

### **Trenco**

818 Soundside Rd Edenton, NC 27932

Re: J0724-4087

Lot 6 Magnolia Hills

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

Pages or sheets covered by this seal: I68289895 thru I68289924

My license renewal date for the state of North Carolina is December 31, 2024.

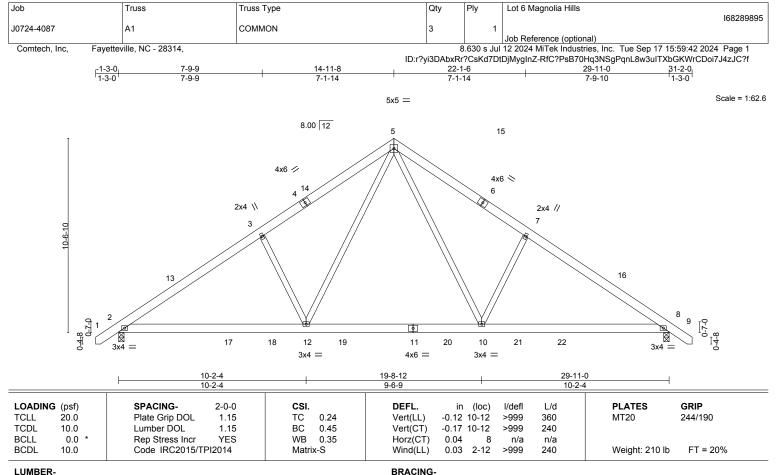
North Carolina COA: C-0844



September 19,2024

Gilbert, Eric

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



TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS.

2=0-3-8, 8=0-3-8 (size) Max Horz 2=-257(LC 10) Max Uplift 2=-80(LC 12), 8=-80(LC 13) Max Grav 2=1409(LC 19), 8=1409(LC 20)

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

2-3=-1925/353, 3-5=-1799/443, 5-7=-1799/443, 7-8=-1926/353 TOP CHORD

2-12=-140/1694, 10-12=0/1103, 8-10=-152/1525 **BOT CHORD** 

WEBS 5-10=-163/931, 7-10=-503/295, 5-12=-163/931, 3-12=-503/295

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-7 to 3-3-6, Interior(1) 3-3-6 to 14-11-8, Exterior(2) 14-11-8 to 19-4-5, Interior(1) 19-4-5 to 31-0-7 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.



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

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



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TP11 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

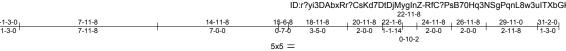


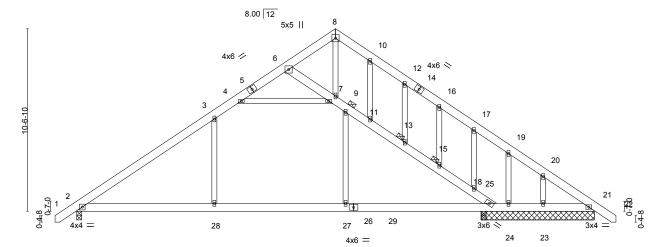
Job Truss Truss Type Qty Ply Lot 6 Magnolia Hills 168289896 J0724-4087 A1GE **GABLE** Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 15:59:43 2024 Page 1 ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Scale = 1:66.6





	7-11-8 7-11-8	+ 10-2-4 2-2-12 + 14-11-8 4-9-4	15-6 <sub>1</sub> 8 19-8-12 0-7-0 4-2-4	23-8-0 24-11-8 26-1 3-11-4 1-3-8 2-0	
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 *	SPACING-         2-0-0           Plate Grip DOL         1.15           Lumber DOL         1.15           Rep Stress Incr         YES	CSI. TC 0.38 BC 0.39 WB 0.65	DEFL.         in (loc)           Vert(LL)         -0.10 27-28           Vert(CT)         -0.17 2-28           Horz(CT)         0.02 21	l/defl L/d >999 360 >999 240 n/a n/a	PLATES         GRIP           MT20         244/190
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.14 2-28	>999 240	Weight: 252 lb FT = 20%

LUMBER-

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

**WEBS** 2x4 SP No.2 **BRACING-**

TOP CHORD **BOT CHORD JOINTS** 

Structural wood sheathing directly applied or 5-7-4 oc purlins. Rigid ceiling directly applied or 6-0-0 oc bracing.

1 Brace at Jt(s): 9, 13, 15

REACTIONS. All bearings 6-6-8 except (jt=length) 2=0-3-8.

Max Horz 2=-321(LC 10) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) except 2=-191(LC 12), 25=-440(LC 13), 24=-228(LC 24), 23=-116(LC 13)

All reactions 250 lb or less at joint(s) 24 except 2=1190(LC 19), 21=285(LC 21), 25=1366(LC 20), Max Grav 25=1141(LC 1), 23=252(LC 20)

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

TOP CHORD 2-3=-1516/203, 3-4=-1123/275, 6-8=-274/134, 12-16=-260/86, 16-17=-304/96,

17-19=-270/218, 19-20=-329/254, 20-21=-418/334, 7-9=-1086/465, 9-11=-1374/440,

11-13=-1484/572, 13-15=-1455/539, 15-18=-1493/567, 18-25=-1587/661

**BOT CHORD** 2-28=-136/1338, 27-28=-136/1338, 25-27=-136/1338, 24-25=-319/430, 23-24=-319/430,

21-23=-319/430

WFBS 3-28=0/396, 9-27=0/575, 4-7=-1320/420, 10-11=-317/238, 17-18=-327/236

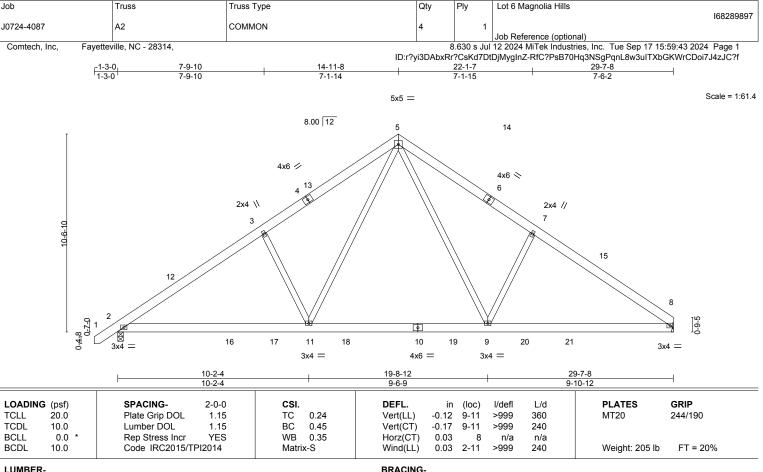
### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 191 lb uplift at joint 2, 440 lb uplift at joint 25, 228 lb uplift at joint 24 and 116 lb uplift at joint 23.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 19,2024





TOP CHORD

BOT CHORD

LUMBER-

**WEBS** 

Job

Truss

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

REACTIONS.

2=0-3-8, 8=Mechanical (size) Max Horz 2=252(LC 11)

Max Uplift 2=-80(LC 12), 8=-61(LC 13) Max Grav 2=1401(LC 19), 8=1329(LC 20)

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

2-3=-1911/352, 3-5=-1785/442, 5-7=-1771/456, 7-8=-1897/362 TOP CHORD

**BOT CHORD** 2-11=-174/1674, 9-11=0/1083, 8-9=-173/1483

WEBS 5-9=-162/904, 7-9=-478/294, 5-11=-163/932, 3-11=-503/295

### NOTES-

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

- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-7 to 3-3-6, Interior(1) 3-3-6 to 14-11-8, Exterior(2) 14-11-8 to 19-4-5, Interior(1) 19-4-5 to 29-6-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 80 lb uplift at joint 2 and 61 lb uplift at joint 8.



Structural wood sheathing directly applied or 5-5-9 oc purlins.

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

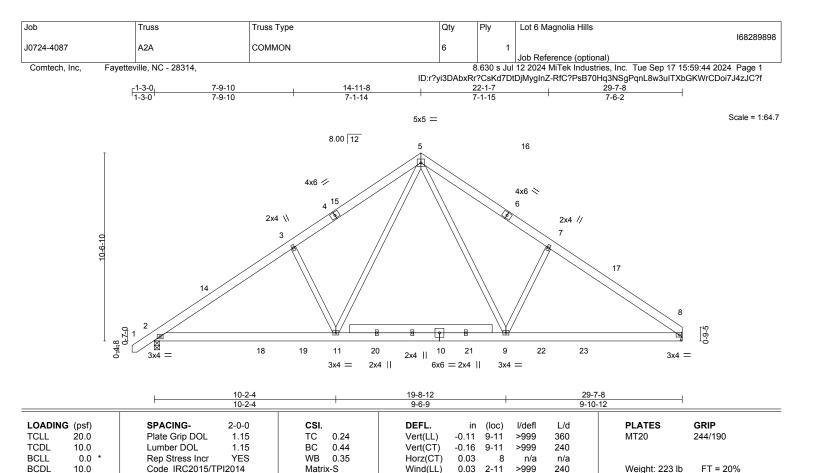
September 19,2024



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TP11 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)





BRACING-TOP CHORD

BOT CHORD

LUMBER-

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

12-13: 2x6 SP No.1

REACTIONS.

(size) 2=0-3-8, 8=Mechanical

Max Horz 2=252(LC 11)

Max Uplift 2=-80(LC 12), 8=-61(LC 13) Max Grav 2=1391(LC 19), 8=1319(LC 20)

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

TOP CHORD 2-3=-1892/352, 3-5=-1765/442, 5-7=-1752/456, 7-8=-1877/362

**BOT CHORD** 2-11=-174/1658, 9-11=0/1072, 8-9=-173/1467

WFBS 5-9=-162/893, 7-9=-478/294, 5-11=-163/920, 3-11=-503/295

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-7 to 3-3-6, Interior(1) 3-3-6 to 14-11-8, Exterior(2) 14-11-8 to 19-4-5, Interior(1) 19-4-5 to 29-6-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 80 lb uplift at joint 2 and 61 lb uplift at



Structural wood sheathing directly applied or 5-5-14 oc purlins.

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

September 19,2024



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TP11 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job Truss Truss Type Qty Lot 6 Magnolia Hills 168289899 J0724-4087 A2GE **GABLE** Job Reference (optional) Fayetteville, NC - 28314, Comtech, Inc, 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 15:59:44 2024 Page 1 ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 14-11-8 14-8-0 Scale = 1:66.0 5x5 = 8.00 12 10 4x6 / 12 4x6 ≫ 13 0-6-1015 16 17 18 0-4-8 0-7-0 9-5-5 3x4 3x4 = 32 31 30 29 28 27 26 25 24 23 22 21 20 19 4x6 =

LOADING (psf) SPACING-2-0-0 CSI. DEFL. L/d **PLATES GRIP** (loc) I/def 20.0 Plate Grip DOL Vert(LL) -0.00 120 244/190 **TCLL** 1.15 TC 0.04 n/r MT20 TCDL 10.0 Lumber DOL 1.15 ВС 0.03 Vert(CT) 0.00 n/r 120 **BCLL** 0.0 Rep Stress Incr YES WB 0.14 Horz(CT) 0.01 18 n/a n/a Code IRC2015/TPI2014 **BCDL** 10.0 Matrix-S Weight: 260 lb FT = 20%

BRACING-

**WEBS** 

TOP CHORD

BOT CHORD

LUMBER-TOP CHORD

**OTHERS** 

2x6 SP No 1 2x6 SP No.1

BOT CHORD 2x4 SP No.2

REACTIONS. All bearings 29-7-8

Max Uplift All uplift 100 lb or less at joint(s) 18, 27, 28, 29, 30, 31, 24, 22, 21, 20, 2 except 32=-122(LC 12),

23=-101(LC 13), 19=-145(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 18, 26, 27, 28, 29, 30, 31, 32, 24, 23, 22, 21, 20, 2

except 19=251(LC 20)

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

TOP CHORD 2-3=-303/230, 9-10=-234/259, 10-11=-234/259

### NOTES-

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

- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18, 27, 28, 29, 30, 31, 24, 22, 21, 20, 2 except (jt=lb) 32=122, 23=101, 19=145.



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

10-26, 9-27, 11-24

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

1 Row at midpt

September 19,2024



Job Truss Truss Type Qty Ply Lot 6 Magnolia Hills 168289900 J0724-4087 B1 COMMON Job Reference (optional) 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 15:59:45 2024 Page 1 Comtech, Inc, Fayetteville, NC - 28314, ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

3-9-8

15-6-8

17-3-11

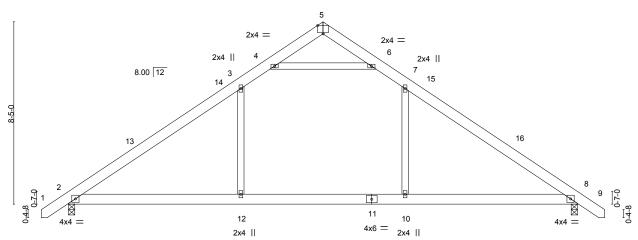
|<del>24-9-0</del> | <del>1-3-0</del> 3-9-8 1-9-3 6-2-5

Scale = 1:53.2 4x6 =

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

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

23-6-0



7-11-8 7-11-8 Plate Offsets (X,Y)-- [5:0-3-0,Edge]

	[0.0 0 0,000]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.45	Vert(LL) -0.15 8-10 >999 360	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.38	Vert(CT) -0.20 8-10 >999 240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.55	Horz(CT) 0.02 8 n/a n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.13 2-12 >999 240	Weight: 151 lb FT = 20%
BCLL 0.0 *	Rep Stress Incr YES	WB 0.55	Horz(CT) 0.02 8 n/a n/a	Weight: 151 lb FT = 20%

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

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

REACTIONS. (size) 2=0-3-8, 8=0-3-8 Max Horz 2=-206(LC 10)

Max Uplift 2=-67(LC 12), 8=-67(LC 13) Max Grav 2=1105(LC 19), 8=1105(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1487/249, 3-4=-1028/302, 4-5=-72/280, 5-6=-72/281, 6-7=-1027/302,

6-2-6 6-2-6

1-9-3

7-8=-1486/249

BOT CHORD 2-12=-42/1150, 10-12=-42/1150, 8-10=-42/1150 WEBS 7-10=0/427, 3-12=0/427, 4-6=-1398/431

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-7 to 3-3-6, Interior(1) 3-3-6 to 11-9-0, Exterior(2) 11-9-0 to 16-1-13, Interior(1) 16-1-13 to 24-7-7 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.



September 19,2024



Job Truss Truss Type Qty Ply Lot 6 Magnolia Hills 168289901 J0724-4087 B1GE **GABLE** Job Reference (optional) 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 15:59:46 2024 Page 1 Fayetteville, NC - 28314, Comtech, Inc,

ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 24-9-0 11-9-0 11-9-0 1-3-0

> Scale = 1:54.0 5x5 =

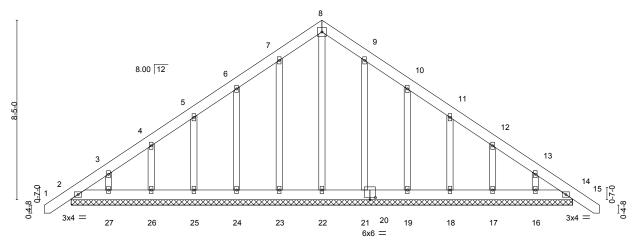


Plate Off	sets (X,Y)	[20:0-3-0,0-1-4]										
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.Ó	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	-0.00	`14	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	ВС	0.02	Vert(CT)	-0.00	14	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code IRC2015/TI	PI2014	Matri	x-S						Weight: 192 lb	FT = 20%

LUMBER-BRACING-

TOP CHORD 2x6 SP No.1 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. 2x6 SP No.1 **BOT CHORD BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. **OTHERS** 2x4 SP No.2

REACTIONS. All bearings 23-6-0.

(lb) -Max Horz 2=-257(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 2, 14, 23, 24, 25, 26, 27, 21, 19, 18, 17, 16 Max Grav All reactions 250 lb or less at joint(s) 2, 14, 22, 23, 24, 25, 26, 27, 21, 19, 18, 17, 16

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

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 14, 23, 24, 25, 26, 27, 21, 19, 18, 17, 16.



September 19,2024



Job Truss Truss Type Qty Lot 6 Magnolia Hills 168289902 J0724-4087 C<sub>1</sub> **ROOF TRUSS** 9 Job Reference (optional) Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 15:59:46 2024 Page 1 ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 24-11-0 11-10-0 16-6-1 18-4-4 6-6-4 4-8-1 1-10-3 5-3-12 1-3-0 Scale = 1:62.2 4x6 = 2x4 || 7 4x6 = 5 22 23 2x4 =2x4 =8 2x4 | 2x4 || 9 12.00 12 2x6 II 20 21 8-2-4 2-0-0 4x6 📏 4x6 / 10 12-7-0 28-1

5-3-12 13-0-8 Plate Offsets (X,Y)- [2:0-1-8,0-2-0], [5:0-3-0,0-0-14], [7:0-3-0,0-0-14], [10:0-1-8,0-2-0], [13:0-5-0,0-7-4], [15:0-5-0,0-7-4]

15

10x10 =

LOADING (ps	f)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.	0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.18 13-15	>999	360	MT20	244/190
TCDL 10.	0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.29 13-15	>948	240		
BCLL 0.	0 *	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.01 12	n/a	n/a		
BCDL 10.	0	Code IRC2015/TP	PI2014	Matri	x-S	Wind(LL)	0.07 13-15	>999	240	Weight: 253 lb	FT = 20%

BRACING-

TOP CHORD

**BOT CHORD** 

**JOINTS** 

•

14

6x8 =

13

1 Brace at Jt(s): 17

10x10 =

23-8-0

Structural wood sheathing directly applied or 5-7-3 oc purlins,

except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-7.

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

₩ 12

3x6 II

LUMBER-

REACTIONS.

TOP CHORD 2x6 SP No.1 BOT CHORD 2x10 SP No.1 **WEBS** 2x6 SP No.1 \*Except\*

2-15,10-13,6-17: 2x4 SP No.2

(size) 16=0-3-8, 12=0-3-8 Max Horz 16=-307(LC 10)

Max Grav 16=1605(LC 2), 12=1605(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1663/23, 3-4=-1048/180, 4-5=-374/140, 7-8=-374/140, 8-9=-1048/180,

9-10=-1663/23, 2-16=-1768/72, 10-12=-1769/72

16

3x6 II

BOT CHORD 15-16=-280/372 13-15=0/1100

WEBS 4-17=-1167/94, 8-17=-1167/94, 3-15=0/696, 9-13=0/696, 2-15=0/1102, 10-13=0/1104

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-10 to 3-3-3, Interior(1) 3-3-3 to 8-6-1, Exterior(2) 8-6-1 to 14-8-12, Interior(1) 14-8-12 to 15-1-15, Exterior(2) 15-1-15 to 21-4-10, Interior(1) 21-4-10 to 24-9-10 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Ceiling dead load (10.0 psf) on member(s). 3-4, 8-9, 4-17, 8-17; Wall dead load (5.0psf) on member(s).3-15, 9-13
- 7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-15
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) Attic room checked for L/360 deflection.



September 19,2024



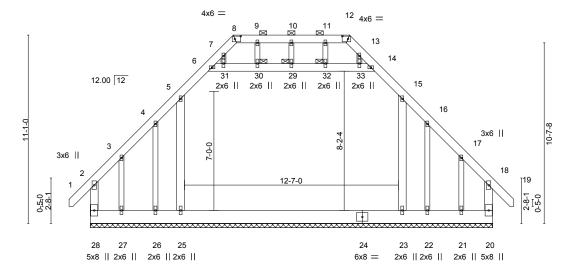
Job Truss Truss Type Qty Lot 6 Magnolia Hills 168289903 J0724-4087 C1GE **GABLE** Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 15:59:47 2024 Page 1 ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

18-4-4 [1-3-0| 1-11-0 1-3-0| 1-11-0 23-8-0 24-11-0 1-11-0 1-3-0 5-3-12 3-4-12 11-10-0 16-6-1 21-9-0 6-6-4 4-8-1 1-10-3 3-4-12

Scale = 1:67.8



1-11-0	5-3-12	18-4-4	21-9-0	23-8-0	
1-11-0	3-4-12	13-0-8	3-4-12	1-11-0	

I late Olis	Hate Offsets (A, 1)== [0.0-4-2,0-2-0], [12.0-4-2,0-2-0]												
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	0.00	18	n/r	120	MT20	244/190	
TCDL	10.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	0.00	18	n/r	120			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.31	Horz(CT)	-0.00	20	n/a	n/a			
BCDL	10.0	Code IRC2015/TF	PI2014	Matri	x-S						Weight: 269 lb	FT = 20%	

LUMBER-BRACING-

TOP CHORD 2x6 SP No.1 Structural wood sheathing directly applied or 6-0-0 oc purlins, TOP CHORD BOT CHORD 2x10 SP No.1 except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 8-12. **WEBS** 2x6 SP No.1 **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. **OTHERS** 2x4 SP No.2 **JOINTS** 1 Brace at Jt(s): 29, 30, 32

REACTIONS. All bearings 23-8-0.

Max Horz 28=-385(LC 10) (lb) -

Plate Offsets (X V)\_\_\_ [8:0\_4\_2 0\_2\_0] [12:0\_4\_2 0\_2\_0]

Max Uplift All uplift 100 lb or less at joint(s) except 28=-349(LC 8), 20=-329(LC 9), 26=-1021(LC 18), 27=-367(LC

12), 22=-1021(LC 18), 21=-363(LC 13)

All reactions 250 lb or less at joint(s) except 28=626(LC 21), 25=1779(LC 23), 23=1776(LC 22), Max Grav 20=610(LC 20), 27=427(LC 10), 21=411(LC 11)

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

TOP CHORD 2-3=-407/256, 3-4=-260/177, 4-5=-272/305, 5-6=-471/281, 6-7=-733/170, 7-8=-613/109,

12-13=-613/111, 13-14=-733/171, 14-15=-471/281, 15-16=-272/306, 16-17=-251/169,

17-18=-395/241, 2-28=-427/212, 18-20=-417/199, 8-9=-594/105, 9-10=-594/105,

10-11=-594/105, 11-12=-594/105

**WEBS** 6-31=-2/474, 30-31=-2/475, 29-30=-2/475, 29-32=-2/475, 32-33=-2/475, 14-33=-1/473,

5-25=-660/38, 15-23=-660/27

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) \* 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.
- 10) Ceiling dead load (10.0 psf) on member(s). 5-6, 14-15, 6-31, 30-31, 29-30, 29-32, 32-33, 14-33; Wall dead load (5.0psf) on member(s).5-25, 15-23
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 349 lb uplift at joint 28, 329 lb uplift at joint 20, 1021 lb uplift at joint 26, 367 lb uplift at joint 27, 1021 lb uplift at joint 22 and 363 lb uplift at joint 21
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) This truss has large uplift reaction(s) from gravity load case(s). Proper connection is required to secure truss against upward Continue mental the bearings. Building designer must provide for uplift reactions indicated.



September 19,2024

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TP11 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job	Truss	Truss Type	Qty	Ply	Lot 6 Magnolia Hills	٦
10=0.4 400=	0.40=				168289903	ا ا
J0724-4087	C1GE	GABLE	1	1		
					Llob Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 15:59:47 2024 Page 2 ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

### NOTES-

14) Attic room checked for L/360 deflection.

Job Truss Truss Type Qty Ply Lot 6 Magnolia Hills 168289904 J0724-4087 D1 PIGGYBACK BASE Job Reference (optional) 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 15:59:47 2024 Page 1 Comtech, Inc, Fayetteville, NC - 28314, ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 17-11-12 6-1-10 5-10-2 6-0-0 5-6-4 Scale: 3/16"=1 6x6 = 6x6 = 6 10.00 12 12 4x6 / 2x4 || 2x4 4x4 // 6-8-4 9 13 14 15 16 3x10 || 10 6x6 =10x10 = 17-11-12 23-6-0 11-11-12 6-0-0 Plate Offsets (X,Y)--[2:Edge,0-0-0], [10:0-4-12,0-4-8] SPACING-LOADING (psf) CSI. DEFL. in (loc) I/def L/d **PLATES** GRIP TCLL 20.0 Plate Grip DOL 1.15 TC 0.15 Vert(LL) -0.15 2-10 >999 360 244/190 MT20 TCDL 10.0 Lumber DOL 1.15 ВС 0.58 Vert(CT) -0.25 2-10 >999 240

Horz(CT)

Wind(LL)

**BRACING-**

TOP CHORD

**BOT CHORD** 

**WEBS** 

0.01

0.01

C

2-10

n/a

>999

1 Row at midpt

n/a

240

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

4-10, 7-9

except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-7.

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

LUMBER-

**BCLL** 

**BCDL** 

2x6 SP No.1 TOP CHORD

0.0

10.0

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

9-10: 2x10 SP No.1 **WEBS** 2x4 SP No.2 \*Except\*

8-9: 2x6 SP No.1 Left 2x6 SP No.1 4-0-15 SLIDER

REACTIONS. (size) 2=0-3-8, 9=0-3-8

Max Horz 2=264(LC 12)

Max Uplift 2=-35(LC 12), 9=-45(LC 12) Max Grav 2=1111(LC 19), 9=1090(LC 2)

Rep Stress Incr

Code IRC2015/TPI2014

YES

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

TOP CHORD 2-4=-1145/273, 4-6=-920/285, 6-7=-645/305

**BOT CHORD** 2-10=-318/897, 9-10=-87/397

WEBS 4-10=-398/280, 6-10=0/290, 7-10=-59/598, 7-9=-812/171

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-9 to 3-3-4, Interior(1) 3-3-4 to 11-11-12, Exterior(2) 11-11-12 to 23-3-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

WB

Matrix-S

0.49

- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 35 lb uplift at joint 2 and 45 lb uplift at
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



FT = 20%

Weight: 229 lb

September 19,2024



Job Truss Truss Type Qty Ply Lot 6 Magnolia Hills 168289905 J0724-4087 D1GE PIGGYBACK BASE SUPPO Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 15:59:48 2024 Page 1 ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

19-2-12 11-11-12 6-0-0

Scale = 1:67.5

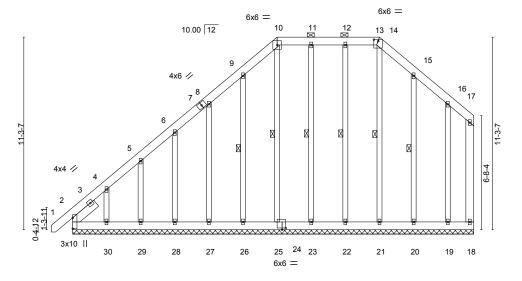


Plate Off	Plate Offsets (X,Y) [2:Edge,0-0-0], [13:0-3-0,0-1-1], [24:0-2-8,0-1-4]												
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	1	n/r	120	MT20	244/190	
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	1	n/r	120			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	-0.00	18	n/a	n/a			
BCDL	10.0	Code IRC2015/T	PI2014	Matri	x-S						Weight: 270 lb	FT = 20%	

TOP CHORD

**BOT CHORD** 

**WEBS** 

BRACING-LUMBER-

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

SLIDER Left 2x6 SP No.1 1-9-2

REACTIONS. All bearings 23-6-0. Max Horz 2=394(LC 12) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 18, 22, 23, 25, 29, 20 except 26=-103(LC 12), 27=-117(LC 12),

28=-113(LC 12), 30=-289(LC 12), 19=-105(LC 13), 2=-189(LC 10)

All reactions 250 lb or less at joint(s) 18, 21, 22, 23, 25, 26, 27, 28, 29, 20, 19 except 30=261(LC Max Grav

19), 2=366(LC 12)

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

TOP CHORD 2-4=-513/342, 4-5=-304/246

WEBS 4-30=-265/282

- 1) Unbalanced roof live loads have been considered for this design
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOI = 1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18, 22, 23, 25, 29, 20 except (jt=lb) 26=103, 27=117, 28=113, 30=289, 19=105, 2=189.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord



14-21, 12-22, 11-23, 10-25, 9-26, 15-20

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

except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 10-13.

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

1 Row at midpt

September 19,2024



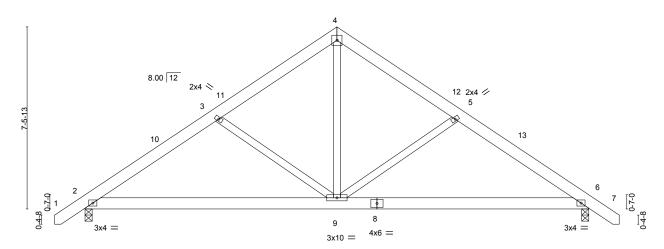
Job Truss Truss Type Qty Ply Lot 6 Magnolia Hills 168289906 J0724-4087 G1 COMMON 2 Job Reference (optional) 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 15:59:49 2024 Page 1 Comtech, Inc, Fayetteville, NC - 28314,

ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 20-8-8 21-11-8 5-5-15 5-5-15 15-2-8 4-10-4 4-10-4 5-6-0 1-3-0

> 5x5 = Scale = 1:47.4

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

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



10-4-4

Plate Offsets (X,Y)	Plate Offsets (X,Y) [3:0-0-0,0-0-0]												
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP										
TCLL 20.0	Plate Grip DOL 1.15	TC 0.11	Vert(LL) -0.06 6-9 >999 360 MT20 244/190										
TCDL 10.0	Lumber DOL 1.15	BC 0.35	Vert(CT) -0.12 6-9 >999 240										
BCLL 0.0 *	Rep Stress Incr YES	WB 0.23	Horz(CT) 0.02 6 n/a n/a										
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) -0.01 6-9 >999 240 Weight: 141 lb FT = 20%										

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

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

REACTIONS. (size) 6=0-3-8, 2=0-3-8 Max Horz 2=-183(LC 10)

Max Uplift 6=-61(LC 13), 2=-61(LC 12) Max Grav 6=893(LC 1), 2=893(LC 1)

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

TOP CHORD 2-3=-1109/267, 3-4=-860/233, 4-5=-859/233, 5-6=-1109/267

**BOT CHORD** 2-9=-99/899, 6-9=-116/863

WFBS 4-9=-102/664, 5-9=-366/216, 3-9=-367/216

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-7 to 3-3-6, Interior(1) 3-3-6 to 10-4-4, Exterior(2) 10-4-4 to 14-9-1, Interior(1) 14-9-1 to 21-9-15 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2.



September 19,2024

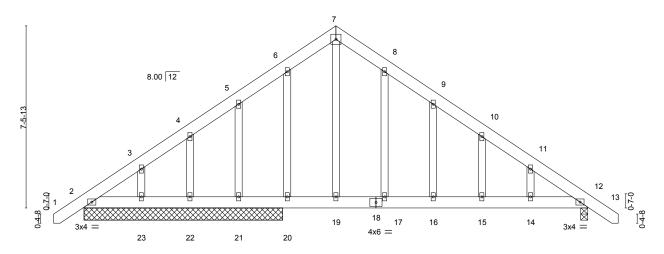


Job Truss Truss Type Qty Ply Lot 6 Magnolia Hills 168289907 J0724-4087 G1GE **GABLE** Job Reference (optional) Fayetteville, NC - 28314, Comtech, Inc, 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 15:59:49 2024 Page 1

5x5 =

ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 21-11-8 20-8-8 10-4-4 10-4-4 1-3-0

Scale = 1:47.4



20-8-8 Plate Offsets (X,Y)-- [8:0-0-0,0-0-0], [9:0-0-0,0-0-0], [10:0-0-0,0-0-0], [11:0-0-0,0-0-0]

1 1010 011	0010 (71, 17	[0:0 0 0;0 0 0], [0:0 0 0;0 0 0], [10:0 0			
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	<b>DEFL.</b> in (loc) I/defl L/d	PLATES GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.24	Vert(LL) -0.09 15-16 >999 360	MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.36	Vert(CT) -0.19 15-16 >920 240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.16	Horz(CT) 0.01 12 n/a n/a	
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.15 15-16 >999 240	Weight: 163 lb FT = 20%

LUMBER-**BRACING-**

2x6 SP No.1 TOP CHORD TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. **BOT CHORD** 2x6 SP No.1 **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. **OTHERS** 2x4 SP No.2

REACTIONS. All bearings 8-2-0 except (jt=length) 12=0-3-8.

(lb) -Max Horz 2=229(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 23 except 2=-116(LC 13), 21=-163(LC 9), 22=-110(LC 13),

12=-216(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 21, 22, 23 except 2=582(LC 20), 12=828(LC 1)

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

TOP CHORD 2-3=-858/184, 3-4=-823/226, 4-5=-820/284, 5-6=-758/288, 6-7=-779/329, 7-8=-745/310,

8-9=-718/250. 9-10=-719/198. 10-11=-762/149. 11-12=-835/97

**BOT CHORD** 2-23=0/589, 22-23=0/589, 21-22=0/589, 20-21=0/589, 19-20=0/589, 17-19=0/589,

16-17=0/589, 15-16=0/589, 14-15=0/589, 12-14=0/589

**WEBS** 7-19=-203/524

- 1) Unbalanced roof live loads have been considered for this design
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOI = 1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 23 except (jt=lb) 2=116, 21=163, 22=110, 12=216.



September 19,2024



Job Truss Truss Type Qty Ply Lot 6 Magnolia Hills 168289908 J0724-4087 G1GRD Common Girder ▲ Job Reference (optional) 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 15:59:50 2024 Page 1 Comtech, Inc, Fayetteville, NC - 28314,

ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 20-8-8 5-8-12 5-8-12 14-11-11 4-7-7 4-7-7 5-8-12

> 6x6 || Scale = 1:43.5

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

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

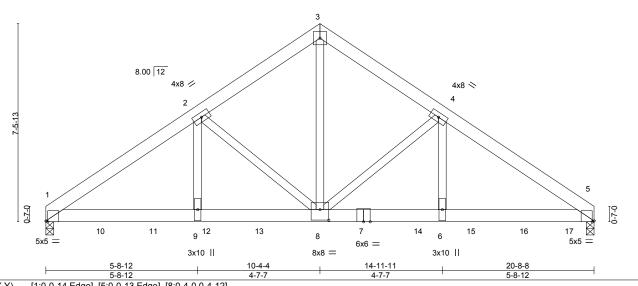


Plate Offsets (X,Y)-- [1:0-0-14,Edge], [5:0-0-13,Edge], [8:0-4-0,0-4-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0		Plate Grip DOL	1.15	TC	0.40	Vert(L	.) -0.10	5-6	>999	360	MT20	244/190
TCDL 10.0		Lumber DOL	1.15	BC	0.73	Vert(C	Γ) -0.19	5-6	>999	240		
BCLL 0.0	*	Rep Stress Incr	NO	WB	0.83	Horz(0	T) 0.06	5	n/a	n/a		
BCDL 10.0		Code IRC2015/TF	PI2014	Matri	x-S	Wind(	L) 0.06	5-6	>999	240	Weight: 289 lb	FT = 20%

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

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

2x4 SP No.2

(size) 1=0-3-8, 5=0-3-8 Max Horz 1=-167(LC 25)

Max Uplift 1=-382(LC 8), 5=-431(LC 9) Max Grav 1=6474(LC 2), 5=7352(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-9349/560, 2-3=-6426/453, 3-4=-6428/453, 4-5=-9547/570 **BOT CHORD** 1-9=-470/7637, 8-9=-470/7637, 6-8=-406/7809, 5-6=-406/7809

WFBS 3-8=-421/6780, 4-8=-3257/299, 4-6=-150/3714, 2-8=-3033/286, 2-9=-137/3473

### NOTES-

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc. Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-6-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=382, 5=431.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1235 lb down and 81 lb up at 2-0-12, 1235 lb down and 81 lb up at 4-0-12, 1235 lb down and 81 lb up at 6-0-12, 1235 lb down and 81 lb up at 8-0-12, 1235 lb down and 81 lb up at 10-0-12, 1235 lb down and 81 lb up at 12-0-12, 1246 lb down and 81 lb up at 14-0-12, 1246 lb down and 81 lb up at 16-0-12, and 1246 lb down and 81 lb up at 18-0-12, and 1248 lb down and 79 lb up at 19-9-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others

### LOAD CASE(S) Standard

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

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



September 19,2024

### Continued on page 2



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/TP11 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Truss Type Job Truss Qty Ply Lot 6 Magnolia Hills 168289908 J0724-4087 G1GRD Common Girder

Comtech, Inc, Fayetteville, NC - 28314,

**Z** Job Reference (optional) 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 15:59:50 2024 Page 2 ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

LOAD CASE(S) Standard

Concentrated Loads (lb)
Vert: 7=-1155(B) 8=-1155(B) 10=-1155(B) 11=-1155(B) 12=-1155(B) 13=-1155(B) 14=-1155(B) 15=-1155(B) 16=-1155(B) 17=-1157(B)



818 Soundside Road Edenton, NC 27932

Job Truss Truss Type Qty Lot 6 Magnolia Hills 168289909 J0724-4087 H1GE **GABLE** Job Reference (optional) Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 15:59:50 2024 Page 1 ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSqPqnL8w3ulTXbGKWrCDoi7J4zJC?f 14-1-0 6-5-0 6-5-0 6-5-0 1-3-0 Scale = 1:30.0 5x5 = 5 6 8.00 12 0-7-0 0-2-0 9 \*\*\*\*\*\*\*\*\*\*\* 0-4-8 94-8 13 12 10 14 11 3x4 = 3x4 = 12-10-0 12-10-0 LOADING (psf) SPACING-2-0-0 CSI. DEFL. L/d **PLATES** GRIP (loc) I/def 20.0 1.15 Vert(LL) -0.00 120 244/190 **TCLL** Plate Grip DOL TC 0.03 8 n/r MT20 TCDL 10.0 Lumber DOL 1.15 ВС 0.01 Vert(CT) -0.00 8 n/r 120 **BCLL** 0.0 Rep Stress Incr YES WB 0.03 Horz(CT) 0.00 8 n/a n/a Code IRC2015/TPI2014 **BCDL** 10.0 Matrix-S Weight: 91 lb FT = 20%

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

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

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

REACTIONS. All bearings 12-10-0

Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 13, 11 except 14=-101(LC 12), 10=-101(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

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

### NOTES-

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

- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf, BCDL=6.0psf, h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8, 13, 11 except (jt=lb) 14=101, 10=101.



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

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

September 19,2024



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 bucking 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/TP11 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job Truss Truss Type Qty Lot 6 Magnolia Hills 168289910 J0724-4087 K1 **SCISSORS** Job Reference (optional) 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 15:59:51 2024 Page 1 Fayetteville, NC - 28314, Comtech, Inc.

3-4-4

ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 15-3-0 10-4-4 14-0-0 3-4-4 3-7-12 1-3-0

5x5 = Scale = 1:43.0

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

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

except end verticals.

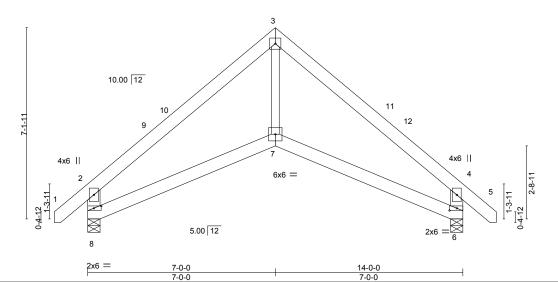


Plate Offsets (X,Y) [6:0-3-4,0-1-0], [8:0-3-4,0-1-0]													
LOADING (psf)		SPACING-	200	001		DEEL		(100)	I/d of	l /d	DIATES	CDID	
	VI /		2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	-0.03	7	>999	360	MT20	244/190	
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.06	7	>999	240			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.06	6	n/a	n/a			
BCDL	10.0	Code IRC2015/T	PI2014	Matri	x-R	Wind(LL)	-0.02	7-8	>999	240	Weight: 96 lb	FT = 20%	

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

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

3-7: 2x4 SP No.2

REACTIONS. (size) 8=0-5-8, 6=0-5-8 Max Horz 8=-162(LC 10)

Max Uplift 8=-38(LC 12), 6=-38(LC 13) Max Grav 8=623(LC 1), 6=623(LC 1)

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

2-3=-772/127, 3-4=-773/108, 2-8=-724/240, 4-6=-723/219 TOP CHORD

**BOT CHORD** 7-8=0/579. 6-7=0/572

**WEBS** 3-7=0/526

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-9 to 3-3-4, Interior(1) 3-3-4 to 7-0-0, Exterior(2) 7-0-0 to 11-4-13, Interior(1) 11-4-13 to 15-1-9 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Bearing at joint(s) 8, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



September 19,2024



Truss Type Qty Lot 6 Magnolia Hills 168289911 J0724-4087 K1GE **GABLE** Job Reference (optional) 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 15:59:51 2024 Page 1 Comtech, Inc, Fayetteville, NC - 28314, ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 16-6-0 8-3-0 7-0-0 7-0-0 1-3-0 Scale = 1:39.8 5x5 = 5 10.00 12 6x6 =14 15 11 10 16 16-6-0 7-0-0 7-0-0 1-3-0 LOADING (psf) SPACING-2-0-0 CSI. DEFL. L/d **PLATES GRIP** (loc) I/def 20.0 Plate Grip DOL 1.15 Vert(LL) -0.00 120 244/190 **TCLL** TC 0.05 9 n/r MT20 TCDL 10.0 Lumber DOL 1.15 ВС 0.04 Vert(CT) -0.00 9 n/r 120 **BCLL** 0.0 Rep Stress Incr YES WB 0.06 Horz(CT) 0.00 10 n/a n/a **BCDL** 10.0 Code IRC2015/TPI2014 Matrix-R Weight: 109 lb FT = 20%

LUMBER-

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

2x6 SP No.1 WEBS **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. All bearings 14-0-0.

(lb) -Max Horz 16=-203(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 13, 10, 14, 12 except 16=-147(LC 13), 15=-210(LC 12), 11=-203(LC

Truss

Max Grav All reactions 250 lb or less at joint(s) 10, 14, 12 except 16=250(LC 20), 13=321(LC 13), 15=272(LC

19), 11=264(LC 20)

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

TOP CHORD 4-5=-233/273, 5-6=-233/272

**WEBS** 5-13=-254/155

Job

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members. 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 10, 14, 12
- except (it=lb) 16=147, 15=210, 11=203, 11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building



September 19,2024



designer.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TP11 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job Truss Truss Type Qty Lot 6 Magnolia Hills 168289912 J0724-4087 K2 **SCISSORS** 2

Fayetteville, NC - 28314, Comtech, Inc.

Job Reference (optional) 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 15:59:52 2024 Page 1 ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

10-4-4 3-4-4 3-4-4

> 5x5 = Scale = 1:43.0

> > Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

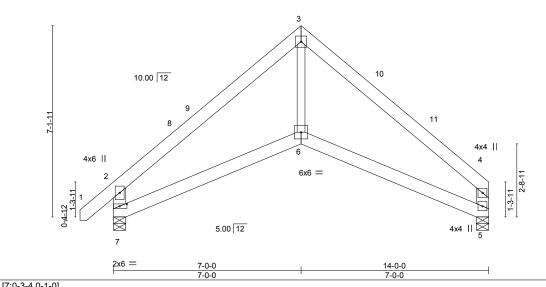


Plate Off	Plate Offsets (X,Y) [7:0-3-4,0-1-0]											
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.Ó	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	-0.04	` 6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	-0.07	6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT	0.07	5	n/a	n/a		
BCDL	10.0	Code IRC2015/T	PI2014	Matri	x-R	Wind(LL	0.02	6-7	>999	240	Weight: 92 lb	FT = 20%

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

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

3-6: 2x4 SP No.2

REACTIONS. (size) 7=0-5-8, 5=0-5-8

Max Horz 7=154(LC 9)

Max Uplift 7=-37(LC 12), 5=-19(LC 13) Max Grav 7=627(LC 1), 5=538(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-777/157, 3-4=-765/164, 2-7=-727/260, 4-5=-628/189

**BOT CHORD** 6-7=-22/557, 5-6=-11/547

WEBS 3-6=0/518

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-9 to 3-3-4, Interior(1) 3-3-4 to 7-0-0, Exterior(2) 7-0-0 to 11-4-13, Interior(1) 11-4-13 to 13-9-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Bearing at joint(s) 7, 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 5
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



September 19,2024



Job Truss Truss Type Qty Ply Lot 6 Magnolia Hills 168289913 J0724-4087 K3 **SCISSORS** Job Reference (optional) 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 15:59:52 2024 Page 1

Fayetteville, NC - 28314, Comtech, Inc.

ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

10-4-4 3-7-12 13-10-0 3-4-4 3-4-4 3-5-12

> 5x5 = Scale = 1:43.0

> > Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

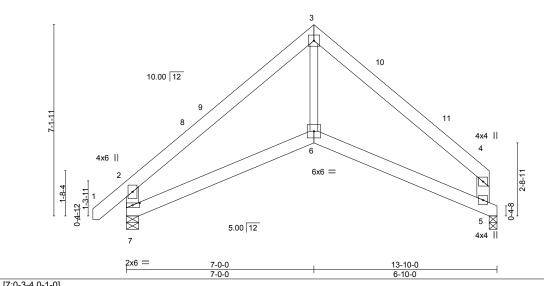


Plate Offsets (X,Y) [7:0-3-4,0-1-0]												
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	-0.04	` <i>6</i>	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.08	6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.07	5	n/a	n/a		
BCDL	10.0	Code IRC2015/T	PI2014	Matri	x-R	Wind(LL)	0.02	6-7	>999	240	Weight: 91 lb	FT = 20%

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

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

3-6: 2x4 SP No.2

REACTIONS. (size) 7=0-5-8, 5=0-3-8

Max Horz 7=153(LC 9)

Max Uplift 7=-36(LC 12), 5=-20(LC 12) Max Grav 7=609(LC 1), 5=519(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-726/156, 3-4=-710/171, 2-7=-694/261, 4-5=-589/188

**BOT CHORD** 6-7=-28/515, 5-6=-22/501

WEBS 3-6=0/478

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-9 to 3-3-4, Interior(1) 3-3-4 to 7-0-0, Exterior(2) 7-0-0 to 11-4-13, Interior(1) 11-4-13 to 13-3-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Bearing at joint(s) 7, 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 5.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

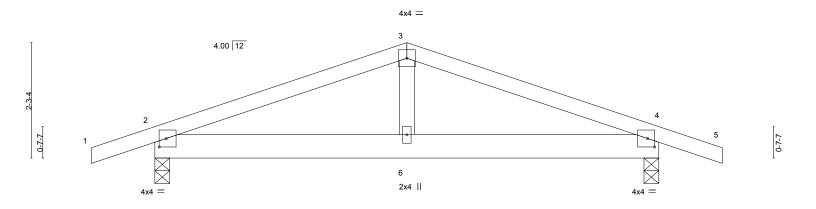


September 19,2024



Job		Truss	Truss Type		Qty	Ply	Lot 6 Magnolia Hills		
									168289914
J0724-4087		P1	COMMON	-	4	1			
							Job Reference (optional)		
Comtech, Inc,	Fayettev	/ille, NC - 28314,			8	.630 s Jul	12 2024 MiTek Industries, Inc. Tue Se	p 17 15:59:53 202	4 Page 1
				ID:r?yi	3DAbxRr	?CsKd7Dtl	DjMygInZ-RfC?PsB70Hq3NSgPqnL8w	3ulTXbGKWrCDoi	i7J4zJC?f
L	-1-3-0	1	4-11-8				9-11-0	11-2-0	
Г	1-3-0		4-11-8				4-11-8	1-3-0	

Scale = 1:22.7



				4-11-8 4-11-8					9-11-0 4-11-8			
Plate Offse	ets (X,Y)	[2:0-1-10,0-2-0], [4:0-1-10	0,0-2-0]									
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	0.02	4-6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.02	6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TF	PI2014	Matr	ix-S						Weight: 45 lb	FT = 20%

LUMBER-BRACING-

2x4 SP No.1 Structural wood sheathing directly applied or 6-0-0 oc purlins. TOP CHORD TOP CHORD **BOT CHORD** 2x6 SP No.1 **BOT CHORD** Rigid ceiling directly applied or 9-10-12 oc bracing. **WEBS** 2x4 SP No.2

REACTIONS. (size) 2=0-3-8, 4=0-3-8 Max Horz 2=42(LC 12)

Max Uplift 2=-271(LC 8), 4=-271(LC 9) Max Grav 2=469(LC 1), 4=469(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-609/728, 3-4=-609/728

BOT CHORD 2-6=-598/514, 4-6=-598/514

WFBS 3-6=-302/230

### NOTES-

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



September 19,2024



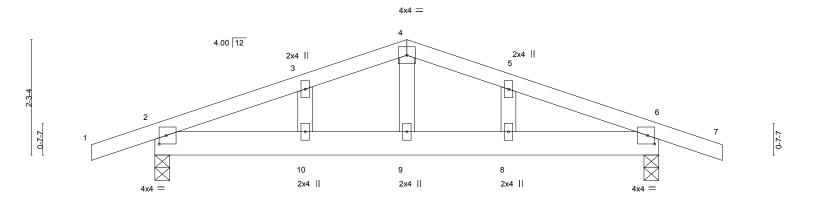
Job Truss Truss Type Qty Ply Lot 6 Magnolia Hills 168289915 J0724-4087 P1GE COMMON SUPPORTED GAB Job Reference (optional) Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 15:59:53 2024 Page 1 ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 11-2-0 4-11-8 4-11-8 1-3-0

Scale = 1:22.7

FT = 20%

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

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



9-11-0 Plate Offsets (X,Y)--[2:0-1-10,0-2-0], [6:0-1-10,0-2-0] SPACING-LOADING (psf) CSI DEFL. in (loc) I/def L/d **PLATES** GRIP TCLL 20.0 Plate Grip DOL 1.15 TC 0.20 Vert(LL) 0.02 8 >999 240 244/190 MT20 TCDL 10.0 Lumber DOL 1.15 ВС 0.33 Vert(CT) -0.02 10 >999 240

**BRACING-**

TOP CHORD

**BCLL** 0.0 Rep Stress Incr YES WB 0.05 -0.00 6 Horz(CT) n/a n/a Code IRC2015/TPI2014 **BCDL** 10.0 Weight: 48 lb Matrix-S

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

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

Max Horz 2=42(LC 16) Max Uplift 2=-271(LC 8), 6=-271(LC 9) Max Grav 2=469(LC 1), 6=469(LC 1)

(size) 2=0-3-8, 6=0-3-8

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-3=-599/706, 3-4=-558/732, 4-5=-558/732, 5-6=-599/706

TOP CHORD **BOT CHORD** 2-10=-590/514, 9-10=-590/514, 8-9=-590/514, 6-8=-590/514

WFBS 4-9=-339/210

### NOTES-

REACTIONS.

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

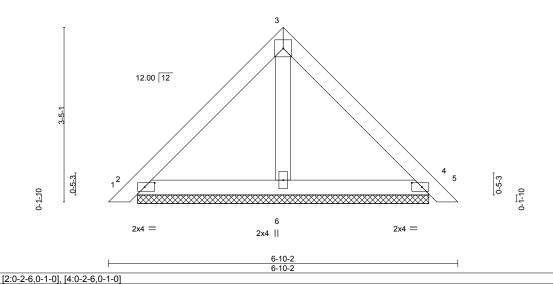


September 19,2024



Job Truss Truss Type Qty Ply Lot 6 Magnolia Hills 168289916 J0724-4087 PB1 Piggyback 9 Job Reference (optional) 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 15:59:54 2024 Page 1 Fayetteville, NC - 28314, Comtech, Inc. ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 3-5-1 3-5-1 3-5-1

4x4 =



SPACING-LOADING (psf) CSI. DEFL. in (loc) I/defl L/d **PLATES** GRIP 20.Ó TCLL Plate Grip DOL 1.15 TC 0.14 Vert(LL) 0.00 5 120 MT20 244/190 n/r TCDL 10.0 Lumber DOL 1.15 ВС 0.06 Vert(CT) 0.00 5 n/r 120 BCLL 0.0 Rep Stress Incr YES WB 0.02 0.00 Horz(CT) n/a n/a Code IRC2015/TPI2014 Weight: 27 lb FT = 20% **BCDL** 10.0 Matrix-P

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

Plate Offsets (X,Y)--

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

(size) 2=5-8-8, 4=5-8-8, 6=5-8-8

Max Horz 2=-77(LC 10)

Max Uplift 2=-27(LC 13), 4=-31(LC 13)

Max Grav 2=162(LC 1), 4=162(LC 1), 6=177(LC 3)

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

### NOTES-

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



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

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

Scale = 1:22.6

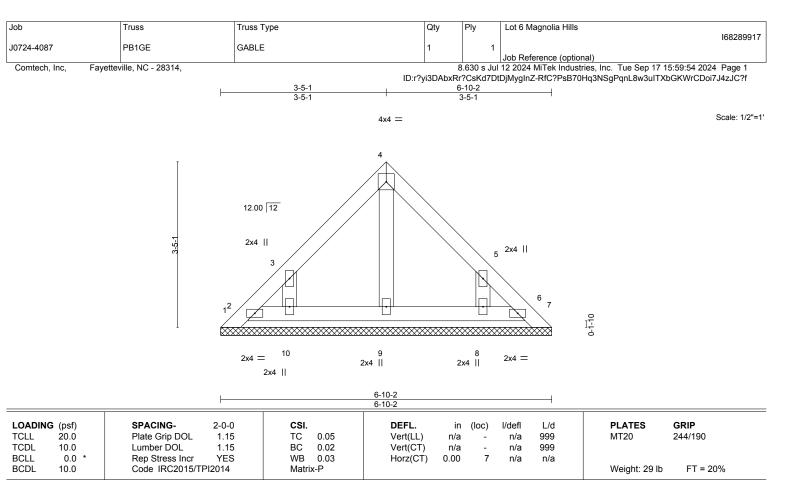


WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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 and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)





**BRACING-**LUMBER-

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

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 6-10-2. Max Horz 1=-96(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 2, 6 except 10=-152(LC 12), 8=-150(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 7, 2, 6, 9, 10, 8

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

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf, BCDL=6.0psf, h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Bearing at joint(s) 7, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 2, 6 except (jt=lb) 10=152, 8=150.
- 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



September 19,2024



Job Truss Truss Type Qty Lot 6 Magnolia Hills 168289918 J0724-4087 PB2 **PIGGYBACK** 5 Job Reference (optional) 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 15:59:54 2024 Page 1 Comtech, Inc, Fayetteville, NC - 28314, ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 3-0-0 3-0-0 Scale = 1:16.8 4x4 = 3 10.00 12 5 0-4-13 0-4-13 0-1-10 0-1-10 6 2x4 = 2x4 || 2x4 = 6-0-0 Plate Offsets (X,Y)--[2:0-2-1,0-1-0], [4:0-2-1,0-1-0] SPACING-**PLATES** LOADING (psf) CSI. DEFL. in (loc) I/defl L/d GRIP 20.Ó TCLL Plate Grip DOL 1.15 TC 0.08 Vert(LL) 0.00 5 120 MT20 244/190 n/r TCDL 10.0 Lumber DOL 1.15 ВС 0.04 Vert(CT) 0.00 5 n/r 120 BCLL 0.0 Rep Stress Incr YES WB 0.01 Horz(CT) 0.00 n/a n/a Code IRC2015/TPI2014 FT = 20% **BCDL** 10.0 Matrix-P Weight: 21 lb LUMBER-**BRACING-**TOP CHORD 2x4 SP No.1 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.

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

REACTIONS. (size) 2=4-8-9, 4=4-8-9, 6=4-8-9

Max Horz 2=-69(LC 10)

Max Uplift 2=-47(LC 12), 4=-56(LC 13)

Max Grav 2=136(LC 1), 4=136(LC 1), 6=155(LC 1)

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

### NOTES-

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





WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 bucking 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/TP11 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job Truss Truss Type Qty Lot 6 Magnolia Hills 168289919 VC1 J0724-4087 **GABLE** Job Reference (optional) 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 15:59:55 2024 Page 1 Comtech, Inc, Fayetteville, NC - 28314, ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 7-10-12 7-10-11 Scale: 3/8"=1" 3x4 =8.00 12 3 3x4 🥢 3x4 <> 15 14 13 12 11 10 Plate Offsets (X,Y)--[5:0-2-0,Edge] SPACING-**PLATES GRIP** LOADING (psf) CSI. **DEFL** in (loc) I/defl L/d 20.Ó TCLL Plate Grip DOL 1.15 TC 0.04 Vert(LL) 999 MT20 244/190 n/a n/a TCDL 10.0 Lumber DOL 1.15 ВС 0.09 Vert(CT) n/a n/a 999 BCLL 0.0 Rep Stress Incr YES WB 0.04 Horz(CT) 0.00 n/a n/a Code IRC2015/TPI2014 FT = 20% **BCDL** 10.0 Matrix-S Weight: 70 lb

LUMBER-

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

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

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

REACTIONS. All bearings 15-9-7

Max Horz 1=-148(LC 8) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 13, 14, 15, 12, 10 except 11=-100(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 9, 14, 15, 11, 10 except 13=295(LC 19), 12=287(LC 20)

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

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 13, 14, 15, 12, 10 except (jt=lb) 11=100.

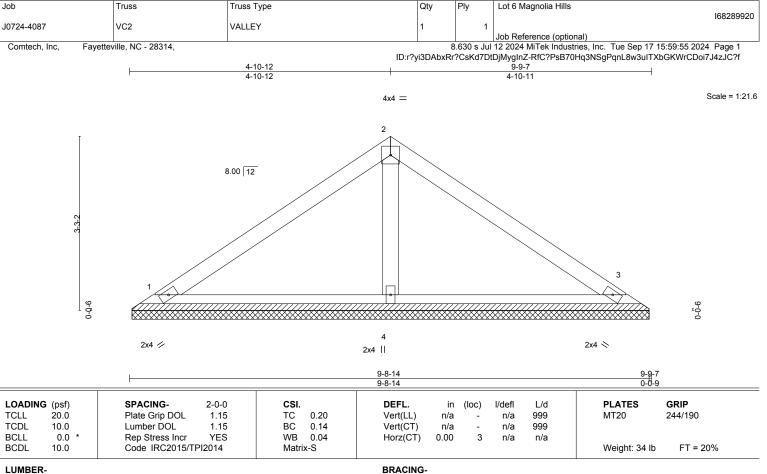


September 19,2024









TOP CHORD

BOT CHORD

LUMBER-

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

**OTHERS** 2x4 SP No.2

REACTIONS.

1=9-8-5, 3=9-8-5, 4=9-8-5 (size) Max Horz 1=-71(LC 8) Max Uplift 1=-22(LC 12), 3=-29(LC 13)

Max Grav 1=175(LC 1), 3=175(LC 1), 4=354(LC 1)

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

### NOTES-

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



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

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

September 19,2024



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TPII Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job Truss Truss Type Qty Ply Lot 6 Magnolia Hills 168289921 J0724-4087 VG1 VALLEY Job Reference (optional) Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 15:59:56 2024 Page 1 ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 8-1-7 8-1-7 16-2-15 8-1-8 Scale = 1:34.5 4x4 = 3 8.00 12 12 2x4 || 2x4 4 13 10 3x4 <> 3x4 🖊 9 8 7 6 2x4 || 2x4 || 2x4 || 3x4 =0-<u>0-9</u> 0-0-9 16-2-15 Plate Offsets (X,Y)--[4:0-0-0,0-0-0] SPACING-**PLATES GRIP** LOADING (psf) CSI. **DEFL** in (loc) I/defl L/d 20.Ó TCLL Plate Grip DOL 1.15 TC 0.16 Vert(LL) 999 244/190 n/a n/a MT20 TCDL 10.0 Lumber DOL 1.15 ВС 0.09 Vert(CT) n/a n/a 999 BCLL 0.0 Rep Stress Incr YES WB 0.08 0.00 Horz(CT) n/a n/a Code IRC2015/TPI2014 FT = 20% **BCDL** 10.0 Weight: 65 lb Matrix-S LUMBER-**BRACING-**Structural wood sheathing directly applied or 6-0-0 oc purlins. TOP CHORD 2x4 SP No.1 **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. **OTHERS** 2x4 SP No.2

TOP CHORD 2x4 SP No.1 BOT CHORD

REACTIONS. All bearings 16-1-13

Max Horz 1=-122(LC 8) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1 except 9=-109(LC 12), 6=-109(LC 13) Max Grav All reactions 250 lb or less at joint(s) 1, 5, 8 except 9=387(LC 19), 6=386(LC 20)

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

2-9=-324/212, 4-6=-324/212 WEBS

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-15 to 4-10-12, Interior(1) 4-10-12 to 8-1-7, Exterior(2) 8-1-7 to 12-6-4, Interior(1) 12-6-4 to 15-9-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 9=109, 6=109
- 6) Non Standard bearing condition. Review required.



September 19,2024





Job Truss Truss Type Qty Ply Lot 6 Magnolia Hills 168289922 J0724-4087 VG2 VALLEY Job Reference (optional) Fayetteville, NC - 28314, 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 15:59:56 2024 Page 1 Comtech, Inc. ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 6-1-7 6-1-7 12-2-15 6-1-8 Scale = 1:26.0 4x4 = 3 10 8.00 12 2x4 || 4<sup>2x4</sup> || 2 8 7 6 3x4 / 3x4 × 2x4 2x4 || 2x4 || 0-0-9 0-0-9 12-2-15 Plate Offsets (X,Y)--[4:0-0-0,0-0-0] **PLATES** SPACING-**GRIP** LOADING (psf) CSI. **DEFL** in (loc) I/defl L/d 20.Ó TCLL Plate Grip DOL 1.15 TC 0.13 Vert(LL) 999 244/190 n/a n/a MT20 TCDL 10.0 Lumber DOL 1.15 ВС 0.09 Vert(CT) n/a n/a 999 BCLL 0.0 Rep Stress Incr YES WB 0.05 0.00 Horz(CT) n/a n/a Code IRC2015/TPI2014 FT = 20% **BCDL** 10.0 Weight: 46 lb Matrix-S LUMBER-**BRACING-**TOP CHORD 2x4 SP No.1 Structural wood sheathing directly applied or 6-0-0 oc purlins. TOP CHORD

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

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

REACTIONS. All bearings 12-1-13.

Max Horz 1=-90(LC 10) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 8, 6

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=264(LC 1), 8=314(LC 19), 6=313(LC 20)

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

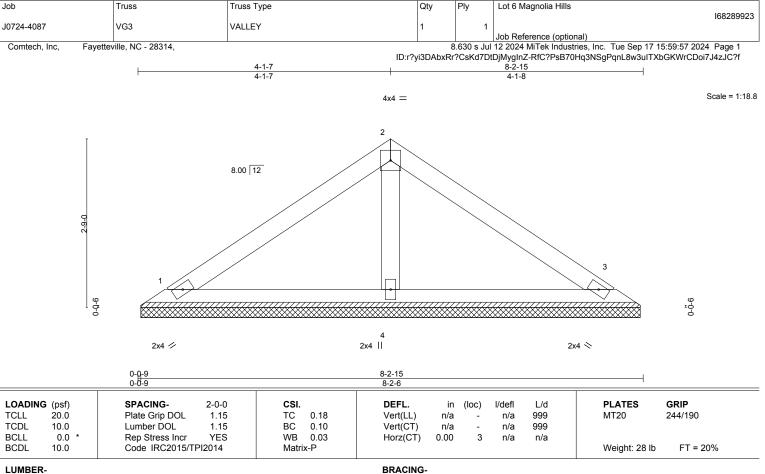
2-8=-278/202, 4-6=-278/202 WEBS

### NOTES-

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







TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

**OTHERS** 2x4 SP No.2

> 1=8-1-13, 3=8-1-13, 4=8-1-13 (size) Max Horz 1=-58(LC 10) Max Uplift 1=-25(LC 12), 3=-31(LC 13)

Max Grav 1=158(LC 1), 3=158(LC 1), 4=265(LC 1)

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

### NOTES-

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



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

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



Job Truss Truss Type Qty Ply Lot 6 Magnolia Hills 168289924 J0724-4087 VG4 VALLEY Job Reference (optional) 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 15:59:57 2024 Page 1 Comtech, Inc, Fayetteville, NC - 28314, ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 4-2-15 2-1-7 2-1-7 Scale = 1:9.8 3x4 =2 8.00 12 3 9-0-0 9-0-0 2x4 // 2x4 > 0-0-9 0-0-9 Plate Offsets (X,Y)--[2:0-2-0,Edge] SPACING-DEFL. **GRIP** LOADING (psf) CSI. in (loc) I/defl L/d **PLATES** 20.Ó 244/190 TCLL Plate Grip DOL 1.15 TC 0.03 Vert(LL) 999 n/a n/a MT20 TCDL 10.0 Lumber DOL 1.15 ВС 0.09 Vert(CT) n/a n/a 999 BCLL 0.0 Rep Stress Incr YES WB 0.00 0.00 3 Horz(CT) n/a n/a Code IRC2015/TPI2014 FT = 20% **BCDL** 10.0 Matrix-P Weight: 12 lb LUMBER-**BRACING-**TOP CHORD 2x4 SP No.1 TOP CHORD Structural wood sheathing directly applied or 4-2-15 oc purlins. **BOT CHORD** BOT CHORD 2x4 SP No.1 Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

1=4-1-13, 3=4-1-13 (size) Max Horz 1=-26(LC 8) Max Uplift 1=-7(LC 12), 3=-7(LC 13) Max Grav 1=130(LC 1), 3=130(LC 1)

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

### NOTES-

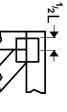
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip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



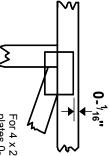


## Symbols

## PLATE LOCATION AND ORIENTATION



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



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

connector plates required direction of slots in This symbol indicates the

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

### **PLATE SIZE**

4 × 4

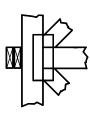
to slots. Second dimension is the length parallel to slots. width measured perpendicular The first dimension is the plate

## LATERAL BRACING LOCATION



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

### **BEARING**



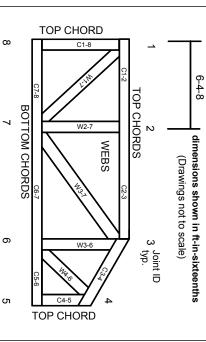
Min size shown is for crushing only number/letter where bearings occur reaction section indicates joint (supports) occur. Icons vary but Indicates location where bearings

### Industry Standards:

ANSI/TPI1: National Design Specification for Metal Installing, Restraining & Bracing of Metal Guide to Good Practice for Handling, Building Component Safety Information, Design Standard for Bracing. Plate Connected Wood Trusses Plate Connected Wood Truss Construction.

DSB-22:

## Numbering System



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

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

# Product Code Approvals

ICC-ES Reports:

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

# Design General Notes

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

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

© 2023 MiTek® All Rights Reserved

## MiTek



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

# General Safety Notes

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

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Ņ Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses

ယ

- 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
- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

œ

- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the camber for dead load deflection responsibility of truss fabricator. General practice is to
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted
- 15. Connections not shown are the responsibility of others
- Do not cut or alter truss member or plate without prior approval of an engineer.
- Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable project engineer before use environmental, health or performance risks. Consult with
- 19. Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- 21. The design does not take into account any dynamic or other loads other than those expressly stated



### **Trenco**

818 Soundside Rd Edenton, NC 27932

Re: J0724-4088

Lot 6 Magnolia Hills

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

Pages or sheets covered by this seal: I68289959 thru I68289970

My license renewal date for the state of North Carolina is December 31, 2024.

North Carolina COA: C-0844



September 20,2024

Gilbert, Eric

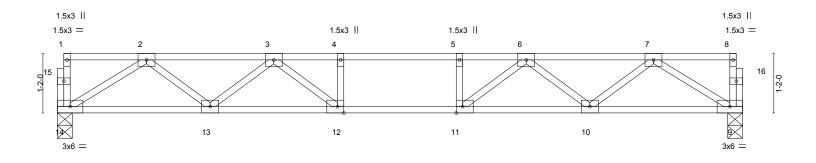
**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes),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

Job Truss Truss Type Qty Ply Lot 6 Magnolia Hills 168289959 Floor J0724-4088 F01 9 Job Reference (optional) 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 15:59:59 2024 Page 1

Fayetteville, NC - 28314, Comtech, Inc.

ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





13-5-8											
Plate Offsets (X,Y) [11:0-1-8,Edge]											
LOADIN	G (nef)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.42	Vert(LL)	-0.12 12-13	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.42	Vert(CT)	-0.15 12-13	>999	360	WITZO	244/130
BCLL	0.0	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.03 9	n/a	n/a		
BCDL	5.0	Code IRC2015/Ti		Matrix						Weight: 66 lb	FT = 20%F, 11%E

13-5-8

LUMBER-**BRACING-**

2x4 SP No.1(flat) TOP CHORD TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, **BOT CHORD** 2x4 SP No.1(flat) except end verticals.

**WEBS** 2x4 SP No.3(flat) **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 14=0-3-8, 9=0-3-8 Max Grav 14=720(LC 1), 9=720(LC 1)

FORCES. (ib) - Max. Comp./Max. Ten. - All forces 250 (ib) or less except when shown. TOP CHORD 2-3=-1533/0, 3-4=-2255/0, 4-5=-2255/0, 5-6=-2255/0, 6-7=-1533/0 BOT CHORD 13-14=0/1028, 12-13=0/2002, 11-12=0/2255, 10-11=0/2002, 9-10=0/1028 2-14=-1217/0, 2-13=0/658, 3-13=-610/0, 3-12=0/546, 4-12=-260/0, 7-9=-1217/0, **WEBS** 

7-10=0/658, 6-10=-610/0, 6-11=0/546, 5-11=-260/0

### 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) 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.



September 20,2024







Job Truss Truss Type Qty Ply Lot 6 Magnolia Hills 168289960 Floor J0724-4088 F02 2 Job Reference (optional) 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 16:00:00 2024 Page 1

Comtech, Inc, Fayetteville, NC - 28314,

ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

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

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

except end verticals.

1-3-0 2-1-8

Scale = 1:21.0

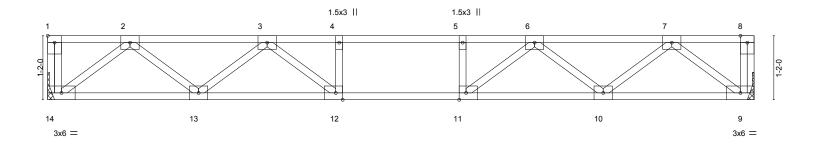


Plate Offsets (X,Y)--[1:Edge,0-1-8], [11:0-1-8,Edge], [12:0-1-8,Edge] SPACING-**PLATES GRIP** LOADING (psf) CSI. DEFL. (loc) I/defl L/d -0.10 12-13 TCLL 40.0 Plate Grip DOL 1.00 TC 0.38 Vert(LL) >999 480 MT20 244/190 -0.13 12-13 TCDL 10.0 Lumber DOL 1.00 ВС 0.46 Vert(CT) >999 360 BCLL 0.0 Rep Stress Incr YES WB 0.31 Horz(CT) 0.03 n/a n/a Code IRC2015/TPI2014 FT = 20%F, 11%E **BCDL** 5.0 Matrix-S Weight: 65 lb

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x4 SP No.1(flat) BOT CHORD 2x4 SP No.1(flat)

REACTIONS. (size) 14=Mechanical, 9=Mechanical

2x4 SP No.3(flat)

Max Grav 14=694(LC 1), 9=694(LC 1) FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1351/0, 3-4=-2060/0, 4-5=-2060/0, 5-6=-2060/0, 6-7=-1351/0 **BOT CHORD** 13-14=0/851, 12-13=0/1815, 11-12=0/2060, 10-11=0/1815, 9-10=0/851

2-14=-1068/0, 2-13=0/650, 3-13=-605/0, 3-12=0/519, 7-9=-1068/0, 7-10=0/650, 6-10=-605/0, 6-11=0/519

## NOTES-

WEBS

**WEBS** 

- 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) Refer to girder(s) for truss to truss connections.
- 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.



September 20,2024



Job Truss Truss Type Qty Ply Lot 6 Magnolia Hills 168289961 J0724-4088 F03 Floor Job Reference (optional) 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 16:00:00 2024 Page 1 Fayetteville, NC - 28314, Comtech, Inc.

ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:21.8

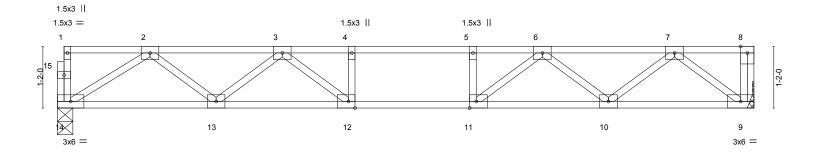


Plate Offsets (X,Y)--[11:0-1-8,Edge], [12:0-1-8,Edge] SPACING-LOADING (psf) CSI. DEFL. (loc) L/d **PLATES** GRIP -0.12 12-13 TCLL 40.0 Plate Grip DOL 1.00 TC 0.43 Vert(LL) >999 480 244/190 MT20 TCDL 10.0 Lumber DOL 1.00 ВС 0.51 Vert(CT) -0.15 12-13 >999 360 BCLL 0.0 Rep Stress Incr YES WB 0.32 Horz(CT) 0.03 n/a n/a Code IRC2015/TPI2014 Weight: 66 lb FT = 20%F. 11%E **BCDL** 5.0 Matrix-S

TOP CHORD

LUMBER-BRACING-

TOP CHORD 2x4 SP No.1(flat) BOT CHORD 2x4 SP No.1(flat)

**WEBS** 2x4 SP No.3(flat) **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 14=0-3-8, 9=Mechanical Max Grav 14=704(LC 1), 9=710(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1491/0, 3-4=-2156/0, 4-5=-2156/0, 5-6=-2156/0, 6-7=-1389/0 **BOT CHORD** 13-14=0/1003, 12-13=0/1938, 11-12=0/2156, 10-11=0/1875, 9-10=0/872 2-14=-1188/0, 2-13=0/635, 3-13=-582/0, 3-12=0/504, 7-9=-1094/0, 7-10=0/672, **WEBS** 

6-10=-633/0, 6-11=0/562, 5-11=-265/0

## 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) Refer to girder(s) for truss to truss connections.
- 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.



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

except end verticals.

September 20,2024



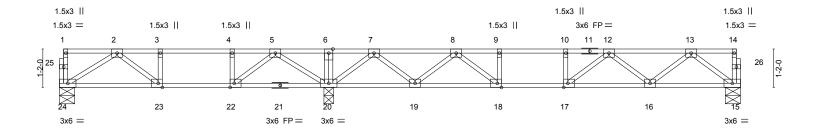


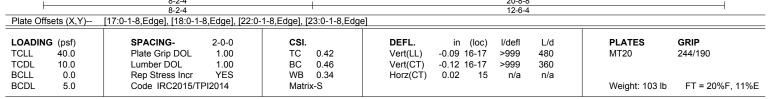
Job	Truss	Truss Type	Qty	Ply	Lot 6 Magnolia Hills
			_		168289962
J0724-4088	F04	Floor	2	1	
					Job Reference (optional)

Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 16:00:00 2024 Page 1 ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f







LUMBER-**BRACING-**

TOP CHORD 2x4 SP No.1(flat) BOT CHORD 2x4 SP No.1(flat) TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins,

except end verticals.

**WEBS** 2x4 SP No.3(flat) **BOT CHORD** Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 24=0-5-8, 20=0-3-8, 15=0-5-8

Max Grav 24=403(LC 3), 20=1256(LC 1), 15=640(LC 7)

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

2-3=-694/30, 3-4=-694/30, 4-5=-694/30, 5-6=0/704, 6-7=0/703, 7-8=-977/0, TOP CHORD

8-9=-1777/0, 9-10=-1777/0, 10-12=-1777/0, 12-13=-1233/0

BOT CHORD  $23-24=0/505,\ 22-23=-30/694,\ 20-22=-263/350,\ 19-20=-11/451,\ 18-19=0/1479,$ 

17-18=0/1777, 16-17=0/1635, 15-16=0/787

2-24=-595/0, 5-20=-788/0, 5-22=0/589, 4-22=-297/0, 7-20=-1110/0, 7-19=0/717, WFBS

8-19=-700/0, 13-15=-985/0, 13-16=0/581, 12-16=-522/0, 12-17=-32/331, 8-18=0/554,

## 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) 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) CAUTION, Do not erect truss backwards.



September 20,2024



Job	Truss	Truss Type	Qty	Ply	Lot 6 Magnolia Hills
10724 4099	F044	Floor	2	1	168289963
J0724-4088	F04A	Floor	3	'	Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

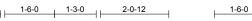
8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 16:00:01 2024 Page 1 ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

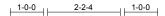
Structural wood sheathing directly applied or 6-0-0 oc purlins,

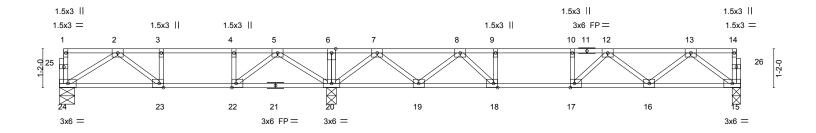
Rigid ceiling directly applied or 6-0-0 oc bracing.

except end verticals.

0-1-8







-		0-2-4						40.04			
	8-2-4							12-3-1			
Plate Of	fsets (X,Y)	[17:0-1-8,Edge], [18:0-1-	-8,Edge], [22:0	)-1-8,Edge], [2	23:0-1-8,Edg	gel					
	• • •			1	-	ī					
LOADIN	IG (psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.43	Vert(LL)	-0.09 16-17	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.46	Vert(CT)	-0.12 16-17	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.02 15	n/a	n/a		
BCDL	5.0	Code IRC2015/T	PI2014	Matri	x-S					Weight: 101 lb	FT = 20%F, 11%E

TOP CHORD

**BOT CHORD** 

LUMBER-**BRACING-**

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

(size) 24=0-5-8, 20=0-3-8, 15=0-3-0

Max Grav 24=405(LC 3), 20=1235(LC 1), 15=631(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-703/9, 3-4=-703/9, 4-5=-703/9, 5-6=0/652, 6-7=0/651, 7-8=-980/0, 8-9=-1721/0,

9-10=-1721/0, 10-12=-1721/0, 12-13=-1210/0

BOT CHORD 23-24=0/509, 22-23=-9/703, 20-22=-229/363, 19-20=-0/473, 18-19=0/1467,

17-18=0/1721, 16-17=0/1601, 15-16=0/776

WFBS 2-24=-599/0, 5-20=-785/0, 5-22=0/583, 4-22=-295/0, 7-20=-1086/0, 7-19=0/691,

 $8-19 = -682/0,\ 13-15 = -971/0,\ 13-16 = 0/566,\ 12-16 = -508/0,\ 12-17 = -27/324,\ 8-18 = 0/541,$ 

## NOTES-

REACTIONS.

- 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) 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) CAUTION, Do not erect truss backwards.



September 20,2024



Job	Truss	Truss Type	Qty	Ply	Lot 6 Magnolia Hills
10704 4000	FOE	Florida			168289964
J0724-4088	F05	Floor	1	1	Job Reference (optional)
					Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 16:00:02 2024 Page 1 ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



H - 1-3-0	1-3-0	1-3-0	1-3-0	1-3-0	0-9-8	1-3-0
	1	1				

2-0-8

0-1-8 Scale = 1:34.4

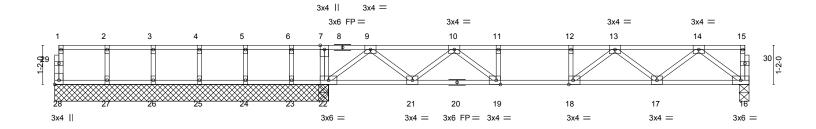




Plate Off	sets (X,Y)	[18:0-1-8,Eage], [19:0-1-8,Eage], [28:E	:age,0-1-8]		
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL	40.0	Plate Grip DOL 1.00	TC 0.37	Vert(LL) -0.10 17-18 >999 480	MT20 244/190
TCDL	10.0	Lumber DOL 1.00	BC 0.45	Vert(CT) -0.12 17-18 >999 360	
BCLL	0.0	Rep Stress Incr YES	WB 0.30	Horz(CT) 0.03 16 n/a n/a	
BCDL	5.0	Code IRC2015/TPI2014	Matrix-S		Weight: 97 lb FT = 20%F, 11%E

LUMBER-**BRACING-**

2x4 SP No.1(flat) TOP CHORD TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins,

BOT CHORD 2x4 SP No.1(flat) except end verticals.

**WEBS** 2x4 SP No.3(flat) **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 8-2-0 except (jt=length) 16=0-3-8.

Max Uplift All uplift 100 lb or less at joint(s) 23 (lb) -

Max Grav All reactions 250 lb or less at joint(s) 28, 27, 26, 25, 24, 23 except 22=814(LC 1), 22=814(LC 1),

16=679(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 9-10=-1283/0, 10-11=-2005/0, 11-12=-2005/0, 12-13=-2005/0, 13-14=-1327/0 TOP CHORD

**BOT CHORD**  $21 - 22 = 0/795,\ 19 - 21 = 0/1758,\ 18 - 19 = 0/2005,\ 17 - 18 = 0/1780,\ 16 - 17 = 0/838$ 

WFBS 9-22=-996/0, 9-21=0/636, 10-21=-618/0, 10-19=0/513, 14-16=-1049/0, 14-17=0/637,

13-17=-589/0, 13-18=0/492

## NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 1.5x3 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 23.
- 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.



September 20,2024



Job Truss Truss Type Qty Ply Lot 6 Magnolia Hills 168289965 Floor J0724-4088 F06 2 Job Reference (optional) 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 16:00:02 2024 Page 1

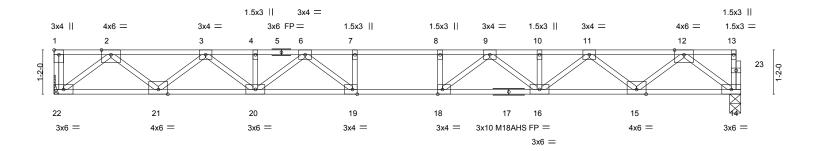
Fayetteville, NC - 28314, Comtech, Inc.

1-3-0

ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

2-1-8 0-11-8

Scale = 1:30.4



			18-1-8	<u> </u>
Plate Offsets (X,Y)	[1:Edge,0-1-8], [18:0-1-8,Edge], [19:0-1	-8,Edge]		
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.38	Vert(LL) -0.24 18-19 >881 480	MT20 244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.48	Vert(CT) -0.33 18-19 >641 360	M18AHS 186/179
BCLL 0.0	Rep Stress Incr YES	WB 0.53	Horz(CT) 0.06 14 n/a n/a	
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S		Weight: 92 lb FT = 20%F, 11%E

18-1-8

LUMBER-BRACING-

2x4 SP 2400F 2.0E(flat) TOP CHORD TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins,

BOT CHORD 2x4 SP 2400F 2.0E(flat) except end verticals. **WEBS** 2x4 SP No.3(flat) **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 22=Mechanical, 14=0-3-8 Max Grav 22=983(LC 1), 14=977(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 2-3=-2075/0, 3-4=-3469/0, 4-6=-3469/0, 6-7=-4167/0, 7-8=-4167/0, 8-9=-4167/0,

9-10=-3469/0, 10-11=-3469/0, 11-12=-2075/0

 $21-22=0/1229,\ 20-21=0/2888,\ 19-20=0/3892,\ 18-19=0/4167,\ 16-18=0/3892,\ 15-16=0/2889,\ 19-20=0/2889,\ 19-2$ 

14-15=0/1228

2-22=-1541/0, 2-21=0/1102, 3-21=-1058/0, 3-20=0/742, 12-14=-1538/0, 12-15=0/1103, 11-15=-1059/0, 11-16=0/741, 9-16=-539/0, 9-18=-56/690, 6-20=-539/0, 6-19=-56/690,

7-19=-319/0, 8-18=-319/0

## NOTES-

WFBS

BOT CHORD

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Refer to girder(s) for truss to truss connections.
- 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.



September 20,2024



Job Truss Truss Type Qty Lot 6 Magnolia Hills Ply 168289966 Floor J0724-4088 F06A Job Reference (optional)

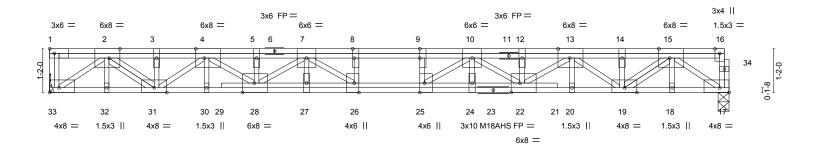
Fayetteville, NC - 28314, Comtech, Inc.

1-2-8

8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 16:00:03 2024 Page 1 ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

1-7-8 0-1-8

Scale = 1:30.7



18-1-8 Plate Offsets (X,Y)--[2:0-3-8,Edge], [4:0-2-12,Edge], [8:0-3-0,Edge], [9:0-3-0,Edge], [13:0-3-12,Edge], [15:0-3-8,Edge], [17:Edge,0-1-8], [22:0-2-12,Edge], [25:0-3-0,Edge], [26:0-3-0,Edge], [28:0-3-12,Edge], [33:Edge,0-1-8] LOADING (psf) SPACING-2-0-0 CSI in (loc) L/d **PLATES GRIP** I/def **TCLL** 40.0 Plate Grip DOL 1.00 TC 0.31 Vert(LL) -0.17 25-26 >999 480 MT20 244/190 TCDL 10.0 Lumber DOL 1.00 вс 0.71 Vert(CT) -0.45 25-26 >475 360 M18AHS 186/179 WB **BCLL** 0.0 Rep Stress Incr NO 0.94 Horz(CT) 0.09 17 n/a n/a Code IRC2015/TPI2014 FT = 20%F 11%F BCDI 5.0 Matrix-S Weight: 141 lb

LUMBER-**BRACING-**

TOP CHORD 2x4 SP 2400F 2.0E(flat) TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins,

**BOT CHORD** 2x4 SP 2400F 2.0E(flat) except end verticals.

2x4 SP No.3(flat) **BOT CHORD WEBS** Rigid ceiling directly applied or 10-0-0 oc bracing

REACTIONS. (size) 33=Mechanical, 17=0-3-8 Max Grav 33=1877(LC 1), 17=1864(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-4395/0, 3-4=-4417/0, 4-5=-7551/0, 5-7=-7551/0, 7-8=-8958/0, 8-9=-8958/0,

9-10=-8958/0, 10-12=-7551/0, 12-13=-7551/0, 13-14=-4419/0, 14-15=-4395/0

BOT CHORD 32-33=0/2488, 31-32=0/2490, 30-31=0/5928, 28-30=0/5930, 27-28=0/8493, 26-27=0/8493,

25-26=0/8958, 24-25=0/8493, 22-24=0/8493, 20-22=0/5930, 19-20=0/5927,

18-19=0/2482, 17-18=0/2481

**WEBS** 2-33=-3000/0, 2-31=0/2443, 3-31=-392/0, 4-31=-1847/0, 4-28=0/1970, 5-28=-277/0,

7-28=-1143/0, 7-26=0/928, 8-26=-390/0, 15-17=-2979/0, 15-19=0/2453, 14-19=-400/0, 13-19=-1846/0, 13-22=0/1970, 12-22=-277/0, 10-22=-1144/0, 10-25=0/928, 9-25=-390/0

## NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- All plates are MT20 plates unless otherwise indicated.
- 3) All plates are 2x6 MT20 unless otherwise indicated.
- 4) Plates checked for a plus or minus 1 degree rotation about its center.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Load case(s) 1, 2, 3, 4, 5, 6 has/have been modified. Building designer must review loads to verify that they are correct for the
- 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.

## LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 17-33=-10, 1-16=-200

2) Dead: Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

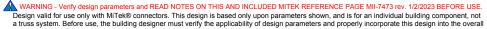
Vert: 17-33=-10, 1-16=-200

3) 1st chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00



September 20,2024

## Continued on page 2



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/TP11 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job	Truss	Truss Type	Qty	Ply	Lot 6 Magnolia Hills
J0724-4088	F06A	Floor	1	1	lob Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc,

8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 16:00:03 2024 Page 2 ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

## LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 17-33=-10, 1-9=-200, 9-16=-120

4) 2nd chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 17-33=-10, 1-8=-120, 8-16=-200

5) 3rd chase Dead: Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

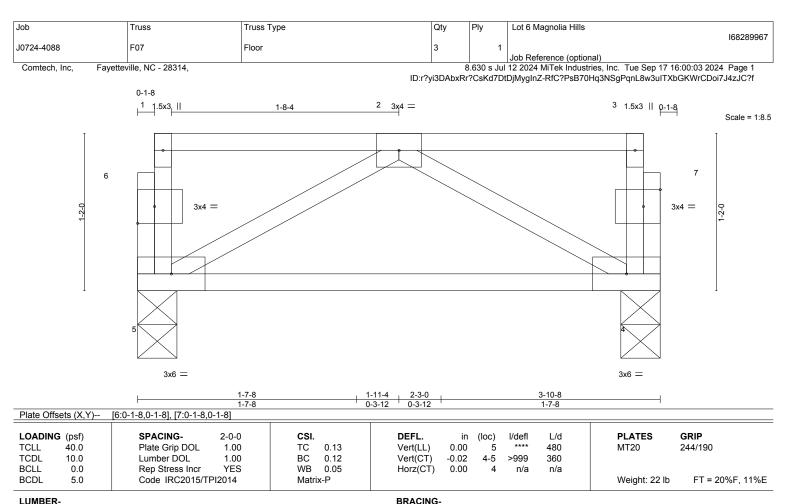
Vert: 17-33=-10, 1-9=-200, 9-16=-120

6) 4th chase Dead: Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 17-33=-10, 1-8=-120, 8-16=-200



818 Soundside Road Edenton, NC 27932



TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x4 SP No.1(flat) **BOT CHORD** 2x4 SP No.1(flat)

**WEBS** 2x4 SP No.3(flat)

REACTIONS. (size) 5=0-3-8, 4=0-3-8 Max Grav 5=193(LC 1), 4=193(LC 1)

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

- 1) Plates checked for a plus or minus 1 degree rotation about its center.
- 2) 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.



Structural wood sheathing directly applied or 3-10-8 oc purlins,

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

except end verticals.

September 20,2024



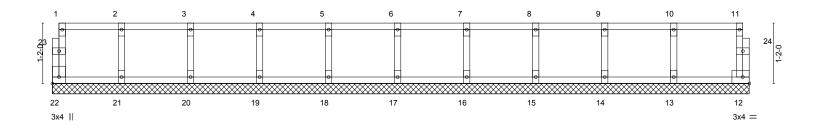
Job	Truss	Truss Type	Qty	Ply	Lot 6 Magnolia Hills
10704 4000	FIGNA	CARLE			168289968
J0724-4088	FKW1	GABLE	1	1	Joh Deference (entional)
					Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 16:00:03 2024 Page 1 ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSqPqnL8w3ulTXbGKWrCDoi7J4zJC?f

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

Scale = 1:22.3



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	13-5-8
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	1-5-8
Plate Offsets (X,Y)	[22:Edge,0-1-8]									
LOADING (psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC	0.07	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 12	n/a	n/a		
BCDL 5.0	Code IRC2015/T	ΓPI2014	Matri	x-R					Weight: 57 lb	FT = 20%F, 11%E

TOP CHORD

LUMBER-**BRACING-**

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

except end verticals. 2x4 SP No.3(flat) **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. **OTHERS** 2x4 SP No.3(flat)

REACTIONS. All bearings 13-5-8.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 22, 12, 21, 20, 19, 18, 17, 16, 15, 14, 13

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) 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.
- 7) CAUTION, Do not erect truss backwards.





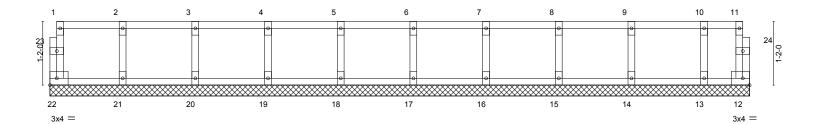
Job	Truss	Truss Type	Qty	Ply	Lot 6 Magnolia Hills	7
10704 4000	FIGMO	GABLE			168289969	
J0724-4088	FKW3	GABLE	1	1	Job Reference (optional)	

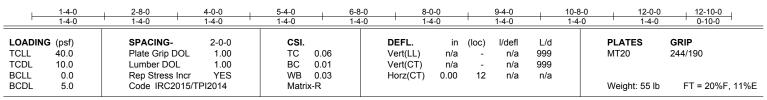
Comtech, Inc, Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 16:00:04 2024 Page 1 ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSqPqnL8w3ulTXbGKWrCDoi7J4zJC?f

0,1,8

Scale = 1:21.1





LUMBER-BRACING-

TOP CHORD 2x4 SP No.1(flat) 2x4 SP No.1(flat) BOT CHORD WEBS

2x4 SP No.3(flat) **OTHERS** 2x4 SP No.3(flat) 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. All bearings 12-10-0.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 22, 12, 21, 20, 19, 18, 17, 16, 15, 14, 13

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

- 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) 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.



September 20,2024





Job Truss Truss Type Qty Ply Lot 6 Magnolia Hills 168289970 Floor J0724-4088 FKW6 Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 16:00:04 2024 Page 1 ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

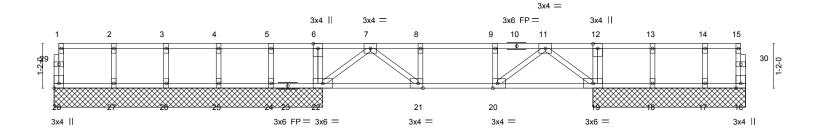
0-1-8

1-3-0 | 1-3-0 | 1-3-0 | 1-0-8 | 1-3-0

1-10-0

1-3-0

0-1-8 Scale = 1:30.2



6-11-0 8,Edge], [21:0-1-8,Edge], [28:Edge	.0-1-81	7-4-0	3-10-8
8,Edge], [21:0-1-8,Edge], [28:Edge	.0-1-81		
PACING- 2-0-0	CSI.	<b>DEFL.</b> in (loc) I/defl L/d	PLATES GRIP
late Grip DOL 1.00	TC 0.30	Vert(LL) -0.02 21 >999 480	MT20 244/190
umber DOL 1.00	BC 0.31	Vert(CT) -0.04 21 >999 360	
ep Stress Incr NO	WB 0.30	Horz(CT) 0.01 16 n/a n/a	I
ode IRC2015/TPI2014	Matrix-S	,	Weight: 84 lb FT = 20%F, 11%E
la u	ate Grip DOL 1.00 umber DOL 1.00 ep Stress Incr NO	ate Grip DOL         1.00         TC         0.30           umber DOL         1.00         BC         0.31           ep Stress Incr         NO         WB         0.30	ate Grip DOL         1.00         TC         0.30         Vert(LL)         -0.02         21         >999         480           umber DOL         1.00         BC         0.31         Vert(CT)         -0.04         21         >999         360           ep Stress Incr         NO         WB         0.30         Horz(CT)         0.01         16         n/a         n/a

LUMBER-**BRACING-**

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

REACTIONS. All bearings 7-0-8 except (jt=length) 16=4-0-0, 19=4-0-0, 18=4-0-0, 17=4-0-0.

(lb) - Max Uplift All uplift 100 lb or less at joint(s) 24

Max Grav All reactions 250 lb or less at joint(s) 28, 16, 27, 26, 25, 18, 17, 24 except 19=882(LC 4), 22=877(LC

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

TOP CHORD 7-8=-1254/0, 8-9=-1254/0, 9-11=-1254/0 BOT CHORD 21-22=0/794, 20-21=0/1254, 19-20=0/791

WFBS 7-22=-996/0, 7-21=0/619, 8-21=-350/0, 11-19=-990/0, 11-20=0/622, 9-20=-351/0

## NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 1.5x3 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24. 5) 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, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 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.
- 7) 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: 16-28=-10, 1-6=-100, 6-12=-200, 12-15=-100

2) Dead: Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf) Vert: 16-28=-10, 1-6=-100, 6-12=-200, 12-15=-100

3) 1st Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 16-28=-10, 1-6=-100, 6-12=-120, 12-15=-20

4) 2nd Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 16-28=-10, 1-6=-20, 6-12=-200, 12-15=-100

## Timmini.

September 20,2024

## Continued on page 2



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MIL-74/3 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MITER® 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/TP1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job	Truss	Truss Type	Qty	Ply	Lot 6 Magnolia Hills	
J0724-4088	FKW6	Floor	1	1		168289970
					Job Reference (ontional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 16:00:05 2024 Page 2 ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hg3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

## LOAD CASE(S) Standard

5) 3rd unbalanced Dead: Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 16-28=-10, 1-6=-100, 6-12=-120, 12-15=-20

6) 4th unbalanced Dead: Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 16-28=-10, 1-6=-20, 6-12=-200, 12-15=-100

7) 1st chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 16-28=-10, 1-6=-100, 6-12=-200, 12-15=-100

8) 2nd chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 16-28=-10, 1-6=-100, 6-12=-200, 12-15=-100

 3rd chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 16-28=-10, 1-6=-100, 6-12=-200, 12-15=-100

 4th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 16-28=-10, 1-6=-100, 6-12=-200, 12-15=-100

11) 5th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 16-28=-10, 1-6=-100, 6-12=-200, 12-15=-100

12) 6th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00

Vert: 16-28=-10, 1-6=-100, 6-12=-200, 12-15=-100

13) 7th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 16-28=-10, 1-6=-100, 6-12=-200, 12-15=-100

14) 8th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (bif)

Vert: 16-28=-10, 1-6=-100, 6-12=-200, 12-15=-100

15) 9th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 16-28=-10, 1-6=-100, 6-12=-200, 12-15=-100

16) 10th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 16-28=-10, 1-6=-100, 6-12=-200, 12-15=-100

17) 11th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 16-28=-10, 1-6=-100, 6-9=-200, 9-12=-120, 12-15=-100

 12th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 16-28=-10, 1-6=-100, 6-8=-120, 8-12=-200, 12-15=-100

 13th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 16-28=-10, 1-6=-100, 6-12=-200, 12-15=-100

20) 14th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 16-28=-10, 1-6=-100, 6-12=-200, 12-15=-100

 15th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 16-28=-10, 1-6=-100, 6-12=-200, 12-15=-100

22) 16th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 16-28=-10, 1-6=-100, 6-12=-200, 12-15=-100

23) 17th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (olf)

Vert: 16-28=-10, 1-6=-100, 6-12=-200, 12-15=-100

24) 18th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 16-28=-10, 1-6=-100, 6-12=-200, 12-15=-100

25) 19th chase Dead: Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 16-28=-10, 1-6=-100, 6-12=-200, 12-15=-100

26) 20th chase Dead: Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 16-28=-10, 1-6=-100, 6-12=-200, 12-15=-100 27) 21st chase Dead: Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf) Vert: 16-28=-10, 1-6=-100, 6-12=-200, 12-15=-100

28) 22nd chase Dead: Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 16-28=-10, 1-6=-100, 6-12=-200, 12-15=-100

29) 23rd chase Dead: Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 16-28=-10, 1-6=-100, 6-12=-200, 12-15=-100

## Continued on page 3



818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 6 Magnolia Hills	
J0724-4088	FKW6	Floor	1	1	I	168289970
JU124-4000	FRVVO	FIOOI	'	'	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Sep 17 16:00:05 2024 Page 3 ID:r?yi3DAbxRr?CsKd7DtDjMygInZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

## LOAD CASE(S) Standard

30) 24th chase Dead: Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 16-28=-10, 1-6=-100, 6-12=-200, 12-15=-100

 25th chase Dead: Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 16-28=-10, 1-6=-100, 6-12=-200, 12-15=-100

32) 26th chase Dead: Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 16-28=-10, 1-6=-100, 6-12=-200, 12-15=-100

33) 27th chase Dead: Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 16-28=-10, 1-6=-100, 6-12=-200, 12-15=-100

34) 28th chase Dead: Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 16-28=-10, 1-6=-100, 6-12=-200, 12-15=-100

35) 29th chase Dead: Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 16-28=-10, 1-6=-100, 6-9=-200, 9-12=-120, 12-15=-100

36) 30th chase Dead: Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 16-28=-10, 1-6=-100, 6-8=-120, 8-12=-200, 12-15=-100

37) 31st chase Dead: Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 16-28=-10, 1-6=-100, 6-12=-200, 12-15=-100

 32nd chase Dead: Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 16-28=-10, 1-6=-100, 6-12=-200, 12-15=-100

39) 33rd chase Dead: Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 16-28=-10, 1-6=-100, 6-12=-200, 12-15=-100

40) 34th chase Dead: Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 16-28=-10, 1-6=-100, 6-12=-200, 12-15=-100

41) 35th chase Dead: Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

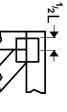
Vert: 16-28=-10, 1-6=-100, 6-12=-200, 12-15=-100

42) 36th chase Dead: Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

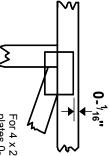
Vert: 16-28=-10, 1-6=-100, 6-12=-200, 12-15=-100

## Symbols

## PLATE LOCATION AND ORIENTATION



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



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

connector plates required direction of slots in This symbol indicates the

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

## **PLATE SIZE**

4 × 4

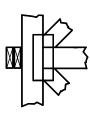
to slots. Second dimension is the length parallel to slots. width measured perpendicular The first dimension is the plate

## LATERAL BRACING LOCATION



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

## **BEARING**



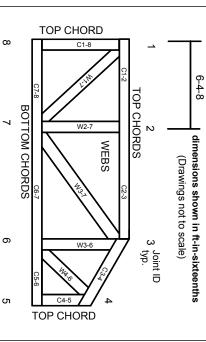
Min size shown is for crushing only number/letter where bearings occur reaction section indicates joint (supports) occur. Icons vary but Indicates location where bearings

## Industry Standards:

ANSI/TPI1: National Design Specification for Metal Installing, Restraining & Bracing of Metal Guide to Good Practice for Handling, Building Component Safety Information, Design Standard for Bracing. Plate Connected Wood Trusses Plate Connected Wood Truss Construction.

DSB-22:

## Numbering System



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

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

# Product Code Approvals

ICC-ES Reports:

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

# Design General Notes

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

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

© 2023 MiTek® All Rights Reserved

## MiTek



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

# General Safety Notes

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

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Ņ 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.
- ယ Never exceed the design loading shown and never stack materials on inadequately braced trusses
- 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
- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

œ

- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the camber for dead load deflection responsibility of truss fabricator. General practice is to
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted
- 15. Connections not shown are the responsibility of others
- Do not cut or alter truss member or plate without prior approval of an engineer.
- Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable project engineer before use environmental, health or performance risks. Consult with
- 19. Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- 21. The design does not take into account any dynamic or other loads other than those expressly stated



Client: Project: Address: **Precision Custom Homes** 

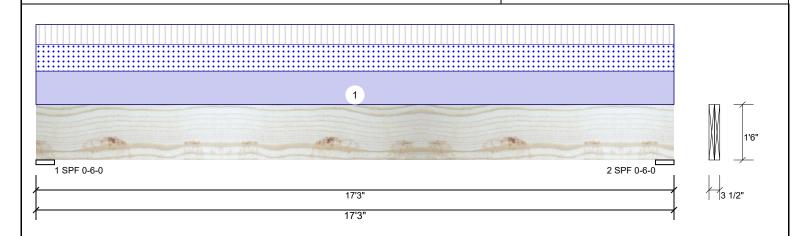
Date: 9/17/2024 Input by: Hampton Horrocks

Job Name: Lot 6 Magnolia Hills Project #: J0724-4088

Page 1 of 3

1.750" X 18.000" **Kerto-S LVL** 2-Ply - PASSED GDH

Level: Level



Member Infor	mation	Reactions UNPATTERNED Ib (Uplift)									
Type:	Girder	Application:	Floor	Brg	Direction	Live	;	Dead	Snow	Wind	Const
Plies:	2	Design Method:	ASD	1	Vertical	1708	3	3010	2320	0	0
Moisture Condition	n: Dry	Building Code:	IBC/IRC 2015	2	Vertical	1708	3	3010	2320	0	0
Deflection LL:	480	Load Sharing:	No								
Deflection TL:	240	Deck:	Not Checked								
Importance:	Normal - II										
Temperature:	Temp <= 100°F										
				Bear	rings						
				Bea	aring Length	Dir.	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.
				1 -	SPF 6.000"	Vert	68%	3010 / 3021	6031	L	D+0.75(L+S)
				2 -	SPF 6.000"	Vert	68%	3010 / 3021	6031	L	D+0.75(L+S)

## Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	23497 ft-lb	8'7 1/2"	49428 ft-lb	0.475 (48%)	D+0.75(L+S)	L
Unbraced	23497 ft-lb	8'7 1/2"	23555 ft-lb	0.998 (100%)	D+0.75(L+S)	L
Shear	4654 lb	2'	15456 lb	0.301 (30%)	D+0.75(L+S)	L
LL Defl inch	0.189 (L/1041)	8'7 9/16"	0.410 (L/480)	0.461 (46%)	0.75(L+S)	L
TL Defl inch	0.377 (L/522)	8'7 9/16"	0.820 (L/240)	0.460 (46%)	D+0.75(L+S)	L

## **Design Notes**

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be laterally braced at a maximum of 5'7 1/4" o.c.
- 6 Bottom must be laterally braced at end bearings.
- 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	Uniform			Тор	335 PLF	198 PLF	269 PLF	0 PLF	0 PLF	C1 Roof
	Self Weight				14 PLF					

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.

- Dry service conditions, unless noted otherwise
   LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- Informing & Installation

  I. VIL 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

  Design assumes top edge is laterally restrained is provide lateral support at bearing points to avoid lateral displacement and rotation
- 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

- This design is valid until 6/28/2026



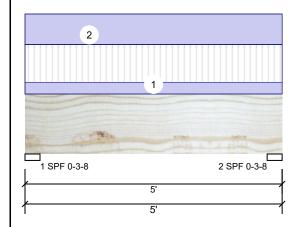
Client: Project: Address: **Precision Custom Homes** 

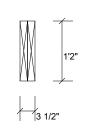
Date: 9/17/2024

Input by: Hampton Horrocks Job Name: Lot 6 Magnolia Hills Project #: J0724-4088

1.750" X 14.000" 2-Ply - PASSED **Kerto-S LVL** BM4

Level: Level





D+L

Page 2 of 3

Member Infor	rmation			Rea	Reactions UNPATTERNED lb (Uplift)								
Туре:	Girder	Application:	Floor	Brg	Direction	Live	Dead	Snow	Wind	Const			
Plies:	2	Design Method:	ASD	1	Vertical	650	755	0	0	0			
Moisture Condition	on: Dry	Building Code:	IBC/IRC 2015	2	Vertical	650	755	0	0	0			
Deflection LL:	480	Load Sharing:	No										
Deflection TL:	240	Deck:	Not Checked										
Importance:	Normal - II												
Temperature:	Temp <= 100°F												
				Bea	rings								
				Ве	aring Length	Dir.	Cap. React D/	L lb Tota	I Ld. Case	Ld. Comb.			
				1 -	SPF 3.500"	Vert	27% 755 /	650 140	5 L	D+L			

2 - SPF 3.500"

Vert

27%

755 / 650

1405 L

## **Analysis Results**

, ,						
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1449 ft-lb	2'6"	26999 ft-lb	0.054 (5%)	D+L	L
Unbraced	1449 ft-lb	2'6"	20546 ft-lb	0.071 (7%)	D+L	L
Shear	996 lb	3'6 1/2"	10453 lb	0.095 (10%)	D+L	L
LL Defl inch	0.003 (L/17407)	2'6"	0.114 (L/480)	0.028 (3%)	L	L
TL Defl inch	0.007 (L/8054)	2'6"	0.227 (L/240)	0.030 (3%)	D+L	L

## **Design Notes**

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be laterally braced at end bearings.
- 6 Bottom must be laterally braced at end bearings.
- 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	Uniform			Far Face	81 PLF	260 PLF	0 PLF	0 PLF	0 PLF	F02	
2	Uniform			Тор	210 PLF	0 PLF	0 PLF	0 PLF	0 PLF	wall	
	Self Weight				11 PLF						

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.

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

Version 23.40.705 Powered by iStruct™ Dataset: 24070801.3993

- Handling & Installation
- Informing & Installation

  I. VIL 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

  Design assumes top edge is laterally restrained is provide lateral support at bearing points to avoid lateral displacement and rotation

- For flat roofs provide proper drainage to prevent ponding

This design is valid until 6/28/2026

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



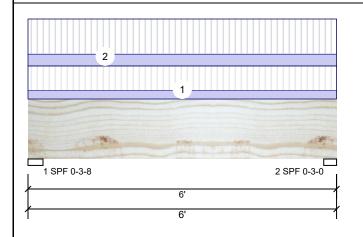
Client: Project: Address: **Precision Custom Homes** 

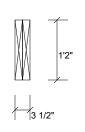
Date: 9/17/2024

Input by: Hampton Horrocks Job Name: Lot 6 Magnolia Hills Project #: J0724-4088

## 1.750" X 14.000" **Kerto-S LVL** 2-Ply - PASSED BM<sub>3</sub>

Level: Level





0

0

Page 3 of 3

## **Member Information**

Type: Plies: 2 Moisture Condition: Dry Deflection LL: 480 Deflection TL: 240 Importance: Normal - II Temperature: Temp <= 100°F

Application: Floor Design Method: ASD **Building Code: IBC/IRC 2015** Load Sharing: No Deck: Not Checked

## Reactions UNPATTERNED Ib (Uplift) Direction Snow Wind Brg Live Dead Const 1900 667 Vertical n 0 0 1

0

658

## **Bearings** Bearing Length Dir. Cap. React D/L lb Total Ld. Case Ld. Comb. D+L 1 - SPF 3.500" Vert 49% 667 / 1900 2567 L 2 - SPF 3.000" Vert 57% 658 / 1874 2532 L D+I

## **Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3312 ft-lb	3' 1/4"	26999 ft-lb	0.123 (12%)	D+L	L
Unbraced	3312 ft-lb	3' 1/4"	17594 ft-lb	0.188 (19%)	D+L	L
Shear	1745 lb	1'5 1/2"	10453 lb	0.167 (17%)	D+L	L
LL Defl inch	0.014 (L/4667)	3' 1/4"	0.140 (L/480)	0.103 (10%)	L	L
TL Defl inch	0.019 (L/3454)	3' 1/4"	0.279 (L/240)	0.069 (7%)	D+L	L

## **Design Notes**

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be laterally braced at end bearings.
- 6 Bottom must be laterally braced at end bearings.
- 7 Lateral slenderness ratio based on single ply width

i Lateral Sieriue	iness ratio based on single	piy widii.								
ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Near Face	87 PLF	260 PLF	0 PLF	0 PLF	0 PLF	F02
2	Uniform			Тор	123 PLF	369 PLF	0 PLF	0 PLF	0 PLF	F06
	Self Weight				11 PLF					

2

Vertical

1874

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.

Dry service conditions, unless noted otherwise
 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

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

This design is valid until 6/28/2026