

Trenco

818 Soundside Rd Edenton, NC 27932

Re: J0225-1016

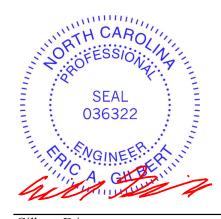
Lot 18 Magnolia Hills

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: I72558341 thru I72558376

My license renewal date for the state of North Carolina is December 31, 2025.

North Carolina COA: C-0844



April 8,2025

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.

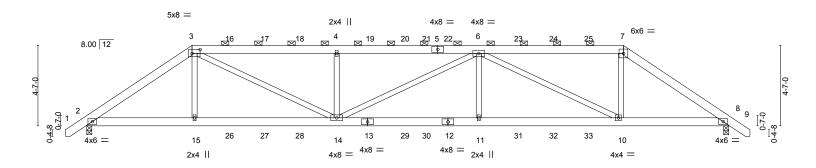
1000		11.000 1,700	α.,	1	Lot 10 Mag. ona 1 mo		
							172558341
J0225-1016	A1	HIP GIRDER	1	2			
					Job Reference (optional)		
Comtech, Inc,	Fayetteville, NC - 28	314,		3.630 s Sep	26 2024 MiTek Industries,	Inc. Mon Apr 7 06:23:5	4 2025 Page 1
	•		ID:3YJEg_u8zX16I	RsP?VvW_	V6zd0wB-RfC?PsB70Hq3N	ISgPqnL8w3uITXbGKW	rCDoi7J4zJC?f
_Γ 1-2-8 _ι	6-0-0	14-2-15	22-4-1	_	30-7-0	36-7-0	37-9-8
1-2-8	6-0-0	8-2-15	8-1-3		8-2-15	6-0-0	1-2-8

Qtv

Plv

Lot 18 Magnolia Hills

Scale = 1:65.6



	6-0-0	14-2-15 8-2-15		22-4-1 8-1-3	-	30-1 8-2-		36-7-0 6-0-0	
	[3:0-5-8,0-2-12]								
LOADING (psf) TCLL 20.0	SPACING- Plate Grip DOL		CSI. TC 0.36	Vert(LL)	in (loc) -0.15 11-14	l/defl >999	L/d 360 240	PLATES MT20	GRIP 244/190
TCDL 10.0 BCLL 0.0 * BCDL 10.0	Lumber DOL Rep Stress Incr Code IRC2021		BC 0.50 WB 0.90 Matrix-S	Vert(CT) Horz(CT) Wind(LL)	-0.31 11-14 0.08 8 0.17 11-14	>999 n/a >999	n/a 240	Weight: 489 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

Job

Truss

Truss Type

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

2x4 SP No.2 WFBS

REACTIONS. (size) 2=0-3-8, 8=0-3-8 Max Horz 2=-114(LC 27)

Max Uplift 2=-653(LC 8), 8=-653(LC 9) Max Grav 2=2833(LC 1), 8=2833(LC 1)

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

TOP CHORD 2-3=-4582/1150, 3-4=-6352/1681, 4-6=-6351/1681, 6-7=-3751/991, 7-8=-4580/1148

BOT CHORD 2-15=-975/3684, 14-15=-974/3704, 11-14=-1652/6353, 10-11=-1652/6353,

8-10=-874/3682

WEBS 3-15=0/728, 3-14=-865/3006, 4-14=-993/579, 6-11=0/674, 6-10=-2969/860,

7-10=-359/1914

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 0-9-0 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 7-16; Vult=130mph (3-second gust) 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) Provide adequate drainage to prevent water ponding.
- 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 653 lb uplift at joint 2 and 653 lb uplift at ioint 8.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

2-0-0 oc purlins (6-0-0 max.): 3-7.

April 8,2025



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)



Jo	ob	Truss	Truss Type	Qty	Ply	Lot 18 Magnolia Hills
	2005 4040	• •	LUD OIDDED			172558341
	0225-1016	A1	HIP GIRDER	1	2	Job Reference (optional)

Comtech, Inc.

Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 06:23:54 2025 Page 2 ID:3YJEg_u8zX16RsP?VvW_V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

NOTES-

10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 137 lb down and 121 lb up at 6-0-0, 142 lb down and 118 lb up at 8-0-12, 142 lb down and 118 lb up at 10-0-12, 142 lb down and 118 lb up at 12-0-12, 142 lb down and 118 lb up at 14-0-12, 142 lb down and 118 lb up at 16-0-12, 142 lb down and 18 lb up at 16-0-12, 142 lb dow lb down and 118 lb up at 18-0-12, 142 lb down and 118 lb up at 18-6-4, 142 lb down and 118 lb up at 20-6-4, 142 lb down and 118 lb up at 22-6-4, 142 lb down and 118 lb up at 20-6-4, 142 lb down and 20-6-4, 142 lb do lb up at 24-6-4, 142 lb down and 118 lb up at 26-6-4, and 142 lb down and 118 lb up at 28-6-4, and 137 lb down and 121 lb up at 30-7-0 on top chord, and 354 lb down and 123 lb up at 6-0-0, 76 lb down at 8-0-12, 76 lb down at 10-0-12, 76 lb down at 12-0-12, 76 lb down at 18-0-4, 76 lb down at 22-6-4, 76 lb down at 22-6-4, 76 lb down at 22-6-4, 76 lb down at 23-6-4, and 354 lb down at 23-6-4, and 354 lb down at 23-6-4, and 354 lb down at 23-6-4, 76 lb down at 23-6-4, 76 lb down at 23-6-4, and 354 lb down at 24-6-4, and 354 lb down at 30-6-4 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, 3-7=-60, 7-9=-60, 2-8=-20

Concentrated Loads (lb)

Vert: 3=-104(B) 7=-104(B) 13=-38(B) 15=-351(B) 14=-38(B) 4=-104(B) 11=-38(B) 10=-351(B) 6=-104(B) 12=-38(B) 16=-104(B) 17=-104(B) 18=-104(B) 19=-104(B) 20=-104(B) 21=-104(B) 22=-104(B) 23=-104(B) 24=-104(B) 25=-104(B) 25=-104(B) 27=-38(B) 27=-38(B) 28=-38(B) 29=-38(B) 30=-38(B) 31=-38(B) 32=-38(B) 32=-38(B) 32=-38(B) 31=-38(B) 31=-38(B)



Job	Truss	Truss Type	Qty	Ply	Lot 18 Magnolia Hills	
					172558342	
J0225-1016	A2	HIP	1	1		
					Job Reference (optional)	
Comtech, Inc, Fayettev	rille, NC - 28314,		8	.630 s Sep	26 2024 MiTek Industries, Inc. Mon Apr 7 06:23:55 2025 Page 1	•
		ID:3V IE«	0-V16D	~D3\44\/ \	VC=d0D_DfC2DcD70Llc2NCcDcsl_02ITVbCKWcDcs7.ld=LC2f	

28-7-0 10-3-8

18-3-8 10-3-8

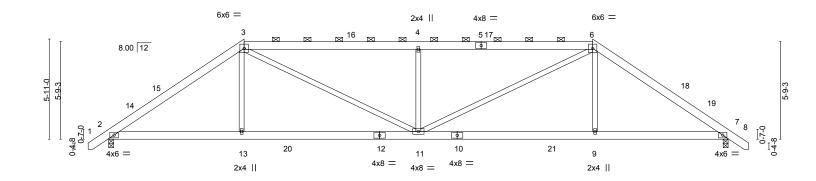
Scale = 1:68.0

36-7-0 8-0-0

Structural wood sheathing directly applied or 4-8-2 oc purlins, except

2-0-0 oc purlins (4-1-0 max.): 3-6.

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



	8-0-0	18-3-8 10-3-8	28-7-0 10-3-8	36-7-0 8-0-0
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2021/TPI2014	TC 0.50 V BC 0.45 V WB 0.48 H	EFL. in (loc) l/defl L/d ert(LL) -0.14 9-11 >999 360 ert(CT) -0.27 9-11 >999 240 orz(CT) 0.07 7 n/a n/a /ind(LL) 0.08 11 >999 240	PLATES GRIP MT20 244/190 Weight: 241 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SP No.2 WFBS

REACTIONS. (size) 2=0-3-8, 7=0-3-8 Max Horz 2=-144(LC 10)

Max Uplift 2=-55(LC 9), 7=-55(LC 8) Max Grav 2=1682(LC 2), 7=1682(LC 2)

8-0-0 8-0-0

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-3=-2506/285, 3-4=-2923/369, 4-6=-2922/368, 6-7=-2508/285 TOP CHORD **BOT CHORD** 2-13=-134/1985, 11-13=-137/1973, 9-11=-88/1975, 7-9=-86/1987 **WEBS** 3-13=0/500, 3-11=-202/1140, 4-11=-729/251, 6-11=-202/1137, 6-9=0/500

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-0-15 to 3-3-14, Interior(1) 3-3-14 to 8-0-0, Exterior(2R) 8-0-0 to 14-2-11, Interior(1) 14-2-11 to 28-7-0, Exterior(2R) 28-7-0 to 34-9-11, Interior(1) 34-9-11 to 37-7-15 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 55 lb uplift at joint 2 and 55 lb uplift at
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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 18 Magnolia Hills 172558343 HIP J0225-1016 **A3** Job Reference (optional) Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 06:23:56 2025 Page 1 Comtech, Inc. ID:3YJEg_u8zX16RsP?VvW_V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

26-7-0

18-3-8

8-3-8

Scale = 1:68.0

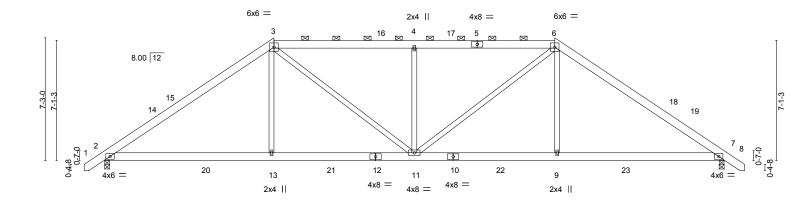
36-7-0

10-0-0

Structural wood sheathing directly applied or 3-9-14 oc purlins,

2-0-0 oc purlins (4-9-0 max.): 3-6.

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



	10-0-0	18-3-8 8-3-8	8-3-8	30-7-0 10-0-0
LOADING (psf) TCLL 20.0	SPACING- 2-0-0 Plate Grip DOL 1.15	TC 0.63	/ert(LL) -0.13 2-13 >999 3	L/d PLATES GRIP 60 MT20 244/190
TCDL 10.0 BCLL 0.0 * BCDL 10.0	Lumber DOL 1.15 Rep Stress Incr YES Code IRC2021/TPI2014	WB 0.42	Horz(CT) 0.07 7 n/a r	40 n/a 40 Weight: 246 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x4 SP No.2

REACTIONS. (size) 2=0-3-8, 7=0-3-8

Max Horz 2=-176(LC 10)

Max Uplift 2=-50(LC 12), 7=-50(LC 13) Max Grav 2=1826(LC 2), 7=1826(LC 2)

10-0-0

10-0-0

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-3=-2609/296, 3-4=-2484/360, 4-6=-2482/359, 6-7=-2610/296 TOP CHORD **BOT CHORD** 2-13=-102/2050, 11-13=-104/2037, 9-11=-75/2038, 7-9=-74/2051 **WEBS** 3-13=0/683, 3-11=-176/666, 4-11=-564/202, 6-11=-176/664, 6-9=0/683

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-0-15 to 3-3-14, Interior(1) 3-3-14 to 10-0-0, Exterior(2R) 10-0-0 to 16-2-11, Interior(1) 16-2-11 to 26-7-0, Exterior(2R) 26-7-0 to 32-9-11, Interior(1) 32-9-11 to 37-7-15 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 50 lb uplift at joint 2 and 50 lb uplift at
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 8,2025

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

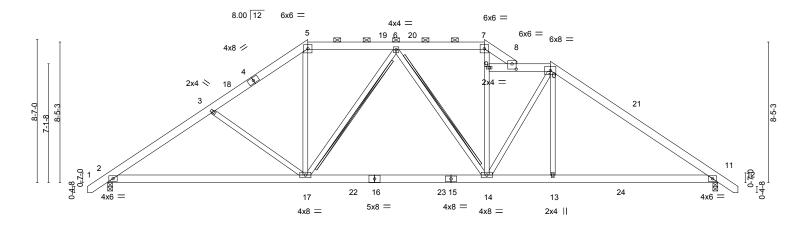
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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 18 Magnolia Hills 172558344 J0225-1016 ROOF SPECIAL A4 Job Reference (optional) Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 06:23:56 2025 Page 1 Comtech, Inc.

ID:3YJEg_u8zX16RsP?VvW_V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 12-0-0 17-3-8 5-3-8 22-7-0 5-3-8 24-6-8 26-6-8 10-0-8 5-8-2 1-11-8 2-0-0

Scale = 1:69.1



	12-0-0	22-7-0	26-6-8	36-7-0
	12-0-0	10-7-0	3-11-8	10-0-8
Plate Offsets (X,Y)	[8:0-3-0,0-3-13]			

1 late 5 libets (14,17 [5:5 5 6;5 5 15]					
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 0.85	Vert(LL) -0.23 14-17 >999 360	MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.64	Vert(CT) -0.35 14-17 >999 240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.35	Horz(CT) 0.06 11 n/a n/a	
BCDL	10.0	Code IRC2021/TPI2014	Matrix-S	Wind(LL) 0.06 11-13 >999 240	Weight: 274 lb FT = 20%

LUMBER-

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

2x4 SP No 2 WFBS

BRACING-TOP CHORD

Structural wood sheathing directly applied or 4-0-1 oc purlins, except 2-0-0 oc purlins (3-7-13 max.): 5-7, 9-10.

BOT CHORD WEBS

Rigid ceiling directly applied or 10-0-0 oc bracing. T-Brace: 2x4 SPF No.2 - 6-17, 6-14

Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

REACTIONS.

(size) 2=0-3-8, 11=0-3-8 Max Horz 2=210(LC 11)

Max Uplift 2=-64(LC 12), 11=-79(LC 13) Max Grav 2=1716(LC 19), 11=1773(LC 2)

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

2-3=-2453/483, 3-5=-2218/440, 5-6=-1765/427, 6-7=-1907/452, 7-8=-2218/493, TOP CHORD

8-10=-1897/401, 10-11=-2478/431

BOT CHORD 2-17=-291/2063, 14-17=-160/1925, 13-14=-169/1964, 11-13=-167/1972 **WEBS** 3-17=-341/240, 5-17=-87/916, 6-17=-389/173, 9-14=-76/443, 7-9=-149/835,

10-13=0/417

NOTES-

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-0-15 to 3-3-14, Interior(1) 3-3-14 to 12-0-0, Exterior(2R) 12-0-0 to 16-4-13, Interior(1) 16-4-13 to 22-7-0, Exterior(2E) 22-7-0 to 24-6-8, Interior(1) 24-6-8 to 26-6-8, Exterior(2R) 26-6-8 to 30-11-5, Interior(1) 30-11-5 to 37-7-15 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 64 lb uplift at joint 2 and 79 lb uplift at joint 11.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 8) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



April 8,2025

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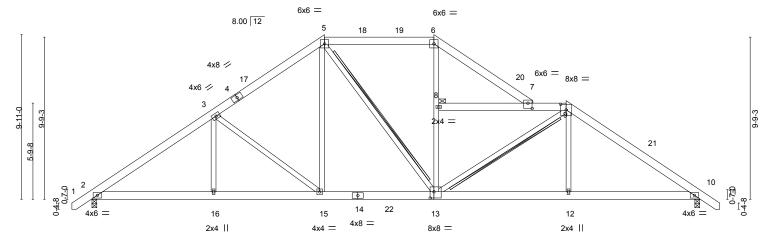


Job Truss Truss Type Qty Ply Lot 18 Magnolia Hills 172558345 ROOF SPECIAL J0225-1016 A5 Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 06:23:57 2025 Page 1 ID:3YJEg_u8zX16RsP?VvW_V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 14-0-0 20-7-0 26-6-8 28-6-8 36-7-0 5-11-8 6-8-2 2-0-0 8-0-8

Scale = 1:69.3



	7-3-13	14-0-0	20-7-0	1 26-6-8	₁ 28-6-8 ₁	36-7-0	
ı	7-3-13	6-8-2	6-7-0	5-11-8	2-0-0	8-0-8	
Plate Offsets (X Y)	[7:0-3-0 0-3-13] [9:0-4-0 0-3-	15] [13:0-2-12 0-4-8]					

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 0.65	Vert(LL) -0.15 13-15 >999 360	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.37	Vert(CT) -0.26 13-15 >999 240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.71	Horz(CT) 0.06 10 n/a n/a	
BCDL 10.0	Code IRC2021/TPI2014	Matrix-S	Wind(LL) 0.08 13 >999 240	Weight: 287 lb FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1 *Except* 8-9: 2x6 SP 2400F 2.0E

BOT CHORD 2x6 SP No.1

WEBS 2x4 SP No.2 BRACING-TOP CHORD

JOINTS

Structural wood sheathing directly applied or 4-9-11 oc purlins,

except

2-0-0 oc purlins (6-0-0 max.): 5-6, 8-9.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. WEBS 2x4 SPF No.2 - 9-13, 5-13

Fasten (2X) T and I braces to narrow edge of web with 10d

(0.131"x3") nails, 6in o.c., with 3in minimum end distance.

Brace must cover 90% of web length. 1 Brace at Jt(s): 8

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

Max Horz 2=241(I C 11)

Max Uplift 2=-76(LC 12), 10=-90(LC 13) Max Grav 2=1706(LC 19), 10=1675(LC 20)

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

TOP CHORD 2-3=-2454/444, 3-5=-1950/472, 5-6=-1594/471, 6-7=-1944/467, 7-9=-1567/302,

BOT CHORD 2-16=-243/2098, 15-16=-243/2098, 13-15=-70/1585, 12-13=-239/1962, 10-12=-237/1971 3-16=0/296, 3-15=-631/217, 5-15=-60/708, 8-13=0/494, 6-8=-48/684, 9-13=-538/207, **WEBS**

9-12=0/347, 5-13=-112/251

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-0-15 to 3-3-14, Interior(1) 3-3-14 to 14-0-0, Exterior(2R) 14-0-0 to 18-4-13, Interior(1) 18-4-13 to 20-7-0, Exterior(2R) 20-7-0 to 24-11-13, Interior(1) 24-11-13 to 28-6-8, Exterior(2R) 28-6-8 to 32-11-5, Interior(1) 32-11-5 to 37-7-15 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 76 lb uplift at joint 2 and 90 lb uplift at
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 8) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



April 8,2025

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)



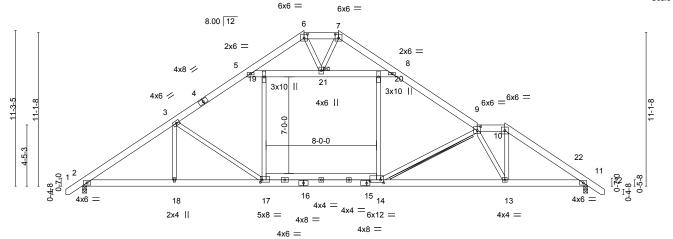
Job Truss Truss Type Qty Ply Lot 18 Magnolia Hills 172558346 J0225-1016 ROOF SPECIAL A6 Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 06:23:57 2025 Page 1

ID:3YJEg_u8zX16RsP?VvW_V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 16-0-8 18-6-8 21-3-8 2-6-0 2-9-0 28-7-0 30-7-0 36-7-0 2-9-0 6-0-0

Scale = 1:83.4



	6-7-12	13-3-8	21-3-8	30-7-0	36-7-0
	6-7-12	6-7-12	8-0-0	9-3-8	6-0-0
[6:0-3-0.0	-3-61. [7:0-3-0.0-3-6]. [9	:0-3-0.0-3-81. [14:0-2-1	2.0-2-8], [15:0-2-12.0-2-0], [17:0-1-8.0-2-0]	

Flate Offices (A, I)				
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 0.40	Vert(LL) -0.27 13-14 >999 360	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.80	Vert(CT) -0.43 13-14 >999 240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.73	Horz(CT) 0.07 11 n/a n/a	
BCDL 10.0	Code IRC2021/TPI2014	Matrix-S	Wind(LL) 0.19 13-14 >999 240	Weight: 309 lb FT = 20%

LUMBER-TOP CHORD

Plate Offcets (Y V)__

2x6 SP No 1 2x6 SP No.1

BOT CHORD 2x4 SP No.2 *Except* WFBS

5-8: 2x6 SP No.1

BRACING-TOP CHORD

JOINTS

Structural wood sheathing directly applied or 4-7-8 oc purlins, except

2-0-0 oc purlins (5-4-14 max.): 6-7, 9-10. BOT CHORD

Rigid ceiling directly applied or 10-0-0 oc bracing. WEBS T-Brace: 2x4 SPF No.2 - 9-14

Fasten (2X) T and I braces to narrow edge of web with 10d

(0.131"x3") nails, 6in o.c., with 3in minimum end distance.

Brace must cover 90% of web length. 1 Brace at Jt(s): 21

REACTIONS. (size) 2=0-3-8, 11=0-3-8

Max Horz 2=272(LC 11)

Max Uplift 2=-85(LC 12), 11=-98(LC 13) Max Grav 2=1801(LC 19), 11=1766(LC 20)

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

TOP CHORD 2-3=-2624/415, 3-5=-2191/443, 5-6=-821/180, 6-7=-749/188, 7-8=-819/179,

8-9=-2234/446, 9-10=-2117/408, 10-11=-2680/416

BOT CHORD 2-18=-225/2260, 17-18=-225/2260, 14-17=-114/1864, 13-14=-315/2558, 11-13=-222/2115 **WEBS**

3-17=-492/196, 17-19=-16/687, 14-20=-2/838, 9-13=-1035/231, 10-13=-114/1247,

9-14=-1020/278, 5-19=-1249/365, 19-21=-1249/365, 20-21=-1173/354, 8-20=-1173/354,

6-21=-55/448, 7-21=-80/336

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-0-15 to 3-3-14, Interior(1) 3-3-14 to 16-0-8, Exterior(2E) 16-0-8 to 18-6-8, Exterior(2R) 18-6-8 to 22-9-14, Interior(1) 22-9-14 to 30-7-0, Exterior(2R) 30-7-0 to 34-11-13, Interior(1) 34-11-13 to 37-7-15 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 85 lb uplift at joint 2 and 98 lb uplift at joint 11.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 8) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



April 8,2025

Job Truss Truss Type Qty Ply Lot 18 Magnolia Hills 172558347 ROOF SPECIAL J0225-1016 A7 Job Reference (optional) Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 06:23:58 2025 Page 1 Comtech, Inc. ID:3YJEg_u8zX16RsP?VvW_V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 17-3-8 21-3-8 30-7-0 32-7-0 36-7-0 37-9-8 4-0-0 1-2-8

6x6 =

4-0-0

9-3-8

4-0-0

8.00 12 6 23 2x6 = 2x6 = 22 5 4x8 / 4x8 💸 21 3x10 | 8 4x6 // 2x6 || 3x10 || 5x8 =3 0 0 -¹⁵ 14 18 17 13 4x4 = 2x4 || 6x12 = 4x6 = 6x8 =4x8 = 4x8 =4x6 =

6-7-12 21-3-8 21_T7-0 30-7-0 36-7-0 6-7-12 6-7-12 4-0-0 4-0-0 0-3-8 9-0-0 4-0-0

4x4 =

Plate Offsets (X,Y)--[9:0-2-12,0-3-8], [10:0-3-4,0-3-6], [14:0-2-8,0-2-8], [15:0-2-8,0-2-0], [17:0-1-8,0-2-12] LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defl L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.40 Vert(LL) -0.32 13-14 >999 360 MT20 244/190 **TCDL** -0.50 13-14 10.0 Lumber DOL 1.15 BC 0.89 Vert(CT) >869 240 WB **BCLL** 0.0 Rep Stress Incr YES 0.77 Horz(CT) 0.08 n/a n/a **BCDL** 10.0 Code IRC2021/TPI2014 Matrix-S Wind(LL) 0.23 13-14 >999 240 Weight: 305 lb FT = 20%

LUMBER-

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

2x4 SP No.2 *Except* WFBS 5-7: 2x6 SP No.1

BRACING-TOP CHORD

JOINTS

Structural wood sheathing directly applied or 4-7-6 oc purlins, except

2-0-0 oc purlins (4-3-11 max.): 9-10.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. WEBS T-Brace: 2x4 SPF No.2 - 9-14

Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.

Brace must cover 90% of web length. 1 Brace at Jt(s): 21

REACTIONS. (size) 2=0-3-8, 11=0-3-8

Max Horz 2=-294(LC 10)

Max Uplift 2=-90(LC 12), 11=-102(LC 13) Max Grav 2=1818(LC 19), 11=1778(LC 20)

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

TOP CHORD 2-3=-2650/392, 3-5=-2262/447, 5-6=-790/131, 6-7=-813/133, 7-9=-2328/423,

9-10=-3314/541, 10-11=-2705/423

BOT CHORD 2-18=-202/2296, 17-18=-202/2296, 14-17=-114/1916, 13-14=-387/3222, 11-13=-250/2154 **WEBS** 3-17=-494/222, 9-13=-1092/297, 10-13=-258/1807, 9-14=-1569/323, 5-19=-1313/415,

19-21=-1313/415, 20-21=-1313/415, 7-20=-1313/415, 17-19=-16/684, 14-20=0/813,

6-21=0/548

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-0-15 to 3-3-14, Interior(1) 3-3-14 to 17-3-8, Exterior(2R) 17-3-8 to 21-8-5, Interior(1) 21-8-5 to 32-7-0, Exterior(2R) 32-7-0 to 36-11-13, Interior(1) 36-11-13 to 37-7-15 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 90 lb uplift at joint 2 and 102 lb uplift at joint 11.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 8) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



April 8,2025

Scale = 1:88.1

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 18 Magnolia Hills 172558348 J0225-1016 ROOF SPECIAL GIRDER **A8** Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 06:23:59 2025 Page 1

34-7-0

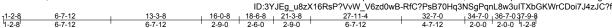
Structural wood sheathing directly applied or 4-4-2 oc purlins, except

10-17

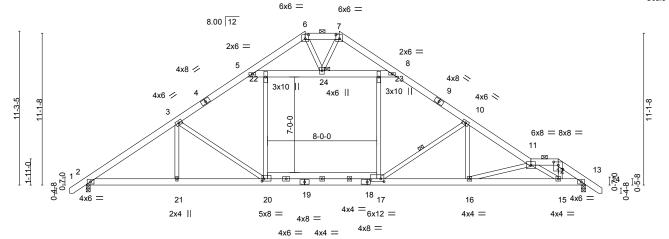
2-0-0 oc purlins (5-7-13 max.): 6-7, 11-12.

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

36-7-0



Scale = 1:84.4



		6-7-1		6-7-12	1 2-9-		0-3-8 6-4	-	' 6	i-7-12	
Plate Offs	Plate Offsets (X,Y) [6:0-3-0,0-3-6], [7:0-3-0,0-3-6], [12:0-4-0,0-2-13], [17:0-2-12,0-2-8], [18:0-2-12,0-2-0], [20:0-1-8,0-2-0]										
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.25 16-17	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.39 16-17	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.73	Horz(CT)	0.08 13	n/a	n/a		
BCDL	10.0	Code IRC2021/TI	PI2014	Matri	<-S	Wind(LL)	0.17 16-17	>999	240	Weight: 315 lb	FT = 20%

16-0-8 18-6-8 21-3-8 21_T7-0

BRACING-

TOP CHORD

BOT CHORD

WEBS

JOINTS

27-11-4

1 Row at midpt

1 Brace at Jt(s): 24

LUMBER-

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

2x4 SP No.2 *Except* WFBS

5-8: 2x6 SP No.1

REACTIONS. (size) 2=0-3-8, 13=0-3-8 Max Horz 2=273(LC 28)

Max Uplift 2=-86(LC 8), 13=-100(LC 9) Max Grav 2=1802(LC 35), 13=1778(LC 36)

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

TOP CHORD 2-3=-2630/123, 3-5=-2186/151, 5-6=-843/54, 6-7=-771/61, 7-8=-836/57, 8-10=-2229/141, 10-11=-3100/160, 11-12=-1912/70, 12-13=-2570/63

BOT CHORD 2-21=-135/2266, 20-21=-135/2266, 17-20=0/1858, 16-17=-21/2538, 15-16=-141/3898,

13-15=-6/2028

WEBS 3-20=-499/192, 20-22=0/694, 17-23=0/860, 11-15=-2402/165, 12-15=0/1343,

10-17=-1075/208, 10-16=0/724, 11-16=-1421/126, 5-22=-1200/173, 22-24=-1200/173,

23-24=-1158/167, 8-23=-1158/167, 7-24=-71/342, 6-24=-60/451

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) 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

13-3-8

- 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 86 lb uplift at joint 2 and 100 lb uplift at joint 13.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 68 lb down and 29 lb up at 34-7-0 on top chord, and 8 lb down at 34-7-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Vert: 1-6=-60, 6-7=-60, 7-11=-60, 11-12=-60, 12-14=-60, 2-13=-20



April 8,2025

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

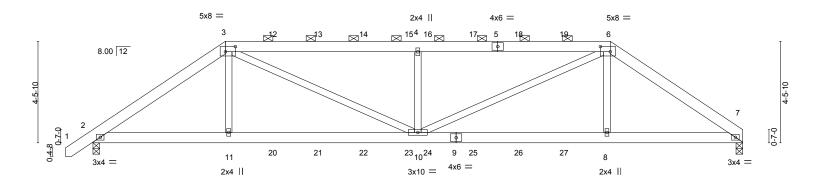
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall

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300	11055	Truss Type	Qiy	riy	LUL TO MAYITUHA HIHS		
						17	2558349
J0225-1016	B1	HIP GIRDER	1	2			
					Job Reference (optiona)	
Comtech, Inc, Fay	etteville, NC - 28314,		8	.630 s Sep	26 2024 MiTek Industrie	es, Inc. Mon Apr 7 06:24:00 2025 Pa	age 1
			ID:3YJEg_u8zX16R	sP?VvW_	V6zd0wB-RfC?PsB70Hq	3NSgPqnL8w3uITXbGKWrCDoi7J4z	JC?f
1-2-8 _	5-10-0	14-3-12		22-9-	8	28-7-8	
1-2-8	5-10-0	8-5-12		8-5-1	2	5-10-0	

Scale = 1:50.8



	5-10-0		14-3-12	1		22-9	9-8		28-7-8	
	5-10-0		8-5-12			8-5-	12		5-10-0	
Plate Offsets (X,Y) [3:0-	5-4,0-2-12], [6:0-5-4,0)-2-12]								
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 0.32	Vert(L	.) -0.07	10	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.28	Vert(C	r) -0.13	10-11	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.21	Horz(C	Ť) 0.04	7	n/a	n/a		
BCDL 10.0	Code IRC2021/TPI	12014	Matrix-S	Wind(I	L) 0.07	10	>999	240	Weight: 372 lb	FT = 20%
				`	,				· ·	

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WFBS 2x4 SP No.2

REACTIONS. (size) 7=0-3-8, 2=0-3-8

Max Horz 2=106(LC 28) Max Uplift 7=-483(LC 9), 2=-501(LC 8)

Max Grav 7=2100(LC 1), 2=2177(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-3=-3447/843, 3-4=-4284/1127, 4-6=-4285/1127, 6-7=-3431/844 TOP CHORD **BOT CHORD** 2-11=-732/2755, 10-11=-731/2776, 8-10=-646/2782, 7-8=-647/2761 WFBS 3-11=0/714, 3-10=-536/1723, 4-10=-1085/640, 6-10=-536/1720, 6-8=0/716

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 0-9-0 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 7-16; Vult=130mph (3-second gust) 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) Provide adequate drainage to prevent water ponding.
- 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 483 lb uplift at joint 7 and 501 lb uplift at
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord
- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 134 lb down and 118 lb up at 5-10-0, 139 lb down and 115 lb up at 7-10-12, 139 lb down and 115 lb up at 9-10-12, 139 lb down and 115 lb up at 11-10-12, 139 lb down and 115 lb up at 13-10-12, 139 lb down and 115 lb up at 14-8-12, 139 lb down and 115 lb up at 16-8-12, 139 lb down and 115 lb up at 18-8-12, and 139 lb down and 115 lb up at 20-8-12, and 134 lb down and 118 lb up at 22-9-8 on top chord, and 336 lb down and 119 lb up at 5-10-0, 73 lb down at 7-10-12, 73 lb down at 9-10-12, 73 lb down at 11-10-12, 73 lb down at 13-10-12, 73 lb down at 14-8-12, 73 lb down at 16-8-12, 73 lb down at 18-8-12, and 73 lb down at 20-8-12, and 336 lb down and 119 lb up at 22-8-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



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

2-0-0 oc purlins (6-0-0 max.): 3-6.

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

April 8,2025

LOAD CASE(S) Standard

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 a duss system. Before use, the culturing design 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 18 Magnolia Hills
			l			172558349
	J0225-1016	B1	HIP GIRDER	1	2	Lik D. Connection Control
L					_	Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 06:24:00 2025 Page 2 ID:3YJEg_u8zX16RsP?VvW_V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

LOAD CASE(S) Standard

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

Vert: 1-3=-60, 3-6=-60, 6-7=-60, 2-7=-20

Concentrated Loads (lb)

23=-36(F) 24=-36(F) 25=-36(F) 26=-36(F) 26=-36(F) 27=-36(F) 27=-36(F) 27=-36(F) 26=-36(F) 26=-36

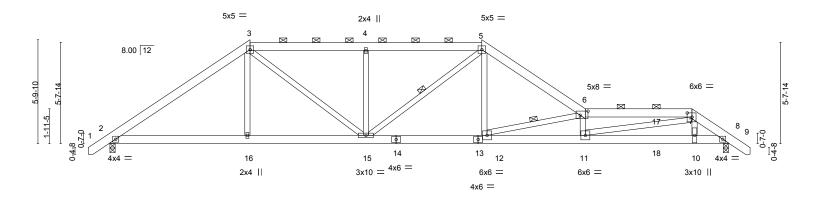


818 Soundside Road Edenton, NC 27932

Job Truss Truss Type Qty Ply Lot 18 Magnolia Hills 172558350 J0225-1016 B2 ROOF SPECIAL GIRDER Job Reference (optional) Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 06:24:00 2025 Page 1 Comtech, Inc. ID:3YJEg_u8zX16RsP?VvW_V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 34-7-0 35-9-8 2-0-8 1-2-8 7-10-0 7-10-0 14-3-12 26-7-0

6-5-12

Scale: 3/16"=1"



⊢	7-10-0	14-3-12	20-9-8	26-7-0	32-6-8	34-7-0
	7-10-0	6-5-12	6-5-12	5-9-8	5-11-8	2-0-8
Plate Offsets (X,Y)	[6:0-5-4,0-2-12], [7:0-3-4,0-2-12]					
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 0.51	Vert(LL) -0.26	11-12 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.57	Vert(CT) -0.53	11-12 >776 240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.83	Horz(CT) 0.07	8 n/a n/a		
BCDL 10.0	Code IRC2021/TPI2014	Matrix-S	Wind(LL) 0.18	11-12 >999 240	Weight: 242 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

TOP CHORD 2x6 SP No 1

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

8-13: 2x6 SP 2400F 2.0E

WFBS 2x4 SP No.2

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

Max Horz 2=142(LC 28)

Max Uplift 2=-39(LC 8), 8=-93(LC 9)

Max Grav 2=1445(LC 1), 8=1445(LC 1)

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

TOP CHORD 2-3=-2078/53, 3-4=-2225/85, 4-5=-2225/85, 5-6=-2717/82, 6-7=-5290/211,

7-8=-2543/104

BOT CHORD 2-16=-78/1610, 15-16=-80/1605, 12-15=0/2203, 11-12=-136/5193, 10-11=-48/1988,

8-10=-42/2029

3-16=0/325, 3-15=-138/880, 4-15=-451/161, 5-12=0/1051, 6-12=-3058/216,

6-11=-971/107, 7-11=-102/3398, 7-10=0/463

NOTES-

WEBS

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) 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
- 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.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 39 lb uplift at joint 2 and 93 lb uplift at
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 64 lb down and 27 lb up at 30-5-12, and 132 lb down and 62 lb up at 32-6-8 on top chord, and 6 lb down at 30-5-12, and 15 lb down at 32-5-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Vert: 1-3=-60, 3-5=-60, 5-6=-60, 6-7=-60, 7-9=-60, 2-8=-20



Structural wood sheathing directly applied or 4-5-1 oc purlins, except

5-15, 6-12

2-0-0 oc purlins (3-1-1 max.): 3-5, 6-7.

1 Row at midpt

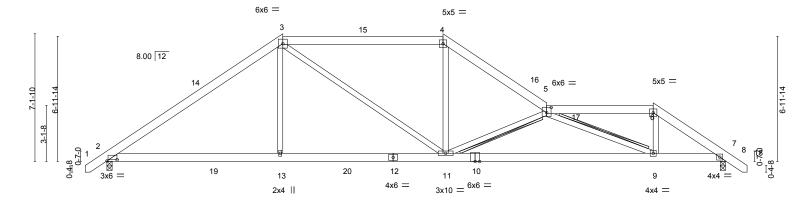
Rigid ceiling directly applied or 10-0-0 oc bracing.



Job Truss Truss Type Qty Ply Lot 18 Magnolia Hills 172558351 J0225-1016 ВЗ ROOF SPECIAL Job Reference (optional) Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 06:24:01 2025 Page 1 Comtech, Inc.

ID:3YJEg_u8zX16RsP?VvW_V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 18-9-8 24-7-0 30-6-8 34-7-0 8-11-8 9-10-0 5-9-8 4-0-8

Scale: 3/16"=1"



⊢	9-10-0 9-10-0	18-9-8 8-11-8	30-6-8 11-9-0	34-7-0 4-0-8
Plate Offsets (X,Y)	[2:0-6-12,0-0-13], [5:0-3-0,0-3-8]			
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2021/TPI2014	CSI. DEFL. TC 0.56 Vert(LL BC 0.71 Vert(CT WB 0.54 Horz(C Matrix-S Wind(Ll	r) -0.37 9-11 >999 240 Γ) 0.08 7 n/a n/a	PLATES GRIP MT20 244/190 Weight: 235 lb FT = 20%

LUMBER-BRACING-

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

BOT CHORD WEBS

TOP CHORD Structural wood sheathing directly applied or 4-0-15 oc purlins, except

2-0-0 oc purlins (4-10-14 max.): 3-4, 5-6.

Rigid ceiling directly applied or 9-7-10 oc bracing.

2x4 SPF No.2 - 5-11, 5-9

Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.

Brace must cover 90% of web length.

REACTIONS. (size) 2=0-3-8, 7=0-3-8

Max Horz 2=-173(LC 10)

Max Uplift 2=-51(LC 12), 7=-96(LC 13) Max Grav 2=1681(LC 2), 7=1581(LC 2)

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

TOP CHORD 2-3=-2364/403, 3-4=-2100/475, 4-5=-2598/500, 5-6=-2007/356, 6-7=-2575/388 **BOT CHORD** 2-13=-163/1850, 11-13=-165/1837, 9-11=-655/3858, 7-9=-221/2070

WEBS 3-13=0/672, 3-11=-100/504, 4-11=-64/1029, 5-11=-1927/512, 5-9=-2027/479,

6-9=-67/1175

NOTES-

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-0-15 to 3-3-14, Interior(1) 3-3-14 to 9-10-0, Exterior(2R) 9-10-0 to 14-2-13, Interior(1) 14-2-13 to 18-9-8, Exterior(2R) 18-9-8 to 23-2-5, Interior(1) 23-2-5 to 30-6-8, Exterior(2R) 30-6-8 to 34-11-5, Interior(1) 34-11-5 to 35-7-15 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 51 lb uplift at joint 2 and 96 lb uplift at joint 7.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 8) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 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 18 Magnolia Hills 172558352 J0225-1016 **B4** ROOF SPECIAL Job Reference (optional) Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 06:24:02 2025 Page 1 Comtech, Inc.

ID:3YJEg_u8zX16RsP?VvW_V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 6-2-14 6-2-14 16-9-8 22-7-0 5-9-8 28-6-8 34-7-0 11-10-0 4-11-8 6-0-8

Scale: 3/16"=1

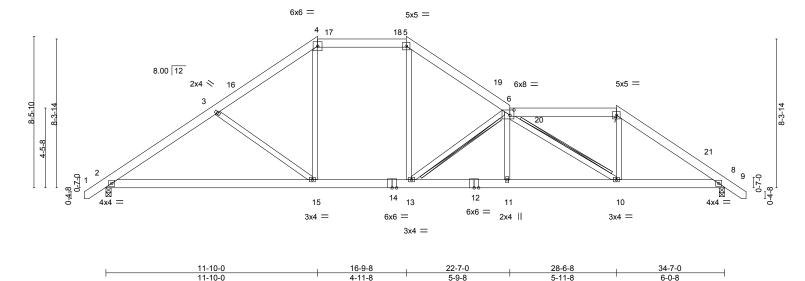


Plate Offsets (X,Y)	ate Offsets (X,Y) [6:0-2-12,0-3-8]									
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP						
TCLL 20.0	Plate Grip DOL 1.15	TC 0.28	Vert(LL) -0.25 11-13 >999 360	MT20 244/190						
TCDL 10.0	Lumber DOL 1.15	BC 0.72	Vert(CT) -0.41 11-13 >998 240							
BCLL 0.0 *	Rep Stress Incr YES	WB 0.45	Horz(CT) 0.07 8 n/a n/a							
BCDL 10.0	Code IRC2021/TPI2014	Matrix-S	Wind(LL) 0.17 11-13 >999 240	Weight: 244 lb FT = 20%						

LUMBER-

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

BOT CHORD

2x4 SP No.2 WFBS

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-11-11 oc purlins,

2-0-0 oc purlins (5-7-5 max.): 4-5, 6-7. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing.

WEBS 2x4 SPF No.2 - 6-13, 6-10

Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.

Brace must cover 90% of web length.

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

Max Horz 2=205(LC 11)

Max Uplift 2=-64(LC 12), 8=-105(LC 13) Max Grav 2=1637(LC 19), 8=1584(LC 2)

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

TOP CHORD 2-3=-2288/485, 3-4=-2071/453, 4-5=-1663/441, 5-6=-2116/469, 6-7=-1861/413,

BOT CHORD 2-15=-289/1950, 13-15=-112/1682, 11-13=-426/3019, 10-11=-428/3009, 8-10=-225/1897

WEBS 3-15=-315/218, 4-15=-51/744, 5-13=-130/956, 6-13=-1648/411, 6-11=0/322,

6-10=-1378/251, 7-10=-68/993

NOTES-

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-0-15 to 3-3-14, Interior(1) 3-3-14 to 11-10-0, Exterior(2R) 11-10-0 to 16-2-13, Interior(1) 16-2-13 to 16-9-8, Exterior(2R) 16-9-8 to 21-2-5, Interior(1) 21-2-5 to 28-6-8, Exterior(2R) 28-6-8 to 32-11-5, Interior(1) 32-11-5 to 35-7-15 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 64 lb uplift at joint 2 and 105 lb uplift at ioint 8.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 8) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



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

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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 18 Magnolia Hills 172558353 J0225-1016 ROOF SPECIAL B5 Job Reference (optional) Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 06:24:02 2025 Page 1 Comtech, Inc. ID:3YJEg_u8zX16RsP?VvW_V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 13-10-0 20-7-0 _ 26-6-8 34-7-0

5-9-8

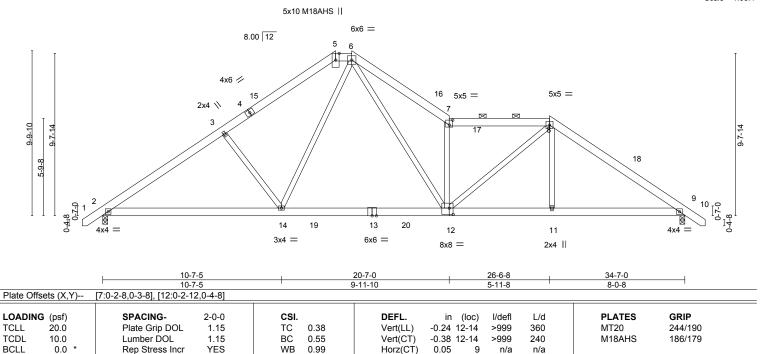
6-7-3

Scale = 1:68.4

8-0-8

Weight: 248 lb

FT = 20%



Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

0.09 12-14

>999

240

2-0-0 oc purlins (4-11-1 max.): 5-6, 7-8.

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

Structural wood sheathing directly applied or 4-0-10 oc purlins,

LUMBER-TOP CHORD

BCDL

2x6 SP No 1 2x6 SP No.1

BOT CHORD 2x4 SP No.2 WFBS

10.0

REACTIONS. (size) 2=0-3-8, 9=0-3-8 Max Horz 2=237(LC 11)

Max Uplift 2=-75(LC 12), 9=-112(LC 13)

Max Grav 2=1672(LC 19), 9=1602(LC 20)

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

Code IRC2021/TPI2014

TOP CHORD 2-3=-2302/427, 3-5=-2115/462, 5-6=-1760/464, 6-7=-3079/713, 7-8=-2469/505,

8-9=-2292/412

 $2\text{-}14\text{--}232/1981,\ 12\text{--}14\text{--}50/1474,\ 11\text{--}12\text{--}179/1799,\ 9\text{--}11\text{--}178/1806}$ BOT CHORD

WEBS $3-14=-311/251,\ 6-14=-82/822,\ 6-12=-427/2031,\ 7-12=-1979/535,\ 8-12=-121/947,$

8-11=0/301

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-0-15 to 3-3-14, Interior(1) 3-3-14 to 13-10-0, Exterior(2E) 13-10-0 to 14-9-8, Exterior(2R) 14-9-8 to 19-2-5, Interior(1) 19-2-5 to 26-6-8, Exterior(2R) 26-6-8 to 30-11-5, Interior(1) 30-11-5 to 35-7-15 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

Matrix-S

- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 75 lb uplift at joint 2 and 112 lb uplift at joint 9.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.





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

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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)



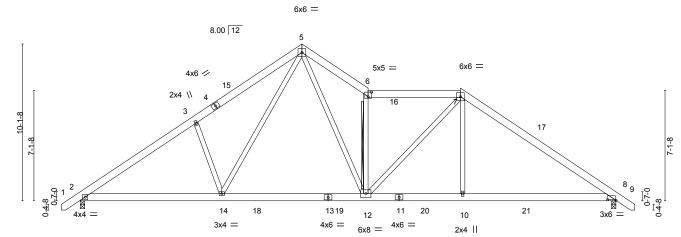
Job Truss Truss Type Qty Ply Lot 18 Magnolia Hills 172558354 ROOF SPECIAL J0225-1016 B6 Job Reference (optional) Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 06:24:03 2025 Page 1 Comtech, Inc.

14-3-12 6-10-1

ID:3YJEg_u8zX16RsP?VvW_V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 24-6-8 18-7-0 34-7-0

10-0-8

Scale = 1:74.4



	9-1-11	18-7-0	24-6-8	34-7-0
	9-1-11	9-5-5	5-11-8	10-0-8
N-4- Off4- (V/ V/)	10.0.0.0.0.0.1.10.0.0.0.0.0.0.0			

Plate Oil	Sels (A, Y)	[0.0-2-8,0-3-8], [8.0-6-8,0-0-9]				
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc)	l/defl L/d	PLATES GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.61	Vert(LL) -0.19 12-14	>999 360	MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.56	Vert(CT) -0.29 12-14	>999 240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.60	Horz(CT) 0.06 8	n/a n/a	
BCDL	10.0	Code IRC2021/TPI2014	Matrix-S	Wind(LL) 0.06 8-10	>999 240	Weight: 253 lb FT = 20%

LUMBER-TOP CHORD 2x6 SP No 1

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-10-7 oc purlins,

except

2-0-0 oc purlins (5-2-9 max.): 6-7.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. WEBS

2x4 SPF No.2 - 6-12 Fasten (2X) T and I braces to narrow edge of web with 10d

(0.131"x3") nails, 6in o.c., with 3in minimum end distance.

Brace must cover 90% of web length.

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

Max Horz 2=246(LC 11)

Max Uplift 2=-78(LC 12), 8=-113(LC 13) Max Grav 2=1734(LC 19), 8=1752(LC 20)

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

TOP CHORD 2-3=-2492/411, 3-5=-2392/532, 5-6=-2609/610, 6-7=-2185/458, 7-8=-2418/397 **BOT CHORD** 2-14=-217/2134, 12-14=-37/1543, 10-12=-138/1902, 8-10=-136/1913

WEBS 3-14=-408/289, 5-14=-181/966, 5-12=-322/1766, 6-12=-1616/433, 7-12=-56/502,

7-10=0/581

NOTES-

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-0-15 to 3-3-14, Interior(1) 3-3-14 to 14-3-12, Exterior(2E) 14-3-12 to 18-7-0, Interior(1) 18-7-0 to 24-6-8, Exterior(2R) 24-6-8 to 28-11-5, Interior(1) 28-11-5 to 35-7-15 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 78 lb uplift at joint 2 and 113 lb uplift at joint 8.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 8) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



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

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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 18 Magnolia Hills 172558355 J0225-1016 В7 ROOF SPECIAL Job Reference (optional)

4x6 =

Fayetteville, NC - 28314, Comtech, Inc.

1-2-8

6-7-12

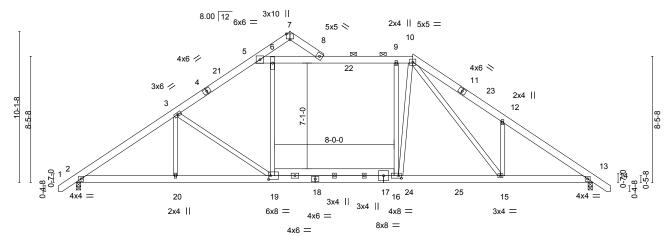
8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 06:24:03 2025 Page 1 ID:3YJEg_u8zX16RsP?VvW_V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Scale = 1:77.2

Structural wood sheathing directly applied or 3-9-3 oc purlins, except

2-0-0 oc purlins (5-1-3 max.): 5-10.

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



	6-7-12	13-3-8	16-7-0	21-3-8	21 _T 7-0	34-7-0
	6-7-12	6-7-12	3-3-8	4-8-8	0-3 ¹ -8	13-0-0
Plate Offsets (X,Y) [7:0-3	-0,Edge], [16:0-2-4,0-2-0],	[19:0-1-8,0-3-0]				

BRACING-

TOP CHORD

BOT CHORD

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 0.77	Vert(LL) -0.30 15-16 >999 36	60 MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.80	Vert(CT) -0.43 15-16 >965 24	40
BCLL	0.0 *	Rep Stress Incr YES	WB 0.44	Horz(CT) 0.07 13 n/a n	/a
BCDL	10.0	Code IRC2021/TPI2014	Matrix-S	Wind(LL) 0.14 15-16 >999 24	Weight: 283 lb FT = 20%

LUMBER-

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

2x4 SP No.2 WFBS

REACTIONS. (size) 2=0-3-8, 13=0-3-8 Max Horz 2=-246(LC 10)

Max Uplift 2=-78(LC 12), 13=-113(LC 13) Max Grav 2=1742(LC 19), 13=1743(LC 20)

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

TOP CHORD 2-3=-2484/394, 3-5=-2097/422, 5-6=-1723/418, 6-8=-1723/418, 8-9=-1809/430,

9-10=-1813/433, 10-12=-2615/579, 12-13=-2614/404

 $2-20 = -207/2109,\ 19-20 = -207/2109,\ 16-19 = -101/1873,\ 15-16 = -84/1766,\ 13-15 = -212/2070$ BOT CHORD **WEBS**

6-19=0/592, 9-16=-313/274, 3-19=-414/186, 12-15=-301/267, 10-15=-249/774,

10-16=-235/738

NOTES-

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-0-15 to 3-3-14, Interior(1) 3-3-14 to 14-3-12, Exterior(2E) 14-3-12 to 16-7-0, Interior(1) 16-7-0 to 22-6-8, Exterior(2R) 22-6-8 to 26-11-5, Interior(1) 26-11-5 to 35-7-15 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 78 lb uplift at joint 2 and 113 lb uplift at
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



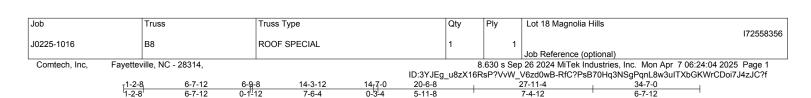
April 8,2025

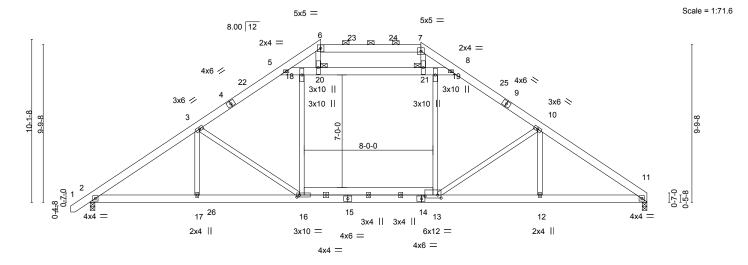
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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	6-7-12	13-3-8	14-7-0	20-6-8	27-11-4	34-7-0
	6-7-12	6-7-12	1-3-8	5-11-8	7-4-12	6-7-12
Plate Offsets (X,Y) [13:	0-2-8,0-2-4], [14:0-2-8,0-2-0]], [16:0-2-0,0-1-8]				

LOADIN	G (psf)	SPACING- 2-0	i-O	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.	15	TC	0.23	Vert(LL)	-0.21 16-17	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL 1.	15	BC	0.62	Vert(CT)	-0.26 16-17	>999	240		
BCLL	0.0 *	Rep Stress Incr YE	S	WB	0.73	Horz(CT)	0.06 11	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI201	4	Matri	x-S	Wind(LL)	0.12 12-13	>999	240	Weight: 284 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

JOINTS

LUMBER-

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

2x4 SP No.2 *Except* WFBS

5-8: 2x6 SP No.1

REACTIONS. (size) 2=0-3-8, 11=0-3-8 Max Horz 2=234(LC 9)

Max Uplift 2=-78(LC 12), 11=-59(LC 13) Max Grav 2=1807(LC 19), 11=1665(LC 20)

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

2-3=-2691/410, 3-5=-2106/429, 5-6=-1271/263, 6-7=-1033/242, 7-8=-1332/267, TOP CHORD

8-10=-2084/432. 10-11=-2512/411

BOT CHORD 2-17=-261/2293, 16-17=-261/2293, 13-16=-118/1717, 12-13=-245/1992, 11-12=-245/1992

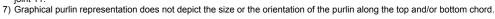
WEBS 3-17=0/381, 16-18=-9/814, 13-19=-15/696, 3-16=-702/190, 10-12=0/261,

10-13=-547/195, 5-18=-653/217, 18-20=-653/217, 20-21=-690/218, 19-21=-642/219,

8-19=-642/219, 6-20=-14/493, 7-21=-17/560

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-0-15 to 3-3-14, Interior(1) 3-3-14 to 14-3-12, Exterior(2R) 14-3-12 to 18-8-9, Interior(1) 18-8-9 to 20-6-8, Exterior(2R) 20-6-8 to 24-11-5, Interior(1) 24-11-5 to 34-5-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 78 lb uplift at joint 2 and 59 lb uplift at





Structural wood sheathing directly applied or 4-7-8 oc purlins, except

2-0-0 oc purlins (6-0-0 max.): 6-7.

1 Brace at Jt(s): 20, 21

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





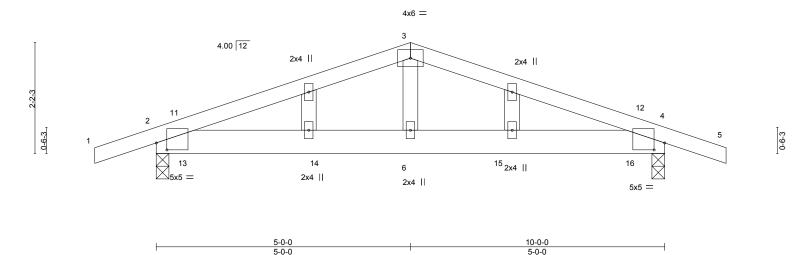
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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Job		Truss	Truss Type	Qty	у	Ply	Lot 18 Magnolia Hills		
									172558357
J0225-1016		C1SG	GABLE	1		1			
							Job Reference (optional)		
Comtech, Inc,	Fayettev	rille, NC - 28314,			8.	630 s Sep	26 2024 MiTek Industries, Inc. Mon A	pr 7 06:24:04 202!	5 Page 1
	•		IC	D:3YJEg u8:	zX16Rs	sP?VvW \	/6zd0wB-RfC?PsB70Hq3NSgPqnL8w3	3uITXbGKWrCDoi7	J4zJC?f
1	-1-2-8	1	5-0-0			_	10-0-0	11-2-8	
	1-2-8		5-0-0				5-0-0	1-2-8	

Scale = 1:22.7



					5-0-0						5-0-0			
Plate Offse	ets (X,Y)	[2:0-2-8,	0-1-10], [4:0-2-8,	0-1-10]										
LOADING	(psf)	S	PACING-	2-0-0	C	SI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	20.0	PI	late Grip DOL	1.15	TO	0.4	12	Vert(LL)	0.05	2-6	>999	240	MT20	244/190
TCDL	10.0	Lu	umber DOL	1.15	BO	0.1	18	Vert(CT)	-0.02	6	>999	240		
BCLL	0.0 *	R	ep Stress Incr	YES	W	B 0.0	06	Horz(CT)	-0.01	4	n/a	n/a		
BCDL	10.0	C	ode IRC2021/TF	PI2014	M	atrix-S							Weight: 48 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

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

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

Max Horz 2=42(LC 12)

Max Uplift 2=-270(LC 8), 4=-270(LC 9)

Max Grav 2=470(LC 1), 4=470(LC 1)

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

TOP CHORD 2-3=-647/1554, 3-4=-647/1554 BOT CHORD 2-6=-1332/556, 4-6=-1332/556

WEBS 3-6=-660/232

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-2-8 to 3-2-5, Exterior(2N) 3-2-5 to 5-0-0, Corner(3R) 5-0-0 to 9-4-13, Exterior(2N) 9-4-13 to 11-2-8 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.
- 4) 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.
- 6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 270 lb uplift at joint 2 and 270 lb uplift at joint 4.



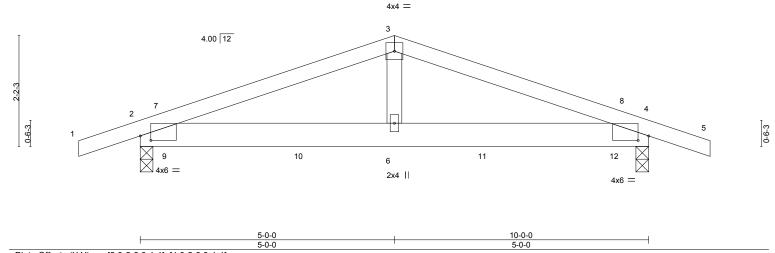
Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 6-5-5 oc bracing.

April 8,2025

Job		Truss	Truss Type	(Qty	Ply	Lot 18 Magnolia Hills		
									172558358
J0225-1016		C2	COMMON	- 4	4	1			
							Job Reference (optional)		
Comtech, Inc,	Fayettev	rille, NC - 28314,			8.	.630 s Sep	26 2024 MiTek Industries, Inc. Mon Ap	pr 7 06:24:05 202	25 Page 1
	•		II	D:3YJEg_i	u8zX16R	sP?VvW_\	V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3	BulTXbGKWrCDoi	7J4zJC?f
1	-1-2-8	1	5-0-0			_	10-0-0	11-2-8	
	1-2-8		5-0-0				5-0-0	1-2-8	

Scale = 1:22.7



_Plate Off	sets (X,Y)	[2:0-2-8,0-1-1], [4:0-2-8,0-1-1]		
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 0.35	Vert(LL) -0.01 6 >999 360 MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.16	Vert(CT) -0.02 6 >999 240
BCLL	0.0 *	Rep Stress Incr YES	WB 0.05	Horz(CT) -0.01 4 n/a n/a
BCDL	10.0	Code IRC2021/TPI2014	Matrix-S	Wind(LL) 0.04 2-6 >999 240 Weight: 45 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

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

Max Horz 2=25(LC 12)

Max Uplift 2=-190(LC 8), 4=-190(LC 9) Max Grav 2=470(LC 1), 4=470(LC 1)

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

TOP CHORD 2-3=-647/1203. 3-4=-647/1203 BOT CHORD 2-6=-1038/556, 4-6=-1038/556

WFBS 3-6=-511/232

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-2-8 to 3-2-5, Interior(1) 3-2-5 to 5-0-0, Exterior(2R) 5-0-0 to 9-4-13, Interior(1) 9-4-13 to 11-2-8 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip
- 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 190 lb uplift at joint 2 and 190 lb uplift at joint 4.



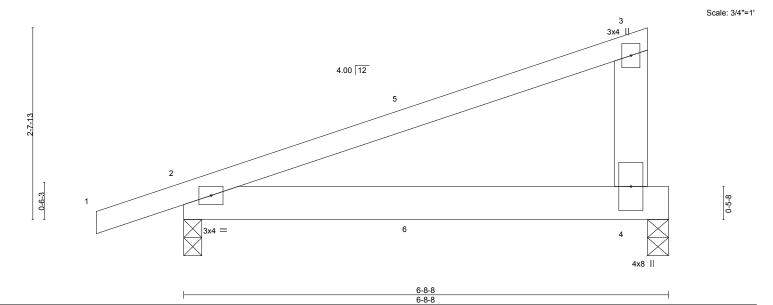
Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 7-3-14 oc bracing.

April 8,2025



Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 06:24:05 2025 Page 1 Comtech, Inc. ID:F7e3nXrh6oAXz?Vjil5mfhz3PFB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.68	Vert(LL)	-0.02 2-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.29	Vert(CT)	-0.04 2-4	>999	240		
BCLL	0.0 *	Rep Stress Incr NO	WB 0.00	Horz(CT)	0.00	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014	Matrix-P	Wind(LL)	0.07 2-4	>999	240	Weight: 32 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

2x6 SP No.1 WFBS

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

Max Horz 2=85(LC 8)

Max Uplift 4=-294(LC 8), 2=-134(LC 8) Max Grav 4=734(LC 1), 2=331(LC 1)

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

TOP CHORD 3-4=-173/274

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-2-8 to 3-2-5, Interior(1) 3-2-5 to 6-2-4 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 294 lb uplift at joint 4 and 134 lb uplift at ioint 2.
- 5) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 500 lb down and 1091 lb up at 6-2-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 6) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Vert: 1-3=-60, 2-4=-20

Concentrated Loads (lb) Vert: 4=-500(F)

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

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

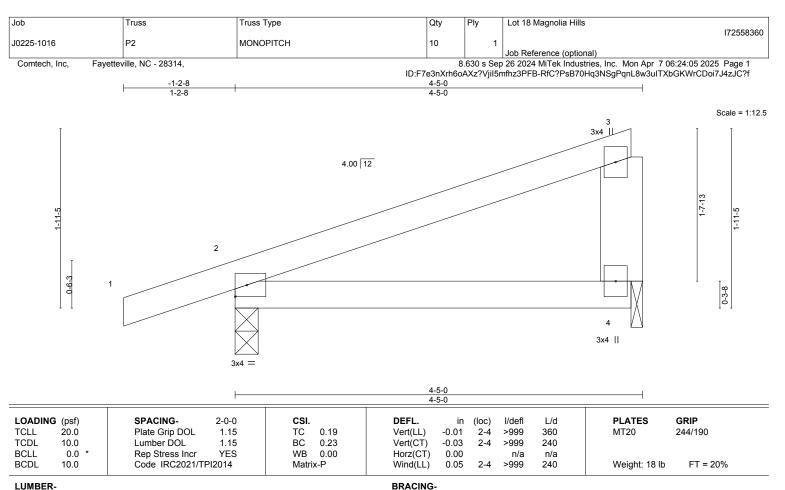
except end verticals.

April 8,2025

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)





TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

2x6 SP No.1 WFBS

> (size) 2=0-3-0, 4=0-1-8 Max Horz 2=62(LC 8)

Max Uplift 2=-109(LC 8), 4=-65(LC 8) Max Grav 2=256(LC 1), 4=149(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-2-8 to 3-2-5, Interior(1) 3-2-5 to 4-2-4 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 109 lb uplift at joint 2 and 65 lb uplift at joint 4.



Structural wood sheathing directly applied or 4-5-0 oc purlins,

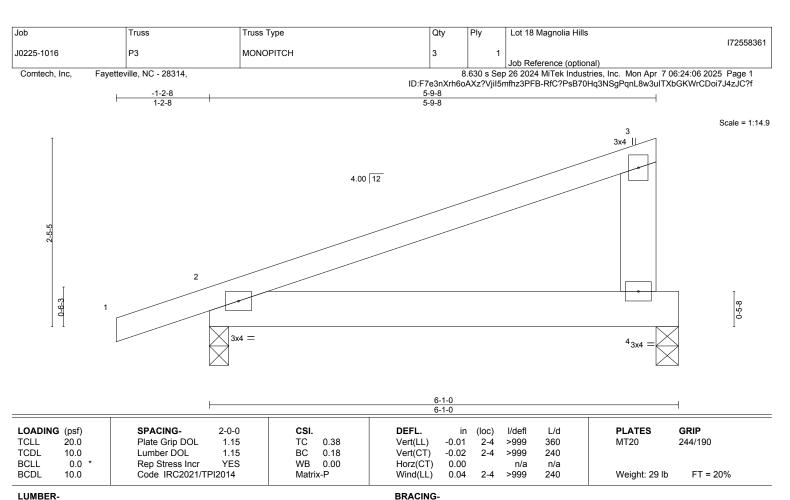
Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

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TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

WFBS

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

2x6 SP No.1

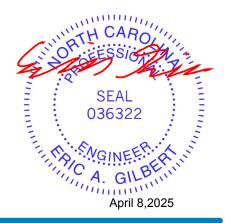
Max Horz 2=78(LC 8) Max Uplift 4=-90(LC 8), 2=-127(LC 8) Max Grav 4=208(LC 1), 2=307(LC 1)

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

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-2-8 to 3-2-5, Interior(1) 3-2-5 to 5-6-12 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 $\,$
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 90 lb uplift at joint 4 and 127 lb uplift at ioint 2.



Structural wood sheathing directly applied or 5-9-8 oc purlins,

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

except end verticals.

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/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 18 Magnolia Hills 172558362 J0225-1016 JACK-OPEN 14 XA1 Job Reference (optional) Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 06:24:06 2025 Page 1 Comtech, Inc. ID:3YJEg_u8zX16RsP?VvW_V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f Scale = 1:26.1 3

4.7.0	8.00 12	4-1-12
0-2-0	1 3x4 = 4	

6-0-0

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 0.50	Vert(LL) -	-0.02 2-4	>999 360	MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.13	Vert(CT) -	-0.03 2-4	>999 240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -	-0.00 3	n/a n/a	
BCDL	10.0	Code IRC2021/TPI2014	Matrix-P	Wind(LL)	0.00 2	**** 240	Weight: 27 lb FT = 20%

LUMBER-

2x4 SP No.1 TOP CHORD BOT CHORD 2x6 SP No 1 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. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical

Max Horz 2=151(LC 12) Max Uplift 3=-105(LC 12)

Max Grav 3=184(LC 19), 2=322(LC 1), 4=116(LC 3)

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

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-2-8 to 3-2-5, Interior(1) 3-2-5 to 5-11-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 105 lb uplift at joint 3.



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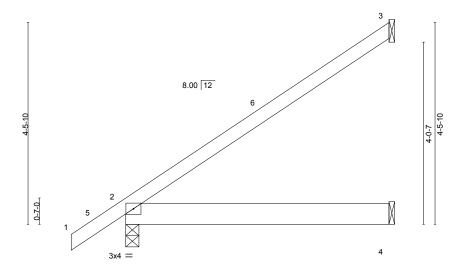
Job	Truss	Truss Type	Qty	Ply	Lot 18 Magnolia Hills
J0225-1016	XB1	JACK-OPEN	10	1	172558363
30223-1010	XDI	SACROI EN	10	'	Job Reference (optional)

Comtech, Inc. Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 06:24:06 2025 Page 1 ID:3YJEg_u8zX16RsP?VvW_V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

5-10-0 5-10-0

Scale = 1:25.5



5-10-0

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	0.47	Vert(LL)	-0.01	2-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.03	2-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2021/TF	PI2014	Matri	x-P	Wind(LL)	0.00	2	****	240	Weight: 27 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD **BOT CHORD** Structural wood sheathing directly applied or 5-10-0 oc purlins.

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

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

Max Horz 2=147(LC 12) Max Uplift 3=-102(LC 12)

Max Grav 3=178(LC 19), 2=316(LC 1), 4=113(LC 3)

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

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-2-8 to 3-2-5, Interior(1) 3-2-5 to 5-9-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 102 lb uplift at joint 3.



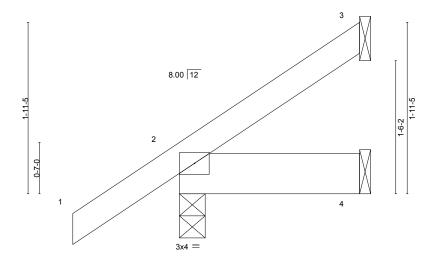


Job		Truss	Truss Type	Qty	Ply	Lot 18 Magnolia Hills	
				_		172558364	1
J022	25-1016	XB2	JACK-OPEN	2	1		
						Llob Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 06:24:07 2025 Page 1

ID:3YJEg_u8zX16RsP?VvW_V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 2-0-8 2-0-8

Scale = 1:13.1



2-0-8 2-0-8

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) -0.00	2	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.01	Vert(CT) -0.00	2	>999	240		
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2021/TPI2014	Matrix-P	Wind(LL) 0.00	2	****	240	Weight: 11 lb	FT = 20%

LUMBER-

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

TOP CHORD BOT CHORD Structural wood sheathing directly applied or 2-0-8 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

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

Max Horz 2=65(LC 12)

Max Uplift 3=-29(LC 12), 2=-16(LC 12)

Max Grav 3=34(LC 19), 2=185(LC 1), 4=37(LC 3)

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

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 3 and 16 lb uplift at joint 2.



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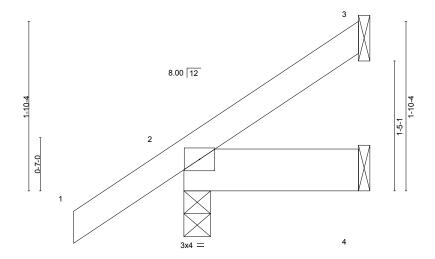
Job	Truss	Truss Type	Qty	Ply	Lot 18 Magnolia Hills
					172558365
J0225-1016	YA1	JACK-OPEN	4	1	
					Llob Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 06:24:07 2025 Page 1 ID:3YJEg_u8zX16RsP?VvW_V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

1-10-15 1-10-15

Scale = 1:12.6



1-10-15 1-10-15

LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.10	Vert(LL)	-0.00	2	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.01	Vert(CT)	-0.00	2	>999	240		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014	Matrix-P	Wind(LL)	0.00	2	****	240	Weight: 10 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD BOT CHORD Structural wood sheathing directly applied or 1-10-15 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical

Max Horz 2=63(LC 12)

Max Uplift 3=-29(LC 12), 2=-15(LC 12)

Max Grav 3=40(LC 19), 2=174(LC 1), 4=37(LC 3)

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

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 3 and 15 lb uplift at joint 2.





Job Truss Truss Type Qty Ply Lot 18 Magnolia Hills 172558366 J0225-1016 JACK-OPEN YA2 Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

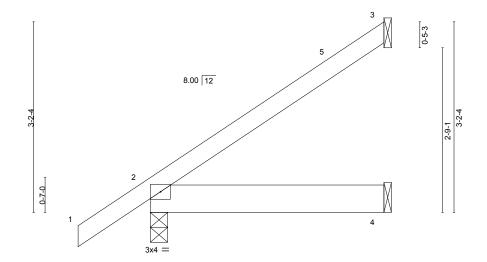
8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 06:24:08 2025 Page 1 ID:3YJEg_u8zX16RsP?VvW_V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Structural wood sheathing directly applied or 3-10-15 oc purlins.

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

3-10-15 3-10-15

Scale = 1:19.3



3-10-15 3-10-15

BRACING-

TOP CHORD

BOT CHORD

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	2-4	>999	360	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.05	Vert(CT) -0.01	2-4	>999	240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.00	3	n/a	n/a	
BCDL 10.0	Code IRC2021/TPI2014	Matrix-P	Wind(LL) 0.00	2	****	240	Weight: 19 lb FT = 20%

LUMBER-

REACTIONS.

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

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical

Max Horz 2=106(LC 12)

Max Uplift 3=-66(LC 12), 2=-6(LC 12)

Max Grav 3=110(LC 19), 2=244(LC 1), 4=74(LC 3)

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

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-2-8 to 3-2-5, Interior(1) 3-2-5 to 3-10-3 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 66 lb uplift at joint 3 and 6 lb uplift at joint 2.



April 8,2025



Job Truss Truss Type Qty Ply Lot 18 Magnolia Hills 172558367 J0225-1016 HALF HIP GIRDER YA3 Job Reference (optional) Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 06:24:08 2025 Page 1 Comtech, Inc. ID:3YJEg_u8zX16RsP?VvW_V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f -1-8-8 1-8-8 Scale = 1:12.4 0-4-9 5.66 12 1-5-11 2 2-8-7 2-8-7 LOADING (psf) SPACING-2-0-0 CSI. DEFL. in I/defl L/d **PLATES** GRIP (loc) **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.19 Vert(LL) -0.00 >999 360 MT20 244/190 TCDL Lumber DOL 1.15 вс 0.02 Vert(CT) -0.00 >999 240 **BCLL** WB 0.00 Horz(CT) 3 0.0 Rep Stress Incr YES -0.00 n/a n/a Code IRC2021/TPI2014 Wind(LL) Weight: 14 lb **BCDL** 10.0 Matrix-P 0.00 240 FT = 20%

> BRACING-TOP CHORD

> BOT CHORD

LUMBER-

REACTIONS.

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

(size) 3=Mechanical, 2=0-4-9, 4=Mechanical Max Horz 2=63(LC 12)

Max Uplift 3=-27(LC 12), 2=-35(LC 12)

Max Grav 3=29(LC 1), 2=256(LC 1), 4=49(LC 3)

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

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 3 and 35 lb uplift at joint 2.



Structural wood sheathing directly applied or 2-8-7 oc purlins.

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



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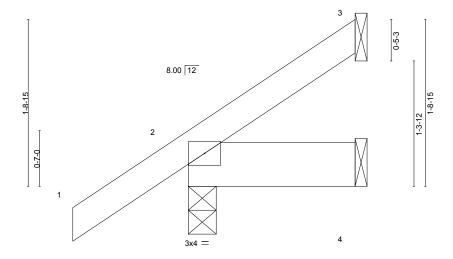
Job Truss Truss Type Qty Ply Lot 18 Magnolia Hills 172558368 J0225-1016 YB1 JACK-OPEN Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 06:24:08 2025 Page 1 ID:3YJEg_u8zX16RsP?VvW_V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

1-8-15 1-8-15

Scale: 1"=1'



1-8-15 1-8-15

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 0.10	Vert(LL) -0.00	2	>999	360	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.01	Vert(CT) -0.00	2	>999	240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.00	3	n/a	n/a	
BCDL 10.0	Code IRC2021/TPI2014	Matrix-P	Wind(LL) 0.00	2	****	240	Weight: 10 lb FT = 20%

LUMBER-

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

TOP CHORD **BOT CHORD** Structural wood sheathing directly applied or 1-8-15 oc purlins.

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

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

Max Horz 2=60(LC 12)

Max Uplift 3=-25(LC 12), 2=-17(LC 12)

Max Grav 3=32(LC 19), 2=169(LC 1), 4=34(LC 3)

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

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 3 and 17 lb uplift at joint 2.



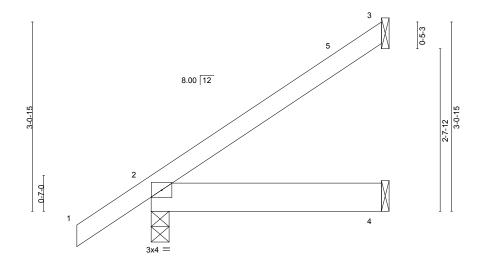
Job	Truss	Truss Type	Qty	Ply	Lot 18 Magnolia Hills
10005 4040	\/D0	IAOK ODEN			172558369
J0225-1016	YB2	JACK-OPEN	4	1	
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 06:24:09 2025 Page 1 ID:3YJEg_u8zX16RsP?VvW_V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

3-8-15 3-8-15

Scale = 1:18.7



3-8-15

LOADING	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	0.16	Vert(LL)	-0.00	2-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	2-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2021/TF	PI2014	Matri	x-P	Wind(LL)	0.00	2	****	240	Weight: 18 lb	FT = 20%

LUMBER-

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

TOP CHORD BOT CHORD Structural wood sheathing directly applied or 3-8-15 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

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

Max Horz 2=102(LC 12)

Max Uplift 3=-63(LC 12), 2=-7(LC 12)

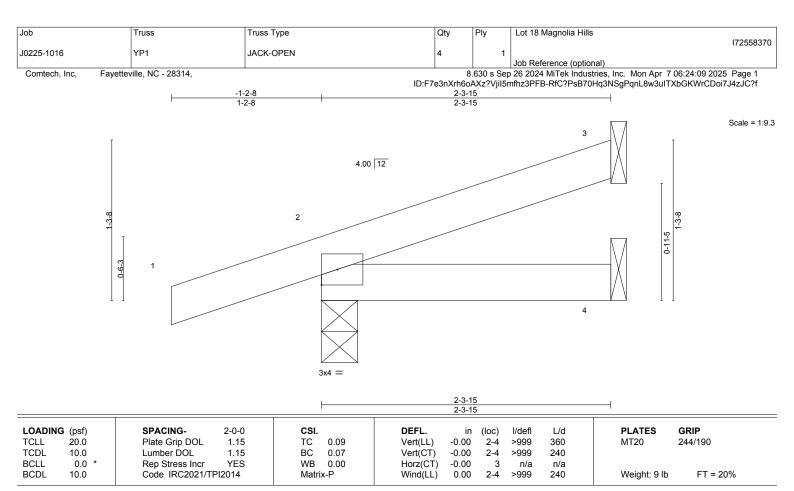
Max Grav 3=104(LC 19), 2=238(LC 1), 4=71(LC 3)

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

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-2-8 to 3-2-5, Interior(1) 3-2-5 to 3-8-3 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 63 lb uplift at joint 3 and 7 lb uplift at joint 2.







LUMBER-

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

TOP CHORD BOT CHORD Structural wood sheathing directly applied or 2-3-15 oc purlins.

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

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

Max Horz 2=41(LC 8)

Max Uplift 3=-23(LC 12), 2=-90(LC 8), 4=-11(LC 8) Max Grav 3=38(LC 1), 2=192(LC 1), 4=42(LC 3)

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

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 3, 90 lb uplift at joint 2 and 11 lb uplift at joint 4.



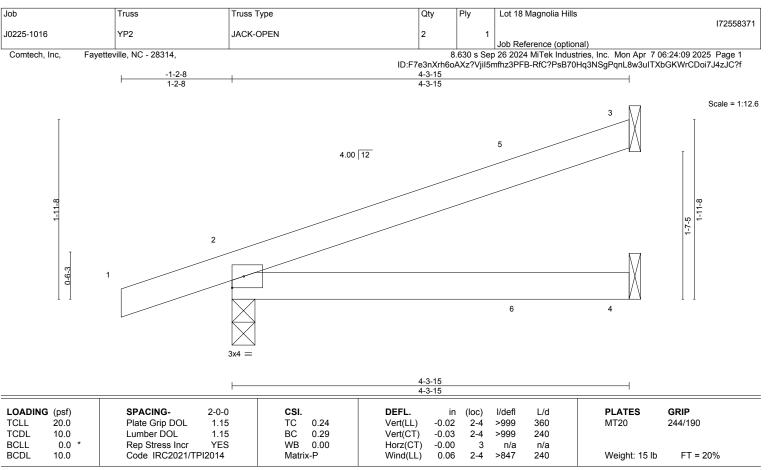


WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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)





LUMBER-

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

TOP CHORD BOT CHORD Structural wood sheathing directly applied or 4-3-15 oc purlins.

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

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

Max Horz 2=62(LC 8)

Max Uplift 3=-50(LC 12), 2=-110(LC 8), 4=-21(LC 8) Max Grav 3=111(LC 1), 2=259(LC 1), 4=83(LC 3)

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

- $1) \ Wind: ASCE\ 7-16; Vult=130mph\ (3-second\ gust)\ Vasd=103mph;\ TCDL=6.0psf;\ BCDL=6.0psf;\ h=15ft;\ Cat.\ II;\ Exp\ C;\ Enclosed;\ ASCE\ TCDL=6.0psf;\ h=15ft;\ h=$ MWFRS (envelope) and C-C Exterior(2E) -1-2-8 to 3-2-5, Interior(1) 3-2-5 to 4-3-3 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 50 lb uplift at joint 3, 110 lb uplift at joint 2 and 21 lb uplift at joint 4.





Job Truss Truss Type Qty Ply Lot 18 Magnolia Hills 172558372 DIAGONAL HIP GIRDER 2 J0225-1016 ZA1 Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

1-8-8

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 06:24:10 2025 Page 1 ID:3YJEg_u8zX16RsP?VvW_V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 8-4-5

4-3-8

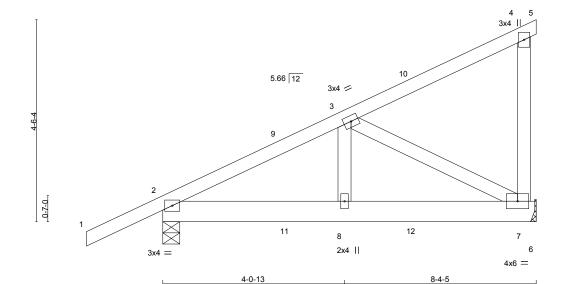
except end verticals.

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

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

4-0-13 4-0-13

Scale = 1:25.8



LOADIN	G (psf)	SPACING- 2-	0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1	.15	TC	0.21	Vert(LL)	-0.00	7-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL 1	.15	BC	0.09	Vert(CT)	-0.01	7-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.15	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI201	14	Matri	x-P	Wind(LL)	0.00	8	>999	240	Weight: 51 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

4-0-13

LUMBER-

REACTIONS.

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

2x4 SP No.2 WFBS

(size) 7=Mechanical, 2=0-4-9

Max Horz 2=150(LC 8)

Max Uplift 7=-110(LC 8), 2=-50(LC 8) Max Grav 7=353(LC 31), 2=456(LC 1)

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

TOP CHORD 2-3=-523/31

BOT CHORD 2-8=-118/381 7-8=-118/381

WEBS 3-7=-430/133

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 110 lb uplift at joint 7 and 50 lb uplift at ioint 2.
- 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 75 lb down and 33 lb up at 2-9-8, 75 lb down and 33 lb up at 2-9-8, and 107 lb down and 84 lb up at 5-7-7, and 107 lb down and 84 lb up at 5-7-7 on top chord , and 2 lb down at 2-9-8, 2 lb down at 2-9-8, and 20 lb down at 5-7-7, and 20 lb down at 5-7-7 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-4=-60, 4-5=-20, 2-6=-20

Concentrated Loads (lb)

Vert: 10=-23(F=-11, B=-11) 12=-17(F=-9, B=-9)



April 8,2025

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Job Truss Truss Type Qty Ply Lot 18 Magnolia Hills 172558373 J0225-1016 ZB1 DIAGONAL HIP GIRDER 2 Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 06:24:10 2025 Page 1 ID:3YJEg_u8zX16RsP?VvW_V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

4-2-2

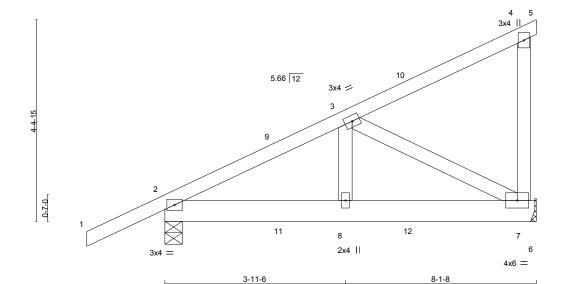
except end verticals.

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

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

8-1-8 3-11-6 1-8-8 3-11-6

Scale = 1:25.2



LOADIN	G (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.	.21	Vert(LL)	-0.00	7-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.	.08	Vert(CT)	-0.01	7-8	>999	240		
BCLL	0.0 *	Rep Stress Incr NC	WB 0.	.13	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014	Matrix-P		Wind(LL)	0.00	8	>999	240	Weight: 49 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

3-11-6

LUMBER-

REACTIONS.

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

2x4 SP No.2 WFBS

(size) 7=Mechanical, 2=0-4-9

Max Horz 2=146(LC 8)

Max Uplift 7=-104(LC 8), 2=-48(LC 8) Max Grav 7=336(LC 31), 2=443(LC 1)

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

TOP CHORD 2-3=-502/26

BOT CHORD 2-8=-112/361 7-8=-112/361

3-7=-408/127 WEBS

NOTES.

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 104 lb uplift at joint 7 and 48 lb uplift at ioint 2.
- 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 74 lb down and 28 lb up at 2-6-11, 74 lb down and 28 lb up at 2-6-11, and 104 lb down and 79 lb up at 5-4-10, and 104 lb down and 79 lb up at 5-4-10 on top chord, and 0 lb down at 2-6-11, 0 lb down at 2-6-11, and 18 lb down at 5-4-10, and 18 lb down at 5-4-10 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-4=-60, 4-5=-20, 2-6=-20

Concentrated Loads (lb)

Vert: 10=-11(F=-6, B=-6) 12=-14(F=-7, B=-7)

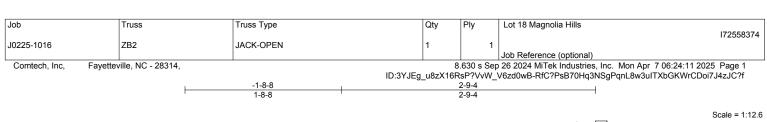


April 8,2025

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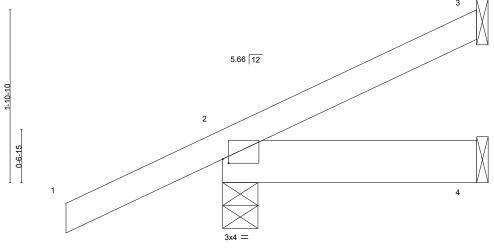


Plate Off	sets (X,Y)	[2:0-0-12,0-0-9]							
LOADING	G (psf)	SPACING- 2-0-0	CSI.	DEFL. i	n (loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.25	Vert(LL) -0.00) 2	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.02	Vert(CT) -0.00	2-4	>999	240		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014	Matrix-P	Wind(LL) 0.00) 2	****	240	Weight: 14 lb	FT = 20%

LUMBER-

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

2-9-4

TOP CHORD **BOT CHORD** Structural wood sheathing directly applied or 2-9-4 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-4-10, 4=Mechanical

Max Horz 2=64(LC 12)

Max Uplift 3=-28(LC 12), 2=-35(LC 12)

Max Grav 3=32(LC 1), 2=258(LC 1), 4=50(LC 3)

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

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Corner(3) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 28 lb uplift at joint 3 and 35 lb uplift at joint 2.

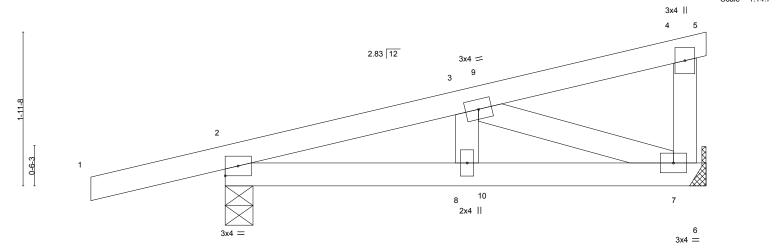




Job Truss Truss Type Qty Ply Lot 18 Magnolia Hills 172558375 ZP1 DIAGONAL HIP GIRDER J0225-1016 Job Reference (optional) Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 06:24:11 2025 Page 1 Comtech, Inc.

ID:F7e3nXrh6oAXz?Vjil5mfhz3PFB-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f -1-8-8 3-0-15 3-0-15 6-1-7 3-0-8

Scale = 1:14.7



	-	3-0-15 3-0-15	6-1-7 3-0-8
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code IRC2021/TPI2014	CSI. DEFL. TC 0.21 Vert(LL) BC 0.21 Vert(CT) WB 0.06 Horz(CT) Matrix-P Horz(CT)	in (loc) I/defl L/d PLATES GRIP 0.01 8 >999 240 -0.01 8 >999 240 0.00 7 n/a n/a Weight: 28 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SP No.2 WFBS

REACTIONS. (size) 7=Mechanical, 2=0-4-4

Max Horz 2=63(LC 4)

Max Uplift 7=-84(LC 4), 2=-159(LC 4) Max Grav 7=219(LC 1), 2=359(LC 1)

1-8-8

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

TOP CHORD 2-3=-360/96

BOT CHORD 2-8=-119/308 7-8=-119/308

3-7=-325/125 WEBS

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 84 lb uplift at joint 7 and 159 lb uplift at ioint 2.
- 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 18 lb down and 24 lb up at 3-4-9, and 18 lb down and 24 lb up at 3-4-9 on top chord, and 4 lb down and 24 lb up at 3-4-9, and 4 lb down and 24 lb up at 3-4-9 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Vert: 1-4=-60, 4-5=-20, 2-6=-20



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

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

except end verticals.

April 8,2025

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Job Truss Truss Type Qty Ply Lot 18 Magnolia Hills 172558376 ZP2 DIAGONAL HIP GIRDER J0225-1016 Job Reference (optional) Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 06:24:12 2025 Page 1 Comtech, Inc. ID:F7e3nXrh6oAXz?Vjil5mfhz3PFB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

4-5-14

4-5-14

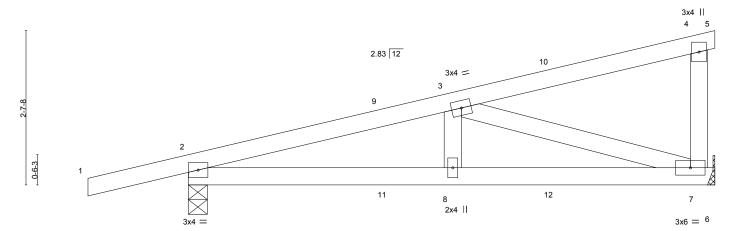
Scale = 1:19.6

8-11-6

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

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

except end verticals.



	 	4-5-14 4-5-14	8-11-6 4-5-8	
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code IRC2021/TPI2014	CSI. DEFL. TC 0.33 Vert(LL) BC 0.28 Vert(CT) WB 0.25 Horz(CT) Matrix-P Horz(CT)	in (loc) I/defl L/d PLATES GRIP 0.03 7-8 >999 240 -0.04 7-8 >999 240 0.01 7 n/a n/a Weight: 40 lb FT = 2	20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SP No.2 WFBS

REACTIONS. (size) 7=Mechanical, 2=0-3-14

-1-8-8

1-8-8

Max Horz 2=84(LC 4)

Max Uplift 7=-174(LC 4), 2=-212(LC 4) Max Grav 7=396(LC 1), 2=488(LC 1)

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

TOP CHORD 2-3=-777/280

BOT CHORD 2-8=-315/710 7-8=-315/710

WEBS 3-7=-742/329

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 174 lb uplift at joint 7 and 212 lb uplift at ioint 2.
- 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 18 lb down and 24 lb up at 3-4-9, 18 lb down and 24 lb up at 3-4-9, and 46 lb down and 62 lb up at 6-2-8, and 46 lb down and 62 lb up at 6-2-8 on top chord, and 4 lb down and 24 lb up at 3-4-9, 4 lb down and 24 lb up at 3-4-9, and 26 lb down and 46 lb up at 6-2-8, and 26 lb down and 46 lb up at 6-2-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-4=-60, 4-5=-20, 2-6=-20

Concentrated Loads (lb)

Vert: 10=-53(F=-26, B=-26) 12=-26(F=-13, B=-13)



April 8,2025

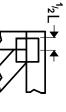
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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)

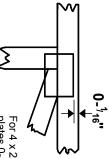


Symbols

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

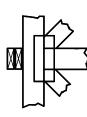
to slots. Second dimension is the length parallel to slots. width measured perpendicular The first dimension is the plate

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



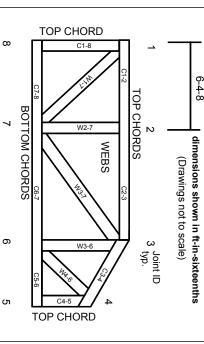
Min size shown is for crushing only number/letter where bearings occur reaction section indicates joint (supports) occur. Icons vary but Indicates location where bearings

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

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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.
- Cut members to bear tightly against each other

5

- 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: J0225-1017

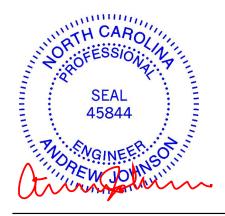
Lot 18 Magnolia Hills

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: I72559482 thru I72559493

My license renewal date for the state of North Carolina is December 31, 2025.

North Carolina COA: C-0844



April 8,2025

Johnson, Andrew

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

Job	Truss	Truss Type	Qty	Ply	Lot 18 Magnolia Hills
J0225-1017	ET1	GABLE	1	1	172559482
					Ich Peference (ontional)

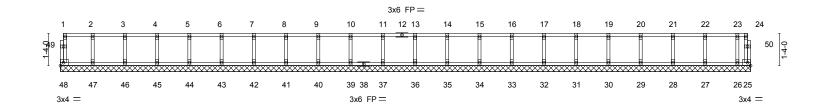
Comtech, Inc,

0-<u>1</u>-8

Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 07:06:19 2025 Page 1 ID:3YJEg_u8zX16RsP?VvW_V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Scale: 1/4"=1"



	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0 0-6	5-8
LOADI	ING (ps	f)		SPACIN	G-	2-0-0)	С	SI.			DEFL.	in	(loc)	l/defl	L/d		PL	ATES		GRIP	
TCLL	40.	0	F	Plate Gri	p DOL	1.00)	T	0.0	6	١ ،	Vert(LL)	n/a	-	n/a	999		M	T20		244/190	
TCDL	10.	0	L	_umber [OOL	1.00)	В	0.0	1	١ ,	Vert(CT)	n/a	-	n/a	999						
BCLL	0.	0	F	Rep Stre	ss Incr	YES	;	W	B 0.0	3		Horz(CT)	0.00	25	n/a	n/a						
BCDL	5.	0	(Code IR	C2021/T	PI2014		М	atrix-R									W	eight: 12	24 lb	FT = 20%	6F, 11%E

. 1-4-0 , 2-8-0 , 4-0-0 , 5-4-0 , 6-8-0 , 8-0-0 , 9-4-0 , 10-8-0 , 12-0-0 , 13-4-0 , 14-8-0 , 16-0-0 , 17-4-0 , 18-8-0 , 20-0-0 , 21-4-0 , 22-8-0 , 24-0-0 , 25-4-0 , 26-8-0 , 28-0-0 28-6-8

LUMBER-BRACING-

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

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 28-6-8.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 48, 25, 47, 46, 45, 44, 43, 42, 41, 40, 39, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28, 27, 26

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.





Job	Truss	Truss Type	Qty	Ply	Lot 18 Magnolia Hills
10005 4047	ETO	CARLE			172559483
J0225-1017	E12	GABLE	1	1	Job Reference (ontional)

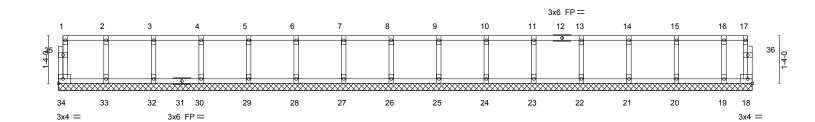
Comtech, Inc, Fayetteville, NC - 28314,

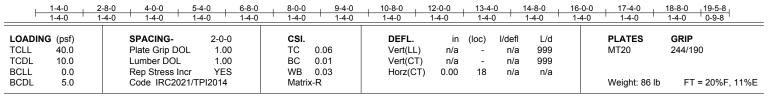
0-<u>1</u>-8

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 07:06:20 2025 Page 1 ID:3YJEg_u8zX16RsP?VvW_V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

0-<u>1</u>-8

Scale: 3/8"=1"





LUMBER-**BRACING-**

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

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

REACTIONS. All bearings 19-5-8.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 34, 18, 33, 32, 30, 29, 28, 27, 26, 25, 24, 23, 22, 21, 20,

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.





Job	Truss	Truss Type	Qty	Ply	Lot 18 Magnolia Hills
J0225-1017	F01	Floor	4	1	172559484
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

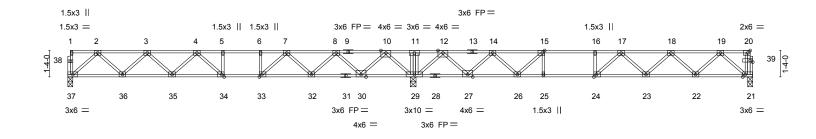
8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 07:06:20 2025 Page 1 ID:3YJEg_u8zX16RsP?VvW_V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

0-1-8 HI 1-3-0

1-9-4

2-5-12

0-1-8 Scale = 1:58.0



 	17-4-12 17-4-12		34-6-0 17-1-4	İ
Plate Offsets (X,Y)	[15:0-1-8,Edge], [20:0-1-8,Edge], [21:0	-1-8,Edge], [24:0-1-8,Edge], [33:	0-1-8,Edge], [34:0-1-8,Edge], [39:0-1-8,0-1-0]	
LOADING (psf) TCLL 40.0	SPACING- 2-0-0 Plate Grip DOL 1.00	CSI . TC 0.90	DEFL. in (loc) I/defl L/d Vert(LL) -0.27 23-24 >742 480	PLATES GRIP MT20 244/190
TCDL 10.0 BCLL 0.0	Lumber DOL 1.00 Rep Stress Incr YES	BC 0.85 WB 0.57	Vert(CT) -0.37 23-24 >554 360 Horz(CT) 0.06 21 n/a n/a	W1120 244/100
BCDL 5.0	Code IRC2021/TPI2014	Matrix-S		Weight: 178 lb FT = 20%F, 11%E

LUMBER-BRACING-TOP CHORD 2x4 SP No 1(flat)

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

21-28: 2x4 SP 2400F 2.0E(flat)

WFBS

2x4 SP No.3(flat)

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins,

except end verticals.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

6-0-0 oc bracing: 30-32,29-30,27-29,26-27.

REACTIONS. (size) 37=0-3-0, 21=0-3-0, 29=0-3-8

Max Grav 37=843(LC 3), 21=830(LC 4), 29=2186(LC 1)

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

TOP CHORD 2-3=-1503/0, 3-4=-2386/0, 4-5=-2643/0, 5-6=-2643/0, 6-7=-2643/0, 7-8=-1780/88,

8-10=-506/546, 10-11=0/2201, 11-12=0/2201, 12-14=-681/785, 14-15=-1899/278,

15-16=-2534/0, 16-17=-2534/0, 17-18=-2402/0, 18-19=-1542/0

36-37=0/903, 35-36=0/2079, 34-35=0/2643, 33-34=0/2643, 32-33=0/2272, 30-32=-286/1285, 29-30=-976/0, 27-29=-1165/0, 26-27=-526/1397, 25-26=0/2534,

24-25=0/2534, 23-24=0/2610, 22-23=0/2105, 21-22=0/965

WEBS $2-37 = -1200/0, \ 2-36 = 0/834, \ 3-36 = -802/0, \ 3-35 = 0/427, \ 4-35 = -357/9, \ 10-29 = -1600/0, \ 10-$ 10-30=0/1200, 8-30=-1156/0, 8-32=0/754, 7-32=-768/0, 7-33=0/811, 6-33=-384/0,

4-34=-350/210, 12-29=-1578/0, 12-27=0/1136, 14-27=-1077/0, 14-26=0/810, 15-26=-1102/0, 19-21=-1233/0, 19-22=0/803, 18-22=-783/0, 18-23=0/413,

17-23=-290/84, 17-24=-451/56, 15-25=0/378

NOTES-

BOT CHORD

- 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.





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 18 Magnolia Hills
J0225-1017	F02	Floor	2	_	172559485
JU225-1017	FU2	Floor	3	1	Job Reference (optional)

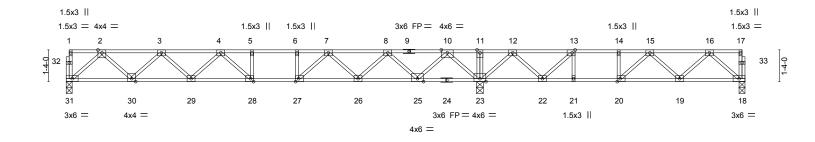
Fayetteville, NC - 28314, Comtech, Inc.

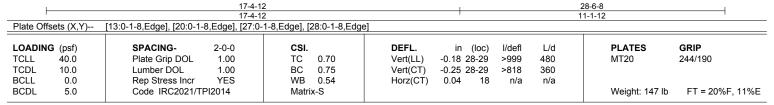
8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 07:06:21 2025 Page 1 ID:3YJEg_u8zX16RsP?VvW_V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

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

0-1-8







LUMBER-BRACING-TOP CHORD

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

2x4 SP No.1(flat) except end verticals. BOT CHORD WFBS 2x4 SP No.3(flat) Rigid ceiling directly applied or 6-0-0 oc bracing

REACTIONS. (size) 31=0-3-0, 23=0-3-8, 18=0-3-0

Max Grav 31=854(LC 10), 23=1831(LC 1), 18=536(LC 4)

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

2-3=-1528/0, 3-4=-2433/0, 4-5=-2723/0, 5-6=-2723/0, 6-7=-2723/0, 7-8=-1895/0, TOP CHORD

8-10=-640/19, 10-11=0/1619, 11-12=0/1619, 12-13=-534/758, 13-14=-1022/387, 14-15=-1022/387 15-16=-850/32

30-31=0/916, 29-30=0/2115, 28-29=0/2703, 27-28=0/2723, 26-27=0/2373, 25-26=0/1410, **BOT CHORD**

23-25=-494/0, 22-23=-1043/109, 21-22=-387/1022, 20-21=-387/1022, 19-20=-137/1078,

18-19=0/563

WEBS 2-31=-1217/0, 2-30=0/850, 3-30=-818/0, 3-29=0/442, 4-29=-375/0, 4-28=-244/309

10-23=-1497/0, 10-25=0/1144, 8-25=-1106/0, 8-26=0/708, 7-26=-708/0, 7-27=0/705 6-27=-338/0, 12-23=-1013/0, 12-22=0/766, 13-22=-925/0, 16-18=-747/0, 16-19=-46/399,

15-19=-318/146, 15-20=-411/0, 13-21=0/267

- 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.



April 8,2025



Job	Truss	Truss Type	Qty	Ply	Lot 18 Magnolia Hills
J0225-1017	F03	FLOOR	9	1	172559486
			-		Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 07:06:21 2025 Page 1 ID:3YJEg_u8zX16RsP?VvW_V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

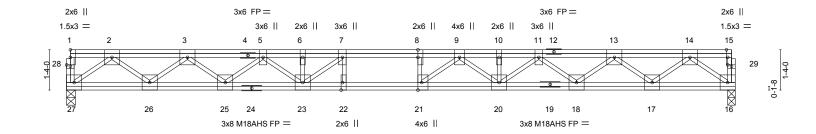
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

0-1-8

0-1-8 Scale = 1:38.1



			22-1-8	· · · · · · · · · · · · · · · · · · ·
Plate Offsets (X,Y)	[8:0-3-0,0-0-0], [15:0-3-0,Edge], [21:0-3	3-0,Edge], [22:0-3-0,Edge]], [28:0-1-8,0-0-8], [29:0-1-8,0-0-8]	
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 0.26	Vert(LL) -0.31 21 >831 480	MT20 244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.61	Vert(CT) -0.43 21 >604 360	M18AHS 186/179
BCLL 0.0	Rep Stress Incr YES	WB 0.62	Horz(CT) 0.05 16 n/a n/a	
BCDL 5.0	Code IRC2021/TPI2014	Matrix-S		Weight: 174 lb FT = 20%F, 11%E

BRACING-

TOP CHORD

BOT CHORD

22-1-8

LUMBER-TOP CHORD

2x4 SP No.1(flat) 2x4 SP No.1(flat)

BOT CHORD

WFBS 2x4 SP No.3(flat)

REACTIONS.

(size) 27=0-3-8, 16=0-3-0 Max Grav 27=1196(LC 1), 16=1196(LC 1)

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

2-3=-2443/0, 3-5=-4219/0, 5-6=-5398/0, 6-7=-5398/0, 7-8=-5883/0, 8-9=-5883/0, TOP CHORD

9-10=-5423/0, 10-11=-5423/0, 11-13=-4215/0, 13-14=-2444/0

BOT CHORD 26-27=0/1458, 25-26=0/3483, 23-25=0/4923, 22-23=0/5883, 21-22=0/5883, 20-21=0/5754,

18-20=0/4927, 17-18=0/3482, 16-17=0/1459

 $2-27 = -1803/0, \ 2-26 = 0/1306, \ 3-26 = -1377/0, \ 3-25 = 0/973, \ 5-25 = -932/0, \ 5-23 = 0/616, \ 3-26 = 0/1306, \ 3-26$ WFBS

14-16=-1803/0, 14-17=0/1307, 13-17=-1374/0, 13-18=0/969, 11-18=-942/0, 11-20=0/643,

9-20=-503/0, 7-23=-1030/30, 9-21=-272/666, 8-21=-309/46

NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) All plates are 6x6 MT20 unless otherwise indicated.
- 4) Plates checked for a plus or minus 1 degree rotation about its center.
- 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.





Job	Truss	Truss Type	Qty	Ply	Lot 18 Magnolia Hills
J0225-1017	F04	Floor	6	1	172559487
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 07:06:22 2025 Page 1 ID:3YJEg_u8zX16RsP?VvW_V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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

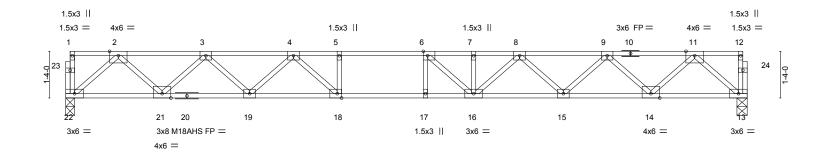
Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

0-1-8



0-1-8 Scale = 1:32.9



· ·			19-5-8	
Plate Offsets (X,Y)	[6:0-1-8,Edge], [18:0-1-8,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 0.51	Vert(LL) -0.27 17 >842 480	MT20 244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.67	Vert(CT) -0.38 17 >614 360	M18AHS 186/179
BCLL 0.0	Rep Stress Incr YES	WB 0.54	Horz(CT) 0.06 13 n/a n/a	
BCDL 5.0	Code IRC2021/TPI2014	Matrix-S		Weight: 100 lb FT = 20%F, 11%E

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E(flat)

BOT CHORD 2x4 SP 2400F 2.0E(flat)

WFBS 2x4 SP No.3(flat)

REACTIONS. (size) 22=0-3-0, 13=0-3-8

Max Grav 22=1050(LC 1), 13=1050(LC 1)

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

2-3=-1957/0, 3-4=-3239/0, 4-5=-4126/0, 5-6=-4126/0, 6-7=-4038/0, 7-8=-4038/0,

8-9=-3250/0, 9-11=-1955/0 21-22=0/1139, 19-21=0/2741, 18-19=0/3738, 17-18=0/4126, 16-17=0/4126, 15-16=0/3740,

14-15=0/2740, 13-14=0/1139 WFBS

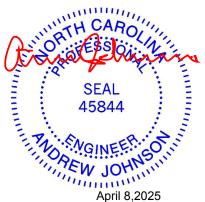
2-22=-1513/0, 2-21=0/1138, 3-21=-1089/0, 3-19=0/693, 4-19=-695/0, 4-18=0/820, 5-18=-387/0, 11-13=-1514/0, 11-14=0/1135, 9-14=-1093/0, 9-15=0/709, 8-15=-681/0,

8-16=0/406, 6-16=-591/277

NOTES-

BOT CHORD

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) All plates are 3x4 MT20 unless otherwise indicated.
- 4) Plates checked for a plus or minus 1 degree rotation about its center.
- 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.





Job	Truss	Truss Type	Qty	Ply	Lot 18 Magnolia Hills
J0225-1017	F05	FLOOR	2	1	172559488
		1	_		Job Reference (optional)

2-6-0

Comtech, Inc, Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 07:06:22 2025 Page 1 ID:3YJEg_u8zX16RsP?VvW_V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

0-1-8

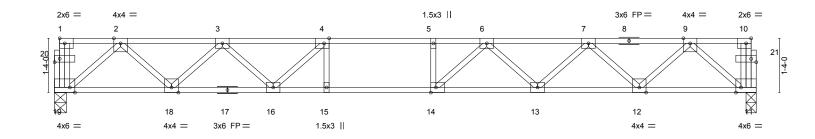


0-1-8 Scale = 1:28.3

Structural wood sheathing directly applied or 2-2-0 oc purlins,

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

except end verticals.



			17-3-0	
Plate Offsets (X,	[4:0-1-8,Edge], [10:0-1-8,Edge], [11:0-	1-8,Edge], [14:0-1-8,Edge],	[19:0-1-8,Edge], [20:0-1-8,0-1-0], [21:0-1-8,0-1-0]	
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 0.74	Vert(LL) -0.25 13-14 >816 480	MT20 244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.64	Vert(CT) -0.33 13-14 >622 360	
BCLL 0.0	Rep Stress Incr YES	WB 0.45	Horz(CT) 0.04 11 n/a n/a	
BCDL 5.0	Code IRC2021/TPI2014	Matrix-S		Weight: 90 lb FT = 20%F, 11%E

BRACING-TOP CHORD

BOT CHORD

17-3-0

LUMBER-

TOP CHORD 2x4 SP No 1(flat) BOT CHORD 2x4 SP 2400F 2.0E(flat)

2x4 SP No.3(flat) WFBS

REACTIONS. (size) 11=0-3-0, 19=0-3-8

Max Grav 11=923(LC 1), 19=923(LC 1)

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

2-3=-1756/0, 3-4=-2780/0, 4-5=-3225/0, 5-6=-3225/0, 6-7=-2785/0, 7-9=-1755/0 TOP CHORD

BOT CHORD 18-19=0/1085, 16-18=0/2390, 15-16=0/3225, 14-15=0/3225, 13-14=0/3113, 12-13=0/2407,

11-12=0/1080

WEBS 9-11=-1381/0, 9-12=0/939, 7-12=-907/0, 7-13=0/526, 6-13=-456/0, 6-14=-135/511,

2-19=-1388/0, 2-18=0/933, 3-18=-882/0, 3-16=0/589, 4-16=-780/0

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.



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 18 Magnolia Hills
					172559489
J0225-1017	F06	Floor	2	1	
					Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

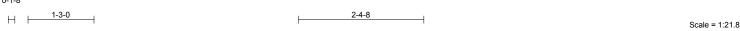
8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 07:06:22 2025 Page 1 ID:3YJEg_u8zX16RsP?VvW_V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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

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

except end verticals.

0-1-8



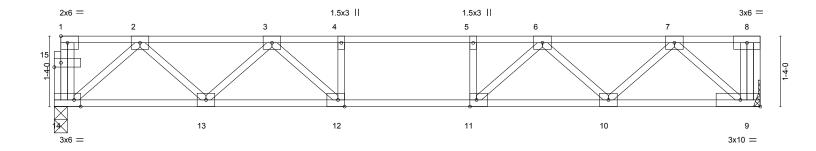


Plate Offsets (X,Y)	[11:0-1-8,Edge], [12:0-1-8,Edge], [14:0-	1-8,Edge], [15:0-1-8,0-1-0	0]	
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 40.0 TCDL 10.0	Plate Grip DOL 1.00 Lumber DOL 1.00	TC 0.44 BC 0.48	Vert(LL) -0.11 10-11 >999 480 Vert(CT) -0.13 10-11 >999 360	MT20 244/190
BCLL 0.0 BCDL 5.0	Rep Stress Incr YES Code IRC2021/TPI2014	WB 0.29 Matrix-S	Horz(CT) 0.03 9 n/a n/a	Weight: 72 lb FT = 20%F, 11%E

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

BOT CHORD

WFBS 2x4 SP No.3(flat)

REACTIONS. (size) 9=Mechanical, 14=0-3-0 Max Grav 9=722(LC 1), 14=709(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-3=-1268/0, 3-4=-1917/0, 4-5=-1917/0, 5-6=-1917/0, 6-7=-1269/0 TOP CHORD **BOT CHORD** 13-14=0/823, 12-13=0/1683, 11-12=0/1917, 10-11=0/1683, 9-10=0/825 **WEBS** 7-9=-1059/0, 7-10=0/618, 6-10=-575/0, 6-11=0/522, 2-14=-1052/0, 2-13=0/619,

3-13=-577/0, 3-12=0/522, 4-12=-273/0, 5-11=-273/0

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.





Job	Truss	Truss Type	Qty	Ply	Lot 18 Magnolia Hills
					172559490
J0225-1017	F07	Floor	4	1	
					Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc.

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 07:06:23 2025 Page 1 ID:3YJEg_u8zX16RsP?VvW_V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

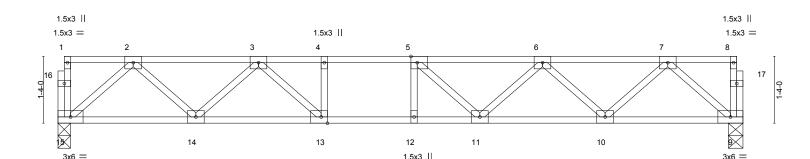
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

 $0_1 1_1 8$ Scale = 1:23.0

0-1-8 1-3-0 1-8-0 $H \vdash$



						13-8-0					
Plate Off	fsets (X,Y)	[5:0-1-8,Edge], [13:0-1-8	Edge]								
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.41	Vert(LL)	-0.11 11-12	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.67	Vert(CT)	-0.14 11-12	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.03 9	n/a	n/a		
BCDL	5.0	Code IRC2021/TF	PI2014	Matri	x-S					Weight: 72 lb	FT = 20%F, 11%E

BRACING-TOP CHORD

BOT CHORD

13-8-0

LUMBER-TOP CHORD 2x4 SP No.1(flat)

BOT CHORD 2x4 SP No.1(flat) WFBS 2x4 SP No.3(flat)

REACTIONS. (size) 15=0-3-0, 9=0-3-8 Max Grav 15=732(LC 1), 9=732(LC 1)

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

2-3=-1252/0, 3-4=-2011/0, 4-5=-2011/0, 5-6=-1901/0, 6-7=-1266/0 TOP CHORD

BOT CHORD 14-15=0/781, 13-14=0/1713, 12-13=0/2011, 11-12=0/2011, 10-11=0/1733, 9-10=0/775 **WEBS**

2-15=-1038/0, 2-14=0/654, 3-14=-641/0, 3-13=0/561, 7-9=-1029/0, 7-10=0/684,

6-10=-649/0, 6-11=0/309, 5-11=-328/45

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.





818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 18 Magnolia Hills
					172559491
J0225-1017	F08	Floor	1	1	
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 07:06:23 2025 Page 1 ID:3YJEg_u8zX16RsP?VvW_V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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

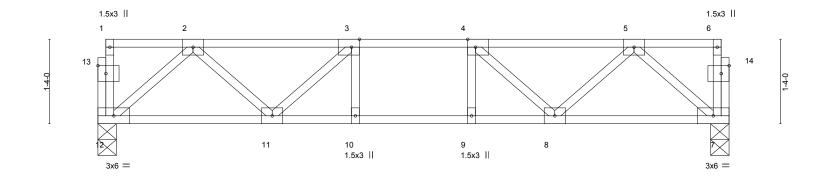
Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.



1-8-8

0₁1₈ Scale = 1:18.2



9-11-8 [3:0-1-8.Edge], [4:0-1-8.Edge], [13:0-1-8.0-1-8], [14:0-1-8.0-1-8]

Tiale Offsets (X, I)	[3.0-1-0,Luge], [4.0-1-0,Luge], [13.0-1-	0,0-1-0], [14.0-1-0,0-1-0]		
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 0.24	Vert(LL) -0.04 10-11 >999 480	MT20 244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.35	Vert(CT) -0.05 10-11 >999 360	
BCLL 0.0	Rep Stress Incr YES	WB 0.17	Horz(CT) 0.01 7 n/a n/a	
BCDL 5.0	Code IRC2021/TPI2014	Matrix-S		Weight: 53 lb FT = 20%F, 11%E

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SP No.3(flat) WFBS

REACTIONS. (size) 12=0-3-8, 7=0-3-8

Max Grav 12=528(LC 1), 7=528(LC 1)

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

2-3=-817/0, 3-4=-1066/0, 4-5=-817/0 TOP CHORD

BOT CHORD 11-12=0/553, 10-11=0/1066, 9-10=0/1066, 8-9=0/1066, 7-8=0/553 **WEBS** 2-12=-735/0, 2-11=0/366, 3-11=-369/0, 5-7=-735/0, 5-8=0/366, 4-8=-369/0

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.



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 18 Magnolia Hills
J0225-1017	FG1	Floor	1	1	172559492
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 07:06:24 2025 Page 1 ID:3YJEg_u8zX16RsP?VvW_V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

34-6-0

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

except end verticals.

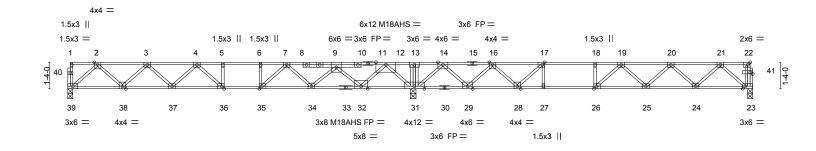
Structural wood sheathing directly applied or 6-0-0 oc purlins,

0-1-8

1-9-4

2-5-12

0-1-8 Scale = 1:58.0



	17-4-12		17-1-4	
Plate Offsets (X,Y)	[17:0-1-8,Edge], [22:0-1-8,Edge], [23:0-	-1-8,Edge], [26:0-1-8,Edg	e], [35:0-1-8,Edge], [36:0-1-8,Edge], [41:0-1-8,0-1-0]	
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 0.85	Vert(LL) -0.26 25-26 >772 480	MT20 244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.97	Vert(CT) -0.35 25-26 >575 360	M18AHS 186/179
BCLL 0.0	Rep Stress Incr NO	WB 0.63	Horz(CT) 0.06 23 n/a n/a	
BCDL 5.0	Code IRC2021/TPI2014	Matrix-S		Weight: 182 lb FT = 20%F, 11%E

BRACING-

TOP CHORD

BOT CHORD

LUMBERTOP CHORD 2x4 SP No.1(flat) *Except*

15-22: 2x4 SP 2400F 2.0E(flat)

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

23-30: 2x4 SP 2400F 2.0E(flat)

WEBS 2x4 SP No.3(flat) *Except* 12-32: 2x4 SP No.2(flat)

REACTIONS. (size) 39=0-3-0, 31=0-3-8, 23=0-3-0

Max Grav 39=961(LC 3), 31=2929(LC 1), 23=761(LC 4)

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

TOP CHORD 2-3=-1761/0, 3-4=-2871/0, 4-5=-3484/0, 5-6=-3484/0, 6-7=-3484/0, 7-9=-3027/0, 9-12=-1111/0, 12-13=0/3075, 13-14=0/3075, 14-16=0/1553, 16-17=-1237/899,

17-4-12

17-18=-2010/423, 18-19=-2010/423, 19-20=-2111/0, 20-21=-1382/0

38-39=0/1038, 37-38=0/2455, 36-37=0/3266, 35-36=0/3484, 34-35=0/3307, 32-34=0/2687, 31-32=-1055/0, 29-31=-1968/0, 28-29=-1235/641, 27-28=-423/2010, 26-27=-423/2010,

25-26=-95/2237, 24-25=0/1876, 23-24=0/879

WEBS 2-39=-1379/0, 2-38=0/1007, 3-38=-965/0, 3-37=0/578, 4-37=-550/0, 4-36=-19/509,

5-36=-250/0, 12-31=-2639/0, 12-32=0/2170, 9-32=-2203/0, 9-34=0/527, 7-34=-484/0,

7-35=-32/499, 6-35=-253/15, 21-23=-1123/0, 21-24=0/700, 20-24=-687/2, 20-25=-57/326, 14-31=-1670/0, 14-29=0/1218, 16-29=-1158/0, 16-28=0/934,

17-28=-1268/0, 17-27=0/416, 19-26=-651/0

NOTES-

BOT CHORD

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) All plates are 3x4 MT20 unless otherwise indicated.
- 4) Plates checked for a plus or minus 1 degree rotation about its center.
- 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.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 879 lb down at 13-6-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Vert: 23-39=-10, 1-22=-100

SEAL 45844 WGINEER SOLUTION AND ADDRESS OF THE SOLUTION ADDRESS O

April 8,2025

Continued on page 2

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

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 ANSITPI1 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 18 Magnolia Hills
J0225-1017	FG1	Floor	1	1	172559492
	-		-		Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 07:06:24 2025 Page 2 ID:3YJEg_u8zX16RsP?VvW_V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

LOAD CASE(S) Standard Concentrated Loads (lb) Vert: 9=-799(B)



818 Soundside Road Edenton, NC 27932

Job Truss Truss Type Qty Ply Lot 18 Magnolia Hills 172559493 J0225-1017 FLOOR GIRDER FG2 Job Reference (optional) Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Apr 7 07:06:24 2025 Page 1 Comtech, Inc. ID:3YJEg_u8zX16RsP?VvW_V6zd0wB-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f 1-3-0 Scale = 1:10.8 3x6 || 3x6 || 3x6 || 2x6 || 2 3 4 3x4 =3x6 =1.5x3 || 1.5x3 || 3x6 =5-3-8 Plate Offsets (X,Y)--[4:0-3-0,Edge], [9:0-1-8,0-0-8] LOADING (psf) SPACING-CSI. DEFL. (loc) I/defl L/d **PLATES GRIP TCLL** 40.0 Plate Grip DOL 1.00 TC 0.09 Vert(LL) -0.01 6-7 >999 480 MT20 244/190 TCDL Vert(CT) 10.0 Lumber DOL 1.00 ВС 0.24 -0.02 6-7 >999 360

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

0.01

n/a

except end verticals.

n/a

Structural wood sheathing directly applied or 5-3-8 oc purlins,

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

Weight: 36 lb

FT = 20%F, 11%E

LUMBER-

BCLL

BCDL

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

BOT CHORD

0.0

5.0

WFBS 2x4 SP No.3(flat)

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

Max Grav 8=899(LC 1), 5=893(LC 1)

Rep Stress Incr

Code IRC2021/TPI2014

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

TOP CHORD 2-3=-1036/0

BOT CHORD 7-8=0/1036, 6-7=0/1036, 5-6=0/1036

WEBS 2-8=-1325/0, 3-5=-1321/0

NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 3) Refer to girder(s) for truss to truss connections.
- 4) 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.
- 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 650 lb down at 1-10-4, and 667 lb down at 3-10-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.

WB

Matrix-S

0.31

7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

NO

LOAD CASE(S) Standard

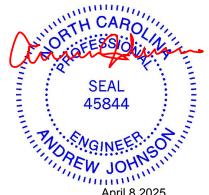
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 5-8=-10, 1-4=-100

Concentrated Loads (lb)

Vert: 2=-622(B) 3=-622(B)



April 8,2025

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

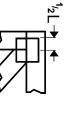
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall

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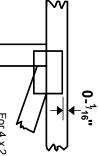


Symbols

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

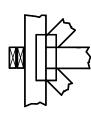
to slots. Second dimension is the length parallel to slots. width measured perpendicular The first dimension is the plate

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



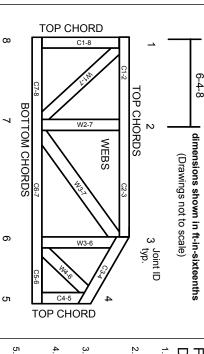
Min size shown is for crushing only number/letter where bearings occur reaction section indicates joint (supports) occur. Icons vary but Indicates location where bearings

Industry Standards:

DSB-22:

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.

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

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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
- 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



Date: 4/7/2025

Input by: Neal Baggett

Job Name: LOT 18 MAGNOLIA HILLS

Page 1 of 16

Const

Ld. Comb.

D+S

D+S

0

0

0

0

Total Ld. Case

12270 L

9507 L

Project #:

Bearing Length

1-SPF 3.000"

2 - SPF 3.000"

End Grain

End Grain Dir.

Vert

Vert

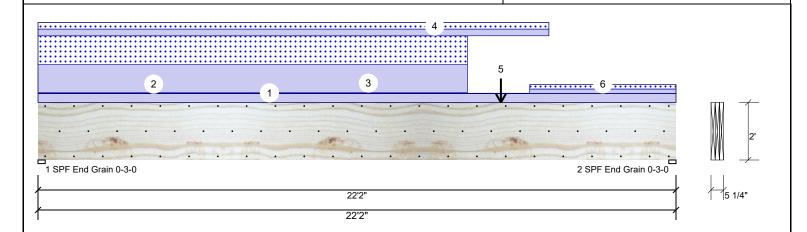
Cap. React D/L lb

6976 / 5294

5594 / 3912

Kerto-S LVL 1.750" X 24.000" FB1

_evel: Level 3-Ply - PASSED



Reactions UNPATTERNED Ib (Uplift) Application: Direction Wind Type: Floor Brg Live Dead Snow Plies: 3 Design Method: ASD 111 6976 5294 Vertical 1 Moisture Condition: Dry **Building Code: IBC/IRC 2015** 2 Vertical 111 5594 3912 Deflection LL: 480 Load Sharing: Yes Deflection TL: 360 Deck: Not Checked Importance: Normal - II Temperature: Temp <= 100°F **Bearings**

Analysis Results

Member Information

•						
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	65069 ft-lb	10'11 1/2"	131295 ft-lb	0.496 (50%)	D+S	L
Unbraced	65069 ft-lb	10'11 1/2"	65236 ft-lb	0.997 (100%)	D+S	L
Shear	9814 lb	2'3"	30912 lb	0.317 (32%)	D+S	L
LL Defl inch	0.222 (L/1177)	11' 1/8"	0.545 (L/480)	0.408 (41%)	S	L
TL Defl inch	0.517 (L/506)	11' 1/4"	0.727 (L/360)	0.711 (71%)	D+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 Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6". Nail from both sides.
- 3 Refer to last page of calculations for fasteners required for specified loads.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be laterally braced at a maximum of 4' 9/16" o.c.
- 7 Bottom must be laterally braced at end bearings.

8 Lateral slend	lerness ratio based or	n 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	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	WALL	
2	Tie-In Far	0-0-0 to 22-2-0	0-3-0	Far Face	15 PSF	40 PSF	0 PSF	0 PSF	0 PSF	FLOOR LOADING	
2	Tie-In Near	0-0-0 to 22-2-0	0-0-0	Тор	15 PSF	40 PSF	0 PSF	0 PSF	0 PSF	FLOOR LOADING	
3	Part. Uniform	0-0-0 to 14-11-0		Тор	392 PLF	0 PLF	392 PLF	0 PLF	0 PLF	A TRUSSES	

Continued on page 2...

Notes	cnemicais
Calculated Structured Designs is responsible only of the	Handling & Installation

Calculated Structure 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
- 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

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

6. 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



Continued from page 1

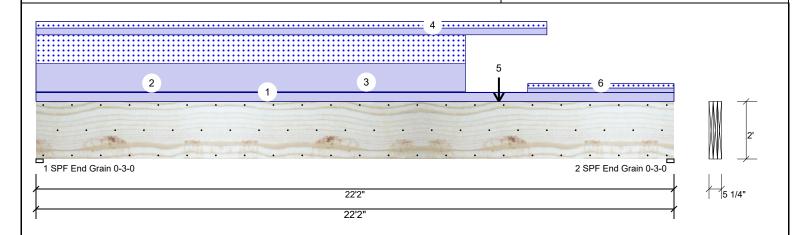
Client: Project: Address: Date: 4/7/2025

Input by: Neal Baggett Job Name: LOT 18 MAGNOLIA HILLS Page 2 of 16

Project #:

Kerto-S LVL 1.750" X 24.000" 3-Ply - PASSED FB₁

Level: Level



ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
4	Part. Uniform	0-0-0 to 17-9-0		Near Face	92 PLF	0 PLF	92 PLF	0 PLF	0 PLF	P TRUSSES
5	Point	16-1-0		Тор	1416 lb	0 lb	1416 lb	0 lb	0 lb	A1
	Bearing Length	0-3-8								
6	Part. Uniform	17-1-0 to 22-2-0		Тор	61 PLF	0 PLF	61 PLF	0 PLF	0 PLF	Y TRUSSES
	Self Weight				28 PLF					

Notes

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

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

Handling & Installation

Handling & Installation

1. IVI beams must not be out or drilled

2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 6/28/2026

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

Manufacturer Info



4/7/2025 Input by: Neal Baggett

Job Name: LOT 18 MAGNOLIA HILLS

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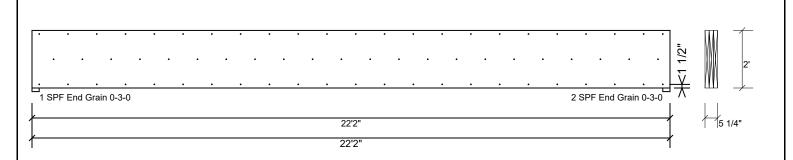
Project #:

Kerto-S LVL FB₁

1.750" X 24.000"

3-Ply - PASSED

Level: Level



Multi-Ply Analysis

Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c.. Nail from both sides. Maximum end distance not to exceed

Capacity	43.4 %	
Load	122.7 PLF	
Yield Limit per Foot	282.4 PLF	
Yield Limit per Fastener	94.1 lb.	
См	1	
Yield Mode	IV	
Edge Distance	1 1/2"	
Min. End Distance	3"	
Load Combination	D+S	
Duration Factor	1 15	

Notes

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

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

Handling & Installation

- Handling & Installation

 1. UVI beams must not be cut or drilled

 2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals

 3. Damaged Beams must not be used

 4. Design assumes top edge is laterally restrained

 5. Provide lateral support at bearing points to avoid lateral displacement and rotation

For flat roofs provide proper drainage to prevent ponding

This design is valid until 6/28/2026

Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850

Manufacturer Info

www.metsawood.com/us



4/7/2025

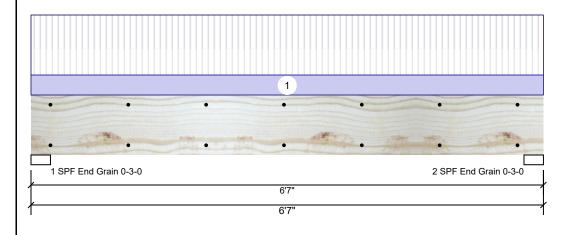
Input by: Neal Baggett

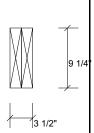
Job Name: LOT 18 MAGNOLIA HILLS

Project #:

1.750" X 9.250" 2-Ply - PASSED Kerto-S LVL DB₂

Level: Level





Page 4 of 16

Member Information

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

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

Reactions UNPATTERNED Ib (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	2696	922	0	0	0
2	Vertical	2696	922	0	0	0

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	5296 ft-lb	3'3 1/2"	12542 ft-lb	0.422 (42%)	D+L	L
Unbraced	5296 ft-lb	3'3 1/2"	9872 ft-lb	0.536 (54%)	D+L	L
Shear	2502 lb	1' 1/4"	6907 lb	0.362 (36%)	D+L	L
LL Defl inch	0.073 (L/1016)	3'3 1/2"	0.155 (L/480)	0.473 (47%)	L	L
TL Defl inch	0.098 (L/757)	3'3 1/2"	0.207 (L/360)	0.476 (48%)	D+L	L

Bearings

l	Bearing	Length	Dir.	Cap. R	eact D/L lb	Total	Ld. Case	Ld. Comb.
	1 - SPF End Grain	3.000"	Vert	41%	922 / 2696	3618	L	D+L
	2 - SPF End Grain	3.000"	Vert	41%	922 / 2696	3618	L	D+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 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 3 Refer to last page of calculations for fasteners required for specified loads.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be laterally braced at end bearings.

Self Weight

- 7 Bottom must be laterally braced at end bearings.
- 8 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	273 PLF	819 PLF	0 PLF	0 PLF	0 PLF	F01

Notes

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

- 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

 2 Damaged Beams must not be used
- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rotation
- 6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 6/28/2026

7 PLF

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

e	nsure	t
a	pplica	tio

Client: Date: 4/7/2025 Page 5 of 16 Project: Input by: Neal Baggett isDesign Address: Job Name: LOT 18 MAGNOLIA HILLS Project #: 1.750" X 9.250" 2-Ply - PASSED Level: Level **Kerto-S LVL** DB₂ . 1 SPF End Grain 0-3-0 2 SPF End Grain 0-3-0 6'7 6'7' Multi-Ply Analysis Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6". Capacity 0.0 PLF 163.7 PLF Yield Limit per Foot Yield Limit per Fastener 81.9 lb. См Yield Mode IV Edge Distance 1 1/2" Min. End Distance 3" Load Combination **Duration Factor** 1.00 For flat roofs provide proper drainage to prevent ponding Manufacturer Info NOtes
Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads. Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 Handling & Installation

This design is valid until 6/28/2026

(800) 622-5850 www.metsawood.com/us

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

L. UVL 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

Danaged Beams must not be used
Design assumes top edge is laterally restrained
Provide lateral support at bearing points to avoid
lateral displacement and rotation



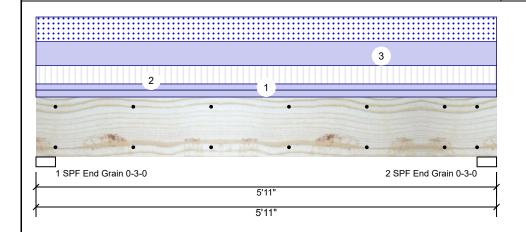
Date: 4/7/2025

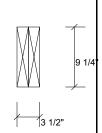
Input by: Neal Baggett Job Name: LOT 18 MAGNOLIA HILLS

Project #:

Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED HDR1

Level: Level





Page 6 of 16

Member In	formation
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Type: Girder Moisture Condition: Dry Deflection LL: 480 Deflection TL: 360 Importance:

Normal - II Temperature: Temp <= 100°F

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

Reactions UNPATTERNED Ib (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	932	1926	1240	0	0
2	Vertical	932	1926	1240	0	0

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4613 ft-lb	2'11 1/2"	14423 ft-lb	0.320 (32%)	D+0.75(L+S)	L
Unbraced	4613 ft-lb	2'11 1/2"	11027 ft-lb	0.418 (42%)	D+0.75(L+S)	L
Shear	2334 lb	4'10 3/4"	7943 lb	0.294 (29%)	D+0.75(L+S)	L
LL Defl inch	0.033 (L/2026)	2'11 1/2"	0.139 (L/480)	0.237 (24%)	0.75(L+S)	L
TL Defl inch	0.072 (L/928)	2'11 1/2"	0.185 (L/360)	0.388 (39%)	D+0.75(L+S)	L

Bearings

Bearing Length Dir. Cap. React D/L lb Total Ld. Case Ld. Comb. 1-SPF 3.000" 1926 / 1629 3555 L D+0.75(L+S) Vert End

Grain

2 - SPF 3.000" 1926 / 1629 D+0.75(L+S) Vert 40% 3555 L End Grain

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

e Eatoral cicinatiness ratio based on single pry water.										
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	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	WALL
2	Uniform			Тор	105 PLF	315 PLF	0 PLF	0 PLF	0 PLF	FLOOR TRUSSES
3	Uniform			Тор	419 PLF	0 PLF	419 PLF	0 PLF	0 PLF	ROOF TRUSSES
	Self Weight				7 PLF					

Notes

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

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

 Damaged Beams must not be used
- 6. 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: Date: 4/7/2025 Page 7 of 16 Project: Input by: Neal Baggett isDesign Address: Job Name: LOT 18 MAGNOLIA HILLS Project #: **Kerto-S LVL** 1.750" X 9.250" 2-Ply - PASSED Level: Level HDR1 . 1 SPF End Grain 0-3-0 2 SPF End Grain 0-3-0 5'11" 5'11' Multi-Ply Analysis Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6".

rastorran prios asing =	10115 01 100 20X 110115 (1120X5) 01
Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	163.7 PLF
Yield Limit per Fastener	81.9 lb.
CM	1
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

Notes

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

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

Handling & Installation

- Handling & Installation

 1. UVI beams must not be cut or drilled

 2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals

 3. Damaged Beams must not be used

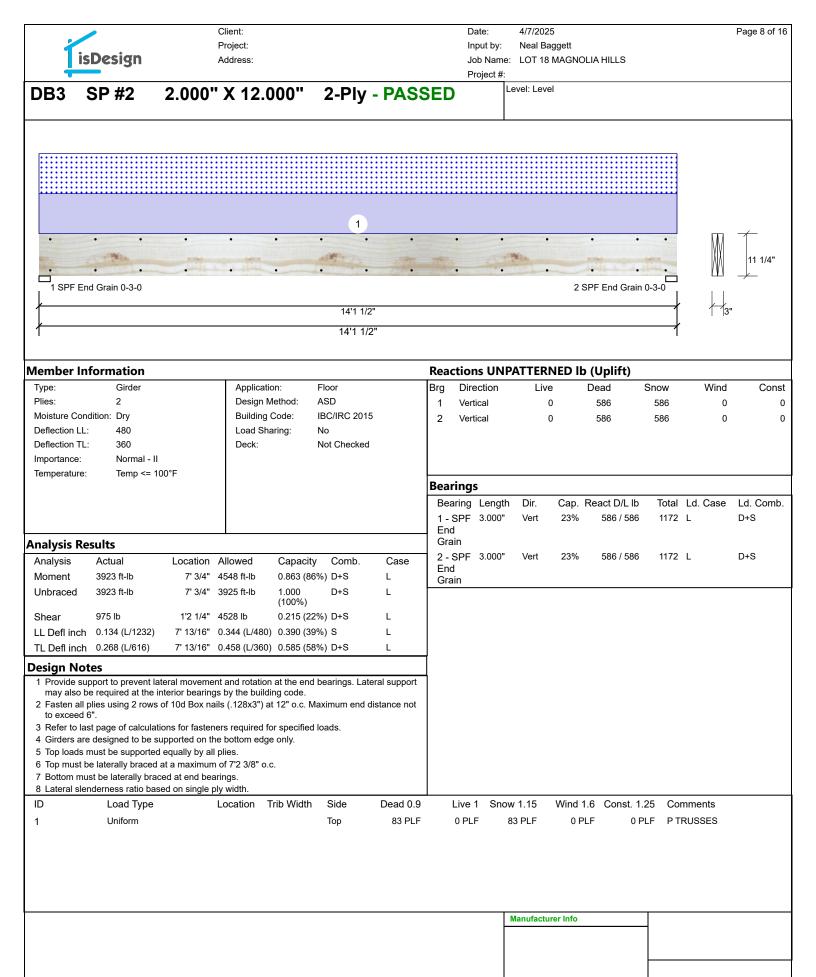
 4. Design assumes top edge is laterally restrained

 5. Provide lateral support at bearing points to avoid lateral displacement and rotation

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

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CSD DESIGN

This design is valid until 6/28/2026

Version 23.40.705 Powered by iStruct™ Dataset: 24051401.1529

			Client:			Date:	4/7/2025	Page 9 of 16
DB3 SP #2 2.000" X 12.000" 2-Ply - PASSED 18FF End Claim 63-24 2-8FF End Claim 63-24 11-12* 14FT 122 14FT 122 14FT 122 14FT 122 14FT 122 14FT	1:	sDesign						
DB3 SP #2 2.000" X 12.000" 2-Ply - PASSED SP6 End Grain 0.3-0 1 1-197		spesign	Address:				LOT 18 MAGNOLIA HILLS	
# SPF End Grain 0-3-2d 14*1 12** 14*1 12** 14*1 12** **Multi-Ply Analysis astern all plies using 2 rows of 10d 8ox nails (128x3*) at 12* o.c. Maximum end distance not to exceed 6*. **Service of the production of the produc	DB3	SD #2	2 000" Y 1	2 000"	2-DIV - DASSED		evel: Level	
### SPF End Grain 0.3-0 ### 172" #	DD3	3P #2	2.000 X 12	2.000	2-Ply - PASSED			
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### SPF End Grain 0.3-0 ### 172" #								- M
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Manufacturer Info		olies using 2 ro		ls (.128x3") a	12" o.c Maximum end dis	stance not	t to exceed 6".	
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This design is valid until \$282028								
1/2*	Cw		1					
Manufacturer Info	Yield Mode							
puration Pactor 1.00 Manufacturer Info This design is valid until 6282028	Edge Distance	9						
Nuration Factor 1.00 Manufacturer Info This design is valid until 628.2026			3"					
Manufacturer Info This design is valid until 6/28/2026			1.00					
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/ersion 23.40.705 Powered by iStruct™ Dataset: 24051401.1529					This design is valid until 6/28/	2026		
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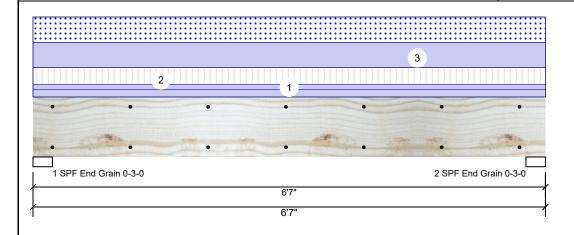
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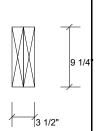
Neal Baggett Job Name: LOT 18 MAGNOLIA HILLS

Project #:

1.750" X 9.250" 2-Ply - PASSED **Kerto-S LVL** HDR2

Level: Level





Page 10 of 16

Member Information

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

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

Reactions UNPATTERNED Ib (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	902	2097	1379	0	0
2	Vertical	902	2097	1379	0	0

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	5574 ft-lb	3'3 1/2"	14423 ft-lb	0.386 (39%)	D+0.75(L+S)	L
Unbraced	5574 ft-lb	3'3 1/2"	10370 ft-lb	0.538 (54%)	D+0.75(L+S)	L
Shear	2633 lb	1' 1/4"	7943 lb	0.331 (33%)	D+0.75(L+S)	L
LL Defl inch	0.047 (L/1601)	3'3 1/2"	0.155 (L/480)	0.300 (30%)	0.75(L+S)	L
TL Defl inch	0.104 (L/719)	3'3 1/2"	0.207 (L/360)	0.501 (50%)	D+0.75(L+S)	L

Bearings

Grain

Bearing	Length	Dir.	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.000"	Vert	43%	2097 / 1711	3808	L	D+0.75(L+S)
2 - SPF End	3.000"	Vert	43%	2097 / 1711	3808	L	D+0.75(L+S)

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

o Eater a sich derness ratio based on single pry 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	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	WALL	
2	Uniform			Тор	91 PLF	274 PLF	0 PLF	0 PLF	0 PLF	FLOOR TRUSSES	
3	Uniform			Тор	419 PLF	0 PLF	419 PLF	0 PLF	0 PLF	ROOF TRUSSES	
	Self Weight				7 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
- LVL beams must not be cut or drilled Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code
- approvals

 Damaged Beams must not be used
- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rotation
- 6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 6/28/2026

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

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Client: Date: 4/7/2025 Page 11 of 16 Project: Input by: Neal Baggett isDesign Address: Job Name: LOT 18 MAGNOLIA HILLS Project #: 1.750" X 9.250" 2-Ply - PASSED Level: Level **Kerto-S LVL** HDR2 . 1 SPF End Grain 0-3-0 2 SPF End Grain 0-3-0 6'7' 6'7' Multi-Ply Analysis Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6". Capacity 0.0 PLF 163.7 PLF Yield Limit per Foot Yield Limit per Fastener 81.9 lb. См Yield Mode IV Edge Distance 1 1/2" Min. End Distance 3" Load Combination **Duration Factor** 1.00 For flat roofs provide proper drainage to prevent ponding Manufacturer Info NOtes
Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads. Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 Handling & Installation L. UVL 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 (800) 622-5850 www.metsawood.com/us

This design is valid until 6/28/2026

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

Danaged Beams must not be used
Design assumes top edge is laterally restrained
Provide lateral support at bearing points to avoid
lateral displacement and rotation



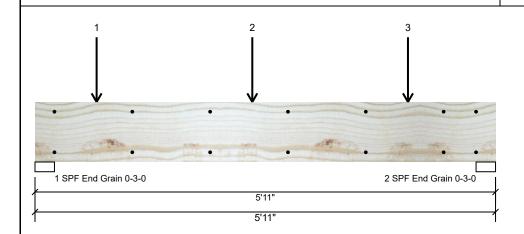
Date: 4/7/2025 Input by:

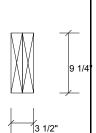
Neal Baggett Job Name: LOT 18 MAGNOLIA HILLS

Project #:

1.750" X 9.250" 2-Ply - PASSED **Kerto-S LVL** HDR3

Level: Level





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Member Information

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

Application: Design Method: ASD **Building Code: IBC/IRC 2015**

Load Sharing: No Deck: Not Checked

Reactions UNPATTERNED Ib (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	1472	1451	0	0
2	Vertical	0	871	850	0	0

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4533 ft-lb	2'9 1/2"	14423 ft-lb	0.314 (31%)	D+S	L
Unbraced	4533 ft-lb	2'9 1/2"	11027 ft-lb	0.411 (41%)	D+S	L
Shear	2468 lb	1' 1/4"	7943 lb	0.311 (31%)	D+S	L
LL Defl inch	0.031 (L/2162)	2'9 1/2"	0.139 (L/480)	0.222 (22%)	S	L
TL Defl inch	0.062 (L/1074)	2'9 1/2"	0.185 (L/360)	0.335 (34%)	D+S	L

Bearings

Bearing	Length	Dir.	Cap. F	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.000"	Vert	33%	1472 / 1451	2923	L	D+S
2 - SPF End Grain	3.000"	Vert	20%	871 / 850	1721	L	D+S

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 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 3 Refer to last page of calculations for fasteners required for specified loads.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be laterally braced at end bearings.
- 7 Bottom must be laterally braced at end bearings.
- 8 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	Point	0-9-8		Тор	763 lb	0 lb	763 lb	0 lb	0 lb	A2
	Bearing Length	0-3-8								
2	Point	2-9-8		Тор	1416 lb	0 lb	1416 lb	0 lb	0 lb	A1
	Bearing Length	0-3-8								
3	Point	4-9-8		Тор	122 lb	0 lb	122 lb	0 lb	0 lb	YA2

Continued on page 2...

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.

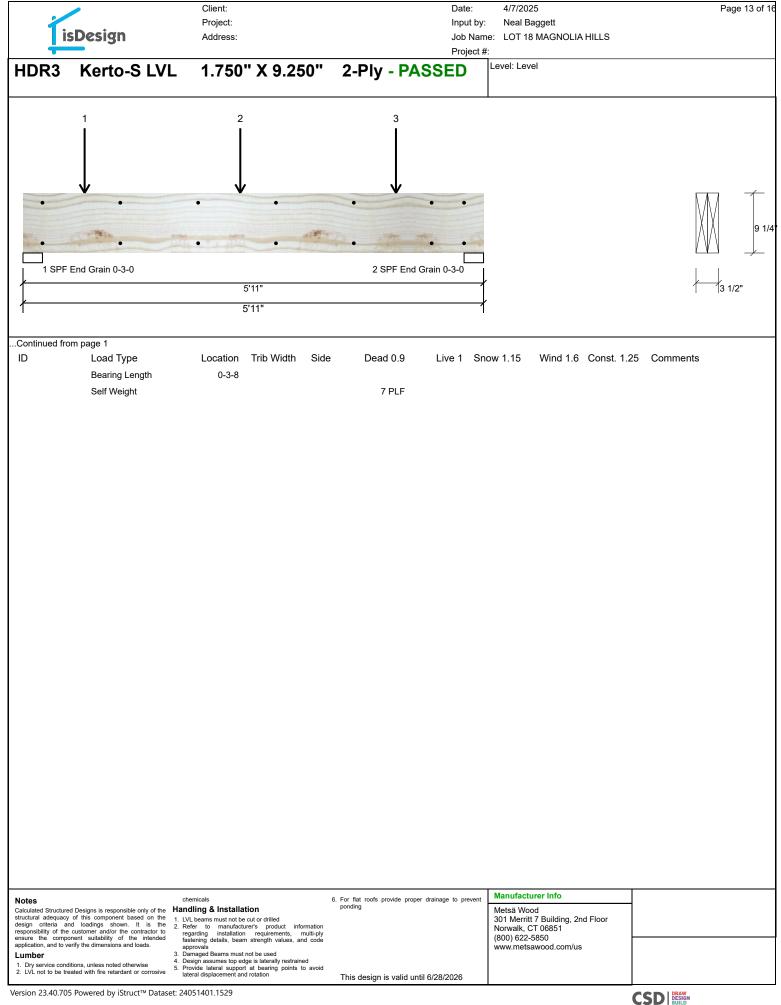
- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- LVL beams must not be cut or drilled
 Refer to manufacturer's product information
 regarding installation requirements, multi-ply
 fastening details, beam strength values, 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

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

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Client: Date: 4/7/2025 Page 14 of 16 Project: Input by: Neal Baggett isDesign Address: Job Name: LOT 18 MAGNOLIA HILLS Project #: 1.750" X 9.250" 2-Ply - PASSED Level: Level **Kerto-S LVL** HDR3 . 1 SPF End Grain 0-3-0 2 SPF End Grain 0-3-0 5'11" 5'11' Multi-Ply Analysis Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6".

. aston an phos asmig 2	(1.20.0)
Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	163.7 PLF
Yield Limit per Fastener	81.9 lb.
См	1
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

Notes

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

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

Handling & Installation

- Handling & Installation

 1. UVI beams must not be cut or drilled

 2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals

 3. Damaged Beams must not be used

 4. Design assumes top edge is laterally restrained

 5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 6/28/2026

Manufacturer Info Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851

(800) 622-5850 www.metsawood.com/us

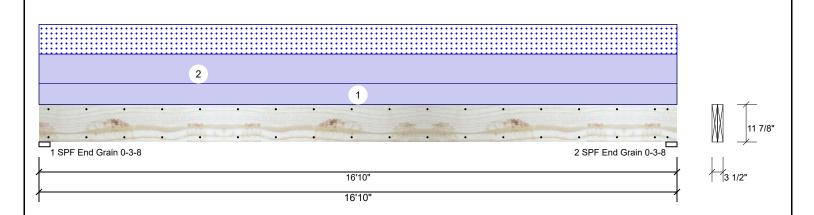


4/7/2025

Input by: Neal Baggett Job Name: LOT 18 MAGNOLIA HILLS Page 15 of 16

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

Level: Level



Member Infori	mation			Rea	ctio
Туре:	Girder	Application:	Floor	Brg	Dire
Plies:	2	Design Method:	ASD	1	Ver
Moisture Condition	n: Dry	Building Code:	IBC/IRC 2015	2	Ver
Deflection LL:	480	Load Sharing:	No		
Deflection TL:	360	Deck:	Not Checked		
Importance:	Normal - II				
Temperature:	Temp <= 100°F				
				Bea	ring
				Be	aring
		1		I	

React	tions	UNPATT	ERNED IL	(U	plift)	
				_		

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	995	539	0	0
2	Vertical	0	995	539	0	0

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	6108 ft-lb	8'5"	22897 ft-lb	0.267 (27%)	D+S	L
Unbraced	6108 ft-lb	8'5"	6109 ft-lb	1.000 (100%)	D+S	L
Shear	1309 lb	1'3 3/8"	10197 lb	0.128 (13%)	D+S	L
LL Defl inch	0.112 (L/1755)	8'5 1/16"	0.409 (L/480)	0.273 (27%)	S	L
TL Defl inch	0.319 (L/617)	8'5 1/16"	0.546 (L/360)	0.584 (58%)	D+S	L

l	Bearing	Length	Dir.	Cap. Re	act D/L lb	Total	Ld. Case	Ld. Comb
ļ	1 - SPF End Grain	3.500"	Vert	15%	995 / 539	1534	L	D+S
l	2 - SPF End Grain	3.500"	Vert	15%	995 / 539	1534	L	D+S

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 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 3 Refer to last page of calculations for fasteners required for specified loads.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be laterally braced at a maximum of 16'3 3/4" o.c.
- 7 Bottom must be laterally braced at end bearings.
- 8 Lateral slenderness ratio based on single ply width.

Γ	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	45 PLF	0 PLF	0 PLF	0 PLF	0 PLF	WALL
	2	Uniform			Тор	64 PLF	0 PLF	64 PLF	0 PLF	0 PLF	P2
ı		Self Weight				Q DI E					

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
- I. 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
 Damagee Beams must not be used
 - Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rotation
- 6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 6/28/2026

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

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Client: Date: 4/7/2025 Page 16 of 16 Project: Input by: Neal Baggett isDesign Address: Job Name: LOT 18 MAGNOLIA HILLS Project #: 1.750" X 11.875" 2-Ply - PASSED Level: Level **Kerto-S LVL GDH** 2 SPF End Grain 0-3-8 1 SPF End Grain 0-3-8 16'10" 16'10" Multi-Ply Analysis Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6". Capacity 0.0 PLF 163.7 PLF Yield Limit per Foot Yield Limit per Fastener 81.9 lb. См Yield Mode IV Edge Distance 1 1/2" Min. End Distance 3" Load Combination **Duration Factor** 1.00

Notes

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

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

Handling & Installation

Handling & Installation

1. UVI beams must not be cut or drilled

2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

5. Provide lateral support at bearing points to avoid lateral displacement and rotation

For flat roofs provide proper drainage to prevent ponding

This design is valid until 6/28/2026

Manufacturer Info

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