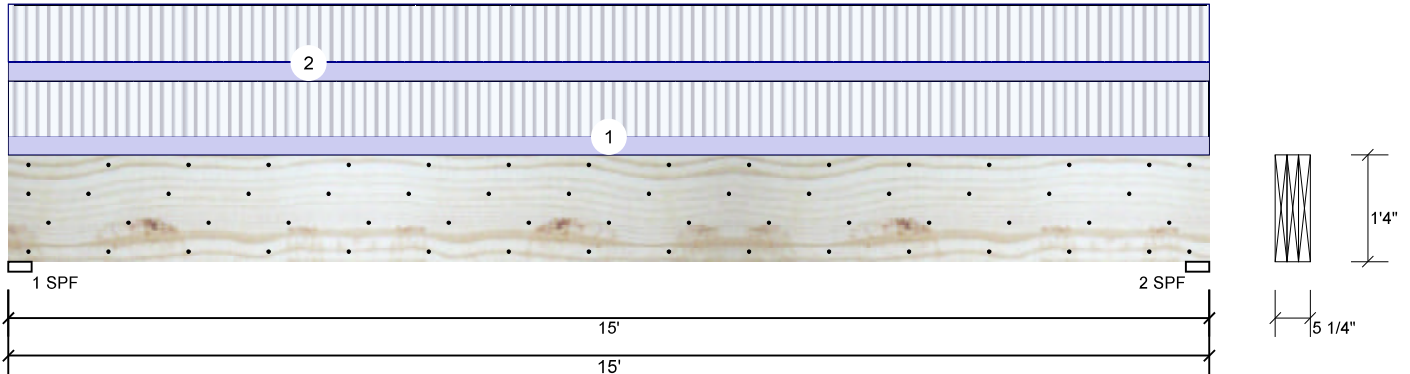


Client: Regency Homes  
 Project: Brinkley  
 Address: 430 Josey Williams Road  
 Erwin, NC 28339

Date: 2/14/2022  
 Input by: David Landry  
 Job Name: Lot 5 Avery Pointe  
 Project #: J0222-0765

**BM2 Kerto-S LVL 1.750" X 16.000" 3-Ply - PASSED**

Level: Level



**Member Information**

Type: Girder  
 Plies: 3  
 Moisture Condition: Dry  
 Deflection LL: 480  
 Deflection TL: 360  
 Importance: Normal  
 Temperature: Temp <= 100°F

Application: Floor  
 Design Method: ASD  
 Building Code: IBC/IRC 2015  
 Load Sharing: Yes  
 Deck: Not Checked  
 Ceiling: Gypsum 1/2"

**Reactions UNPATTERNED lb (Uplift)**

Brg	Live	Dead	Snow	Wind	Const
1	5415	1948	0	0	0
2	5415	1948	0	0	0

**Bearings**

Bearing	Length	Cap. React	D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	94%	1948 / 5415	7363	L	D+L
2 - SPF	3.500"	94%	1948 / 5415	7363	L	D+L

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	26022 ft-lb	7'6"	53922 ft-lb	0.483 (48%)	D+L	L
Unbraced	26022 ft-lb	7'6"	26044 ft-lb	0.999 (100%)	D+L	L
Shear	7123 lb	1'6 5/8"	17920 lb	0.397 (40%)	D+L	L
LL Defl inch	0.230 (L/759)	7'6 1/16"	0.364 (L/480)	0.630 (63%)	L	L
TL Defl inch	0.313 (L/559)	7'6 1/16"	0.485 (L/360)	0.640 (64%)	D+L	L

**Design Notes**

- 1 Fasten all plies using 4 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top must be laterally braced at a maximum of 6'8 5/8" o.c.
- 5 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Far Face	118 PLF	354 PLF	0 PLF	0 PLF	0 PLF	F1
2	Uniform			Near Face	123 PLF	368 PLF	0 PLF	0 PLF	0 PLF	F2
	Self Weight				19 PLF					

**Notes**

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

**Lumber**

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

**Handling & Installation**

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/24/2023

**Manufacturer Info**

Metsä Wood  
 301 Merritt 7 Building, 2nd Floor  
 Norwalk, CT 06851  
 (800) 622-5850  
[www.metsawood.com/us](http://www.metsawood.com/us)  
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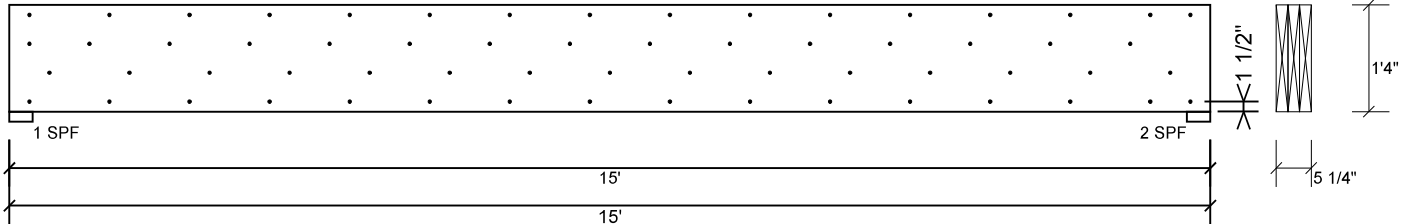


Client: Regency Homes  
 Project: Brinkley  
 Address: 430 Josey Williams Road  
 Erwin, NC 28339

Date: 2/14/2022  
 Input by: David Landry  
 Job Name: Lot 5 Avery Pointe  
 Project #: J0222-0765

**BM2 Kerto-S LVL 1.750" X 16.000" 3-Ply - PASSED**

Level: Level



**Multi-Ply Analysis**

Fasten all plies using 4 rows of 10d Box nails (.128x3") at 12" o.c.. Nail from both sides. Maximum end distance not to exceed 6"

Capacity	100.0 %
Load	327.3 PLF
Yield Limit per Foot	327.4 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	D+L
Duration Factor	1.00

**Notes**

Calculated Structural Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

**Lumber**

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

**Handling & Installation**

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/24/2023

**Manufacturer Info**

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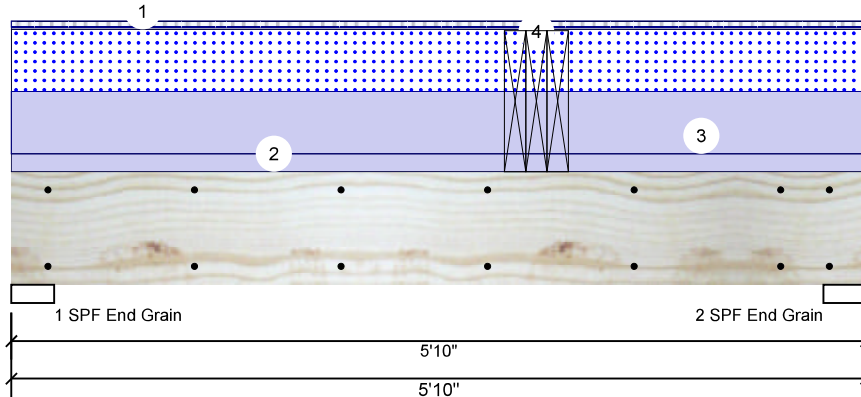


Client: Regency Homes  
 Project: Brinkley  
 Address: 430 Josey Williams Road  
 Erwin, NC 28339

Date: 2/14/2022  
 Input by: David Landry  
 Job Name: Lot 5 Avery Pointe  
 Project #: J0222-0765

**BM3 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED**

Level: Level



**Member Information**

Type:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	480
Deflection TL:	360
Importance:	Normal
Temperature:	Temp <= 100°F

Application:	Floor
Design Method:	ASD
Building Code:	IBC/IRC 2015
Load Sharing:	No
Deck:	Not Checked
Ceiling:	Gypsum 1/2"

**Reactions UNPATTERNED lb (Uplift)**

Brg	Live	Dead	Snow	Wind	Const
1	2153	2357	1210	0	0
2	3496	2840	1210	0	0

**Bearings**

Bearing	Length	Cap. React	D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	46%	2357 / 2522	4880	L	D+0.75(L+S)
2 - SPF End Grain	3.500"	60%	2840 / 3530	6370	L	D+0.75(L+S)

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	11308 ft-lb	3'7"	12542 ft-lb	0.902 (90%)	D+L	L
Unbraced	11308 ft-lb	3'7"	11327 ft-lb	0.998 (100%)	D+L	L
Shear	5739 lb	4'10"	6907 lb	0.831 (83%)	D+L	L
LL Defl inch	0.084 (L/764)	3'4 7/8"	0.134 (L/480)	0.630 (63%)	L	L
TL Defl inch	0.143 (L/451)	3'3 5/8"	0.179 (L/360)	0.800 (80%)	D+L	L

**Design Notes**

- 1 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be laterally braced at a maximum of 4'3" o.c.
- 6 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Tie-In	0-0-0 to 5-10-0	1-0-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	0 PSF	Floor
2	Uniform			Top	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall
3	Uniform			Top	415 PLF	0 PLF	415 PLF	0 PLF	0 PLF	A3
4	Point Self Weight	3-7-0		Top	1948 lb	5415 lb	0 lb	0 lb	0 lb	BM2 Brg 2

**Notes**  
 Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

**Lumber**  
 1. Dry service conditions, unless noted otherwise  
 2. LVL not to be treated with fire retardant or corrosive chemicals

**Handling & Installation**  
 1. LVL beams must not be cut or drilled  
 2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals  
 3. Damaged Beams must not be used  
 4. Design assumes top edge is laterally restrained  
 5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/24/2023

**Manufacturer Info**  
 Metsä Wood  
 301 Merritt 7 Building, 2nd Floor  
 Norwalk, CT 06851  
 (800) 622-5850  
 www.metsawood.com/us  
 ICC-ES: ESR-3633

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 910-864-TRUS



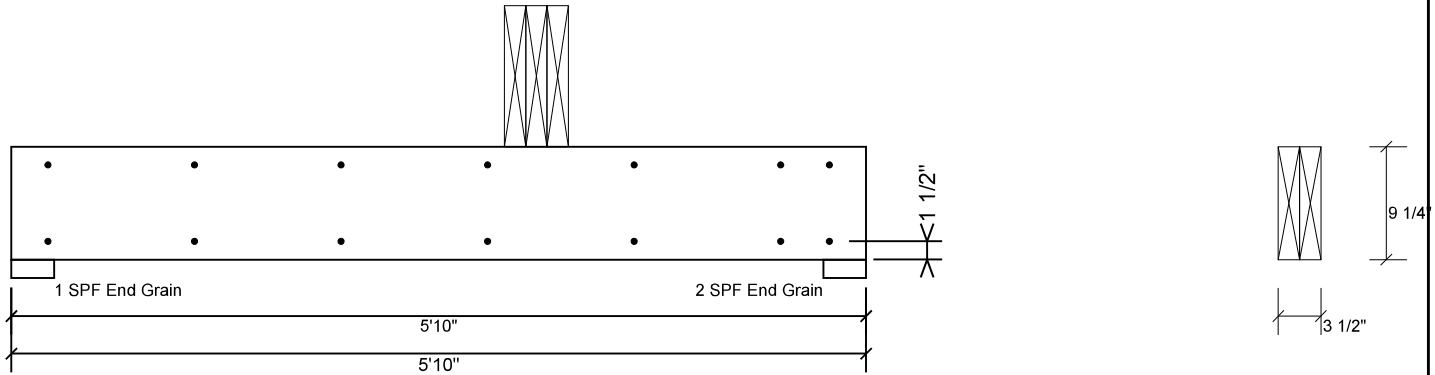


Client: Regency Homes  
 Project: Brinkley  
 Address: 430 Josey Williams Road  
 Erwin, NC 28339

Date: 2/14/2022  
 Input by: David Landry  
 Job Name: Lot 5 Avery Pointe  
 Project #: J0222-0765

**BM3 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED**

Level: Level



**Multi-Ply Analysis**

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6"

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	163.7 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

**Notes**

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

**Lumber**

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive

**chemicals**

**Handling & Installation**

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/24/2023

**Manufacturer Info**

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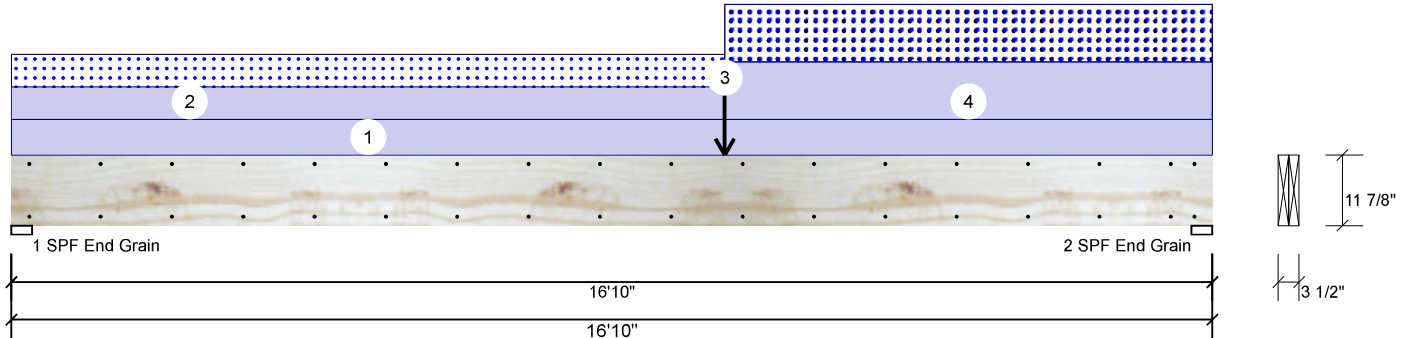


Client: Regency Homes  
 Project: Brinkley  
 Address: 430 Josey Williams Road  
 Erwin, NC 28339

Date: 2/14/2022  
 Input by: David Landry  
 Job Name: Lot 5 Avery Pointe  
 Project #: J0222-0765

**GDH Kerto-S LVL 1.750" X 11.875" 2-Ply - PASSED**

Level: Level



**Member Information**

Type:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	480
Deflection TL:	360
Importance:	Normal
Temperature:	Temp <= 100°F

Application:	Floor
Design Method:	ASD
Building Code:	IBC/IRC 2015
Load Sharing:	No
Deck:	Not Checked
Ceiling:	Gypsum 1/2"

**Reactions UNPATTERNED lb (Uplift)**

Brg	Live	Dead	Snow	Wind	Const
1	0	1190	608	0	0
2	0	1408	825	0	0

**Bearings**

Bearing	Length	Cap. React	D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	17%	1190 / 608	1798	L	D+S
2 - SPF End Grain	3.500"	21%	1408 / 825	2233	L	D+S

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	8610 ft-lb	10'	22897 ft-lb	0.376 (38%)	D+S	L
Unbraced	8610 ft-lb	10'	8629 ft-lb	0.998 (100%)	D+S	L
Shear	1912 lb	15' 3/8"	10197 lb	0.188 (19%)	D+S	L
LL Defl inch	0.158 (L/1246)	8' 8 13/16"	0.409 (L/480)	0.390 (39%)	S	L
TL Defl inch	0.436 (L/450)	8' 7 3/4"	0.546 (L/360)	0.800 (80%)	D+S	L

**Design Notes**

- 1 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be laterally braced at a maximum of 11' 3/4" o.c.
- 6 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	60 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall
2	Part. Uniform	0-0-0 to 10-0-0		Top	55 PLF	0 PLF	55 PLF	0 PLF	0 PLF	M1
3	Point	10-0-0		Top	220 lb	0 lb	220 lb	0 lb	0 lb	M2A
4	Part. Uniform	10-0-0 to 16-10-0		Top	97 PLF	0 PLF	97 PLF	0 PLF	0 PLF	M2
	Self Weight				9 PLF					

**Notes**  
 Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

**Lumber**  
 1. Dry service conditions, unless noted otherwise  
 2. LVL not to be treated with fire retardant or corrosive chemicals

**Handling & Installation**  
 1. LVL beams must not be cut or drilled  
 2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals  
 3. Damaged Beams must not be used  
 4. Design assumes top edge is laterally restrained  
 5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/24/2023

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 301 Merritt 7 Building, 2nd Floor  
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 (800) 622-5850  
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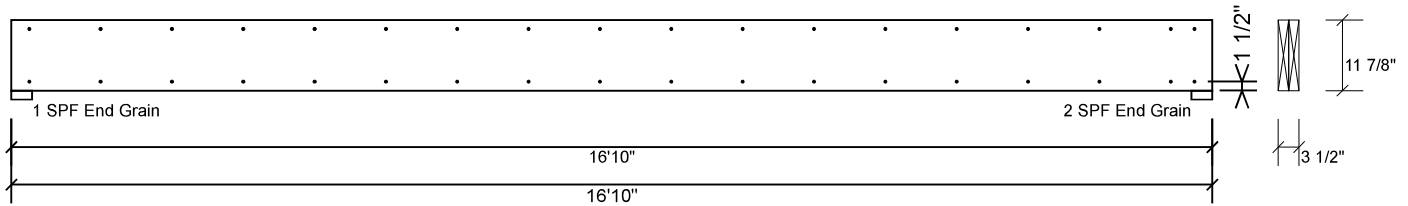


Client: Regency Homes  
 Project: Brinkley  
 Address: 430 Josey Williams Road  
 Erwin, NC 28339

Date: 2/14/2022  
 Input by: David Landry  
 Job Name: Lot 5 Avery Pointe  
 Project #: J0222-0765

**GDH Kerto-S LVL 1.750" X 11.875" 2-Ply - PASSED**

Level: Level



**Multi-Ply Analysis**

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6"

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	163.7 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

**Notes**

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

**Lumber**

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

**Handling & Installation**

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/24/2023

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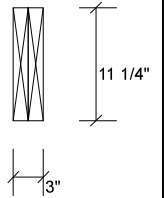
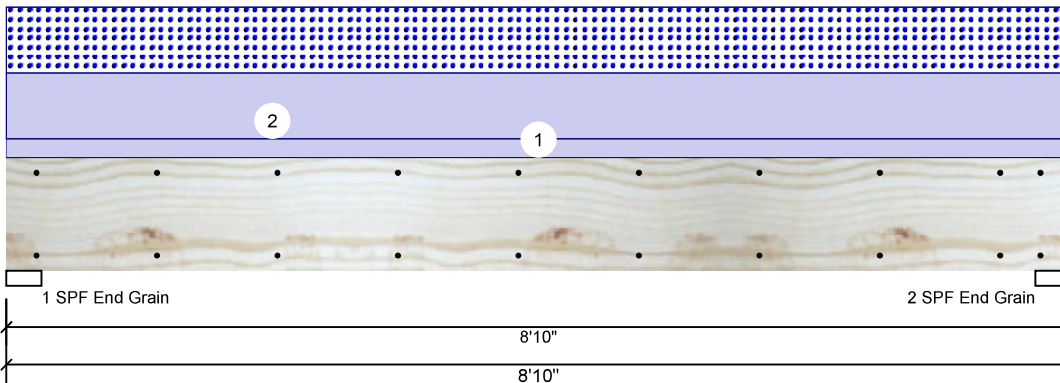


Client: Regency Homes  
 Project: Brinkley  
 Address: 430 Josey Williams Road  
 Erwin, NC 28339

Date: 2/14/2022  
 Input by: David Landry  
 Job Name: Lot 5 Avery Pointe  
 Project #: J0222-0765

**GDH2 S-P-F #2 2.000" X 12.000" 2-Ply - PASSED**

Level: Level



**Member Information**

Type:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	480
Deflection TL:	360
Importance:	Normal
Temperature:	Temp <= 100°F

Application:	Floor
Design Method:	ASD
Building Code:	IBC/IRC 2015
Load Sharing:	No
Deck:	Not Checked
Ceiling:	Gypsum 1/2"

**Reactions UNPATTERNED lb (Uplift)**

Brg	Live	Dead	Snow	Wind	Const
1	0	1188	923	0	0
2	0	1188	923	0	0

**Bearings**

Bearing	Length	Cap. React	D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	47%	1188 / 923	2111	L	D+S
2 - SPF End Grain	3.500"	47%	1188 / 923	2111	L	D+S

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4191 ft-lb	4'5"	5306 ft-lb	0.790 (79%)	D+S	L
Unbraced	4191 ft-lb	4'5"	4197 ft-lb	0.999 (100%)	D+S	L
Shear	1554 lb	7'8"	3493 lb	0.445 (44%)	D+S	L
LL Defl inch	0.046 (L/2165)	4'5 1/16"	0.209 (L/480)	0.220 (22%)	S	L
TL Defl inch	0.106 (L/947)	4'5 1/16"	0.279 (L/360)	0.380 (38%)	D+S	L

**Design Notes**

- 1 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be laterally braced at a maximum of 7'6" o.c.
- 6 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	60 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall
2	Uniform			Top	209 PLF	0 PLF	209 PLF	0 PLF	0 PLF	D1

**Manufacturer Info**

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This design is valid until 4/24/2023

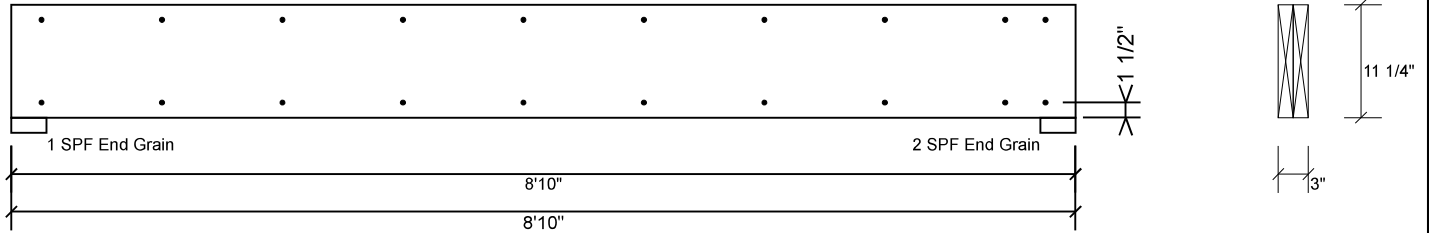


Client: Regency Homes  
 Project: Brinkley  
 Address: 430 Josey Williams Road  
 Erwin, NC 28339

Date: 2/14/2022  
 Input by: David Landry  
 Job Name: Lot 5 Avery Pointe  
 Project #: J0222-0765

**GDH2 S-P-F #2 2.000" X 12.000" 2-Ply - PASSED**

Level: Level



**Multi-Ply Analysis**

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6"

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	157.4 PLF
Yield Limit per Fastener	78.7 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

<b>Manufacturer Info</b>	Comtech, Inc. 1001 S. Reilly Road, Suite #639 Fayetteville, NC USA 28314 910-864-TRUS

This design is valid until 4/24/2023



RE: J0222-0765  
Lot 5 Avery Pointe

Trenco  
818 Soundside Rd  
Edenton, NC 27932

**Site Information:**

Customer: Regency Homes Project Name: J0222-0765  
Lot/Block: 5 Model: Brinkley  
Address: 430 Josey Williams Road Subdivision: Avery Pointe  
City: Erwin State: NC

**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: N/A Wind Speed: N/A mph  
Roof Load: N/A psf Floor Load: 55.0 psf

This package includes 15 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date
1	E16477192	ET1	12/9/2021
2	E16477193	ET2	12/9/2021
3	E16477194	ET3	12/9/2021
4	E16477195	ET4	12/9/2021
5	E16477196	ET5	12/9/2021
6	E16477197	F1	12/9/2021
7	E16477198	F1A	12/9/2021
8	E16477199	F2	12/9/2021
9	E16477200	F2A	12/9/2021
10	E16477201	F3	12/9/2021
11	E16477202	F4	12/9/2021
12	E16477203	F5	12/9/2021
13	E16477204	F6	12/9/2021
14	E16477205	FG1	12/9/2021
15	E16477206	FG2	12/9/2021

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.



December 09, 2021

Job J0222-0765	Truss ET1	Truss Type GABLE	Qty 1	Ply 1	Lot 5 Avery Pointe Job Reference (optional)	E16477192
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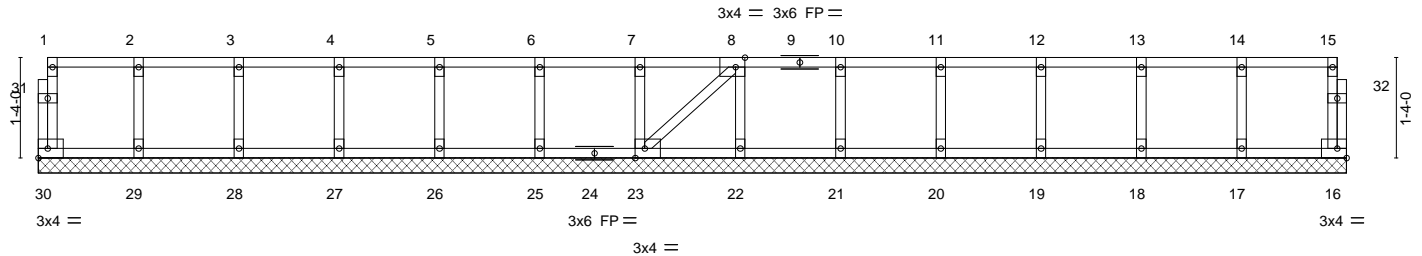
Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 9 07:37:42 2021 Page 1  
ID:14HRAT3elT9qoRIdAoEs\_5z0Axy-ZRjZ6pQzCiaeICDjECeqYz9QWFyQvDMB9M5PdKyAmHN

0-1-8

0-1-8

Scale = 1:28.8



1-4-0	2-8-0	4-0-0	5-4-0	6-8-0	8-0-0	9-4-0	10-8-0	12-0-0	13-4-0	14-8-0	16-0-0	17-4-12
1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-12

Plate Offsets (X, Y)-- [8:0-1-8, Edge], [23:0-1-8, Edge]					
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.06	Vert(LL) n/a - n/a 999	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.01	Vert(CT) n/a - n/a 999		
BCLL 0.0	Rep Stress Incr YES	WB 0.03	Horz(CT) 0.00 16 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S		Weight: 79 lb	FT = 20%F, 11%E

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.1 (flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1 (flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 (flat)	
OTHERS 2x4 SP No.3 (flat)	

**REACTIONS.** All bearings 17-4-12.  
(lb) - Max Grav All reactions 250 lb or less at joint(s) 30, 16, 29, 28, 27, 26, 25, 23, 22, 21, 20, 19, 18, 17


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

- NOTES-**
- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
  - 2) Plates checked for a plus or minus 1 degree rotation about its center.
  - 3) Gable requires continuous bottom chord bearing.
  - 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 5) Gable studs spaced at 1-4-0 oc.
  - 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 7) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



December 9, 2021

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



818 Soundside Road  
Edenton, NC 27932

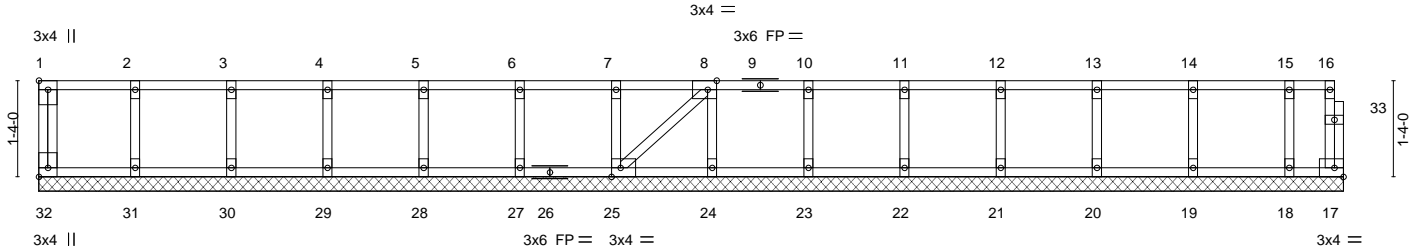
Job	Truss	Truss Type	Qty	Ply	Lot 5 Avery Pointe	E16477193
J0222-0765	ET2	GABLE	1	1		
					Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 9 07:37:43 2021 Page 1  
ID:14HRAT3eIT9qRIdAoEs\_5z0Axy-1dHxK9Rbz0iVwMovow935AibGeHgE4cLO0ry9myAmHM

0-1/8

Scale = 1:30.1



1-4-0	2-8-0	4-0-0	5-4-0	6-8-0	8-0-0	9-4-0	10-8-0	12-0-0	13-4-0	14-8-0	16-0-0	17-4-0	18-1-0
1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	0-9-0
Plate Offsets (X,Y)-- [1:Edge,0-1-8], [8:0-1-8,Edge], [25:0-1-8,Edge], [32:Edge,0-1-8]													

<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 40.0	Plate Grip DOL	1.00	TC 0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.01	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	17	n/a	n/a		
BCDL 5.0	Code	IRC2015/TPI2014	Matrix-S						Weight: 83 lb	FT = 20%F, 11%E

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.1 (flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1 (flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 (flat)	
OTHERS 2x4 SP No.3 (flat)	

**REACTIONS.** All bearings 18-1-0.  
(lb) - Max Grav All reactions 250 lb or less at joint(s) 32, 17, 31, 30, 29, 28, 27, 25, 24, 23, 22, 21, 20, 19, 18


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

- NOTES-**
- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
  - 2) Plates checked for a plus or minus 1 degree rotation about its center.
  - 3) Gable requires continuous bottom chord bearing.
  - 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 5) Gable studs spaced at 1-4-0 oc.
  - 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 7) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 8) CAUTION, Do not erect truss backwards.



December 9, 2021

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



818 Soundside Road  
Edenton, NC 27932



Job J0222-0765	Truss ET3	Truss Type GABLE	Qty 1	Ply 1	Lot 5 Avery Pointe	E16477194
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Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 9 07:37:44 2021 Page 1  
ID:14HRAT3eIT9qoRIdAoEs\_5z0Axy-VqqJXVRDjJqMYWN5LdgleOFm?2dvzXsUdgaVhDyAmHL

0-1-8

Scale = 1:13.9

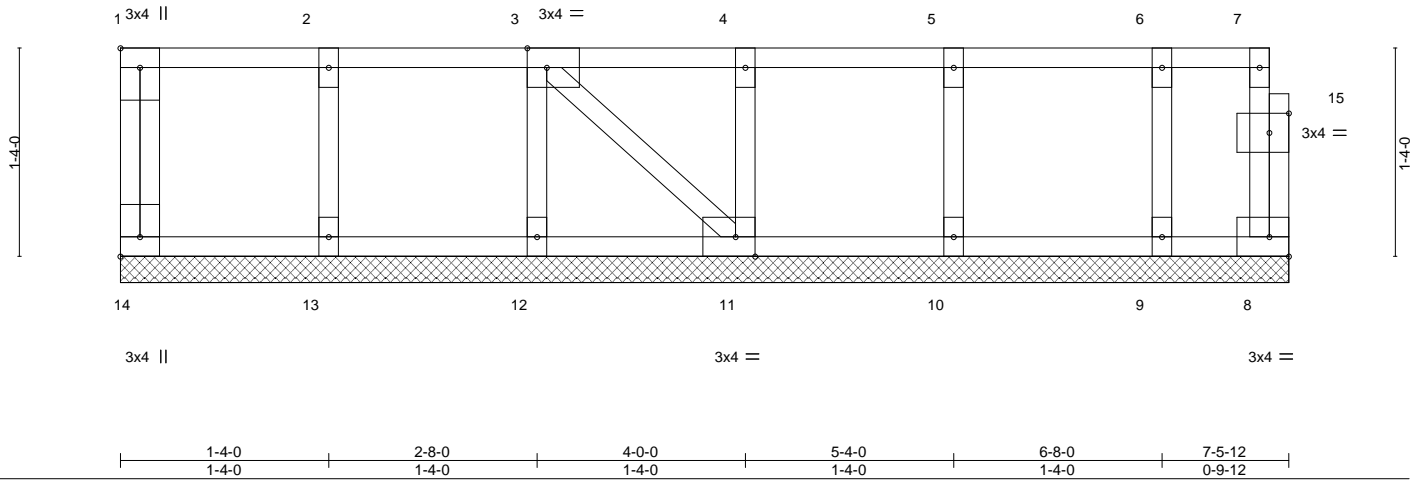


Plate Offsets (X, Y)--	[1:Edge,0-1-8], [3:0-1-8,Edge], [11:0-1-8,Edge], [14:Edge,0-1-8], [15:0-1-8,0-1-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 40.0	2-0-0 Plate Grip DOL 1.00	TC 0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.01	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr YES	WB 0.03	Horz(CT)	0.00	8	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-P							
							Weight: 39 lb	FT = 20%F, 11%E	

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1 (flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1 (flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 (flat)	
OTHERS 2x4 SP No.3 (flat)	


**REACTIONS.** All bearings 7-5-12.  
(lb) - Max Grav All reactions 250 lb or less at joint(s) 14, 8, 13, 12, 11, 10, 9

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

- NOTES-**
- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
  - 2) Plates checked for a plus or minus 1 degree rotation about its center.
  - 3) Gable requires continuous bottom chord bearing.
  - 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 5) Gable studs spaced at 1-4-0 oc.
  - 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 7) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 8) CAUTION, Do not erect truss backwards.



December 9, 2021

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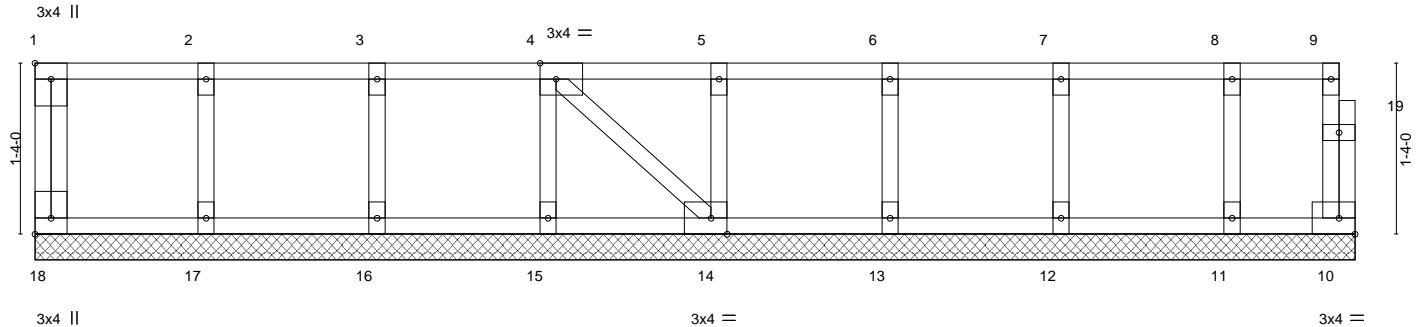
Job J0222-0765	Truss ET4	Truss Type GABLE	Qty 1	Ply 1	Lot 5 Avery Pointe	E16477195
					Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 9 07:37:44 2021 Page 1  
ID:14HRAT3elT9qoRldAoEs\_5z0Axy-VqqJXVRDjJqMYWN5LdgleOFm?2dvzXsUdgaVhDyAmHL

0,1-8

Scale = 1:16.9



1-4-0	2-8-0	4-0-0	5-4-0	6-8-0	8-0-0	9-4-0	10-3-8
1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	0-11-8

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [4:0-1-8,Edge], [14:0-1-8,Edge], [18:Edge,0-1-8]										
<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 40.0	Plate Grip DOL	1.00	TC 0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.01	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	10	n/a	n/a		
BCDL 5.0	Code	IRC2015/TPI2014	Matrix-S							
									Weight: 50 lb	FT = 20%F, 11%E

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.1 (flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1 (flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 (flat)	
OTHERS 2x4 SP No.3 (flat)	


**REACTIONS.** All bearings 10-3-8.  
(lb) - Max Grav All reactions 250 lb or less at joint(s) 18, 10, 17, 16, 15, 14, 13, 12, 11

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

- NOTES-**
- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
  - 2) Plates checked for a plus or minus 1 degree rotation about its center.
  - 3) Gable requires continuous bottom chord bearing.
  - 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 5) Gable studs spaced at 1-4-0 oc.
  - 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 7) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 8) CAUTION, Do not erect truss backwards.



December 9, 2021

<p><b>WARNING -</b> Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 <p>818 Soundside Road Edenton, NC 27932</p>
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Job	Truss	Truss Type	Qty	Ply	Lot 5 Avery Pointe	E16477196
J0222-0765	ET5	GABLE	1	1		

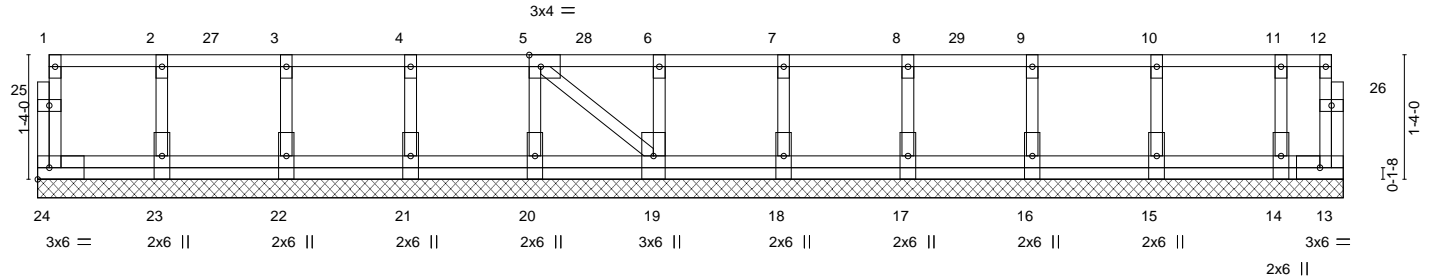
Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 9 07:37:45 2021 Page 1  
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0-1/8

0-1/8

Scale = 1:23.3



1-4-0	2-8-0	4-0-0	5-4-0	6-8-0	8-0-0	9-4-0	10-8-0	12-0-0	13-4-0	14-0-0
1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	0-8-0

Plate Offsets (X,Y)-- [5:0-1-8,Edge]											
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>		
TCLL 40.0	Plate Grip DOL	1.00	TC 0.12	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
TCDL 10.0	Lumber DOL	1.00	BC 0.00	Vert(CT)	n/a	-	n/a	999			
BCLL 0.0	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	13	n/a	n/a			
BCDL 5.0	Code	IRC2015/TPI2014	Matrix-S								
									Weight: 84 lb	FT = 20%F, 11%E	

<b>LUMBER-</b>	<b>BRACING-</b>	
TOP CHORD 2x4 SP No.1 (flat)	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1 (flat)	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3 (flat)		
OTHERS 2x4 SP No.3 (flat)		

**REACTIONS.** All bearings 14-0-0.  
(lb) - Max Grav All reactions 250 lb or less at joint(s) 24, 23, 22, 21, 20, 19, 18, 17, 16, 15, 14

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

- NOTES-**
- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
  - 2) Plates checked for a plus or minus 1 degree rotation about its center.
  - 3) Gable requires continuous bottom chord bearing.
  - 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 5) Gable studs spaced at 1-4-0 oc.
  - 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 7) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

**LOAD CASE(S)** Standard

- 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)  
Vert: 13-24=-10, 1-12=-100

Concentrated Loads (lb)  
Vert: 4=-91 7=-91 10=-91 27=-91 28=-91 29=-91



December 9, 2021

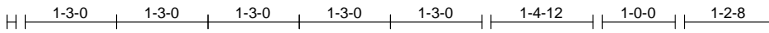


Job J0222-0765	Truss F1A	Truss Type Floor	Qty 1	Ply 1	Lot 5 Avery Pointe	E16477198
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Comtech, Inc, Fayetteville, NC - 28314,

8,430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 9 07:37:47 2021 Page 1  
ID:I4HRAT3eIT9qoRIdAoEs\_5z0Axy-vOWS9WU60ECxPz6g1IE?F0t7fGU4AkFwJdpAIYyAmHI

0-1-8



Scale = 1:29.7

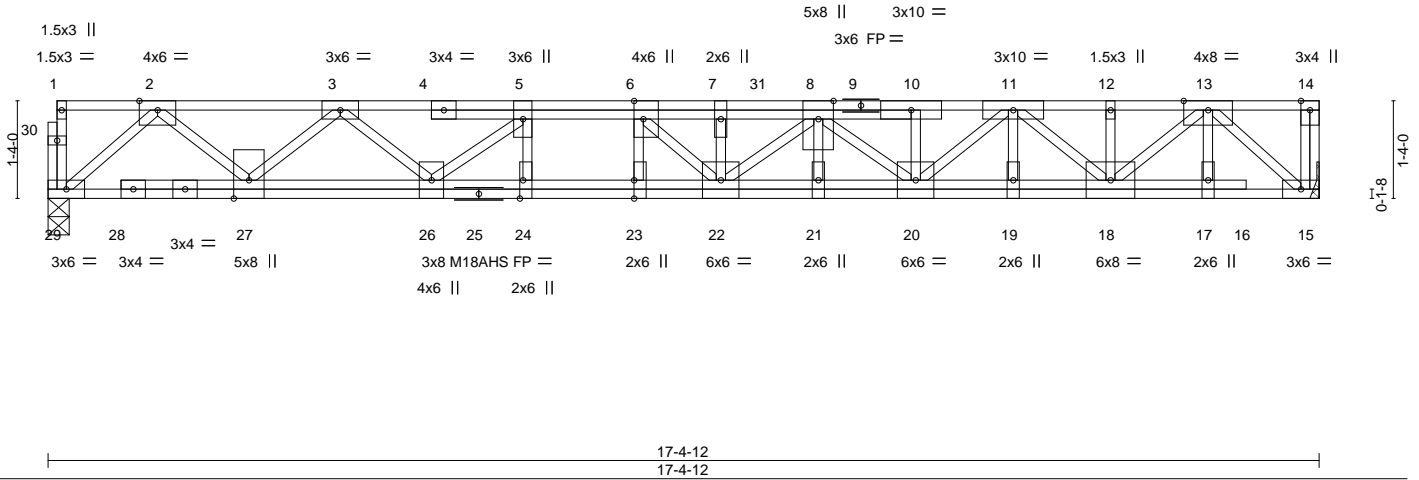


Plate Offsets (X,Y)-- [6:0-3-0,Edge], [23:0-3-0,Edge], [24:0-3-0,Edge]

LOADING (psf)	SPACING-	CS.I.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.67	Vert(LL) -0.20	22-23	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.74	Vert(CT) -0.28	22-23	>739	360	M18AHS	186/179
BCLL 0.0	Rep Stress Incr NO	WB 0.69	Horz(CT) 0.05	15	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S						
							Weight: 128 lb	FT = 20%F, 11%E

**LUMBER-**  
TOP CHORD 2x4 SP No.1 (flat)  
BOT CHORD 2x4 SP No.1 (flat)  
WEBS 2x4 SP No.3 (flat)

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

**REACTIONS.** (size) 29=0-3-8, 15=Mechanical  
Max Grav 29=1112(LC 1), 15=1169(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2171/0, 3-5=-3758/0, 5-6=-4691/0, 6-7=-5203/0, 7-8=-5203/0, 8-10=-4093/0, 10-11=-4088/0, 11-12=-2410/0, 12-13=-2410/0  
BOT CHORD 27-29=0/1244, 26-27=0/3037, 24-26=0/4691, 23-24=0/4691, 22-23=0/4691, 21-22=0/4965, 20-21=0/4965, 19-20=0/3348, 18-19=0/3348, 17-18=0/1304, 15-17=0/1304  
WEBS 2-29=-1654/0, 2-27=0/1258, 3-27=-1174/0, 3-26=0/970, 5-26=-1275/0, 5-24=0/452, 13-15=-1725/0, 13-18=0/1458, 11-18=-1237/0, 11-20=0/976, 8-20=-1130/0, 8-22=0/394, 7-22=-541/0, 6-22=0/978, 6-23=-458/0

- NOTES-**
- Unbalanced floor live loads have been considered for this design.
  - All plates are MT20 plates unless otherwise indicated.
  - Plates checked for a plus or minus 1 degree rotation about its center.
  - Refer to girder(s) for truss to truss connections.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - CAUTION, Do not erect truss backwards.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 481 lb down at 9-9-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard  
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 15-29=-10, 1-14=-100  
Concentrated Loads (lb)  
Vert: 31=-401(F)



December 9, 2021

Job J0222-0765	Truss F2	Truss Type Floor	Qty 7	Ply 1	Lot 5 Avery Pointe	E16477199
Comtech, Inc, Fayetteville, NC - 28314,					8,430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 9 07:37:48 2021 Page 1	
					Job Reference (optional)	
					ID:14HRAT3eIT9qoRldAoEs_5z0Axy-Ob4qNsVknYK0o7htaTIEoDPJ7fpwvEp4XHYjq_yAmHH	
					0-1-8	
					Scale = 1:30.3	

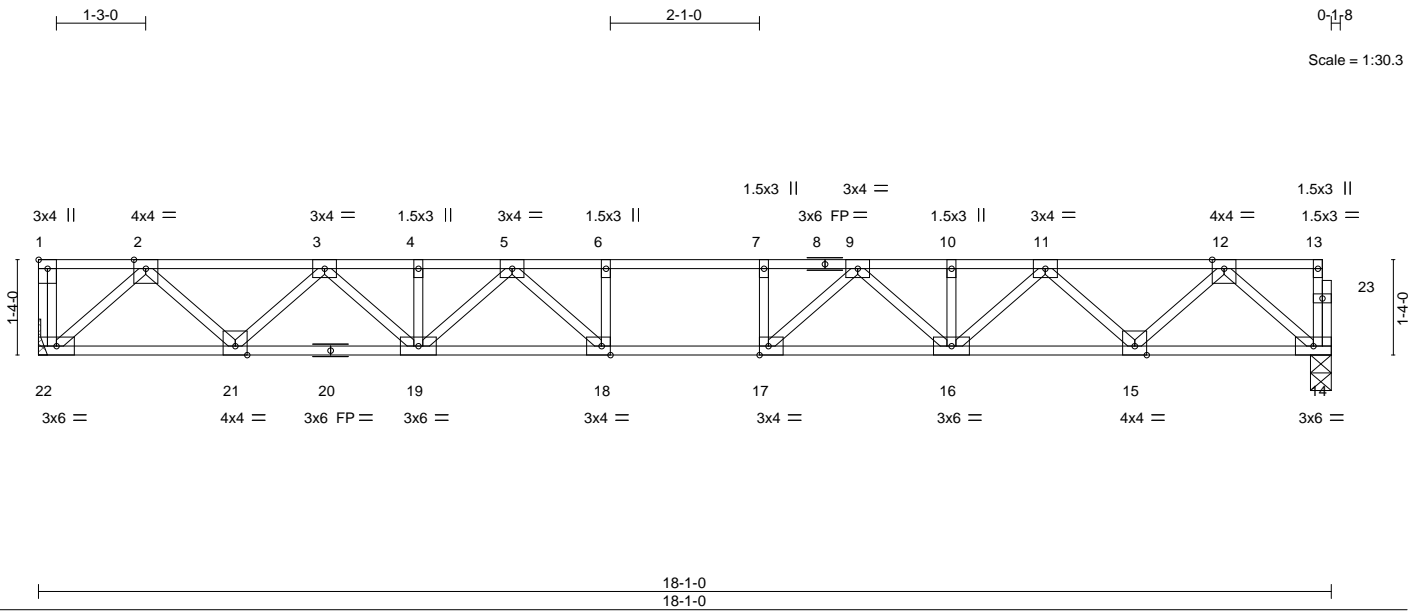


Plate Offsets (X,Y)--		[1:Edge,0-1-8], [17:0-1-8,Edge], [18:0-1-8,Edge]	
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>
TCLL 40.0	Plate Grip DOL	1.00	TC 0.56
TCDL 10.0	Lumber DOL	1.00	BC 0.77
BCLL 0.0	Rep Stress Incr	YES	WB 0.48
BCDL 5.0	Code	IRC2015/TPI2014	Matrix-S
			<b>DEFL.</b>
			in (loc) l/defl L/d
			Vert(LL) -0.22 17-18 >956 480
			Vert(CT) -0.31 17-18 >695 360
			Horz(CT) 0.06 14 n/a n/a
			<b>PLATES</b>
			MT20
			<b>GRIP</b>
			244/190
			Weight: 96 lb FT = 20%F, 11%E

**LUMBER-**  
TOP CHORD 2x4 SP No.1 (flat)  
BOT CHORD 2x4 SP No.1 (flat)  
WEBS 2x4 SP No.3 (flat)

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

**REACTIONS.** (size) 22=Mechanical, 14=0-3-8  
Max Grav 22=981(LC 1), 14=975(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1787/0, 3-4=-2985/0, 4-5=-2985/0, 5-6=-3581/0, 6-7=-3581/0, 7-9=-3581/0, 9-10=-2985/0, 10-11=-2985/0, 11-12=-1787/0  
BOT CHORD 21-22=0/1058, 19-21=0/2486, 18-19=0/3347, 17-18=0/3581, 16-17=0/3347, 15-16=0/2486, 14-15=0/1058  
WEBS 2-22=-1409/0, 2-21=0/1013, 3-21=-972/0, 3-19=0/678, 5-19=-492/0, 5-18=-55/627, 6-18=-316/0, 12-14=-1406/0, 12-15=0/1014, 11-15=-973/0, 11-16=0/678, 9-16=-492/0, 9-17=-55/627, 7-17=-316/0

- NOTES-**
- Unbalanced floor live loads have been considered for this design.
  - Plates checked for a plus or minus 1 degree rotation about its center.
  - Refer to girder(s) for truss to truss connections.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - CAUTION, Do not erect truss backwards.



December 9, 2021

Job J0222-0765	Truss F2A	Truss Type Floor	Qty 1	Ply 1	Lot 5 Avery Pointe	E16477200
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Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 9 07:37:48 2021 Page 1  
ID:14HRAT3elT9qoRIdAoEs\_5z0Axy-Ob4qNsVknYKo07htaTIEoDPJefnlv704XHYjq\_yAmHH

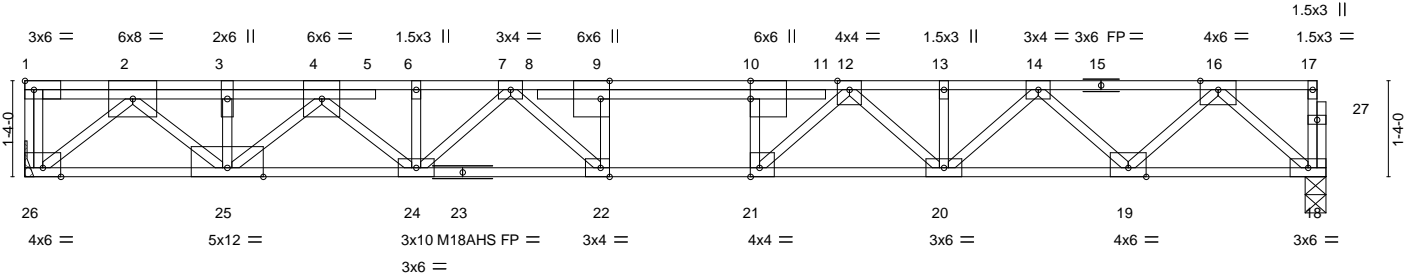
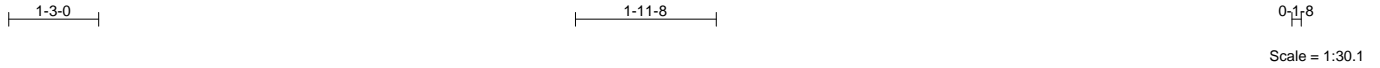


Plate Offsets (X,Y)--	[9:0-3-0,Edge], [10:0-3-0,Edge], [21:0-1-8,Edge], [22:0-1-8,Edge]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.53	Vert(LL) -0.25	22	>845	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.94	Vert(CT) -0.35	22	>610	360	M18AHS	186/179
BCLL 0.0	Rep Stress Incr NO	WB 0.92	Horz(CT) 0.08	18	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S						

Weight: 109 lb FT = 20%F, 11%E

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.1 (flat)	TOP CHORD Structural wood sheathing directly applied or 5-10-1 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1 (flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 (flat)	

**REACTIONS.** (size) 26=Mechanical, 18=0-3-8  
Max Grav 26=1498(LC 1), 18=1066(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-3150/0, 3-4=-3150/0, 4-6=-3973/0, 6-7=-3970/0, 7-9=-4445/0, 9-10=-4442/0, 10-12=-4454/0, 12-13=-3379/0, 13-14=-3379/0, 14-16=-1986/0  
BOT CHORD 25-26=0/1698, 24-25=0/3684, 22-24=0/4215, 21-22=0/4442, 20-21=0/3824, 19-20=0/2777, 18-19=0/1162  
WEBS 2-26=-2210/0, 2-25=0/1927, 3-25=-776/0, 4-25=-709/0, 4-24=0/380, 16-18=-1545/0, 16-19=0/1145, 14-19=-1101/0, 14-20=0/818, 12-20=-605/0, 12-21=0/1075, 10-21=-658/0, 7-24=-333/0, 7-22=-126/529, 9-22=-328/61

- NOTES-**
- Unbalanced floor live loads have been considered for this design.
  - All plates are MT20 plates unless otherwise indicated.
  - Plates checked for a plus or minus 1 degree rotation about its center.
  - Refer to girder(s) for truss to truss connections.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - CAUTION, Do not erect truss backwards.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 689 lb down at 2-6-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard  
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 18-26=-10, 1-17=-100  
Concentrated Loads (lb)  
Vert: 3=-609(F)



December 9, 2021

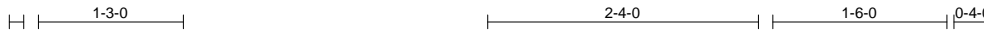
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before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



818 Soundside Road  
Edenton, NC 27932

Job J0222-0765	Truss F3	Truss Type Floor	Qty 2	Ply 1	Lot 5 Avery Pointe	E16477201
Comtech, Inc, Fayetteville, NC - 28314,					8,430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 9 07:37:49 2021 Page 1	
					Job Reference (optional)	
ID:I4HRAT3elT9qoRldAoEs_5z0Axy-sneCaCVMYsSeeHG38AGTLRyXF3DqekmDmxIGNQyAmHG						

0-1-8



Scale = 1:18.7

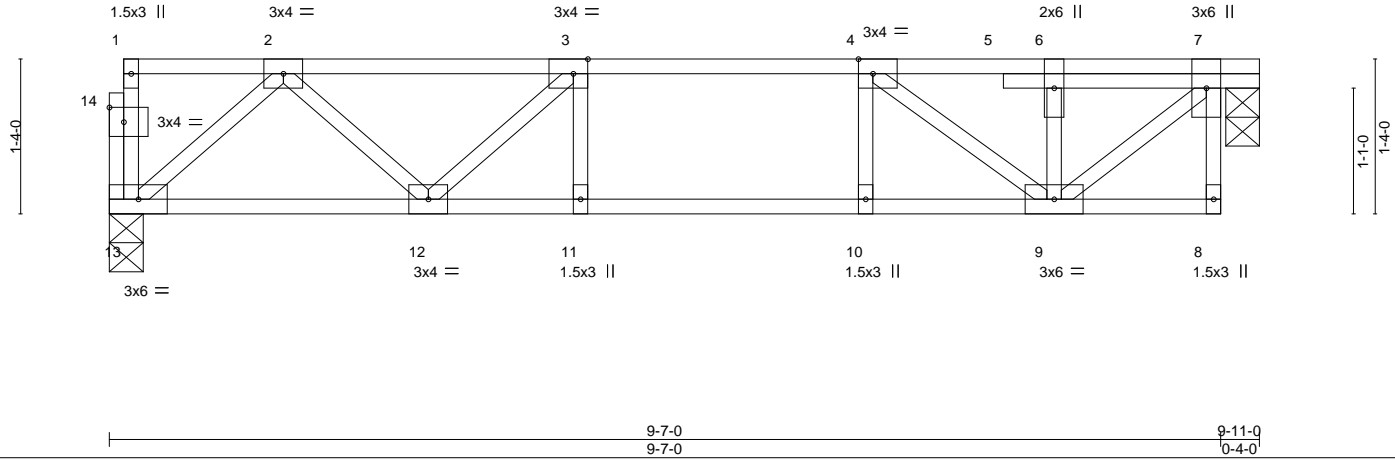


Plate Offsets (X,Y)--	[3:0-1-8,Edge], [4:0-1-8,Edge], [14:0-1-8,0-1-8]
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LOADING (psf)	SPACING-	CS.I.	DEFL.	PLATES	GRIP
TCLL 40.0	2-0-0	TC 0.35	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.47	Vert(LL) -0.07 11 >999 480		
BCLL 0.0	Lumber DOL 1.00	WB 0.31	Vert(CT) -0.09 11 >999 360		
BCDL 5.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.02 7 n/a n/a		
	Code IRC2015/TPI2014			Weight: 54 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1 (flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1 (flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 (flat)	


**REACTIONS.** (size) 13=0-3-8, 7=0-3-8  
Max Grav 13=511(LC 1), 7=517(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-781/0, 3-4=-965/0, 4-6=-499/0, 6-7=-499/0  
BOT CHORD 12-13=0/541, 11-12=0/965, 10-11=0/965, 9-10=0/965  
WEBS 7-9=0/649, 2-13=-718/0, 2-12=0/334, 3-12=-307/0, 4-9=-640/0

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) Plates checked for a plus or minus 1 degree rotation about its center.
  - 3) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 5) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
  - 6) CAUTION, Do not erect truss backwards.



December 9, 2021

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b> Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 818 Soundside Road Edenton, NC 27932
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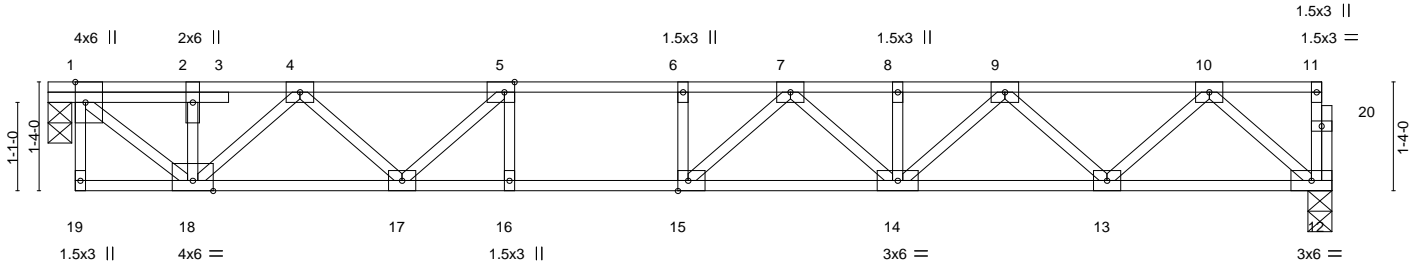
Job J0222-0765	Truss F4	Truss Type Floor	Qty 2	Ply 1	Lot 5 Avery Pointe	E16477202
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Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 9 07:37:50 2021 Page 1  
ID:I4HRAT3eIT9qoRIdAoEs\_5z0Axy-KzCaoYW\_J9aVGRrFiuniteVdATSnN77N?b1qvsyAmHF



0-1-8  
Scale = 1:26.5



0-4-0 0-4-0	15-8-8 15-4-8
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Plate Offsets (X,Y)--	[1:0-3-0,Edge], [5:0-1-8,Edge], [15:0-1-8,Edge]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.66	Vert(LL) -0.21 14-15 >856 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.94	Vert(CT) -0.28 14-15 >640 360		
BCLL 0.0	Rep Stress Incr YES	WB 0.56	Horz(CT) 0.02 12 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S		Weight: 84 lb	FT = 20%F, 11%E

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.1 (flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1 (flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 15-16.
WEBS 2x4 SP No.3 (flat)	

**REACTIONS.** (size) 12=0-3-8, 1=0-3-8  
Max Grav 12=829(LC 1), 1=835(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-900/0, 2-4=-903/0, 4-5=-1988/0, 5-6=-2524/0, 6-7=-2524/0, 7-8=-2371/0, 8-9=-2371/0, 9-10=-1469/0  
BOT CHORD 17-18=0/1531, 16-17=0/2524, 15-16=0/2524, 14-15=0/2568, 13-14=0/2027, 12-13=0/891  
WEBS 1-18=0/1172, 4-18=-857/0, 4-17=0/636, 5-17=-794/0, 10-12=-1184/0, 10-13=0/804, 9-13=-776/0, 9-14=0/468, 7-14=-279/0, 7-15=-258/302

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are 3x4 MT20 unless otherwise indicated.
  - 3) Plates checked for a plus or minus 1 degree rotation about its center.
  - 4) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 6) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
  - 7) CAUTION, Do not erect truss backwards.



December 9, 2021

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

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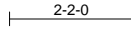


Job J0222-0765	Truss F6	Truss Type Floor	Qty 5	Ply 1	Lot 5 Avery Pointe	E16477204
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Comtech, Inc, Fayetteville, NC - 28314,

8,430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 9 07:37:52 2021 Page 1  
ID:I4HRAT3eIT9qoRIdAoEs\_5z0Axy-GMJLCEYErnqDVL\_epJpAy3a25HDSr?JfSvWxzyAmHD

0-1-8



0-1-8  
Scale = 1:37.8

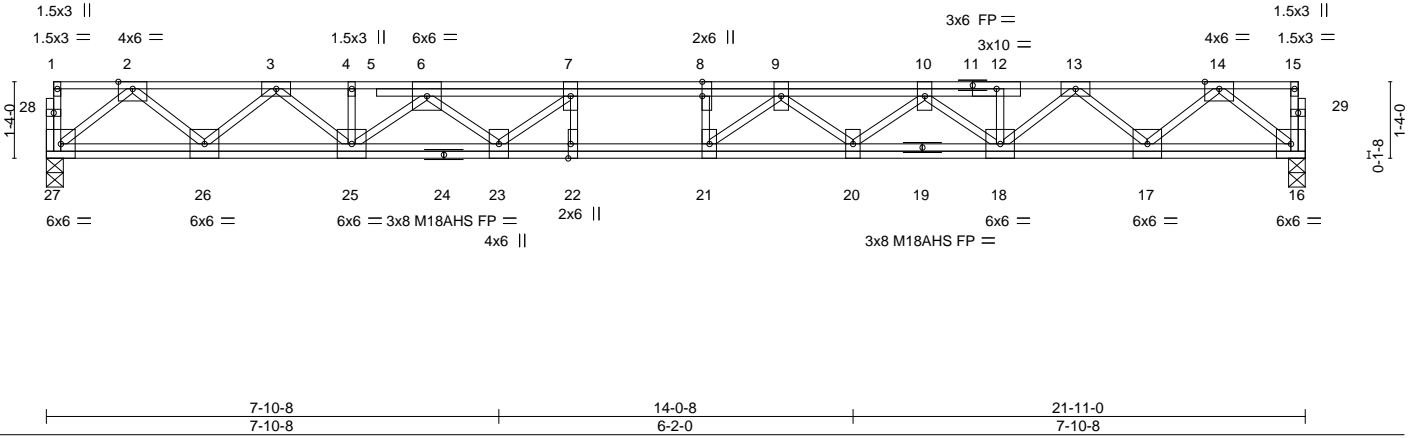


Plate Offsets (X,Y)--	[8:0-3-0,0-0-0], [22:0-3-0,Edge]
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LOADING (psf)	SPACING-	CS.I.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.37	Vert(LL) -0.33	21	>797	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.60	Vert(CT) -0.45	21	>579	360	M18AHS	186/179
BCLL 0.0	Rep Stress Incr YES	WB 0.64	Horz(CT) 0.06	16	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S						

Weight: 158 lb FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1 (flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1 (flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 (flat)	

**REACTIONS.** (size) 27=0-3-8, 16=0-3-8  
Max Grav 27=1185(LC 1), 16=1185(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2352/0, 3-4=-4056/0, 4-6=-4064/0, 6-7=-5383/0, 7-8=-5847/0, 8-9=-5847/0, 9-10=-5402/0, 10-12=-4085/0, 12-13=-4085/0, 13-14=-2350/0  
BOT CHORD 26-27=0/1358, 25-26=0/3320, 23-25=0/4944, 22-23=0/5847, 21-22=0/5847, 20-21=0/5744, 18-20=0/5011, 17-18=0/3314, 16-17=0/1360  
WEBS 2-27=-1765/0, 2-26=0/1348, 3-26=-1313/0, 3-25=0/978, 14-16=-1768/0, 14-17=0/1344, 13-17=-1307/0, 13-18=0/1024, 10-18=-1200/0, 10-20=0/518, 9-20=508/0, 6-25=-1151/0, 6-23=0/707, 7-23=-889/0, 9-21=-301/635, 8-21=-272/53

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are MT20 plates unless otherwise indicated.
  - 3) All plates are 3x6 MT20 unless otherwise indicated.
  - 4) Plates checked for a plus or minus 1 degree rotation about its center.
  - 5) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



December 9, 2021

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

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Edenton, NC 27932

Job J0222-0765	Truss FG1	Truss Type Floor Girder	Qty 1	Ply 1	Lot 5 Avery Pointe	E16477205
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Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 9 07:37:53 2021 Page 1  
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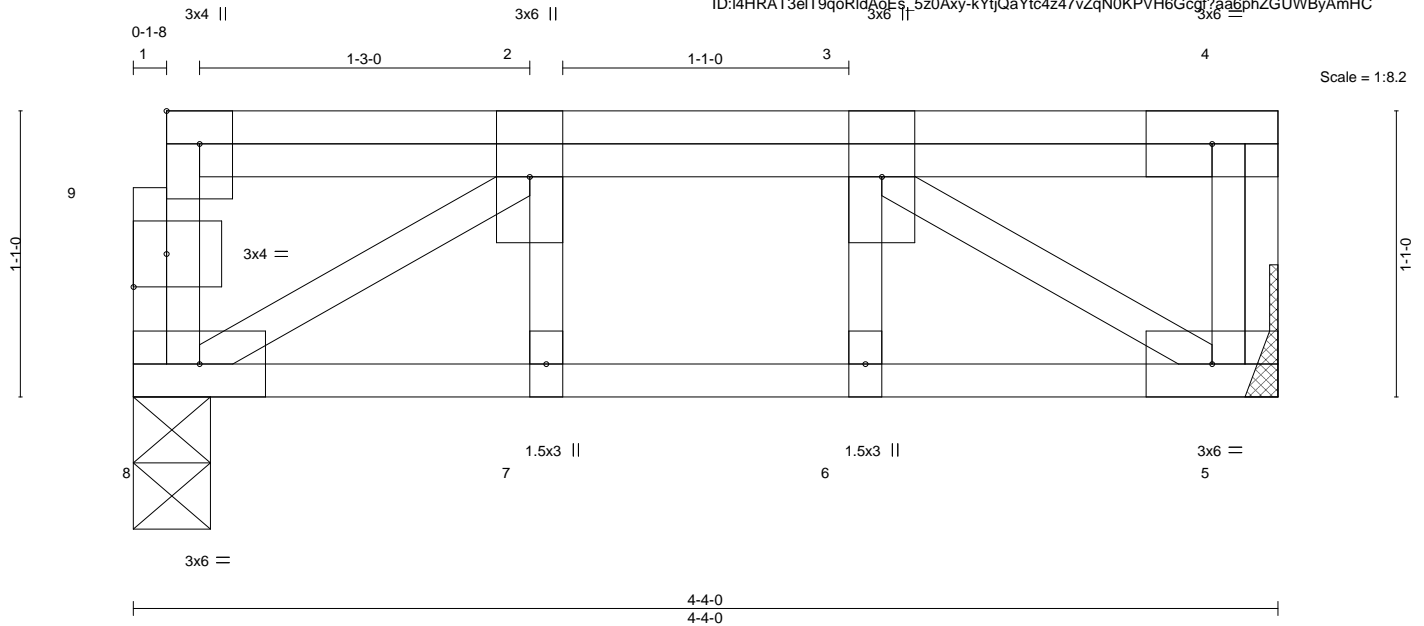


Plate Offsets (X, Y)--	[1:Edge,0-1-8], [9:0-1-8,0-1-8]
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LOADING (psf)	SPACING-	CS.I.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP	
TCLL 40.0	Plate Grip DOL 1.00	TC 0.13	Vert(LL)	-0.01	6	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.20	Vert(CT)	-0.01	6	>999	360		
BCLL 0.0	Rep Stress Incr NO	WB 0.16	Horz(CT)	0.00	5	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S							

Weight: 29 lb FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1 (flat)	TOP CHORD Structural wood sheathing directly applied or 4-4-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1 (flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 (flat)	

**REACTIONS.** (size) 8=0-3-8, 5=Mechanical  
 Max Grav 8=810(LC 1), 5=501(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-8=-473/0, 2-3=-581/0  
 BOT CHORD 7-8=0/581, 6-7=0/581, 5-6=0/581  
 WEBS 3-5=-684/0, 2-8=-648/0

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) Plates checked for a plus or minus 1 degree rotation about its center.
  - 3) Refer to girder(s) for truss to truss connections.
  - 4) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 6) CAUTION, Do not erect truss backwards.

**LOAD CASE(S)** Standard  
 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
 Uniform Loads (plf)  
 Vert: 5-8=-10, 1-4=-100  
 Concentrated Loads (lb)  
 Vert: 1=-452 3=-417



December 9, 2021

Job J0222-0765	Truss FG2	Truss Type Floor Girder	Qty 1	Ply 1	Lot 5 Avery Pointe	E16477206
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Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Dec 9 07:37:53 2021 Page 1  
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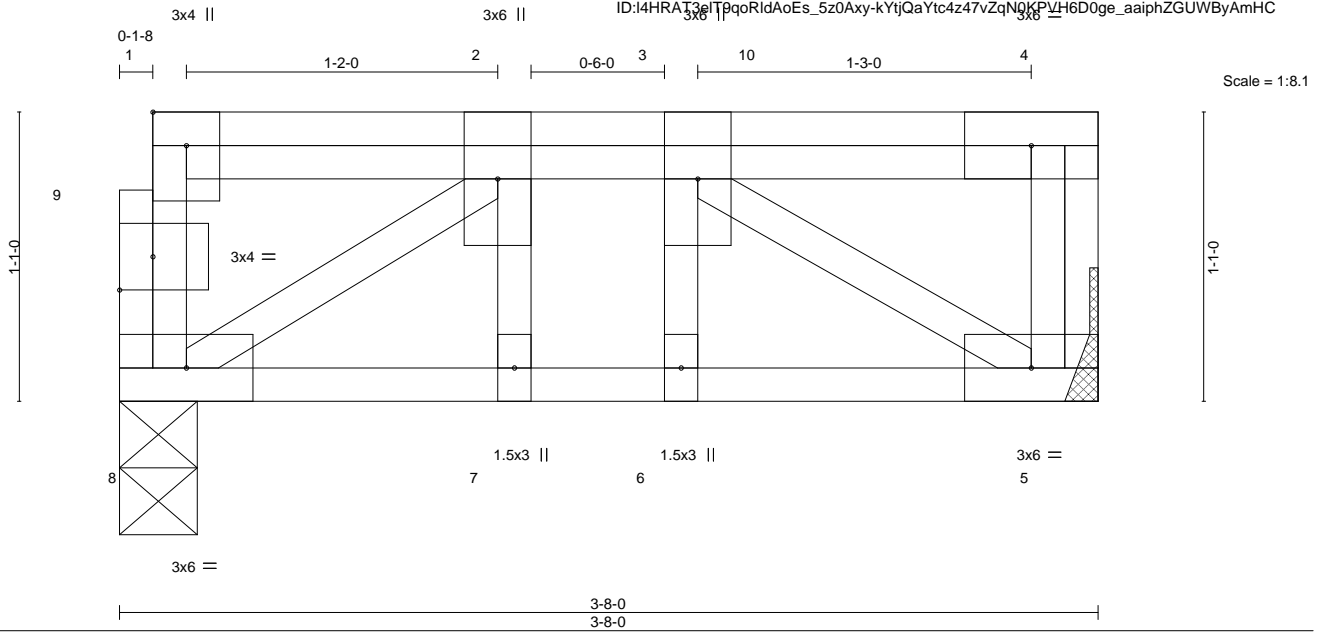


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [9:0-1-8,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 40.0	2-0-0	TC 0.36	Vert(LL)	-0.01	6	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.26	Vert(CT)	-0.01	5-6	>999		
BCLL 0.0	Lumber DOL 1.00	WB 0.19	Horz(CT)	0.00	5	n/a		
BCDL 5.0	Rep Stress Incr NO	Matrix-S						
	Code IRC2015/TPI2014						Weight: 26 lb	FT = 20%F, 11%E

**LUMBER-**  
 TOP CHORD 2x4 SP No.1 (flat)  
 BOT CHORD 2x4 SP No.1 (flat)  
 WEBS 2x4 SP No.3 (flat)

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

**REACTIONS.** (size) 8=0-3-8, 5=Mechanical  
 Max Grav 8=1167(LC 1), 5=709(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-8=-764/0, 4-5=-268/0, 2-3=-672/0  
 BOT CHORD 7-8=0/672, 6-7=0/672, 5-6=0/672  
 WEBS 3-5=-792/0, 2-8=-747/0

- NOTES-**
- Unbalanced floor live loads have been considered for this design.
  - Plates checked for a plus or minus 1 degree rotation about its center.
  - Refer to girder(s) for truss to truss connections.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - CAUTION, Do not erect truss backwards.

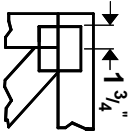
**LOAD CASE(S)** Standard  
 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
 Uniform Loads (plf)  
 Vert: 5-8=-10, 1-4=-100  
 Concentrated Loads (lb)  
 Vert: 1=-771 10=-735



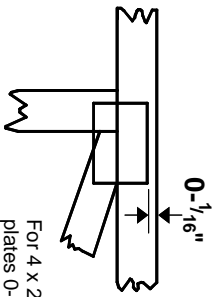
December 9, 2021

# 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 X 4

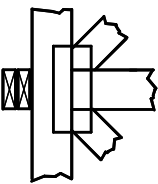
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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



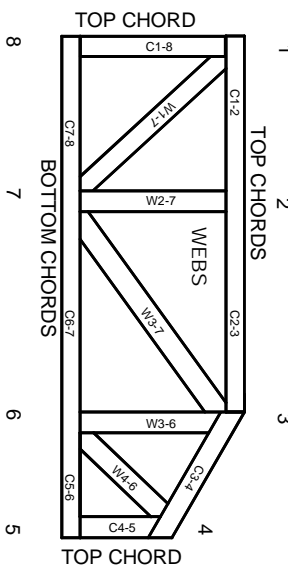
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TP1: 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

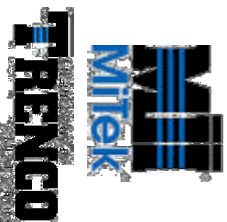
ICC-ES Reports:

ESR-1311, ESR-1352, ESR 1988  
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/TP1 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/TP1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.