ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J1224-6433
Lot 16 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: I72278215 thru I72278238

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

North Carolina COA: C-0844

March 26,2025

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.

Job	Truss	Truss Type	Qty	Ply	Lot 16 Magnolia Hills	I72278215
J1224-6433	A1	ATTIC	3	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Mar 25 13:54:16 2025 Page 1

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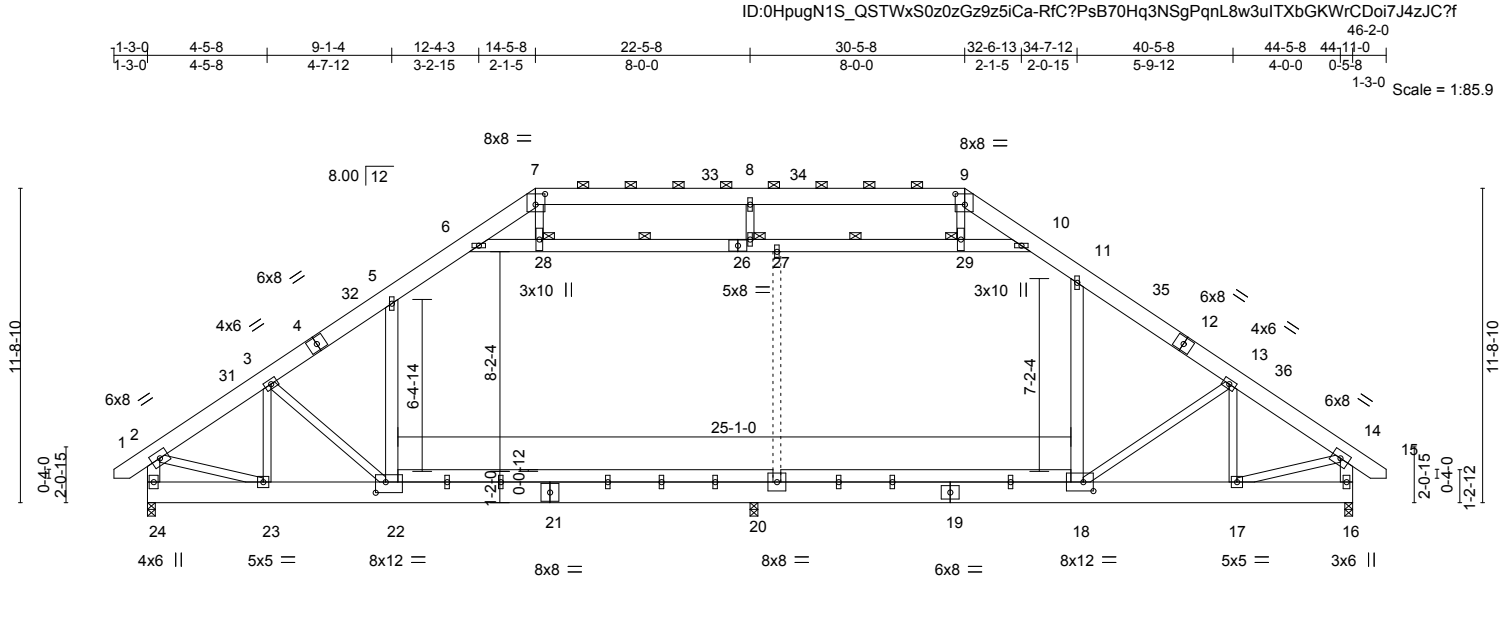

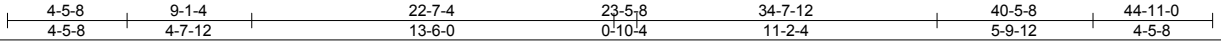

Plate Offsets (X,Y)-- [7:0-4-4,0-4-12], [9:0-4-4,0-4-12], [18:0-4-8,0-4-0], [22:0-4-8,0-4-12]

LOADING (psf)		SPACING- 2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC	0.31	Vert(LL)	-0.29	20-22	>921	360	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC	0.45	Vert(CT)	-0.40	20-22	>672	240		
BCLL	0.0 *	Rep Stress Incr YES	WB	0.64	Horz(CT)	0.03	16	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S		Wind(LL)	0.22	18-20	>999	240	Weight: 547 lb	FT = 20%

LUMBER-

TOP CHORD 2x8 SP 2400F 2.0E
BOT CHORD 2x10 SP 2400F 2.0E *Except*
22-25,18-25: 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
5-22,11-18,6-26,2-24,14-16,10-26: 2x6 SP No.1

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 27-28, 27-29
JOINTS 1 Brace at Jt(s): 27, 28, 29

REACTIONS. (size) 24=0-3-8, 16=0-3-8, 20=0-3-8
Max Horz 24=299(LC 11)
Max Grav 24=2234(LC 2), 16=2157(LC 2), 20=1817(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2432/199, 3-5=-2785/211, 5-6=-2309/356, 6-7=-1823/473, 7-8=-1566/452, 8-9=-1566/452, 9-10=-1820/476, 10-11=-2262/362, 11-13=-2712/247, 13-14=-2334/222, 2-24=-2097/244, 14-16=-2019/257
BOT CHORD 23-24=-224/433, 22-23=-95/2157, 20-22=0/2151, 18-20=0/2151, 17-18=-81/1885
WEBS 5-22=0/730, 11-18=0/576, 6-28=-1169/0, 27-28=-1143/0, 27-29=-1143/0, 10-29=-1175/0, 2-23=-45/1839, 7-28=0/474, 9-29=-5/470, 3-23=-839/74, 3-22=-246/450, 13-18=-244/562, 13-17=-784/101, 14-17=-76/1744

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-7 to 3-6-7, Interior(1) 3-6-7 to 14-5-8, Exterior(2) 14-5-8 to 20-9-12, Interior(1) 20-9-12 to 30-5-8, Exterior(2) 30-5-8 to 36-9-12, Interior(1) 36-9-12 to 45-10-7 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 2x6 MT20 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.
7) Ceiling dead load (10.0 psf) on member(s). 5-6, 10-11, 6-28, 27-28, 27-29, 10-29; Wall dead load (5.0psf) on member(s).5-22, 11-18
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 20-22, 18-20
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Attic room checked for L/360 deflection.

March 26,2025

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Job	Truss	Truss Type	Qty	Ply	Lot 16 Magnolia Hills
J1224-6433	A1-GR	ATTIC	1	2	I72278216
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Mar 25 13:54:18 2025 Page 1
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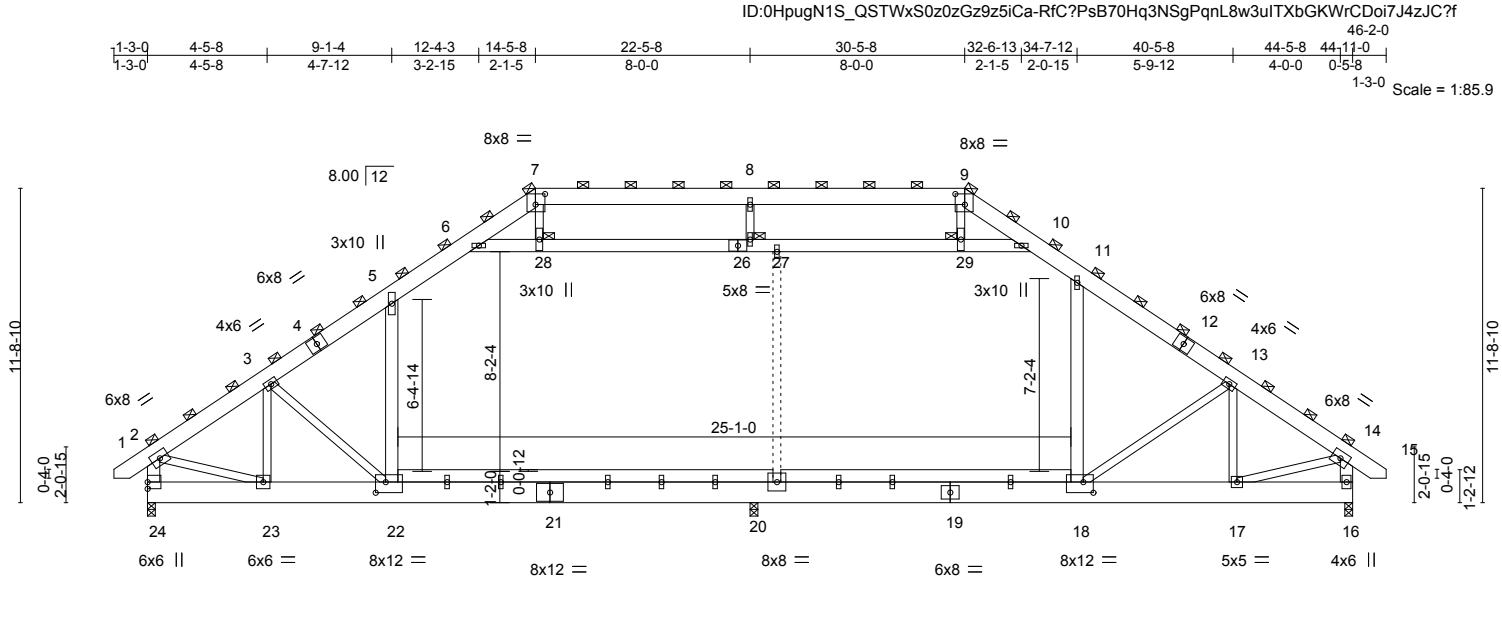

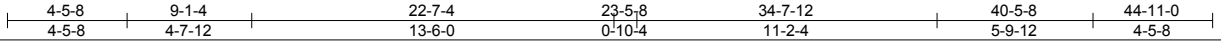

Plate Offsets (X,Y)-- [7:0-4-4,0-4-12], [9:0-4-4,0-4-12], [18:0-4-8,0-4-12], [22:0-4-8,0-4-12]

LOADING (psf)		SPACING- 4-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	-0.45	20-22	>598	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.61	20-22	>441	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.64	Horz(CT)	0.04	16	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.22	18-20	>999	240	Weight: 1094 lb	FT = 20%

LUMBER-
TOP CHORD 2x8 SP 2400F 2.0E
BOT CHORD 2x10 SP 2400F 2.0E *Except*
22-25,18-25: 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
5-22,11-18,6-26,2-24,14-16,10-26: 2x6 SP No.1

BRACING-
TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals
(Switched from sheeted: Spacing > 2-8-0).
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 7, 9, 2, 14, 27, 28, 29

REACTIONS. (size) 24=0-3-8, 16=0-3-8, 20=0-3-8
Max Horz 24=-494(LC 6)
Max Grav 24=5742(LC 2), 16=4452(LC 2), 20=3642(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-6103/0, 3-5=-6141/0, 5-6=-4906/0, 6-7=-3604/579, 7-8=-3092/535, 8-9=-3092/535, 9-10=-3620/551, 10-11=-4855/0, 11-13=-5822/0, 13-14=-4736/0, 2-24=-5193/0, 14-16=-4098/0
BOT CHORD 23-24=-353/928, 22-23=0/5333, 20-22=0/4674, 18-20=0/4674, 17-18=0/3809, 16-17=0/531
WEBS 5-22=0/2100, 11-18=0/1303, 6-28=-2970/0, 27-28=-2926/0, 27-29=-2926/0, 10-29=-2984/0, 2-23=0/4670, 8-27=-177/256, 7-28=-7/934, 9-29=0/961, 3-23=-1069/342, 3-22=-950/672, 13-18=-374/1539, 13-17=-1906/106, 14-17=0/3485

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) All plates are 2x6 MT20 unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Ceiling dead load (10.0 psf) on member(s). 5-6, 10-11, 6-28, 27-28, 27-29, 10-29; Wall dead load (5.0psf) on member(s).5-22, 11-18
10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 20-22, 18-20
11) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.

March 26,2025

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NOTES-

12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-120, 2-5=-120, 5-6=-160, 6-7=-120, 7-9=-120, 9-10=-120, 10-11=-160, 11-14=-120, 14-15=-120, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
   Drag: 5-22=-20, 11-18=-20
2) Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-100, 2-5=-100, 5-6=-140, 6-7=-100, 7-9=-100, 9-10=-100, 10-11=-140, 11-14=-100, 14-15=-100, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
   Drag: 5-22=-20, 11-18=-20
3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-2=-40, 2-5=-40, 5-6=-80, 6-7=-40, 7-9=-40, 9-10=-40, 10-11=-80, 11-14=-40, 14-15=-40, 22-24=-120(F=-40), 16-22=-80, 6-10=-40
   Drag: 5-22=-20, 11-18=-20
4) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=5, 2-5=-26, 5-6=-50, 6-7=-26, 7-9=41, 9-10=22, 10-11=-2, 11-14=22, 14-15=8, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
   Horz: 1-2=-29, 2-7=2, 9-14=46, 14-15=32
   Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20
5) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=8, 2-5=22, 5-6=-2, 6-7=22, 7-9=41, 9-10=-26, 10-11=-50, 11-14=-26, 14-15=5, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
   Horz: 1-2=-32, 2-7=-46, 9-14=-2, 14-15=29
   Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20
6) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=-56, 2-5=-69, 5-6=-109, 6-7=-69, 7-9=-2, 9-10=-21, 10-11=-61, 11-14=-21, 14-15=-8, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
   Horz: 1-2=16, 2-7=29, 9-14=19, 14-15=32
   Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20
7) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=-8, 2-5=-21, 5-6=-61, 6-7=-21, 7-9=-2, 9-10=-69, 10-11=-109, 11-14=-69, 14-15=-56, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
   Horz: 1-2=-32, 2-7=-19, 9-14=-29, 14-15=-16
   Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20
8) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=28, 2-5=41, 5-6=17, 6-7=41, 7-9=17, 9-10=17, 10-11=-7, 11-14=17, 14-15=4, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
   Horz: 1-2=-52, 2-7=-65, 9-14=41, 14-15=28
   Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20
9) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=4, 2-5=17, 5-6=-7, 6-7=17, 7-9=17, 9-10=41, 10-11=17, 11-14=41, 14-15=28, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
   Horz: 1-2=-28, 2-7=-41, 9-14=65, 14-15=52
   Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20
10) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=28, 2-5=41, 5-6=17, 6-7=41, 7-9=17, 9-10=17, 10-11=-7, 11-14=17, 14-15=4, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
   Horz: 1-2=-52, 2-7=-65, 9-14=41, 14-15=28
   Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20
11) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=4, 2-5=17, 5-6=-7, 6-7=17, 7-9=17, 9-10=41, 10-11=17, 11-14=41, 14-15=28, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
   Horz: 1-2=-28, 2-7=-41, 9-14=65, 14-15=52
   Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20
12) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=12, 2-5=-2, 5-6=-42, 6-7=-2, 7-9=-26, 9-10=-26, 10-11=-66, 11-14=-26, 14-15=-12, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
   Horz: 1-2=-52, 2-7=-38, 9-14=14, 14-15=28
   Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20
13) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=-12, 2-5=-26, 5-6=-66, 6-7=-26, 7-9=-26, 9-10=-2, 10-11=-42, 11-14=-2, 14-15=12, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
   Horz: 1-2=-28, 2-7=-14, 9-14=38, 14-15=52
   Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20
14) Dead + Attic Floor: Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
   Vert: 1-2=-40, 2-5=-40, 5-6=-80, 6-7=-40, 7-9=-40, 9-10=-40, 10-11=-80, 11-14=-40, 14-15=-40, 22-24=-240(F=-200), 18-22=-240, 16-18=-40, 6-10=-40
   Drag: 5-22=-20, 11-18=-20
15) Dead: Lumber Increase=1.00, Plate Increase=1.00

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LOAD CASE(S) Standard

Uniform Loads (plf)
Vert: 1-2=-40, 2-5=-40, 5-6=-80, 6-7=-40, 7-9=-40, 9-10=-40, 10-11=-80, 11-14=-40, 14-15=-40, 22-24=-240(F=-200), 18-22=-240, 16-18=-40, 6-10=-40
Drag: 5-22=-20, 11-18=-20

16) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-112, 2-5=-122, 5-6=-162, 6-7=-122, 7-9=-71, 9-10=-86, 10-11=-126, 11-14=-86, 14-15=-76, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
Horz: 1-2=12, 2-7=22, 9-14=14, 14-15=24
Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

17) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-76, 2-5=-86, 5-6=-126, 6-7=-86, 7-9=-71, 9-10=-122, 10-11=-162, 11-14=-122, 14-15=-112, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
Horz: 1-2=-24, 2-7=-14, 9-14=-22, 14-15=-12
Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

18) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-61, 2-5=-71, 5-6=-111, 6-7=-71, 7-9=-89, 9-10=-89, 10-11=-129, 11-14=-89, 14-15=-79, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
Horz: 1-2=-39, 2-7=-29, 9-14=11, 14-15=21
Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

19) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-79, 2-5=-89, 5-6=-129, 6-7=-89, 7-9=-89, 9-10=-71, 10-11=-111, 11-14=-71, 14-15=-61, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
Horz: 1-2=-21, 2-7=-11, 9-14=29, 14-15=39
Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

20) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-120, 2-5=-120, 5-6=-160, 6-7=-120, 7-9=-120, 9-10=-40, 10-11=-80, 11-14=-40, 14-15=-40, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
Drag: 5-22=-20, 11-18=-20

21) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-40, 2-5=-40, 5-6=-80, 6-7=-40, 7-9=-120, 9-10=-120, 10-11=-160, 11-14=-120, 14-15=-120, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
Drag: 5-22=-20, 11-18=-20

22) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-100, 2-5=-100, 5-6=-140, 6-7=-100, 7-9=-100, 9-10=-40, 10-11=-80, 11-14=-40, 14-15=-40, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
Drag: 5-22=-20, 11-18=-20

23) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-40, 2-5=-40, 5-6=-80, 6-7=-40, 7-9=-100, 9-10=-100, 10-11=-140, 11-14=-100, 14-15=-100, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
Drag: 5-22=-20, 11-18=-20

24) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=5, 2-5=-26, 5-6=-50, 6-7=-26, 7-9=41, 9-10=22, 10-11=-2, 11-14=22, 14-15=8, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
Horz: 1-2=-29, 2-7=2, 9-14=46, 14-15=32
Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

25) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=8, 2-5=22, 5-6=-2, 6-7=22, 7-9=41, 9-10=-26, 10-11=-50, 11-14=-26, 14-15=5, 22-24=-64(F=-40), 18-22=-48,
16-18=-24, 6-10=-24
Horz: 1-2=-32, 2-7=-46, 9-14=-2, 14-15=29
Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

26) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-56, 2-5=-69, 5-6=-109, 6-7=-69, 7-9=-2, 9-10=-21, 10-11=-61, 11-14=-21, 14-15=-8, 22-24=-80(F=-40),
18-22=-80, 16-18=-40, 6-10=-40
Horz: 1-2=16, 2-7=29, 9-14=19, 14-15=32
Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

27) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-8, 2-5=-21, 5-6=-61, 6-7=-21, 7-9=-2, 9-10=-69, 10-11=-109, 11-14=-69, 14-15=-56, 22-24=-80(F=-40),
18-22=-80, 16-18=-40, 6-10=-40
Horz: 1-2=-32, 2-7=-19, 9-14=-29, 14-15=-16
Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

28) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=28, 2-5=41, 5-6=17, 6-7=41, 7-9=17, 9-10=17, 10-11=-7, 11-14=17, 14-15=4, 22-24=-64(F=-40), 18-22=-48,
16-18=-24, 6-10=-24
Horz: 1-2=-52, 2-7=-65, 9-14=41, 14-15=28
Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

29) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Continued on page 4

LOAD CASE(S) Standard

Uniform Loads (plf)
Vert: 1-2=4, 2-5=17, 5-6=-7, 6-7=17, 7-9=17, 9-10=41, 10-11=17, 11-14=41, 14-15=28, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
Horz: 1-2=-28, 2-7=-41, 9-14=65, 14-15=52
Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

30) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=28, 2-5=41, 5-6=17, 6-7=41, 7-9=17, 9-10=17, 10-11=-7, 11-14=17, 14-15=4, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
Horz: 1-2=-52, 2-7=-65, 9-14=41, 14-15=28
Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

31) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=4, 2-5=17, 5-6=-7, 6-7=17, 7-9=17, 9-10=41, 10-11=17, 11-14=41, 14-15=28, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
Horz: 1-2=-28, 2-7=-41, 9-14=65, 14-15=52
Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

32) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=12, 2-5=-2, 5-6=-42, 6-7=-2, 7-9=-26, 9-10=-26, 10-11=-66, 11-14=-26, 14-15=-12, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
Horz: 1-2=-52, 2-7=-38, 9-14=14, 14-15=28
Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

33) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-12, 2-5=-26, 5-6=-66, 6-7=-26, 7-9=-26, 9-10=-2, 10-11=-42, 11-14=-2, 14-15=12, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
Horz: 1-2=-28, 2-7=-14, 9-14=38, 14-15=52
Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

34) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-112, 2-5=-122, 5-6=-162, 6-7=-122, 7-9=-71, 9-10=-86, 10-11=-126, 11-14=-86, 14-15=-76, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
Horz: 1-2=12, 2-7=22, 9-14=14, 14-15=24
Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

35) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-76, 2-5=-86, 5-6=-126, 6-7=-86, 7-9=-71, 9-10=-122, 10-11=-162, 11-14=-122, 14-15=-112, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
Horz: 1-2=-24, 2-7=-14, 9-14=-22, 14-15=-12
Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

36) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-61, 2-5=-71, 5-6=-111, 6-7=-71, 7-9=-89, 9-10=-89, 10-11=-129, 11-14=-89, 14-15=-79, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
Horz: 1-2=-39, 2-7=-29, 9-14=11, 14-15=21
Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

37) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-79, 2-5=-89, 5-6=-129, 6-7=-89, 7-9=-89, 9-10=-71, 10-11=-111, 11-14=-71, 14-15=-61, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
Horz: 1-2=-21, 2-7=-11, 9-14=29, 14-15=39
Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

Job	Truss	Truss Type	Qty	Ply	Lot 16 Magnolia Hills
J1224-6433	A1GE	GABLE	1	1	I72278217
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Mar 25 13:54:17 2025 Page 1
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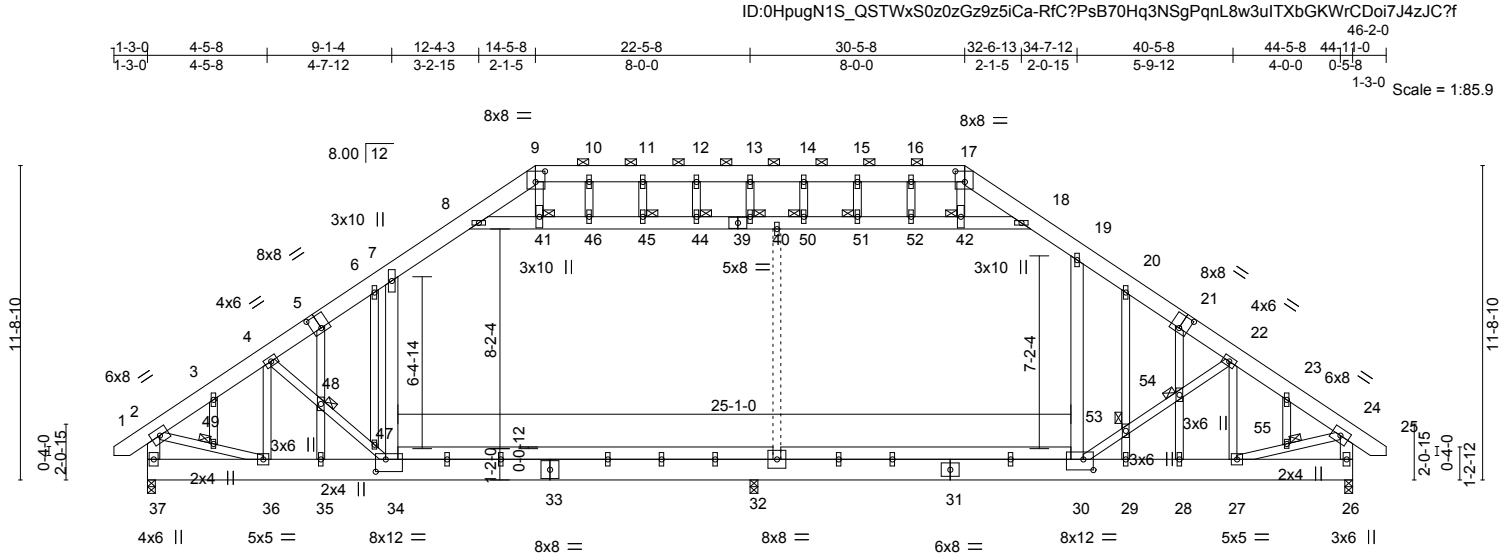

Plate Offsets (X,Y)-- [5:0-4-0,0-6-0], [9:0-4-4,0-4-12], [17:0-4-4,0-4-12], [21:0-4-0,0-6-0], [30:0-4-8,0-4-12], [34:0-4-8,0-5-8]

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	0.31	Vert(LL)	-0.28	32-34	>956	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.38	32-34	>699	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.58	Horz(CT)	0.03	26	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.27	30-32	>983	240	Weight: 596 lb	FT = 20%

LUMBER-

TOP CHORD	2x8 SP 2400F 2.0E
BOT CHORD	2x10 SP 2400F 2.0E *Except* 34-38,30-38: 2x6 SP No.1
WEBS	2x4 SP No.2 *Except* 7-34,19-30,8-39,2-37,24-26,18-39: 2x6 SP No.1
OTHERS	2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 9-17.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS	1 Brace at Jt(s): 40, 41, 42, 44, 45, 48, 49, 50, 51, 53, 54, 55

REACTIONS. (size) 37=0-3-8, 26=0-3-8, 32=0-3-8
Max Horz 37=374(LC 11)
Max Uplift 37=-89(LC 12), 26=-93(LC 13)
Max Grav 37=2252(LC 2), 26=2176(LC 2), 32=1780(LC 18)

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

TOP CHORD	2-3=-2532/306, 3-4=-2381/316, 4-5=-2664/309, 5-6=-2869/322, 6-7=-2827/345, 7-8=-2332/478, 8-9=-1898/615, 9-10=-1650/569, 10-11=-1645/569, 11-12=-1645/569, 12-13=-1645/569, 13-14=-1645/569, 14-15=-1645/569, 15-16=-1645/569, 16-17=-1650/569, 17-18=-1891/609, 18-19=-2282/478, 19-20=-2752/386, 20-21=-2663/348, 21-22=-2648/311, 22-23=-2281/345, 23-24=-2426/336, 2-37=-2145/338, 24-26=-2065/361
BOT CHORD	36-37=-303/527, 35-36=-243/2160, 34-35=-243/2160, 32-34=-45/2177, 30-32=-45/2177, 29-30=-180/1906, 28-29=-180/1906, 27-28=-180/1906, 26-27=-38/298
WEBS	7-34=0/974, 19-30=0/812, 8-41=-1224/52, 41-46=-1198/60, 45-46=-1198/60, 44-45=-1198/60, 40-44=-1198/60, 40-50=-1198/60, 50-51=-1198/60, 51-52=-1198/60, 42-52=-1198/60, 18-42=-1237/67, 2-49=-122/1773, 36-49=-125/1830, 9-41=-206/679, 17-42=-227/667, 4-36=-534/188, 4-48=-346/496, 47-48=-344/471, 34-47=-419/490, 30-53=-376/597, 53-54=-341/556, 22-54=-356/585, 22-27=-632/181, 27-55=-153/1735, 24-55=-149/1682, 10-46=-277/144, 5-48=-549/9, 35-48=-538/7, 16-52=-270/156, 20-53=-306/47, 29-53=-338/31

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x6 MT20 unless otherwise indicated.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

Continued on page 2

March 26,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 16 Magnolia Hills
J1224-6433	A1GE	GABLE	1	1	I72278217
					Job Reference (optional)

NOTES-

8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Ceiling dead load (10.0 psf) on member(s). 7-8, 18-19, 8-41, 41-46, 45-46, 44-45, 40-44, 40-50, 50-51, 51-52, 42-52, 18-42; Wall dead load (5.0psf) on member(s).7-34, 19-30
10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 32-34, 30-32
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 89 lb uplift at joint 37 and 93 lb uplift at joint 26.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Attic room checked for L/360 deflection.

Job	Truss	Truss Type	Qty	Ply	Lot 16 Magnolia Hills
J1224-6433	A2	ATTIC	1	1	I72278218
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Mar 25 13:54:19 2025 Page 1
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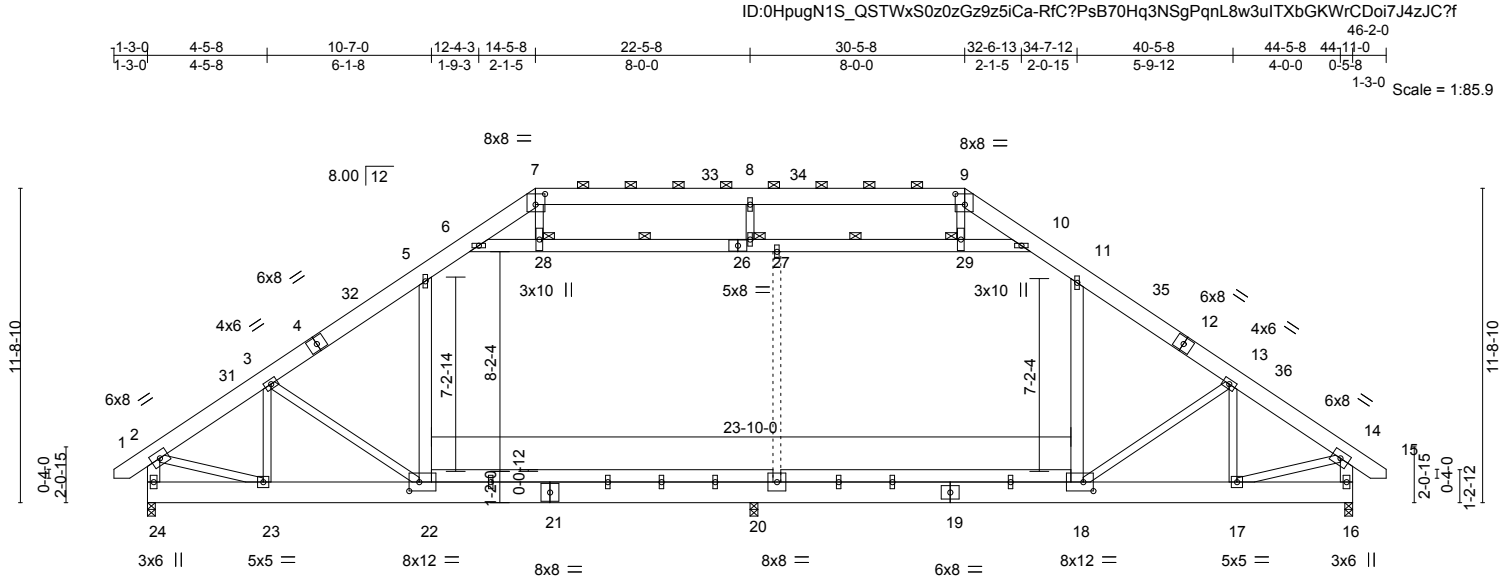

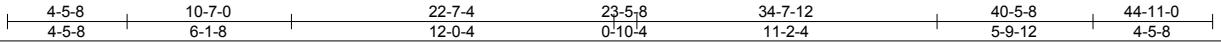

Plate Offsets (X,Y)-- [7:0-4-4,0-4-12], [9:0-4-4,0-4-12], [18:0-4-8,0-4-0], [22:0-4-8,0-4-0]

LOADING (psf)		SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES GRIP
TCLL 20.0		Plate Grip DOL 1.15	TC 0.26	Vert(LL) -0.23 20-22 >999 360	MT20 244/190
TCDL 10.0		Lumber DOL 1.15	BC 0.41	Vert(CT) -0.29 20-22 >916 240	
BCLL 0.0	*	Rep Stress Incr YES	WB 0.64	Horz(CT) 0.03 16 n/a n/a	
BCDL 10.0		Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.22 20-22 >999 240	Weight: 548 lb FT = 20%

LUMBER-
TOP CHORD 2x8 SP 2400F 2.0E
BOT CHORD 2x10 SP 2400F 2.0E *Except*
22-25,18-25: 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
5-22,11-18,6-26,2-24,14-16,10-26: 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 27-28, 27-29
JOINTS 1 Brace at Jt(s): 27, 28, 29

REACTIONS. (size) 24=0-3-8, 16=0-3-8, 20=0-3-8
Max Horz 24=-247(LC 10)
Max Grav 24=2179(LC 2), 16=2174(LC 2), 20=1721(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2370/206, 3-5=-2728/233, 5-6=-2261/352, 6-7=-1845/460, 7-8=-1591/434, 8-9=-1591/434, 9-10=-1847/458, 10-11=-2267/352, 11-13=-2726/233, 13-14=-2360/208, 2-24=-2051/249, 14-16=-2043/251
BOT CHORD 23-24=-183/405, 22-23=-76/2093, 20-22=0/2154, 18-20=0/2154, 17-18=-91/1909
WEBS 5-22=0/606, 11-18=0/596, 6-28=-1081/0, 27-28=-1051/0, 27-29=-1051/0, 10-29=-1084/0, 2-23=-84/1792, 7-28=-1/467, 9-29=0/471, 3-23=-752/71, 3-22=-223/510, 13-18=-223/526, 13-17=-766/75, 14-17=-86/1776

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-7 to 3-6-7, Interior(1) 3-6-7 to 14-5-8, Exterior(2) 14-5-8 to 20-9-12, Interior(1) 20-9-12 to 30-5-8, Exterior(2) 30-5-8 to 36-9-12, Interior(1) 36-9-12 to 45-10-7 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) All plates are 2x6 MT20 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.
7) Ceiling dead load (10.0 psf) on member(s). 5-6, 10-11, 6-28, 27-28, 27-29, 10-29; Wall dead load (5.0psf) on member(s).5-22, 11-18
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 20-22, 18-20
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Attic room checked for L/360 deflection.

March 26,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 16 Magnolia Hills
J1224-6433	A2-GR	ATTIC	1	2	I72278219
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Mar 25 13:54:21 2025 Page 1
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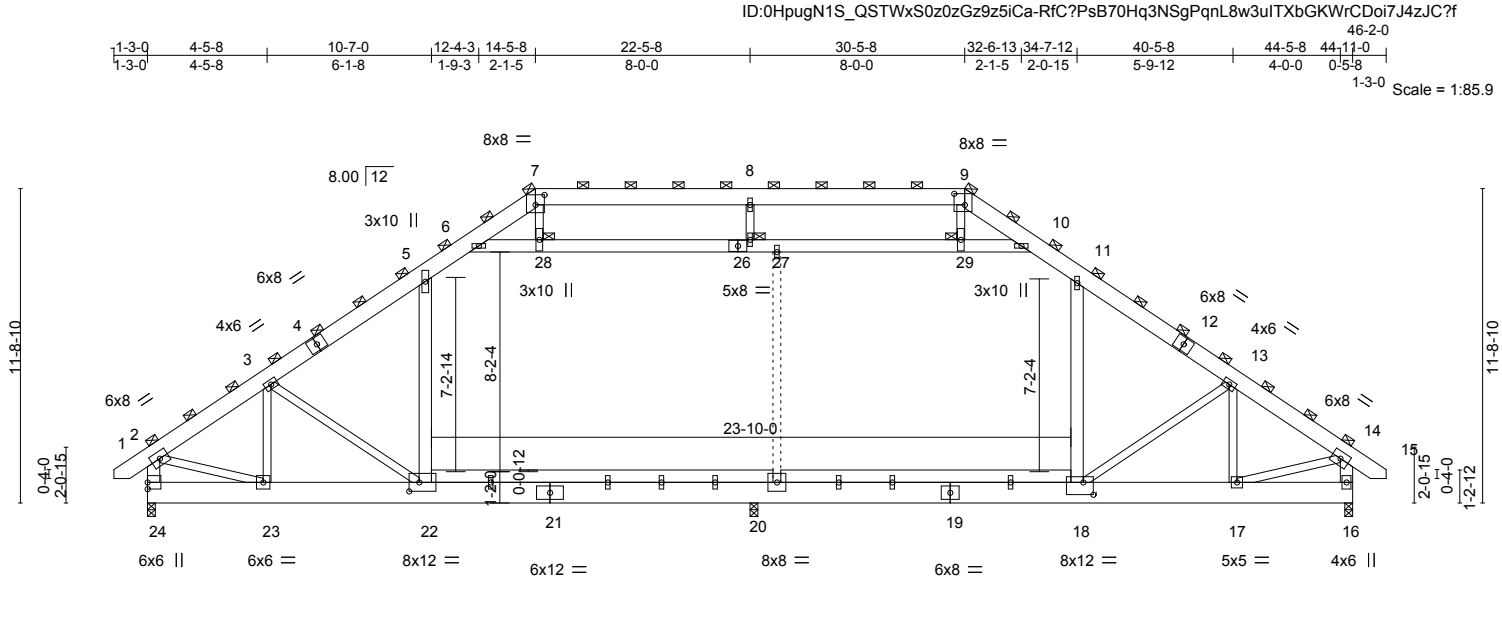

Plate Offsets (X,Y)-- [7:0-4-0,0-4-8], [9:0-4-12,0-5-0], [18:0-4-8,0-5-8], [22:0-4-8,0-4-0]

LOADING (psf)		SPACING-	4-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.41	20-22	>652	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.54	20-22	>496	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.67	Horz(CT)	0.04	16	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.22	20-22	>999	240	Weight: 1095 lb	FT = 20%

LUMBER-
TOP CHORD 2x8 SP 2400F 2.0E
BOT CHORD 2x10 SP 2400F 2.0E *Except*
22-25,18-25: 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
5-22,11-18,6-26,2-24,14-16,10-26: 2x6 SP No.1

BRACING-
TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals (Switched from sheeted: Spacing > 2-8-0).
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 7, 9, 2, 14, 27, 28, 29

REACTIONS. (size) 24=0-3-8, 16=0-3-8, 20=0-3-8
Max Horz 24=-494(LC 6)
Max Grav 24=5786(LC 2), 16=4525(LC 2), 20=3460(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-6237/0, 3-5=-6111/0, 5-6=-4873/0, 6-7=-3651/530, 7-8=-3153/463, 8-9=-3153/464, 9-10=-3689/494, 10-11=-4949/0, 11-13=-5951/0, 13-14=-4815/0, 2-24=-5318/0, 14-16=-4167/0
BOT CHORD 23-24=-339/916, 22-23=0/5449, 20-22=0/4769, 18-20=0/4769, 17-18=0/3877, 16-17=0/538
WEBS 5-22=0/1895, 11-18=0/1379, 6-28=-2842/0, 27-28=-2804/0, 27-29=-2804/0, 10-29=-2865/0, 2-23=0/4804, 8-27=-176/258, 7-28=-23/912, 9-29=0/980, 3-23=-931/369, 3-22=-919/681, 13-18=-321/1550, 13-17=-1956/44, 14-17=0/3556

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) All plates are 2x6 MT20 unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Ceiling dead load (10.0 psf) on member(s). 5-6, 10-11, 6-28, 27-28, 27-29, 10-29; Wall dead load (5.0psf) on member(s).5-22, 11-18
10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 20-22, 18-20
11) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT
March 26,2025

Continued on page 2

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

NOTES-

12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-120, 2-5=-120, 5-6=-160, 6-7=-120, 7-9=-120, 9-10=-120, 10-11=-160, 11-14=-120, 14-15=-120, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
   Drag: 5-22=-20, 11-18=-20
2) Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-100, 2-5=-100, 5-6=-140, 6-7=-100, 7-9=-100, 9-10=-100, 10-11=-140, 11-14=-100, 14-15=-100, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
   Drag: 5-22=-20, 11-18=-20
3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-2=-40, 2-5=-40, 5-6=-80, 6-7=-40, 7-9=-40, 9-10=-40, 10-11=-80, 11-14=-40, 14-15=-40, 22-24=-120(F=-40), 16-22=-80, 6-10=-40
   Drag: 5-22=-20, 11-18=-20
4) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=5, 2-5=-26, 5-6=-50, 6-7=-26, 7-9=41, 9-10=22, 10-11=-2, 11-14=22, 14-15=8, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
   Horz: 1-2=-29, 2-7=2, 9-14=46, 14-15=32
   Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20
5) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=8, 2-5=22, 5-6=-2, 6-7=22, 7-9=41, 9-10=-26, 10-11=-50, 11-14=-26, 14-15=5, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
   Horz: 1-2=-32, 2-7=-46, 9-14=-2, 14-15=29
   Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20
6) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=-56, 2-5=-69, 5-6=-109, 6-7=-69, 7-9=-2, 9-10=-21, 10-11=-61, 11-14=-21, 14-15=-8, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
   Horz: 1-2=16, 2-7=29, 9-14=19, 14-15=32
   Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20
7) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=-8, 2-5=-21, 5-6=-61, 6-7=-21, 7-9=-2, 9-10=-69, 10-11=-109, 11-14=-69, 14-15=-56, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
   Horz: 1-2=-32, 2-7=-19, 9-14=-29, 14-15=-16
   Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20
8) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=28, 2-5=41, 5-6=17, 6-7=41, 7-9=17, 9-10=17, 10-11=-7, 11-14=17, 14-15=4, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
   Horz: 1-2=-52, 2-7=-65, 9-14=41, 14-15=28
   Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20
9) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=4, 2-5=17, 5-6=-7, 6-7=17, 7-9=17, 9-10=41, 10-11=17, 11-14=41, 14-15=28, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
   Horz: 1-2=-28, 2-7=-41, 9-14=65, 14-15=52
   Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20
10) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=28, 2-5=41, 5-6=17, 6-7=41, 7-9=17, 9-10=17, 10-11=-7, 11-14=17, 14-15=4, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
   Horz: 1-2=-52, 2-7=-65, 9-14=41, 14-15=28
   Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20
11) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=4, 2-5=17, 5-6=-7, 6-7=17, 7-9=17, 9-10=41, 10-11=17, 11-14=41, 14-15=28, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
   Horz: 1-2=-28, 2-7=-41, 9-14=65, 14-15=52
   Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20
12) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=12, 2-5=-2, 5-6=-42, 6-7=-2, 7-9=-26, 9-10=-26, 10-11=-66, 11-14=-26, 14-15=-12, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
   Horz: 1-2=-52, 2-7=-38, 9-14=14, 14-15=28
   Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20
13) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=-12, 2-5=-26, 5-6=-66, 6-7=-26, 7-9=-26, 9-10=-2, 10-11=-42, 11-14=-2, 14-15=12, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
   Horz: 1-2=-28, 2-7=-14, 9-14=38, 14-15=52
   Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20
14) Dead + Attic Floor: Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
   Vert: 1-2=-40, 2-5=-40, 5-6=-80, 6-7=-40, 7-9=-40, 9-10=-40, 10-11=-80, 11-14=-40, 14-15=-40, 22-24=-240(F=-200), 18-22=-240, 16-18=-40, 6-10=-40
   Drag: 5-22=-20, 11-18=-20
15) Dead: Lumber Increase=1.00, Plate Increase=1.00

Continued on page 3

LOAD CASE(S) Standard

Uniform Loads (plf)
Vert: 1-2=-40, 2-5=-40, 5-6=-80, 6-7=-40, 7-9=-40, 9-10=-40, 10-11=-80, 11-14=-40, 14-15=-40, 22-24=-240(F=-200), 18-22=-240, 16-18=-40, 6-10=-40
Drag: 5-22=-20, 11-18=-20

16) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-112, 2-5=-122, 5-6=-162, 6-7=-122, 7-9=-71, 9-10=-86, 10-11=-126, 11-14=-86, 14-15=-76, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
Horz: 1-2=12, 2-7=22, 9-14=14, 14-15=24
Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

17) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-76, 2-5=-86, 5-6=-126, 6-7=-86, 7-9=-71, 9-10=-122, 10-11=-162, 11-14=-122, 14-15=-112, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
Horz: 1-2=-24, 2-7=-14, 9-14=-22, 14-15=-12
Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

18) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-61, 2-5=-71, 5-6=-111, 6-7=-71, 7-9=-89, 9-10=-89, 10-11=-129, 11-14=-89, 14-15=-79, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
Horz: 1-2=-39, 2-7=-29, 9-14=11, 14-15=21
Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

19) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-79, 2-5=-89, 5-6=-129, 6-7=-89, 7-9=-89, 9-10=-71, 10-11=-111, 11-14=-71, 14-15=-61, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
Horz: 1-2=-21, 2-7=-11, 9-14=29, 14-15=39
Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

20) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-120, 2-5=-120, 5-6=-160, 6-7=-120, 7-9=-120, 9-10=-40, 10-11=-80, 11-14=-40, 14-15=-40, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
Drag: 5-22=-20, 11-18=-20

21) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-40, 2-5=-40, 5-6=-80, 6-7=-40, 7-9=-120, 9-10=-120, 10-11=-160, 11-14=-120, 14-15=-120, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
Drag: 5-22=-20, 11-18=-20

22) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-100, 2-5=-100, 5-6=-140, 6-7=-100, 7-9=-100, 9-10=-40, 10-11=-80, 11-14=-40, 14-15=-40, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
Drag: 5-22=-20, 11-18=-20

23) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-40, 2-5=-40, 5-6=-80, 6-7=-40, 7-9=-100, 9-10=-100, 10-11=-140, 11-14=-100, 14-15=-100, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
Drag: 5-22=-20, 11-18=-20

24) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=5, 2-5=-26, 5-6=-50, 6-7=-26, 7-9=41, 9-10=22, 10-11=-2, 11-14=22, 14-15=8, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
Horz: 1-2=-29, 2-7=2, 9-14=46, 14-15=32
Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

25) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=8, 2-5=22, 5-6=-2, 6-7=22, 7-9=41, 9-10=-26, 10-11=-50, 11-14=-26, 14-15=5, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
Horz: 1-2=-32, 2-7=-46, 9-14=-2, 14-15=29
Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

26) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-56, 2-5=-69, 5-6=-109, 6-7=-69, 7-9=-2, 9-10=-21, 10-11=-61, 11-14=-21, 14-15=-8, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
Horz: 1-2=16, 2-7=29, 9-14=19, 14-15=32
Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

27) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-8, 2-5=-21, 5-6=-61, 6-7=-21, 7-9=-2, 9-10=-69, 10-11=-109, 11-14=-69, 14-15=-56, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
Horz: 1-2=-32, 2-7=-19, 9-14=-29, 14-15=-16
Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

28) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=28, 2-5=41, 5-6=17, 6-7=41, 7-9=17, 9-10=17, 10-11=-7, 11-14=17, 14-15=4, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
Horz: 1-2=-52, 2-7=-65, 9-14=41, 14-15=28
Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

29) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Continued on page 4

LOAD CASE(S) Standard

Uniform Loads (plf)
Vert: 1-2=4, 2-5=17, 5-6=-7, 6-7=17, 7-9=17, 9-10=41, 10-11=17, 11-14=41, 14-15=28, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
Horz: 1-2=-28, 2-7=-41, 9-14=65, 14-15=52
Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

30) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=28, 2-5=41, 5-6=17, 6-7=41, 7-9=17, 9-10=17, 10-11=-7, 11-14=17, 14-15=4, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
Horz: 1-2=-52, 2-7=-65, 9-14=41, 14-15=28
Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

31) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=4, 2-5=17, 5-6=-7, 6-7=17, 7-9=17, 9-10=41, 10-11=17, 11-14=41, 14-15=28, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
Horz: 1-2=-28, 2-7=-41, 9-14=65, 14-15=52
Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

32) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=12, 2-5=-2, 5-6=-42, 6-7=-2, 7-9=-26, 9-10=-26, 10-11=-66, 11-14=-26, 14-15=-12, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
Horz: 1-2=-52, 2-7=-38, 9-14=14, 14-15=28
Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

33) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-12, 2-5=-26, 5-6=-66, 6-7=-26, 7-9=-26, 9-10=-2, 10-11=-42, 11-14=-2, 14-15=12, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
Horz: 1-2=-28, 2-7=-14, 9-14=38, 14-15=52
Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

34) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-112, 2-5=-122, 5-6=-162, 6-7=-122, 7-9=-71, 9-10=-86, 10-11=-126, 11-14=-86, 14-15=-76, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
Horz: 1-2=12, 2-7=22, 9-14=14, 14-15=24
Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

35) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-76, 2-5=-86, 5-6=-126, 6-7=-86, 7-9=-71, 9-10=-122, 10-11=-162, 11-14=-122, 14-15=-112, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
Horz: 1-2=-24, 2-7=-14, 9-14=-22, 14-15=-12
Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

36) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-61, 2-5=-71, 5-6=-111, 6-7=-71, 7-9=-89, 9-10=-89, 10-11=-129, 11-14=-89, 14-15=-79, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
Horz: 1-2=-39, 2-7=-29, 9-14=11, 14-15=21
Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

37) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-79, 2-5=-89, 5-6=-129, 6-7=-89, 7-9=-89, 9-10=-71, 10-11=-111, 11-14=-71, 14-15=-61, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
Horz: 1-2=-21, 2-7=-11, 9-14=29, 14-15=39
Drag: 7-8=-0, 8-9=0, 5-22=-20, 11-18=-20

Job	Truss	Truss Type	Qty	Ply	Lot 16 Magnolia Hills
J1224-6433	A2A-GR	ATTIC	1	3	I72278220
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Mar 25 13:54:20 2025 Page 1
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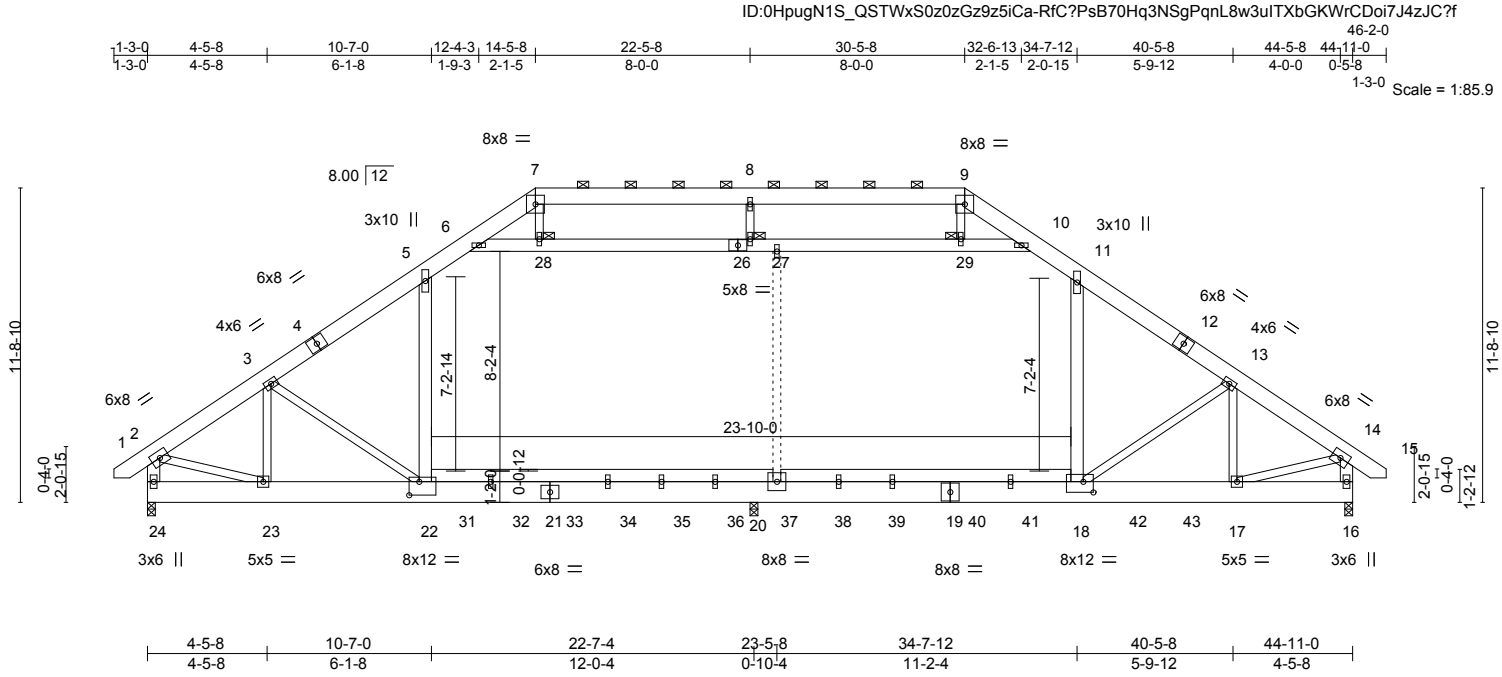

Plate Offsets (X,Y)-- [18:0-4-8,0-4-12], [22:0-4-8,0-6-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	-0.21	18-20	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.30	18-20	>872	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.53	Horz(CT)	0.03	16	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.07	20-22	>999	240	Weight: 1643 lb	FT = 20%

LUMBER-
TOP CHORD 2x8 SP 2400F 2.0E
BOT CHORD 2x10 SP 2400F 2.0E *Except*
22-25,18-25: 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
5-22,11-18,6-26,2-24,14-16,10-26: 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 27, 28, 29

REACTIONS. (size) 24=0-3-8, 16=0-3-8, 20=0-3-8
Max Horz 24=-247(LC 6)
Max Grav 24=4364(LC 2), 16=6289(LC 14), 20=5113(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4923/0, 3-5=-6079/0, 5-6=-4461/0, 6-7=-1707/246, 7-8=-1384/218, 8-9=-1384/218, 9-10=-1678/244, 10-11=-4423/0, 11-13=-6224/0, 13-14=-7162/0, 2-24=-4119/0, 14-16=-5868/0
BOT CHORD 23-24=-183/489, 22-23=-31/4032, 20-22=0/4894, 18-20=0/4894, 17-18=0/5951, 16-17=0/661
WEBS 5-22=0/2888, 11-18=0/3237, 6-28=-5077/0, 27-28=-5039/0, 27-29=-5039/0, 10-29=-5064/0, 2-23=0/3763, 7-28=-1/563, 9-29=0/469, 3-23=-1589/71, 3-22=-223/1133, 13-18=-1312/457, 13-17=-766/805, 14-17=0/5602

NOTES-
1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x10 - 4 rows staggered at 0-4-0 oc.
Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) All plates are 2x6 MT20 unless otherwise indicated.

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Continued on page 2

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NOTES-

7) N/A

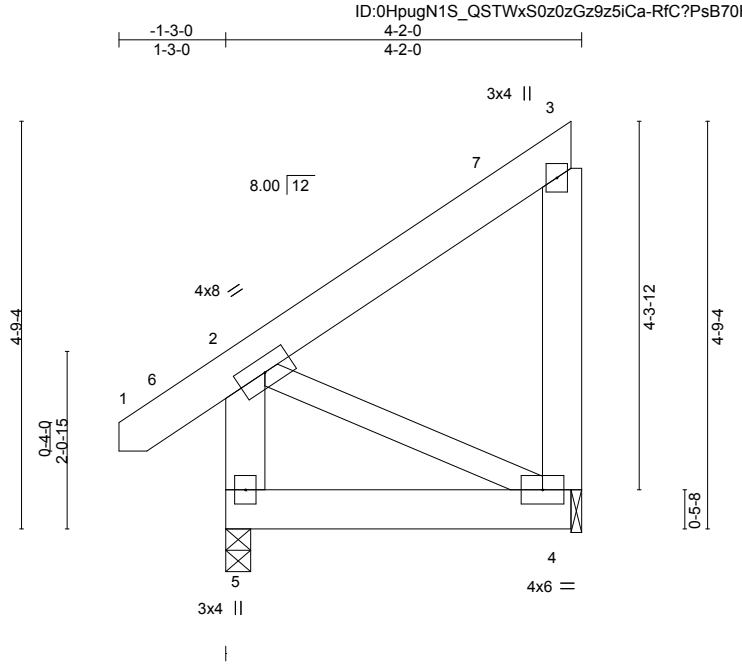
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Ceiling dead load (10.0 psf) on member(s). 5-6, 10-11, 6-28, 27-28, 27-29, 10-29; Wall dead load (5.0psf) on member(s).5-22, 11-18
11) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 20-22, 18-20
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2488 lb down at 10-4-12, 160 lb down and 83 lb up at 11-9-4, 160 lb down and 83 lb up at 13-9-4, 160 lb down and 83 lb up at 15-9-4, 160 lb down and 83 lb up at 17-9-4, 160 lb down and 83 lb up at 19-9-4, 160 lb down and 83 lb up at 21-9-4, 917 lb down at 23-9-4, 917 lb down at 25-9-4, 917 lb down at 27-9-4, 264 lb down at 29-9-4, 264 lb down at 30-9-4, 264 lb down at 32-9-4, 264 lb down at 34-9-4, 264 lb down at 36-9-4, and 264 lb down at 38-9-4, and 2984 lb down at 40-7-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
14) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-60, 2-5=-60, 5-6=-80, 6-7=-60, 7-9=-60, 9-10=-60, 10-11=-80, 11-14=-60, 14-15=-60, 22-24=-20, 18-22=-40, 16-18=-20, 6-10=-20
   Drag: 5-22=-10, 11-18=-10
   Concentrated Loads (lb)
   Vert: 22=-761(B) 18=-48(B) 19=-48(B) 17=-1017(B) 31=-5(B) 32=-5(B) 33=-5(B) 34=-5(B) 35=-5(B) 36=-5(B) 37=-236(B) 38=-236(B) 39=-236(B) 40=-48(B) 41=-48(B) 42=-48(B) 43=-48(B)

Job	Truss	Truss Type	Qty	Ply	Lot 16 Magnolia Hills
J1224-6433	A3	MONOPITCH	2	1	I72278221
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Mar 25 13:54:21 2025 Page 1
ID:0HpugN1S_QSTWxS0z0zGz9z5iCa-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



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	0.09	Vert(LL)	-0.00	4-5	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.01	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P		Wind(LL)	0.00	5	****	240	Weight: 42 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x6 SP No.1 *Except*
2-4: 2x4 SP No.2

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

REACTIONS. (size) 5=0-3-8, 4=0-1-8
Max Horz 5=106(LC 9)
Max Uplift 4=-81(LC 12)
Max Grav 5=241(LC 1), 4=167(LC 19)

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

NOTES-
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-1 to 3-3-12, Interior(1) 3-3-12 to 3-11-0 zone; end vertical 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 81 lb uplift at joint 4.

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Job	Truss	Truss Type	Qty	Ply	Lot 16 Magnolia Hills
J1224-6433	A3GE	GABLE	1	1	I72278222
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Mar 25 13:54:22 2025 Page 1
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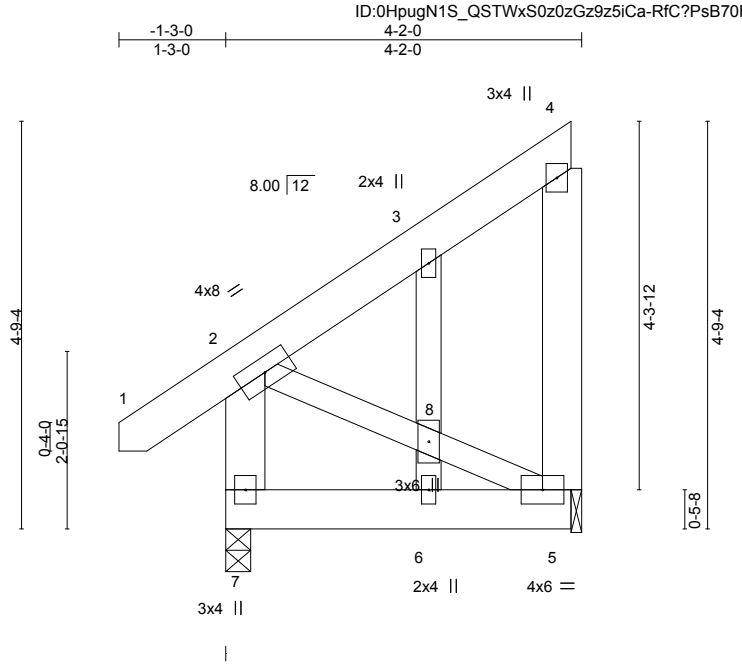

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	-0.00	6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	-0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.00	6	>999	240	Weight: 46 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 7=0-3-8, 5=0-1-8
Max Horz 7=150(LC 12)
Max Uplift 5=-139(LC 12)
Max Grav 7=241(LC 1), 5=165(LC 19)

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

NOTES-

1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable studs spaced at 2-0-0 oc.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 139 lb uplift at joint 5.

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Job	Truss	Truss Type	Qty	Ply	Lot 16 Magnolia Hills
J1224-6433	B1	ROOF SPECIAL	7	1	I72278223
					Job Reference (optional)

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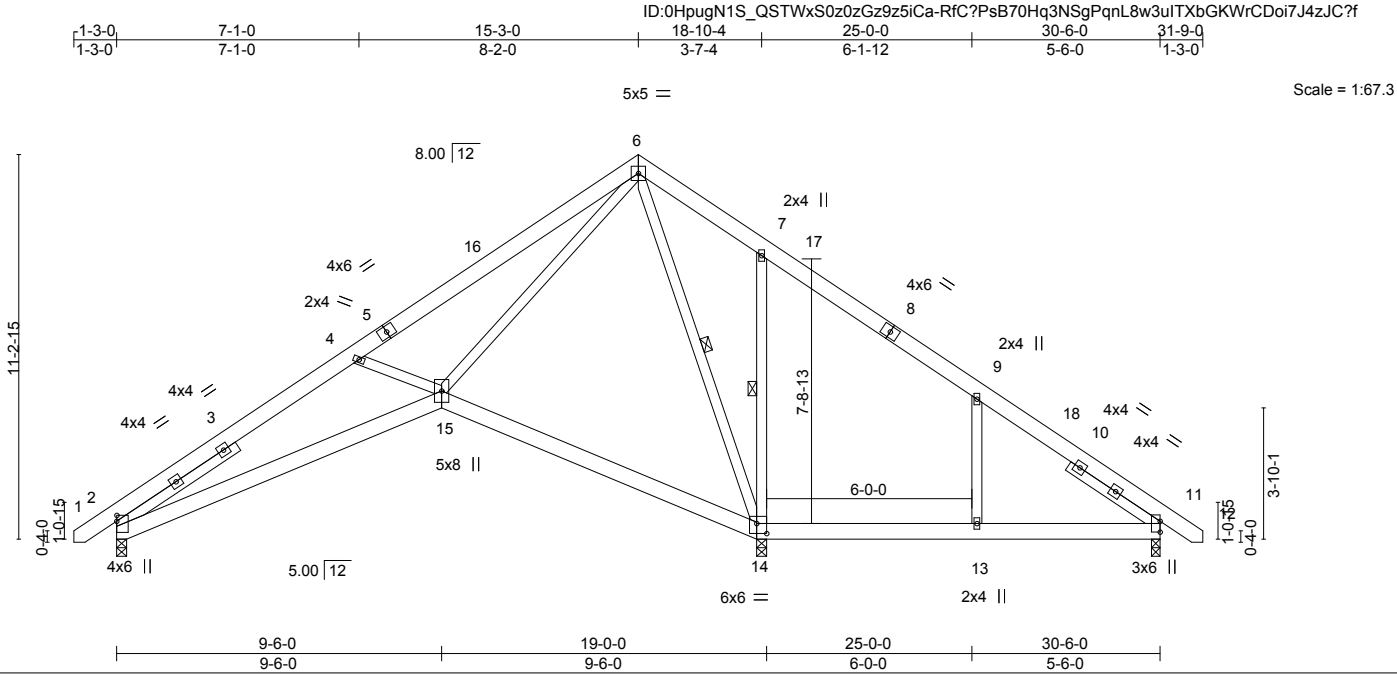

Plate Offsets (X,Y)-- [2:0-2-1,0-0-1], [14:0-3-8,0-3-8]

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	0.53	Vert(LL)	-0.24	13-14	>601	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.40	13-14	>352	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.09	14	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.30	13-14	>467	240	Weight: 230 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.2
SLIDER	Left 2x4 SP No.2 4-3-0, Right 2x4 SP No.2 3-2-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 2-15.
WEBS	1 Row at midpt 7-14, 6-14

REACTIONS. (size) 2=0-3-8, 14=0-3-8, 11=0-3-0
Max Horz 2=-262(LC 10)
Max Uplift 2=-93(LC 13), 14=-71(LC 12), 11=-377(LC 8)
Max Grav 2=724(LC 1), 14=1576(LC 19), 11=608(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1470/711, 4-6=-1078/617, 6-7=-384/750, 7-9=-229/498, 9-11=-406/452
BOT CHORD 2-15=-498/1334, 13-14=-318/208, 11-13=-318/207
WEBS 4-15=-512/299, 6-15=-226/1138, 7-14=-681/504, 6-14=-863/138

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-1 to 3-3-12, Interior(1) 3-3-12 to 15-3-0, Exterior(2) 15-3-0 to 19-7-13, Interior(1) 19-7-13 to 31-7-1 zone; porch right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 93 lb uplift at joint 2, 71 lb uplift at joint 14 and 377 lb uplift at joint 11.
7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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Job	Truss	Truss Type	Qty	Ply	Lot 16 Magnolia Hills
J1224-6433	B1GE	GABLE	1	1	I72278224
					Job Reference (optional)

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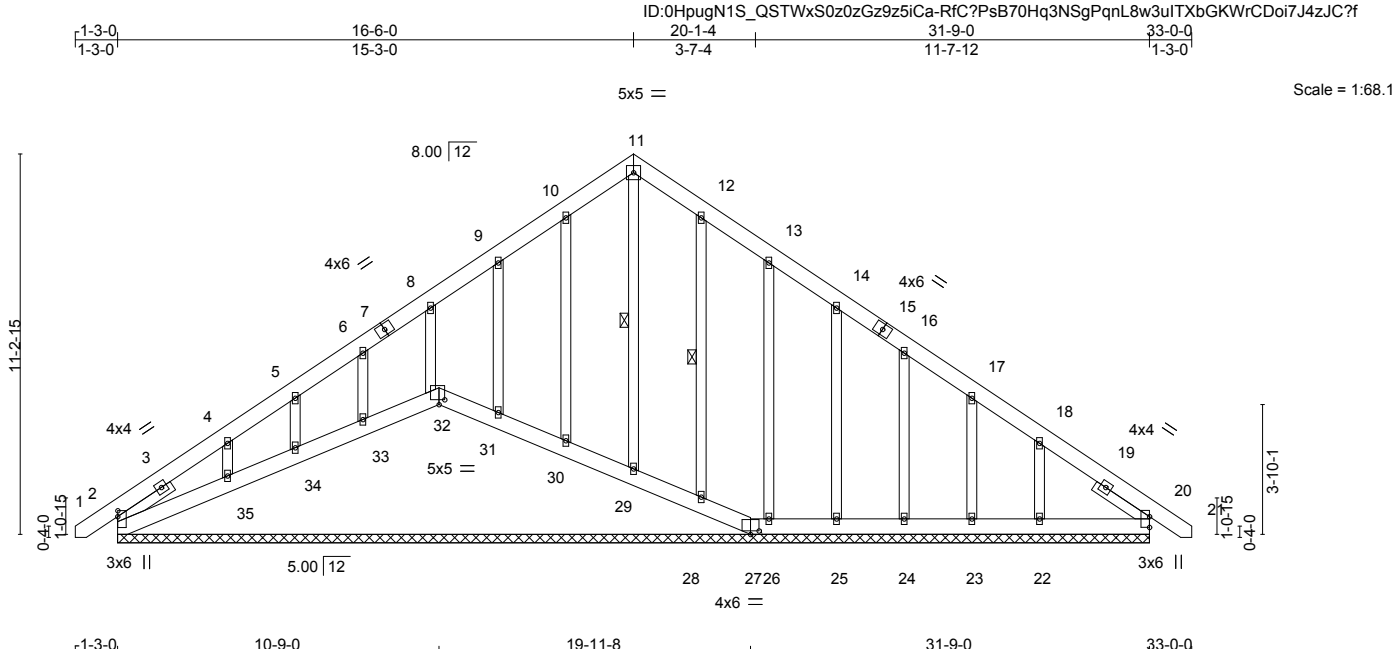

Plate Offsets (X,Y)-- [2:0-2-2,0-0-1], [27:0-3-0,0-1-4], [32:0-2-0,0-1-12]

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	0.06	Vert(LL)	0.00	20	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	20	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.01	20	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 266 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
OTHERS	2x4 SP No.2
SLIDER	Left 2x4 SP No.2 1-11-6, Right 2x4 SP No.2 1-10-13

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 11-29, 12-28

REACTIONS. All bearings 30-6-0.

(lb) - Max Horz 2=-327(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 32, 27, 20, 30, 31, 33, 34, 28, 25, 24, 23 except 2=-179(LC 8), 35=-221(LC 12), 26=-110(LC 13), 22=-190(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 27, 20, 30, 31, 33, 34, 28, 26, 25, 24, 23 except 2=319(LC 20), 32=265(LC 19), 29=255(LC 13), 35=293(LC 19), 22=284(LC 20)

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

TOP CHORD	2-4=-293/241, 9-10=-257/286, 10-11=-291/316, 11-12=-291/317, 12-13=-257/270
BOT CHORD	31-32=-145/251, 30-31=-146/253, 29-30=-146/253, 28-29=-146/253, 27-28=-142/253
WEBS	18-22=-251/206

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 32, 27, 20, 30, 31, 33, 34, 28, 25, 24, 23 except (jt=lb) 2=179, 35=221, 26=110, 22=190.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 16 Magnolia Hills
J1224-6433	C1	ROOF SPECIAL	1	1	I72278225
					Job Reference (optional)

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2-0-2	7-2-0	12-2-0	20-2-0	30-5-8	31-8-8
2-0-2	5-1-14	5-0-0	8-0-0	10-3-8	1-3-0

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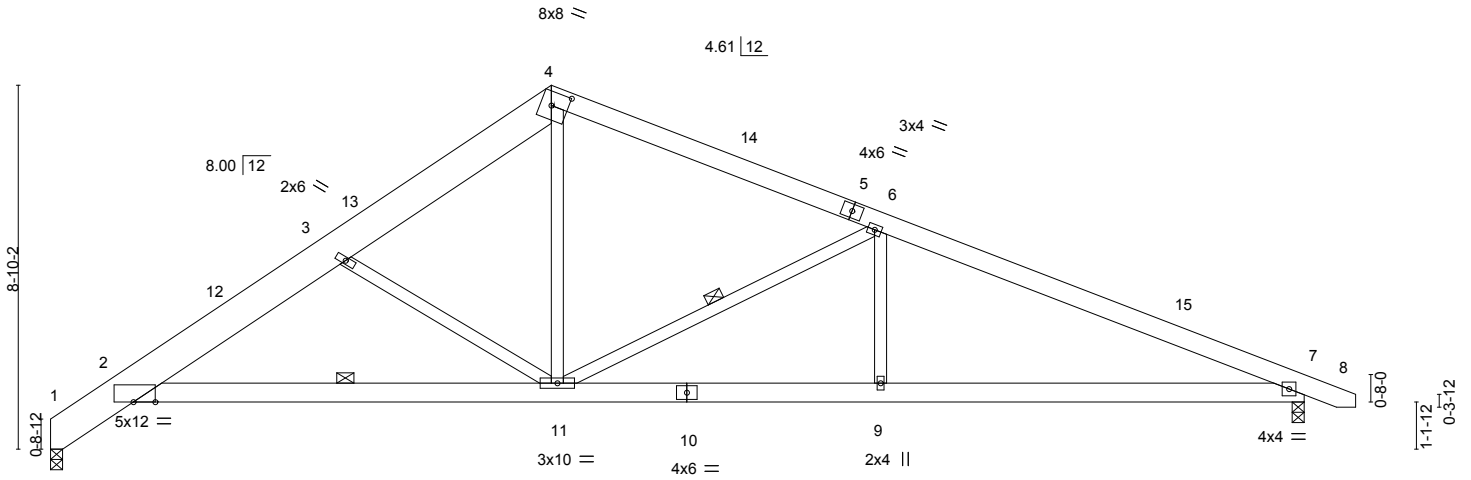


2-0-2	12-2-0	20-2-0	30-5-8
2-0-2	10-1-14	8-0-0	10-3-8

Plate Offsets (X,Y)-- [2:0-6-6,Edge], [4:0-4-13,0-4-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	-0.11	2-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.28	2-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.12	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.08	2-11	>999	240	Weight: 212 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1 *Except*
	1-4: 2x10 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-5-9 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
	10-0-0 oc bracing: 2-11
WEBS	1 Row at midpt 6-11

REACTIONS. (size) 1=0-3-8, 7=0-3-8
Max Horz 1=-201(LC 10)
Max Uplift 1=-48(LC 12), 7=-104(LC 13)
Max Grav 1=1210(LC 1), 7=1278(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-569/121, 2-3=-2092/501, 3-4=-1644/425, 4-6=-1467/377, 6-7=-2383/481
BOT CHORD 2-11=-353/1874, 9-11=-346/2112, 7-9=-346/2112
WEBS 3-11=-791/296, 4-11=-169/1036, 6-11=-960/266, 6-9=0/375

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 12-2-0, Exterior(2) 12-2-0 to 16-6-13, Interior(1) 16-6-13 to 31-5-11 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 7=104.

March 26,2025

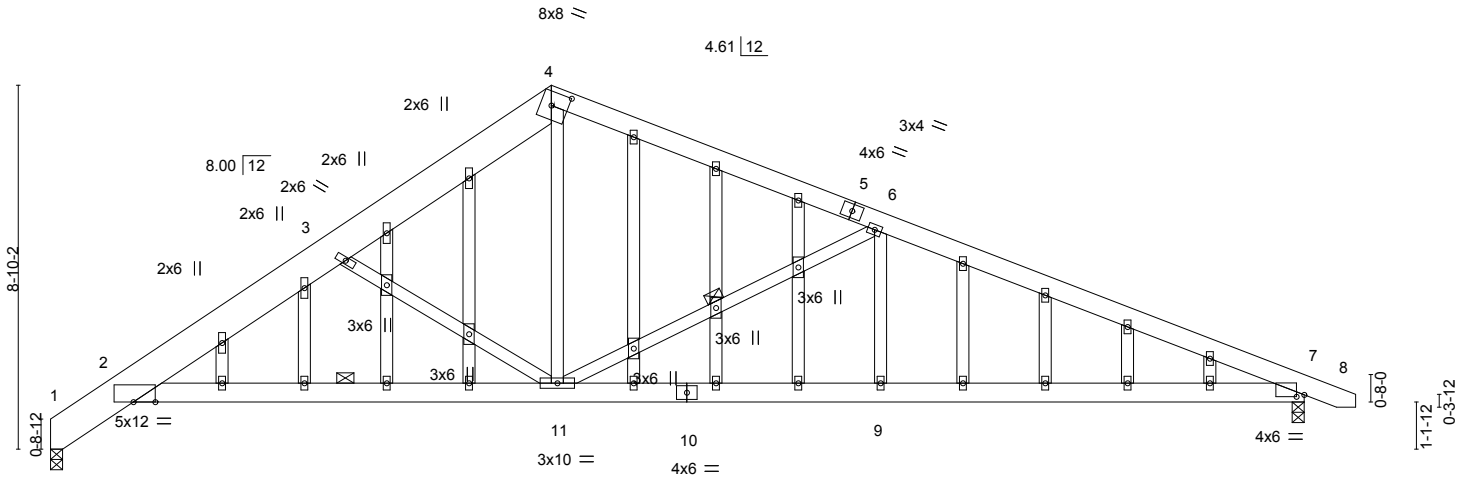
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 16 Magnolia Hills
J1224-6433	C1SG	ROOF SPECIAL STRUCTU	1	1	I72278226
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Mar 25 13:54:24 2025 Page 1
ID:0HpugN1S_QSTWxS0z0zGz9z5iCa-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

2-0-2	7-2-0	12-2-0	20-2-0	30-5-8	31-8-8
2-0-2	5-1-14	5-0-0	8-0-0	10-3-8	1-3-0

Scale = 1:56.0



2-0-2	12-2-0	20-2-0	30-5-8
2-0-2	10-1-14	8-0-0	10-3-8

Plate Offsets (X,Y)-- [2:0-6-6,Edge], [4:0-4-13,0-4-0], [7:0-2-4,0-0-9]

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	0.71	Vert(LL)	-0.11	2-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.28	2-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.12	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.11	2-11	>999	240	Weight: 263 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1 *Except*
	1-4: 2x10 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-4-5 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
	10-0-0 oc bracing: 2-11
WEBS	1 Row at midpt 6-11

REACTIONS. (size) 1=0-3-8, 7=0-3-8
Max Horz 1=-273(LC 10)
Max Uplift 1=-208(LC 12), 7=-307(LC 13)
Max Grav 1=1210(LC 1), 7=1278(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-569/212, 2-3=-2092/687, 3-4=-1644/583, 4-6=-1467/531, 6-7=-2383/765
BOT CHORD 2-11=-471/1874, 9-11=-577/2112, 7-9=-577/2112
WEBS 3-11=-791/393, 4-11=-299/1036, 6-11=-960/461, 6-9=0/375

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=208, 7=307.

March 26,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 16 Magnolia Hills
J1224-6433	C2	ROOF SPECIAL	7	1	I72278227
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Mar 25 13:54:25 2025 Page 1
ID:0HpugN1S_QSTWxS0z0zGz9z5iCa-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

4-11-4	6-7-0	9-7-0	14-7-0	18-4-5	21-2-12	27-10-8	29-1-8
4-11-4	1-7-12	3-0-0	5-0-0	3-9-5	2-10-7	6-7-12	1-3-0

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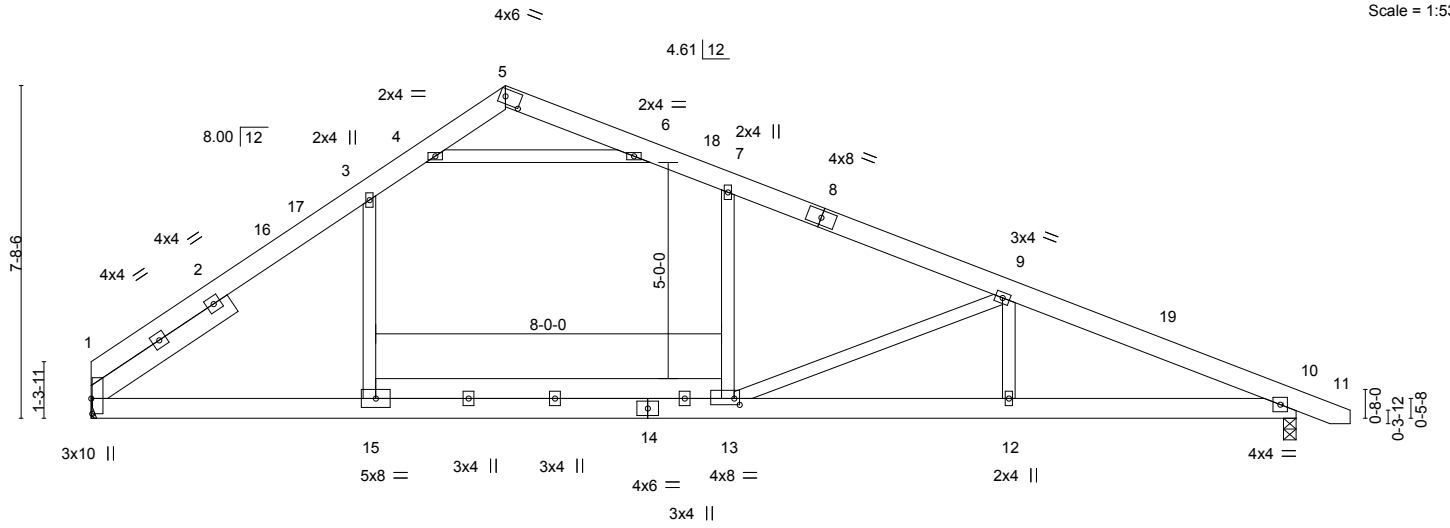

6-7-0	9-7-0	14-7-0	18-4-5	21-2-12	27-10-8
6-7-0	3-0-0	5-0-0	3-9-5	2-10-7	6-7-12

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

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)	-0.31	12-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.56	12-13	>598	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.04	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.23	12-13	>999	240	Weight: 205 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.1 *Except*
9-12,9-13: 2x4 SP No.2
SLIDER Left 2x6 SP No.1 3-11-6

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-11-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-2-13 oc bracing.

REACTIONS. (size) 1=Mechanical, 10=0-3-8
Max Horz 1=-189(LC 10)
Max Uplift 1=-37(LC 12), 10=-104(LC 13)
Max Grav 1=1108(LC 1), 10=1180(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1685/375, 3-4=-1221/401, 5-6=-39/275, 6-7=-1215/378, 7-9=-1449/349, 9-10=-2434/469
BOT CHORD 1-15=-153/1243, 13-15=-161/1248, 12-13=-366/2187, 10-12=-366/2187
WEBS 3-15=0/525, 7-13=0/385, 4-6=-1466/447, 9-12=0/375, 9-13=-1095/232

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 9-7-0, Exterior(2) 9-7-0 to 13-11-13, Interior(1) 13-11-13 to 28-10-11 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 10=104.

March 26,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 16 Magnolia Hills
J1224-6433	C2GE	ROOF SPECIAL SUPPORT	1	1	I72278228
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Mar 25 13:54:26 2025 Page 1
ID:0HpugN1S_QSTWxS0z0zGz9z5iCa-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

9-7-0 27-10-8 29-1-8
9-7-0 18-3-8 1-3-0

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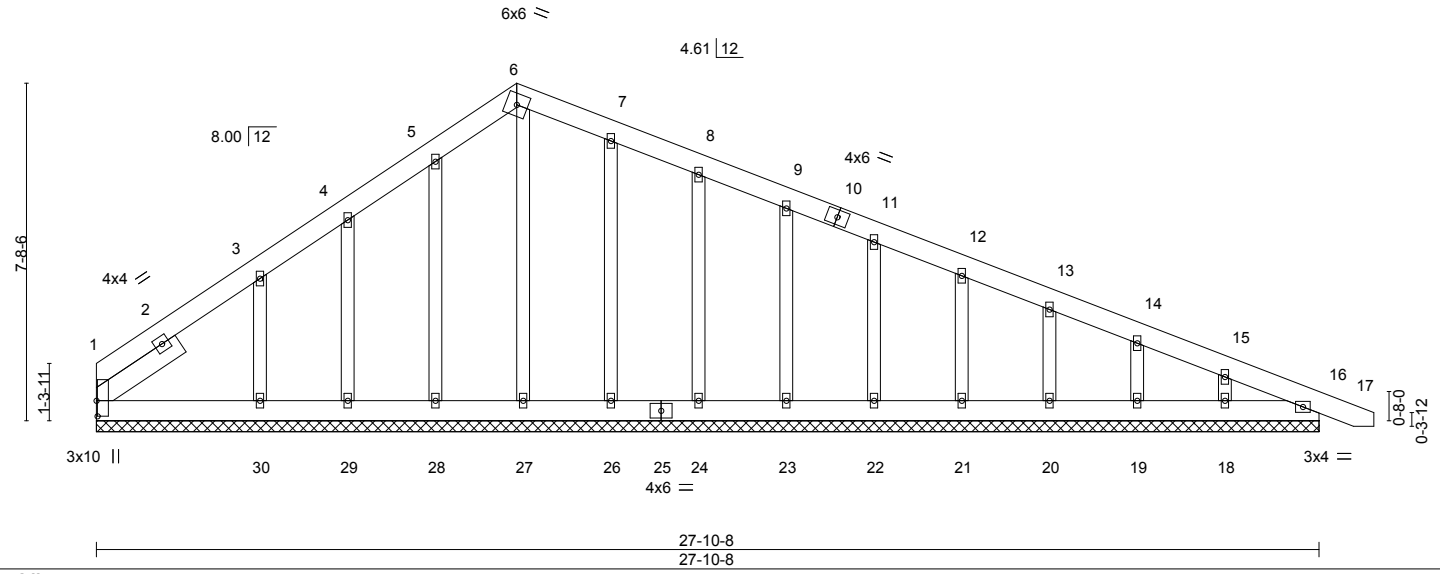

27-10-8
27-10-8

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

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	0.07	Vert(LL)	-0.00	16	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	16	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00	16	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 215 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
OTHERS	2x4 SP No.2
SLIDER	Left 2x6 SP No.1 2-3-13

BRACING-

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

REACTIONS. All bearings 27-10-8.
(lb) - Max Horz 1=-260(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 28, 29, 26, 24, 23, 22, 21, 20, 19, 18, 16 except 30=-206(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 27, 28, 29, 26, 24, 23, 22, 21, 20, 19, 18, 16 except 30=346(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 5-6=-158/274, 6-7=-157/257
WEBS 3-30=-281/228

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 28, 29, 26, 24, 23, 22, 21, 20, 19, 18, 16 except (jt=lb) 30=206.
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1.

March 26,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 16 Magnolia Hills
J1224-6433	D1	ROOF SPECIAL	2	1	I72278229
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Mar 25 13:54:26 2025 Page 1
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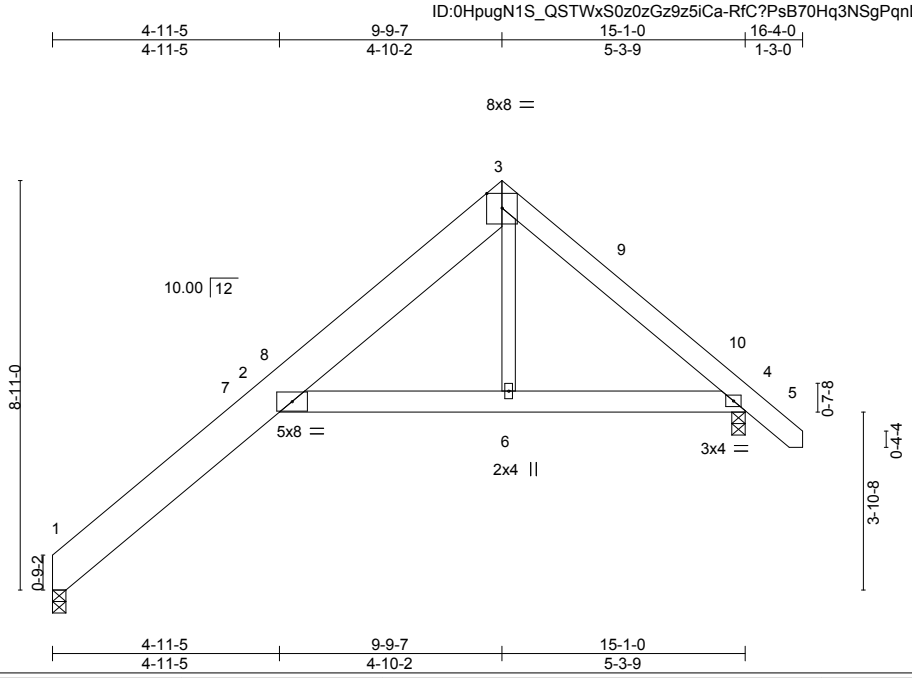

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	-0.15	2	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.30	2	>597	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.23	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.15	2	>999	240	Weight: 102 lb	FT = 20%

LUMBER-
TOP CHORD 2x10 SP No.1 *Except*
3-5: 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

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

REACTIONS. (size) 1=0-3-8, 4=0-3-8
Max Horz 1=179(LC 9)
Max Uplift 1=-6(LC 12), 4=-46(LC 12)
Max Grav 1=610(LC 1), 4=674(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-394/97, 2-3=-530/150, 3-4=-768/205
BOT CHORD 2-6=-14/550, 4-6=-13/557
WEBS 3-6=0/284

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 9-9-7, Exterior(2) 9-9-7 to 14-2-4, Interior(1) 14-2-4 to 16-2-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4.

March 26,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 16 Magnolia Hills
J1224-6433	D1SG	GABLE	1	1	I72278230
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Mar 25 13:54:27 2025 Page 1
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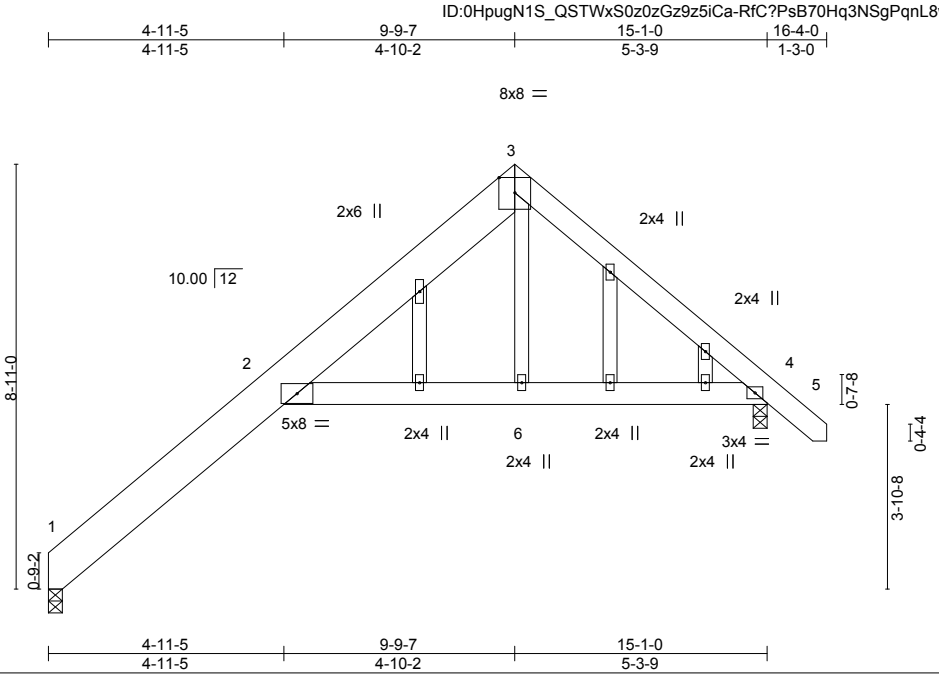

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	-0.15	2	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.30	2	>597	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.23	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.22	2	>814	240	Weight: 110 lb	FT = 20%

LUMBER-

TOP CHORD	2x10 SP No.1 *Except*
	3-5: 2x6 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.2

BRACING-

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

REACTIONS. (size) 1=0-3-8, 4=0-3-8
Max Horz 1=247(LC 12)
Max Uplift 1=-83(LC 12), 4=-145(LC 12)
Max Grav 1=610(LC 1), 4=674(LC 1)

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

TOP CHORD	1-2=-415/127, 2-3=-530/161, 3-4=-783/245
BOT CHORD	2-6=-93/570, 4-6=-93/577
WEBS	3-6=0/284

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) 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) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 4=145.

March 26,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 16 Magnolia Hills
J1224-6433	D2	ROOF SPECIAL	2	1	I72278231
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Mar 25 13:54:27 2025 Page 1
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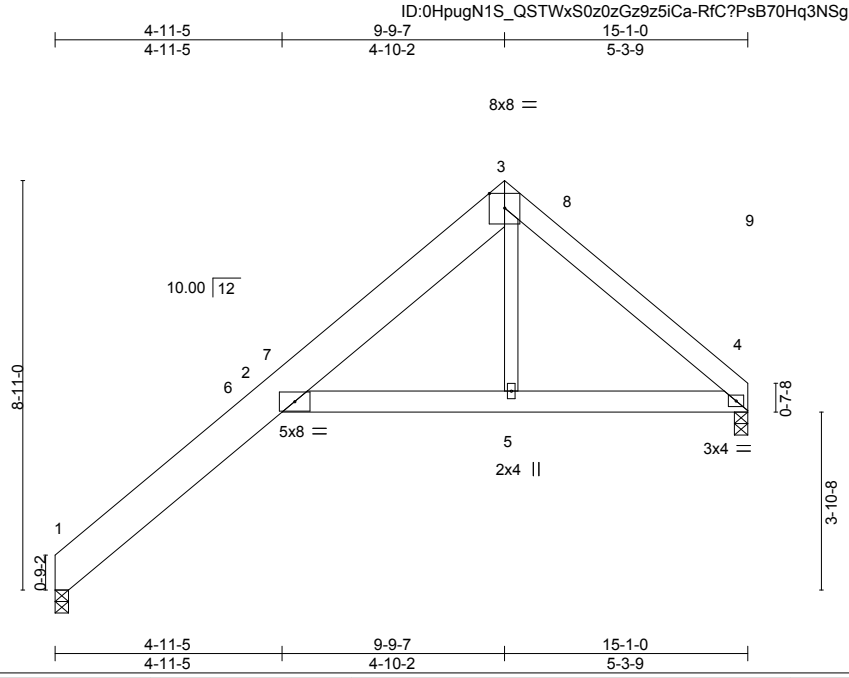

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.15	2	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.30	2	>594	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.24	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.16	2	>999	240	Weight: 99 lb	FT = 20%

LUMBER-
TOP CHORD 2x10 SP No.1 *Except*
3-4: 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

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

REACTIONS. (size) 1=0-3-8, 4=0-3-8
Max Horz 1=191(LC 9)
Max Uplift 1=-3(LC 12), 4=-47(LC 12)
Max Grav 1=613(LC 1), 4=596(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-391/85, 2-3=-540/159, 3-4=-774/241
BOT CHORD 2-5=-71/542, 4-5=-70/549
WEBS 3-5=0/287

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 9-9-7, Exterior(2) 9-9-7 to 14-2-4, Interior(1) 14-2-4 to 14-11-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4.

March 26,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 16 Magnolia Hills
J1224-6433	G1	COMMON	3	1	I72278232
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Mar 25 13:54:27 2025 Page 1
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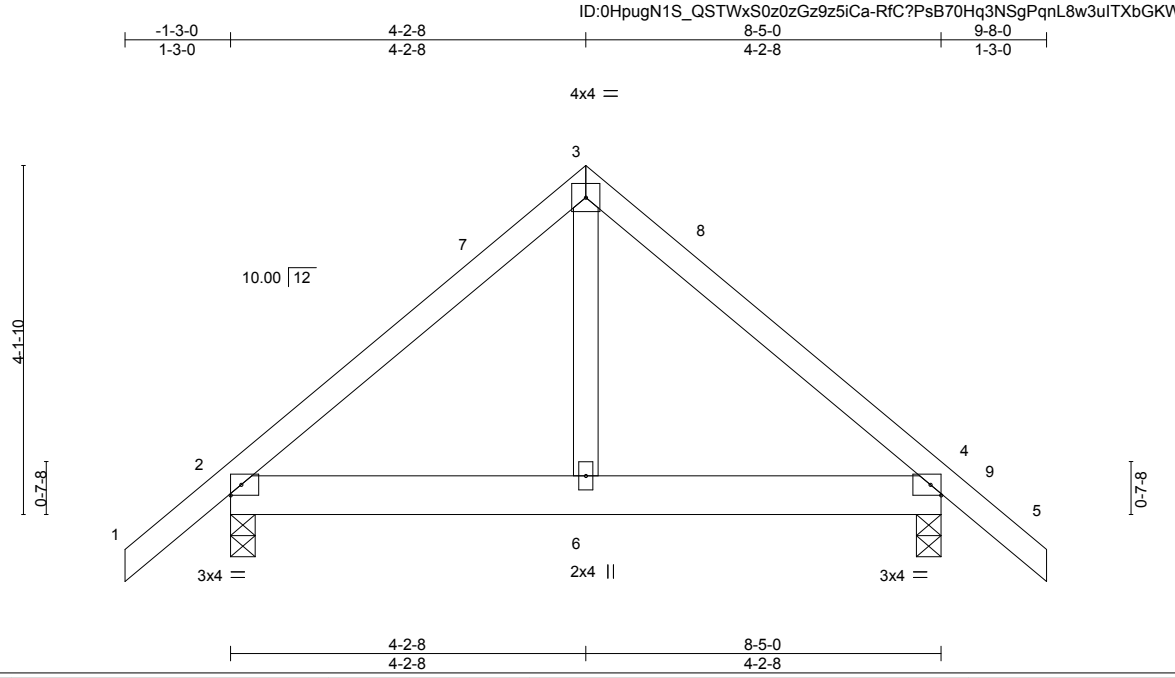


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.00	6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.01	2-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P		Wind(LL)	-0.00	6	>999	240	Weight: 46 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-3-8, 4=0-3-8
Max Horz 2=109(LC 11)
Max Uplift 2=-34(LC 12), 4=-34(LC 13)
Max Grav 2=409(LC 1), 4=409(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-321/71, 3-4=-321/71

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

March 26,2025

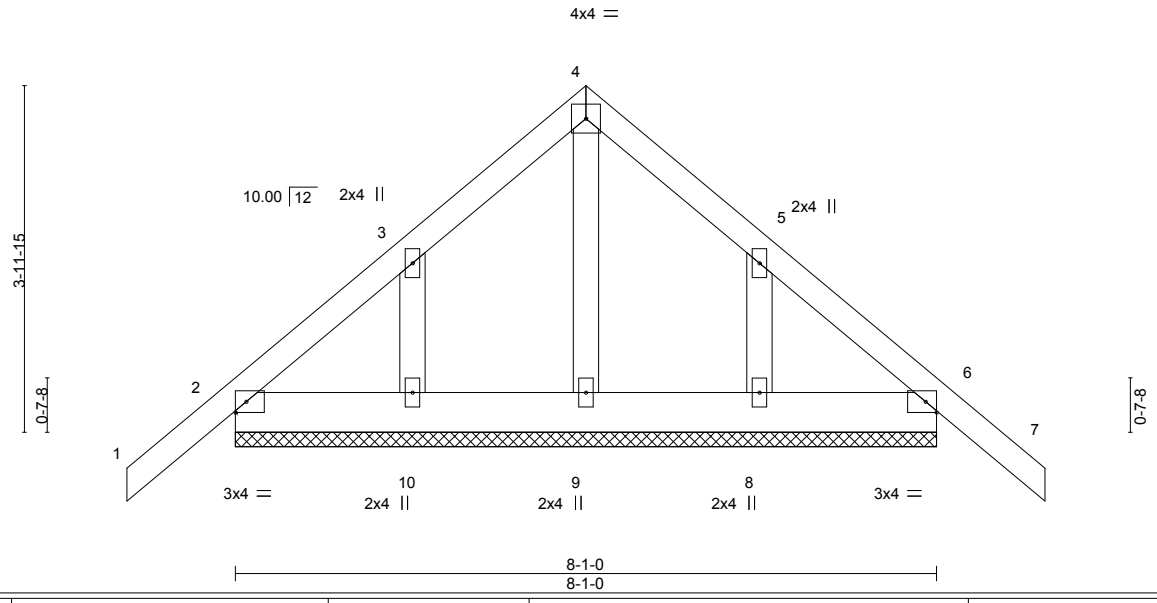
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 16 Magnolia Hills
J1224-6433	G1GE	GABLE	1	1	I72278233
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Mar 25 13:54:28 2025 Page 1
ID:0HpugN1S_QSTWxS0z0zGz9z5iCa-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

-1-3-0 | 4-0-8 | 8-1-0 | 9-4-0
1-3-0 | 4-0-8 | 8-1-0 | 1-3-0

Scale = 1:26.6



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	0.08	Vert(LL)	-0.01	7	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	-0.01	7	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 50 lb	FT = 20%

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

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

REACTIONS. All bearings 8-1-0.
(lb) - Max Horz 2=132(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 10=-126(LC 12), 8=-124(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9, 10, 8

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip 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 requires continuous bottom chord bearing.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6 except (jt=lb) 10=126, 8=124.

March 26,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 16 Magnolia Hills
J1224-6433	M1	MONOPITCH	3	1	I72278234
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Mar 25 13:54:28 2025 Page 1
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1-3-0 5-8-0

Scale = 1:13.4

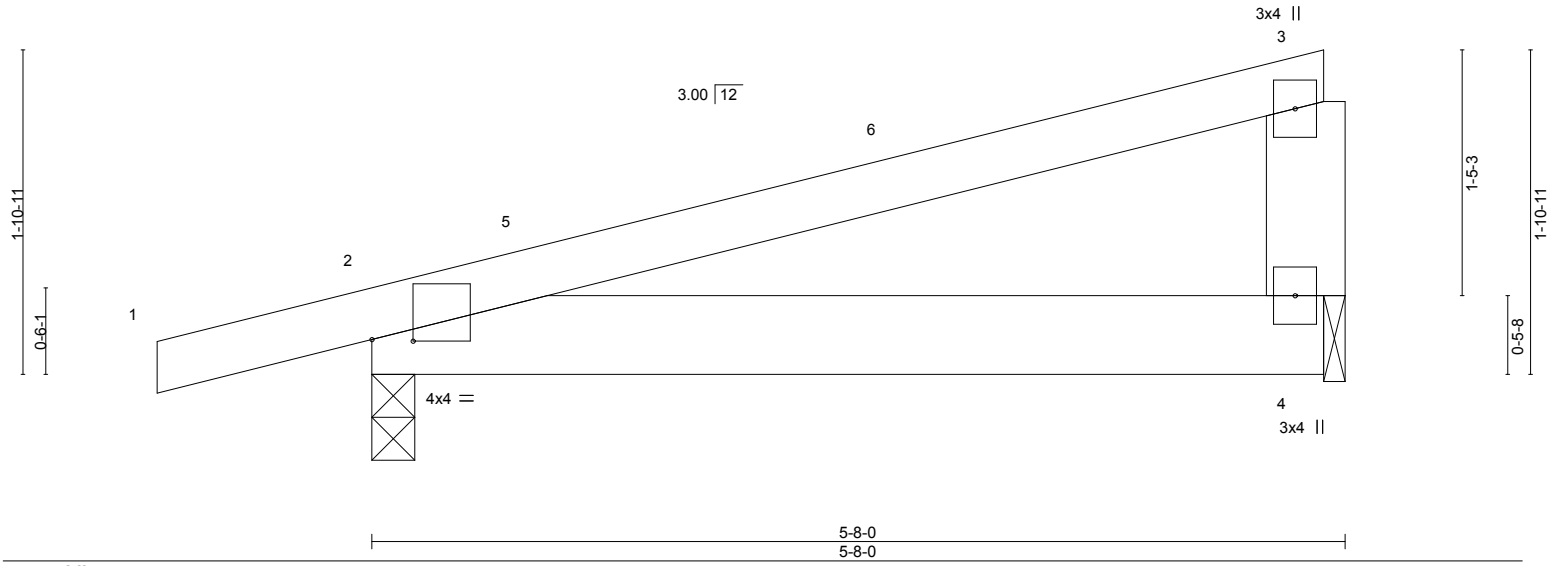

Plate Offsets (X,Y)-- [2:0-2-14,0-0-2]

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	0.36	Vert(LL)	-0.01	2-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.02	2-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P		Wind(LL)	0.02	2-4	>999	240	Weight: 26 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-8-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-0, 4=0-1-8
Max Horz 2=57(LC 8)
Max Uplift 2=-132(LC 8), 4=-82(LC 8)
Max Grav 2=306(LC 1), 4=202(LC 1)

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

NOTES-
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-3-0 to 3-1-13, Interior(1) 3-1-13 to 5-5-4 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 100 lb uplift at joint(s) 4 except (jt=lb) 2=132.

March 26,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 16 Magnolia Hills
J1224-6433	M1GE	GABLE	1	1	I72278235
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Mar 25 13:54:29 2025 Page 1
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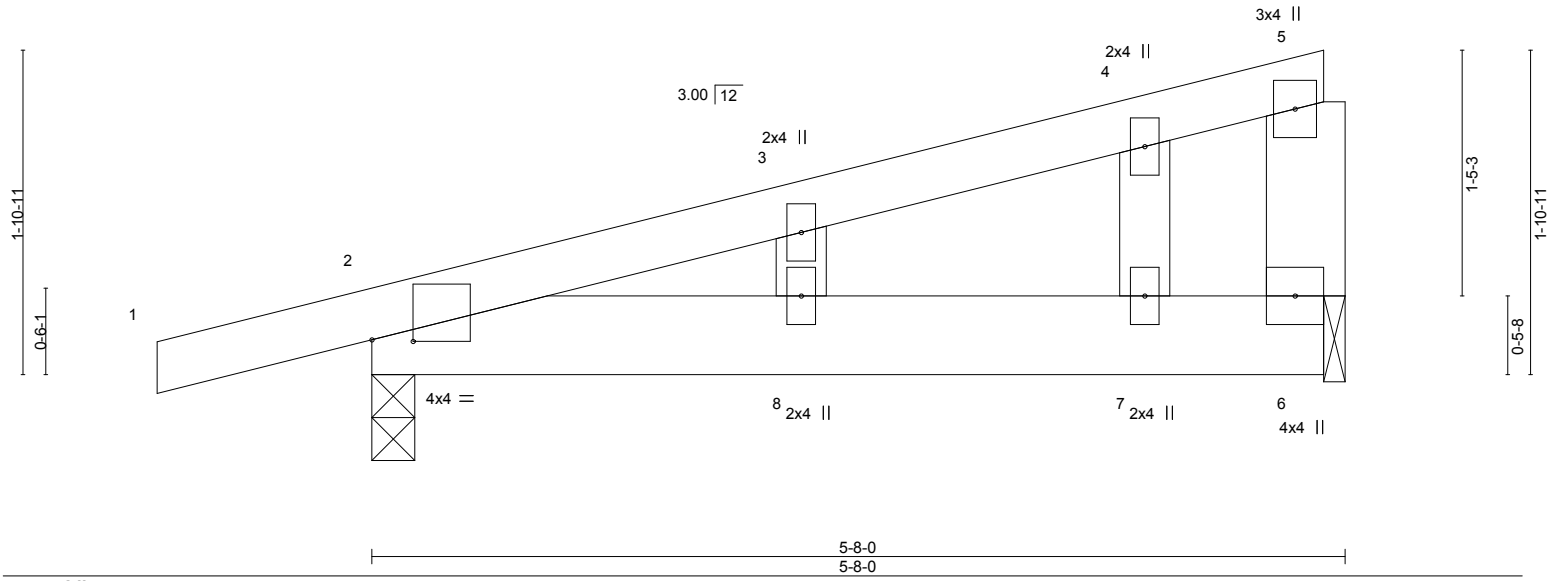
Scale = 1:13.4



5-8-0 / 5-8-0

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

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	0.11	Vert(LL)	0.02	8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.02	8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	-0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 28 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 5-8-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-0, 6=0-1-8
Max Horz 2=81(LC 8)
Max Uplift 2=-189(LC 8), 6=-120(LC 8)
Max Grav 2=306(LC 1), 6=202(LC 1)

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

NOTES-

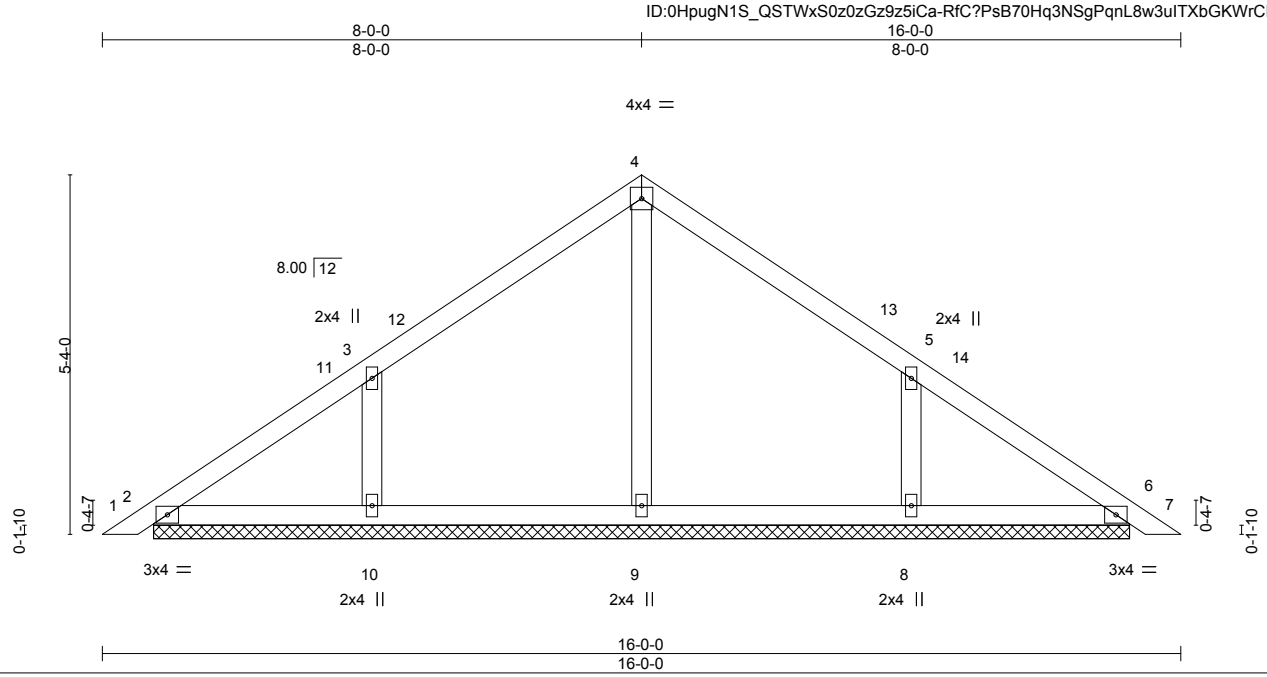
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable studs spaced at 2-0-0 oc.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 6.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=189, 6=120.

March 26,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 16 Magnolia Hills
J1224-6433	PB	GABLE	5	1	I72278236
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Mar 25 13:54:29 2025 Page 1
ID:0HpugN1S_QSTWxS0z0zGz9z5iCa-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



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	0.14	Vert(LL)	0.00	6	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	0.00	7	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 63 lb	FT = 20%

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

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

REACTIONS. All bearings 14-5-12.
(lb) - Max Horz 2=-124(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2 except 10=-104(LC 12), 8=-104(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 6 except 9=252(LC 1), 10=363(LC 19), 8=362(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-10=-309/207, 5-8=-310/207

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-2 to 4-7-15, Interior(1) 4-7-15 to 8-0-0, Exterior(2) 8-0-0 to 12-4-13, Interior(1) 12-4-13 to 15-8-14 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 10=104, 8=104.
9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

March 26,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 16 Magnolia Hills
J1224-6433	PBA	GABLE	2	1	I72278237
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Mar 25 13:54:30 2025 Page 1
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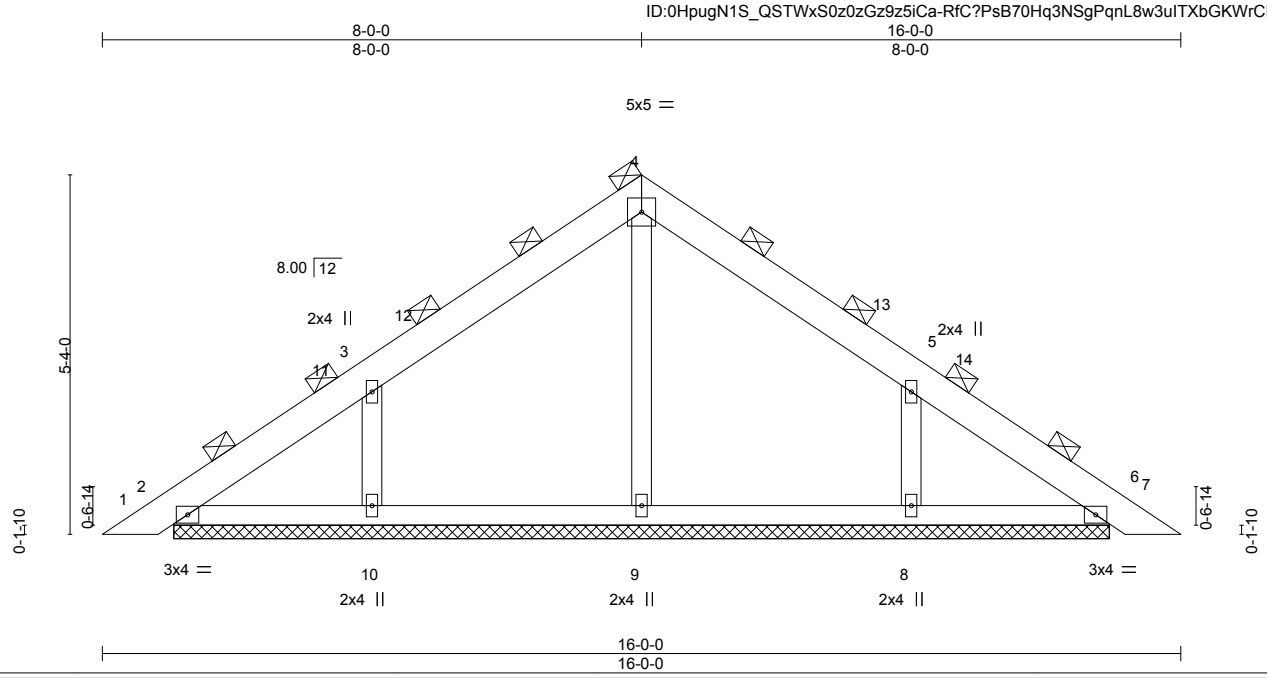

LOADING (psf)		SPACING-	5-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	0.00	6	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	0.00	7	n/r	120		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 77 lb	FT = 20%

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

BRACING-
TOP CHORD 2-0-0 oc purlins (6-0-0 max.)
(Switched from sheeted: Spacing > 2-8-0).
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 13-10-9.
(lb) - Max Horz 2=-303(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2 except 10=-253(LC 12), 8=-249(LC 13)
Max Grav All reactions 250 lb or less at joint(s) except 2=392(LC 1), 6=392(LC 1), 9=617(LC 1), 10=864(LC 19), 8=858(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-326/230, 3-4=-389/340, 4-5=-388/348
WEBS 4-9=-411/0, 3-10=-756/503, 5-8=-757/504

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-15 to 4-9-12, Interior(1) 4-9-12 to 8-0-0, Exterior(2) 8-0-0 to 12-4-13, Interior(1) 12-4-13 to 15-7-1 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 10=253, 8=249.
9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 26,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 16 Magnolia Hills
J1224-6433	PGBE	GABLE	1	1	I72278238
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Mar 25 13:54:30 2025 Page 1
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8-0-0 16-0-0
8-0-0 8-0-0

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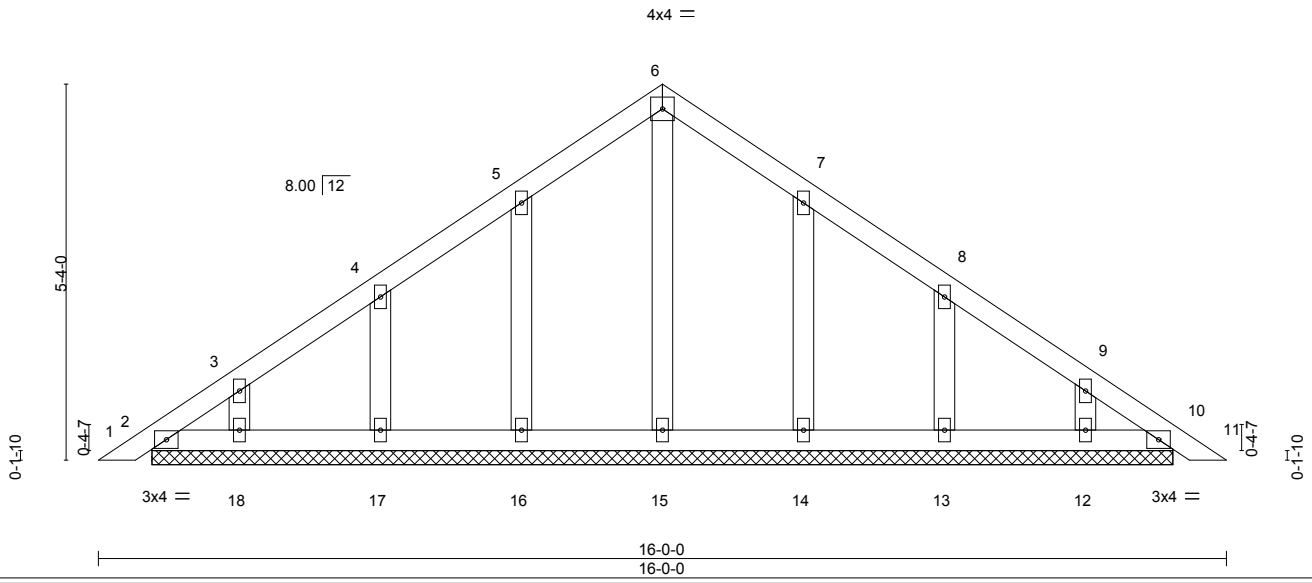


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	-0.00	10	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	10	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 75 lb	FT = 20%

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

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

REACTIONS. All bearings 14-5-12.
(lb) - Max Horz 2=-155(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 16, 17, 18, 14, 13, 12
Max Grav All reactions 250 lb or less at joint(s) 2, 10, 15, 16, 17, 18, 14, 13, 12

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

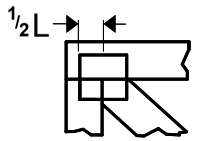
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10, 16, 17, 18, 14, 13, 12.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

March 26,2025

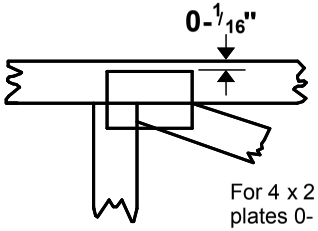
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

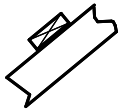
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

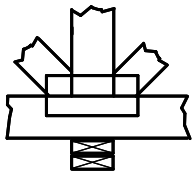
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

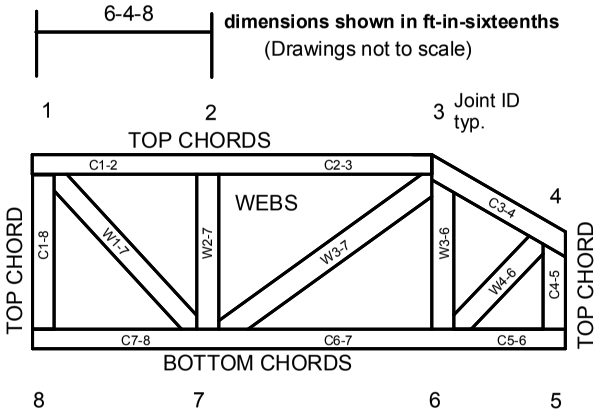


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

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

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

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

MiTek®

ENGINEERING BY TRENCO
A MiTek Affiliate

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

General Safety Notes

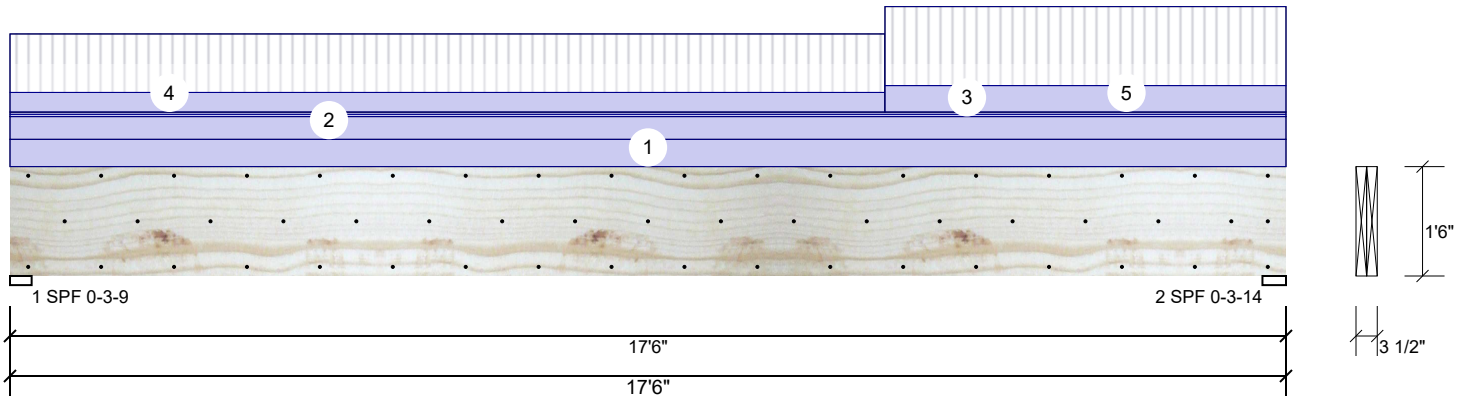
Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.

Client:	Precision Custom Homes	Date:	3/25/2025
Project:	Anconia Mod.	Input by:	David Landry
Address:		Job Name:	Lot 16 Magnolia Hills
		Project #:	J1224-6434

BM1 Kerto-S LVL 1.750" X 18.000" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	2318	2907	87	0	0
2	Vertical	2674	3033	88	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.563"	Vert	99%	2907 / 2318	5226	L	D+L
2 - SPF	3.875"	Vert	99%	3033 / 2674	5707	L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	22105 ft-lb	8'10 13/16"	42981 ft-lb	0.514 (51%)	D+L	L
Unbraced	22105 ft-lb	8'10 13/16"	42981 ft-lb	0.514 (51%)	D+L	L
Shear	4439 lb	15'8 1/8"	13440 lb	0.330 (33%)	D+L	L
LL Defl inch	0.172 (L/1190)	8'9 15/16"	0.426 (L/480)	0.403 (40%)	L	L
TL Defl inch	0.381 (L/536)	8'9 1/2"	0.568 (L/360)	0.671 (67%)	D+L	L

Design Notes

1. Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
2. Fasten all plies using 3 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 continuously laterally braced.
7. Bottom must be laterally braced at 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			Top	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Above
2	Uniform			Top	100 PLF	0 PLF	0 PLF	0 PLF	0 PLF	C2GE
3	Tie-In	0-0-0 to 17-6-0	0-6-0	Top	20 PSF	0 PSF	20 PSF	0 PSF	0 PSF	Roof Load
4	Part. Uniform	0-0-0 to 12-0-0		Top	86 PLF	257 PLF	0 PLF	0 PLF	0 PLF	F3
5	Part. Uniform	12-0-0 to 17-6-0		Top	116 PLF	347 PLF	0 PLF	0 PLF	0 PLF	F2
	Self Weight				14 PLF					

Notes

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Lumber

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

Handling & Installation

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

This design is valid until 6/28/2026

Manufacturer Info

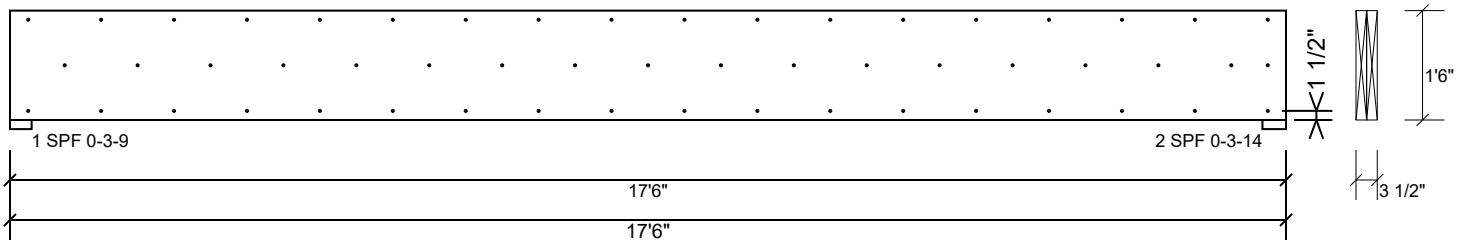
Metsä Wood
301 Merritt 7 Building, 2nd Floor
Norwalk, CT 06851
(800) 622-5850
www.metsawood.com/us

Comtech, Inc.
1001 S Reilly Rd., NC 28314
(910) 864-8787

Client:	Precision Custom Homes	Date:	3/25/2025
Project:	Anconia Mod.	Input by:	David Landry
Address:		Job Name:	Lot 16 Magnolia Hills
		Project #:	J1224-6434

BM1 Kerto-S LVL 1.750" X 18.000" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6".

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	245.6 PLF
Yield Limit per Fastener	81.9 lb.
C_M	1
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

Notes

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Lumber

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Handling & Installation

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Client:	Precision Custom Homes	Date:	3/25/2025
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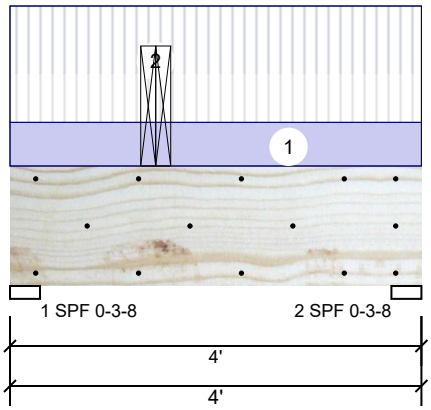
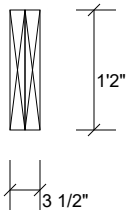
Address:		Job Name:	Lot 16 Magnolia Hills
		Project #:	J1224-6434

BM2 Kerto-S LVL 1.750" X 14.000" 2-Ply - PASSED

Level: Level





Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	80	1806	1701	0	0
2	Vertical	80	937	858	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	Vert	67%	1806 / 1701	3507	L	D+S
2 - SPF	3.500"	Vert	34%	937 / 858	1795	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4138 ft-lb	1'5"	31049 ft-lb	0.133 (13%)	D+S	L
Unbraced	4138 ft-lb	1'5"	31049 ft-lb	0.133 (13%)	D+S	L
Shear	3296 lb	1'5 1/2"	12021 lb	0.274 (27%)	D+S	L
LL Defl inch	0.007 (L/6271)	1'5"	0.089 (L/480)	0.077 (8%)	S	L
TL Defl inch	0.014 (L/3057)	1'5"	0.118 (L/360)	0.118 (12%)	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".
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 continuously laterally braced.
7. Bottom must be laterally braced at 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	Tie-In	0-0-0 to 4-0-0	1-0-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	0 PSF	Floor Load
2	Point	1-5-0		Top	2640 lb	0 lb	2559 lb	0 lb	0 lb	B3 Brg 2
	Bearing Length	0-3-8								
	Self Weight				11 PLF					

Notes

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

Lumber

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

Handling & Installation

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

This design is valid until 6/28/2026

Manufacturer Info

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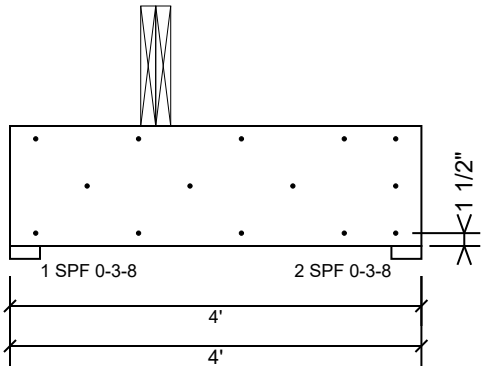
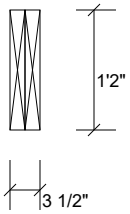
Address:		Job Name:	Lot 16 Magnolia Hills
		Project #:	J1224-6434

BM2 Kerto-S LVL 1.750" X 14.000" 2-Ply - PASSED

Level: Level





Multi-Ply Analysis

Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6".

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	245.6 PLF
Yield Limit per Fastener	81.9 lb.
C_M	1
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

Notes

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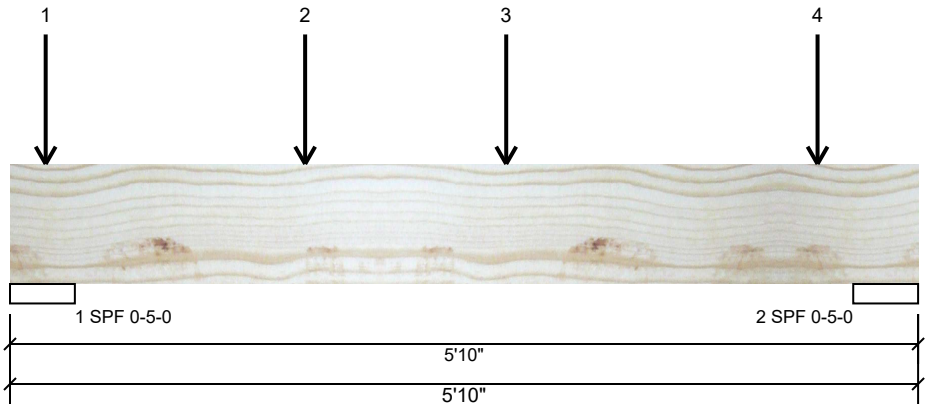
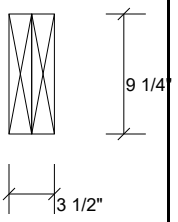
Address:		Job Name:	Lot 16 Magnolia Hills
		Project #:	J1224-6434

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

Level: Level





Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	3107	3086	0	0
2	Vertical	0	2835	2814	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	5.000"	Vert	83%	3107 / 3086	6193	L	D+S
2 - SPF	5.000"	Vert	76%	2835 / 2814	5649	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	9142 ft-lb	1'10 3/4"	14423 ft-lb	0.634 (63%)	D+S	L
Unbraced	9142 ft-lb	1'10 3/4"	11505 ft-lb	0.795 (79%)	D+S	L
Shear	5936 lb	1'2 1/4"	7943 lb	0.747 (75%)	D+S	L
LL Defl inch	0.058 (L/1065)	2'8 7/16"	0.128 (L/480)	0.451 (45%)	S	L
TL Defl inch	0.116 (L/531)	2'8 7/16"	0.256 (L/240)	0.452 (45%)	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. Girders are designed to be supported on the bottom edge only.
3. Multiple plies must be fastened together as per manufacturer's details.
4. Top loads must be supported equally by all plies.
5. Top must be laterally braced at end bearings.
6. Bottom must be laterally braced at end bearings.
7. Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Point	0-2-12		Top	127 lb	0 lb	127 lb	0 lb	0 lb	A2
	Bearing Length	0-3-8								
2	Point	1-10-12		Top	3363 lb	0 lb	3363 lb	0 lb	0 lb	A1-GR
	Bearing Length	0-3-8								
3	Point	3-2-4		Top	1205 lb	0 lb	1205 lb	0 lb	0 lb	A1
	Bearing Length	0-3-8								

Continued on page 2...

Notes

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Lumber

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

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
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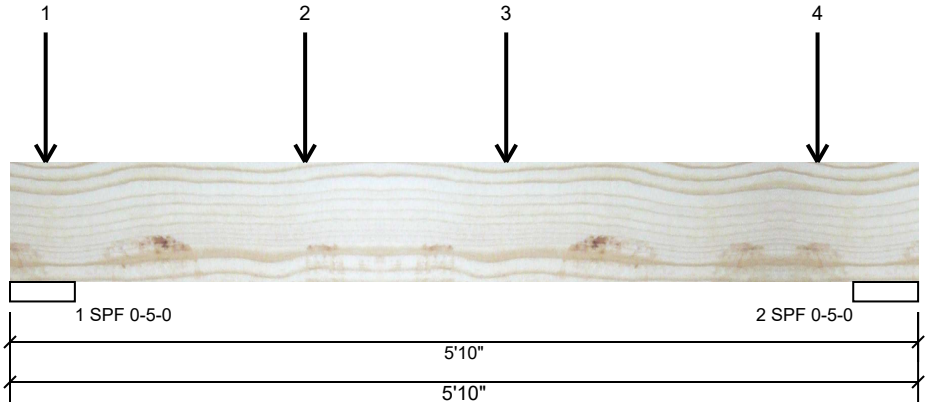
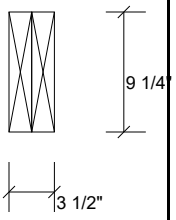
BM3 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

Level: Level





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ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
4	Point	5-2-4		Top	1205 lb	0 lb	1205 lb	0 lb	0 lb	A1
	Bearing Length	0-3-8								
	Self Weight				7 PLF					

Notes

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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

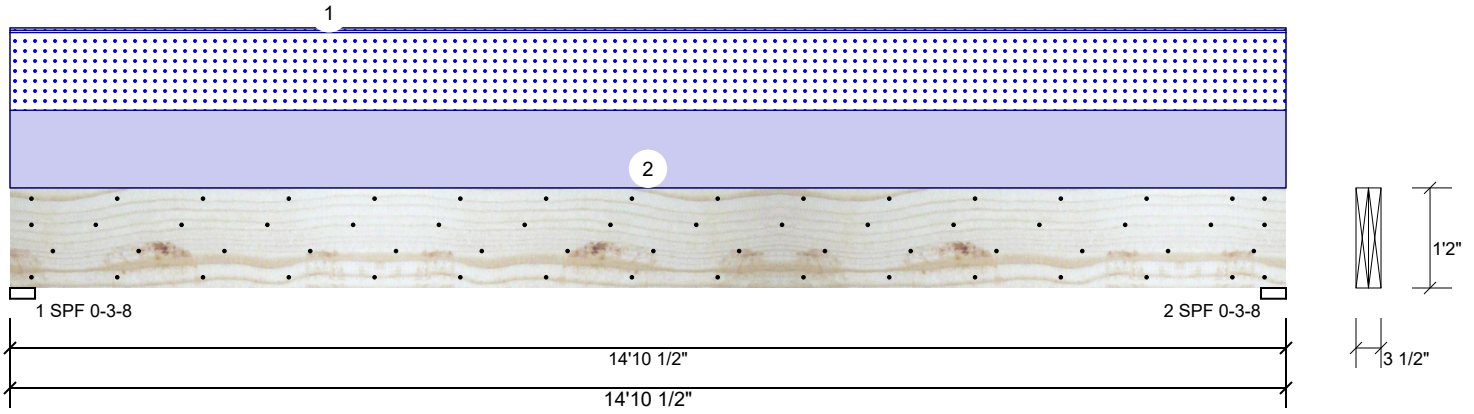
Metsä Wood
301 Merritt 7 Building, 2nd Floor
Norwalk, CT 06851
(800) 622-5850
www.metsawood.com/us

Comtech, Inc.
1001 S Reilly Rd., NC
28314
(910) 864-8787

Client:	Precision Custom Homes	Date:	3/25/2025
Project:	Anconia Mod.	Input by:	David Landry
Address:		Job Name:	Lot 16 Magnolia Hills
		Project #:	J1224-6434

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

Level: Level



Member Information

Type:	Girder	Application:	Roof
Plies:	2	Slope:	0/12
Moisture Condition:	Dry	Design Method:	ASD
Deflection LL:	360	Building Code:	IBC/IRC 2015
Deflection TL:	240	Load Sharing:	No
Importance:	Normal - II	Deck:	Not Checked
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	2639	2559	0	0
2	Vertical	0	2639	2559	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	Vert	100%	2639 / 2559	5198	L	D+S
2 - SPF	3.500"	Vert	100%	2639 / 2559	5198	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	18157 ft-lb	7'5 1/4"	31049 ft-lb	0.585 (58%)	D+S	L
Unbraced	18157 ft-lb	7'5 1/4"	31049 ft-lb	0.585 (58%)	D+S	L
Shear	4994 lb	1'5 1/2"	12021 lb	0.415 (42%)	D+S	L
LL Defl inch	0.230 (L/753)	7'5 5/16"	0.481 (L/360)	0.478 (48%)	S	L
TL Defl inch	0.467 (L/370)	7'5 5/16"	0.721 (L/240)	0.648 (65%)	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 4 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 must be continuously laterally braced.
6 Bottom must be laterally braced at bearings.
7 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Tie-In	0-0-0 to 14-10-8	0-6-0	Near Face	20 PSF	0 PSF	20 PSF	0 PSF	0 PSF	Roof Load
2	Uniform			Far Face	334 PLF	0 PLF	334 PLF	0 PLF	0 PLF	C2
	Self Weight				11 PLF					

Notes

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

Lumber

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

Handling & Installation

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

This design is valid until 6/28/2026

Manufacturer Info

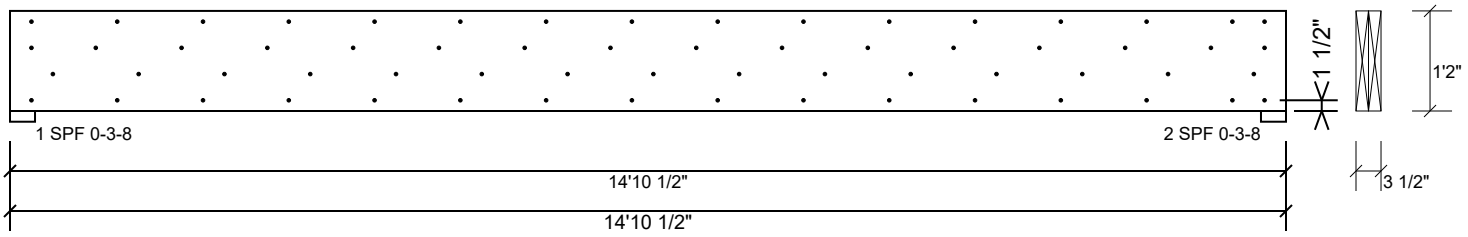
Metsä Wood
301 Merritt 7 Building, 2nd Floor
Norwalk, CT 06851
(800) 622-5850
www.metsawood.com/us

Comtech, Inc.
1001 S Reilly Rd., NC 28314
(910) 864-8787

Client:	Precision Custom Homes	Date:	3/25/2025
Project:	Anconia Mod.	Input by:	David Landry
Address:		Job Name:	Lot 16 Magnolia Hills
		Project #:	J1224-6434

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

Level: Level



Multi-Ply Analysis

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

Capacity	88.7 %
Load	334.0 PLF
Yield Limit per Foot	376.5 PLF
Yield Limit per Fastener	94.1 lb.
C_M	1
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	D+S
Duration Factor	1.15

Notes

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

Lumber

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

Handling & Installation

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

This design is valid until 6/28/2026

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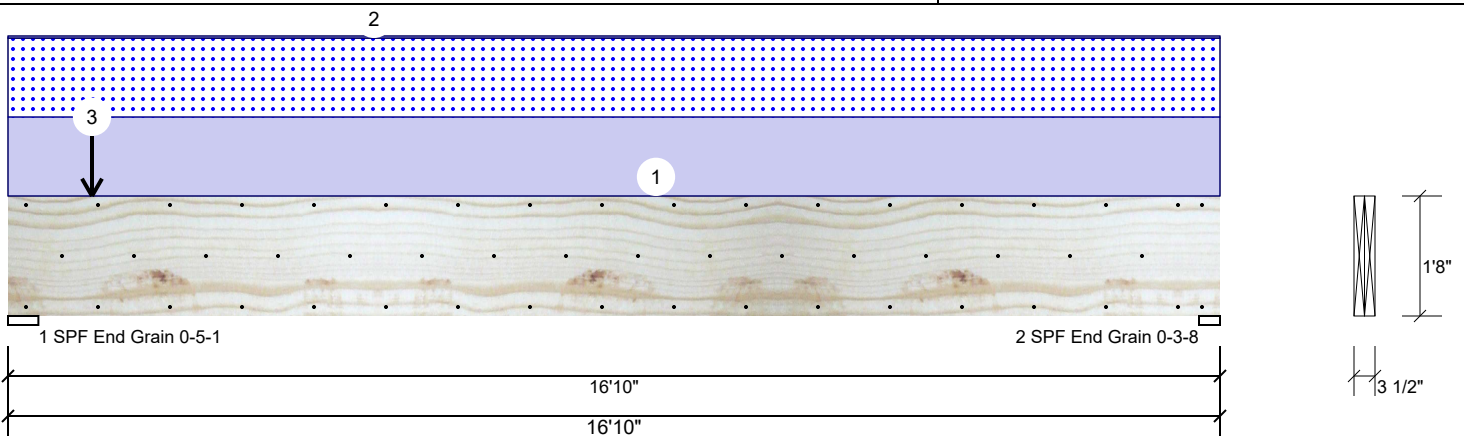
Comtech, Inc.
1001 S Reilly Rd., NC
28314
(910) 864-8787

Client:	Precision Custom Homes	Date:	3/25/2025
Project:	Anconia Mod.	Input by:	David Landry
Address:		Job Name:	Lot 16 Magnolia Hills
		Project #:	J1224-6434

GDH Kerto-S LVL 1.750" X 20.000" 2-Ply - PASSED

Level: Level



Member Information

Type:	Header	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	360	Load Sharing:	No
Deflection TL:	240	Header Supports Glass:	No
Importance:	Normal - II	Deck:	Not Checked
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	7562	7303	0	0
2	Vertical	0	5273	5017	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	5.063"	Vert	100%	7562 / 7303	14865	L	D+S
2 - SPF End Grain	3.500"	Vert	100%	5273 / 5017	10290	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	41804 ft-lb	8'3 5/16"	60066 ft-lb	0.696 (70%)	D+S	L
Unbraced	41804 ft-lb	8'3 5/16"	60066 ft-lb	0.696 (70%)	D+S	L
Shear	9662 lb	2'1 1/16"	17173 lb	0.563 (56%)	D+S	L
LL Defl inch	0.244 (L/801)	8'4 13/16"	0.542 (L/360)	0.449 (45%)	S	L
TL Defl inch	0.499 (L/391)	8'4 13/16"	0.813 (L/240)	0.614 (61%)	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".
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 continuously laterally braced.
7. Bottom must be laterally braced at 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			Top	586 PLF	0 PLF	586 PLF	0 PLF	0 PLF	A1
2	Uniform			Top	15 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Above
3	Point	1-2-0		Top	2456 lb	0 lb	2456 lb	0 lb	0 lb	A1-GR
	Bearing Length	0-3-8								
	Self Weight				16 PLF					

Notes

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Lumber

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

Handling & Installation

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

This design is valid until 6/28/2026

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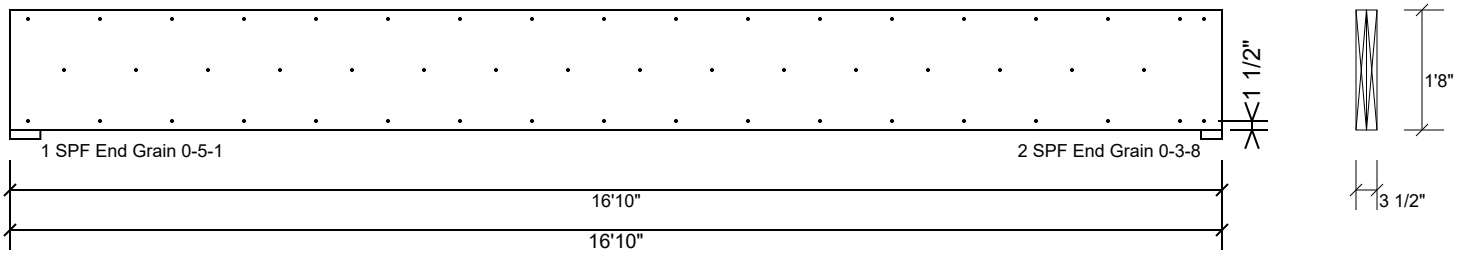
Comtech, Inc.
1001 S Reilly Rd., NC 28314
(910) 864-8787

Client:	Precision Custom Homes	Date:	3/25/2025
Project:	Anconia Mod.	Input by:	David Landry
Address:		Job Name:	Lot 16 Magnolia Hills
		Project #:	J1224-6434

GDH Kerto-S LVL 1.750" X 20.000" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6".

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	245.6 PLF
Yield Limit per Fastener	81.9 lb.
C_M	1
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

Notes

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

Lumber

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

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
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ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J1224-6434
Lot 16 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: I72278239 thru I72278243

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

North Carolina COA: C-0844

March 26,2025

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.

Job	Truss	Truss Type	Qty	Ply	Lot 16 Magnolia Hills
J1224-6434	F1	FLOOR	6	1	I72278239
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Mar 25 13:54:02 2025 Page 1
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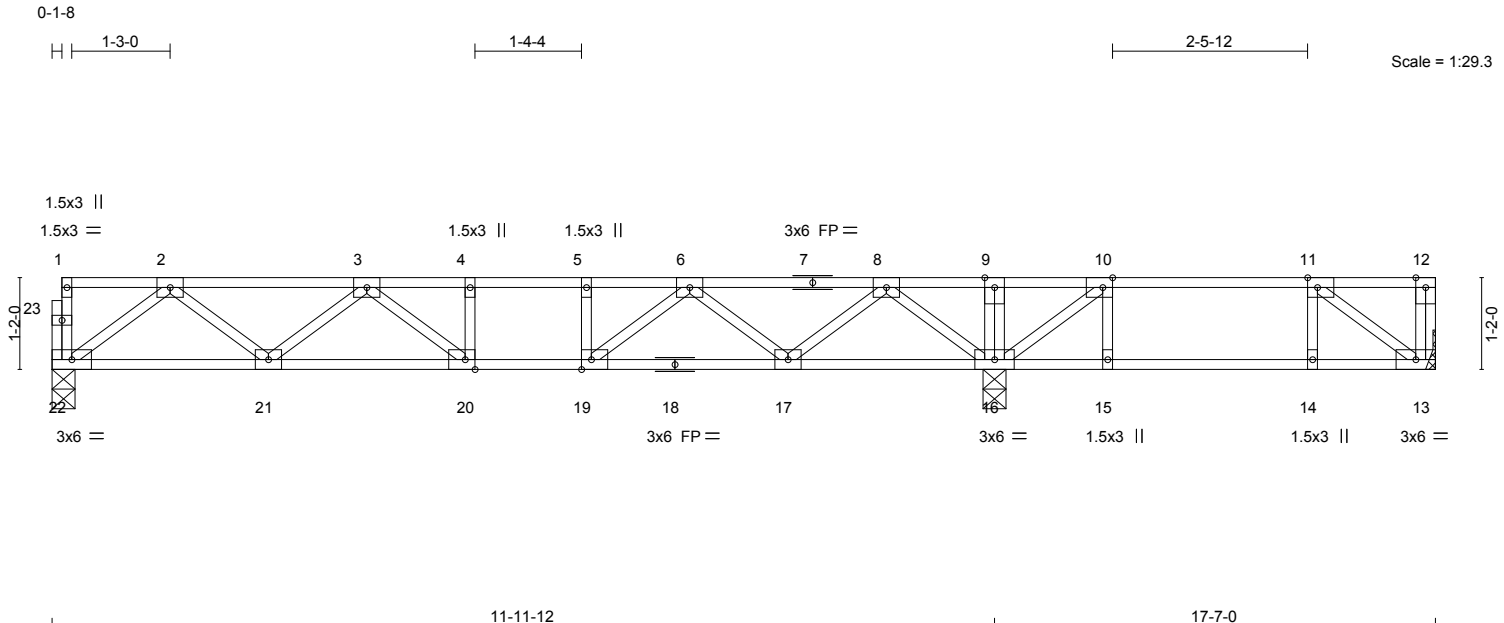

Plate Offsets (X,Y)-- [10:0-1-8,Edge], [11:0-1-8,Edge], [19:0-1-8,Edge], [20:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.37	Vert(LL)	-0.06	20-21	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.37	Vert(CT)	-0.09	20-21	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.02	13	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 89 lb	FT = 20%F, 11%E

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

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

REACTIONS. (size) 22=0-3-8, 16=0-3-8, 13=Mechanical
Max Grav 22=628(LC 10), 16=1033(LC 9), 13=284(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1204/0, 3-4=-1732/0, 4-5=-1732/0, 5-6=-1732/0, 6-8=-1092/0, 8-9=0/336, 9-10=0/336, 10-11=-309/29
BOT CHORD 21-22=0/771, 20-21=0/1597, 19-20=0/1732, 17-19=0/1529, 16-17=0/624, 15-16=-29/309, 14-15=-29/309, 13-14=-29/309
WEBS 2-22=-965/0, 2-21=0/562, 3-21=-512/0, 3-20=-39/343, 8-16=-1043/0, 8-17=0/628, 6-17=-593/0, 6-19=0/430, 10-16=-600/0, 11-13=-382/36

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.

March 26,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 16 Magnolia Hills	I72278240
J1224-6434	F1A	FLOOR	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309 — 8.630 s Jul 12 2024 MiTek Industries, Inc. Wed Mar 26 12:30:19 2025 Page 1
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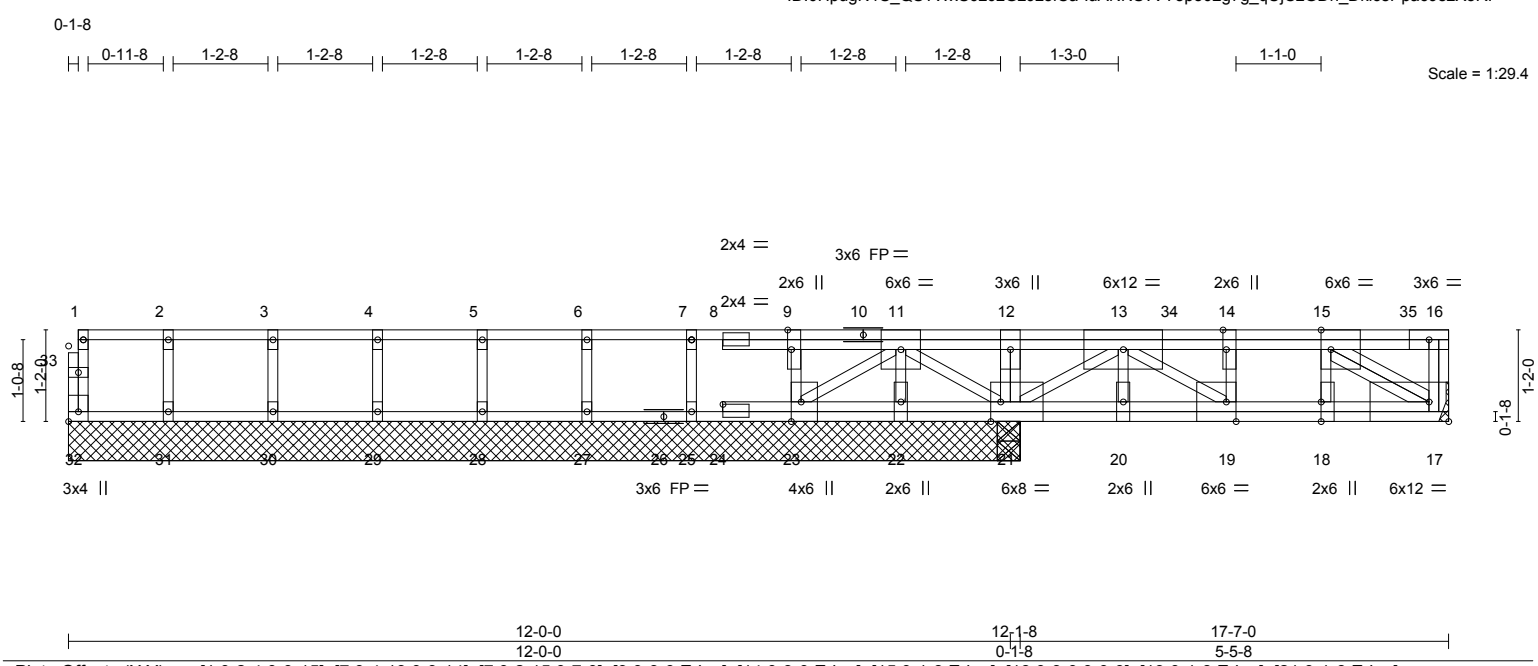

Plate Offsets (X,Y)-- [1:0-2-4,0-0-15], [7:0-4-13,0-9-14], [7:0-2-15,0-7-0], [9:0-3-0,Edge], [14:0-3-0,Edge], [15:0-1-8,Edge], [18:0-3-0,0-0-0], [19:0-1-8,Edge], [21:0-1-8,Edge], [23:0-3-0,Edge], [32:Edge,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.67	Vert(LL)	-0.02	19-20	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.45	Vert(CT)	-0.04	19-20	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.78	Horz(CT)	0.01	17	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 112 lb	FT = 20%F, 11%E

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

BRACING-
TOP CHORD Sheathed or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 22-23,21-22.

REACTIONS. All bearings 12-1-8 except (jt=length) 17=Mechanical.
(lb) - Max Uplift All uplift 100 lb or less at joint(s) except 22=-249(LC 4), 23=-218(LC 4)
Max Grav All reactions 250 lb or less at joint(s) 32, 22, 23, 25, 27, 28, 29, 30, 31 except 17=3004(LC 4), 21=2701(LC 1), 21=2701(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 16-17=-1072/0, 11-12=0/1300, 12-13=0/1300, 13-34=-3063/0, 14-34=-3063/0, 14-15=-3063/0
BOT CHORD 22-23=-540/0, 21-22=-540/0, 20-21=0/1789, 19-20=0/1789, 18-19=0/3063, 17-18=0/3063
WEBS 11-21=-908/0, 13-21=-3362/0, 13-19=0/1535, 14-19=-837/0, 15-17=-3633/0, 15-18=-243/269, 11-23=0/658, 12-21=-264/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 1.5x3 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 249 lb uplift at joint 22 and 218 lb uplift at joint 23.
6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
8) 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.
9) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1299 34=-1299 35=-1250

March 26,2025

Continued on page 2

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

LOAD CASE(S) Standard

2) Dead: Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
      Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
   Concentrated Loads (lb)
      Vert: 15=-1299 34=-1299 35=-1250
3) 1st Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
      Vert: 17-32=-10, 1-12=-100, 12-35=-140, 16-35=-20
   Concentrated Loads (lb)
      Vert: 15=-390 34=-390 35=-341
4) 2nd Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
      Vert: 17-32=-10, 1-12=-20, 12-35=-220, 16-35=-100
   Concentrated Loads (lb)
      Vert: 15=-1299 34=-1299 35=-1250
5) 3rd unbalanced Dead: Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
      Vert: 17-32=-10, 1-12=-100, 12-35=-140, 16-35=-20
   Concentrated Loads (lb)
      Vert: 15=-390 34=-390 35=-341
6) 4th unbalanced Dead: Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
      Vert: 17-32=-10, 1-12=-20, 12-35=-220, 16-35=-100
   Concentrated Loads (lb)
      Vert: 15=-1299 34=-1299 35=-1250
7) 1st chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
      Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
   Concentrated Loads (lb)
      Vert: 15=-1299 34=-1299 35=-1250
8) 2nd chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
      Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
   Concentrated Loads (lb)
      Vert: 15=-1299 34=-1299 35=-1250
9) 3rd chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
      Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
   Concentrated Loads (lb)
      Vert: 15=-1299 34=-1299 35=-1250
10) 4th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
    Uniform Loads (plf)
       Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
    Concentrated Loads (lb)
       Vert: 15=-1299 34=-1299 35=-1250
11) 5th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
    Uniform Loads (plf)
       Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
    Concentrated Loads (lb)
       Vert: 15=-1299 34=-1299 35=-1250
12) 6th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
    Uniform Loads (plf)
       Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
    Concentrated Loads (lb)
       Vert: 15=-1299 34=-1299 35=-1250
13) 7th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
    Uniform Loads (plf)
       Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
    Concentrated Loads (lb)
       Vert: 15=-1299 34=-1299 35=-1250
14) 8th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
    Uniform Loads (plf)
       Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
    Concentrated Loads (lb)
       Vert: 15=-1299 34=-1299 35=-1250
15) 9th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
    Uniform Loads (plf)
       Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
    Concentrated Loads (lb)
       Vert: 15=-1299 34=-1299 35=-1250
16) 10th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
    Uniform Loads (plf)
       Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
    Concentrated Loads (lb)
       Vert: 15=-1299 34=-1299 35=-1250
17) 11th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00

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ENGINEERING BY TRENCO A MiTek Affiliate
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LOAD CASE(S) Standard
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1299 34=-1299 35=-1250
18) 12th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1299 34=-1299 35=-1250
19) 13th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1299 34=-1299 35=-1250
20) 14th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1299 34=-1299 35=-1250
21) 15th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-15=-220, 15-35=-140, 16-35=-20
Concentrated Loads (lb)
Vert: 15=-390 34=-1299 35=-341
22) 16th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-14=-140, 14-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1299 34=-390 35=-1250
23) 17th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1299 34=-1299 35=-1250
24) 18th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1299 34=-1299 35=-1250
25) 19th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1299 34=-1299 35=-1250
26) 20th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1299 34=-1299 35=-1250
27) 21st chase Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1299 34=-1299 35=-1250
28) 22nd chase Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1299 34=-1299 35=-1250
29) 23rd chase Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1299 34=-1299 35=-1250
30) 24th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1299 34=-1299 35=-1250
31) 25th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1299 34=-1299 35=-1250
32) 26th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100

Continued on page 4

LOAD CASE(S) Standard

Concentrated Loads (lb)
Vert: 15=-1299 34=-1299 35=-1250

33) 27th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1299 34=-1299 35=-1250

34) 28th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1299 34=-1299 35=-1250

35) 29th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1299 34=-1299 35=-1250

36) 30th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1299 34=-1299 35=-1250

37) 31st chase Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-15=-220, 15-35=-140, 16-35=-20
Concentrated Loads (lb)
Vert: 15=-390 34=-1299 35=-341

38) 32nd chase Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-14=-140, 14-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1299 34=-390 35=-1250

Job	Truss	Truss Type	Qty	Ply	Lot 16 Magnolia Hills
J1224-6434	F2	FLOOR	3	1	I72278241
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Mar 25 13:54:04 2025 Page 1
ID:0HpugN1S_QSTWxS0z0zGz9z5iCa-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

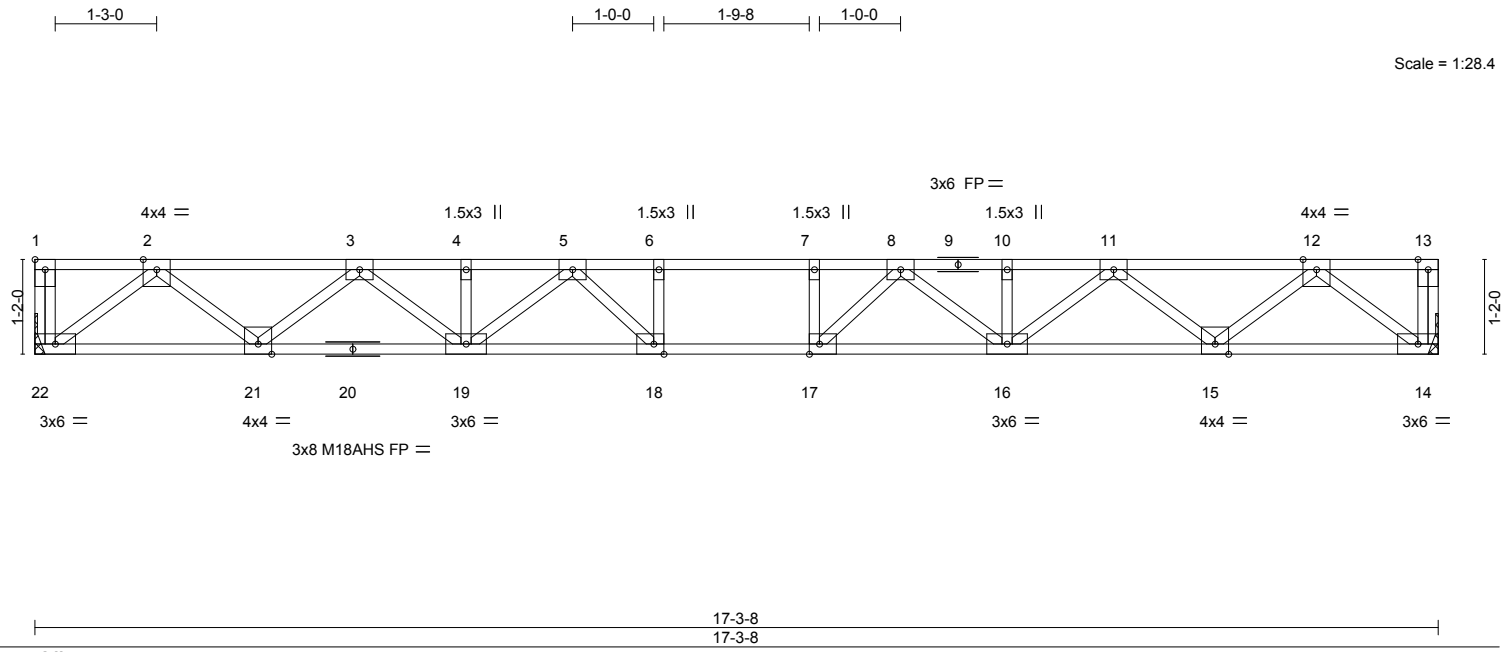

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [17:0-1-8,Edge], [18:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.47	Vert(LL)	-0.25	17-18	>821	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.75	Vert(CT)	-0.34	17-18	>597	360	M18AHS	186/179
BCLL	0.0	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.06	14	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 89 lb	FT = 20%F, 11%E

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

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

REACTIONS. (size) 22=Mechanical, 14=Mechanical
Max Grav 22=937(LC 1), 14=937(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1961/0, 3-4=-3242/0, 4-5=-3242/0, 5-6=-3793/0, 6-7=-3793/0, 7-8=-3793/0, 8-10=-3242/0, 10-11=-3242/0, 11-12=-1961/0
BOT CHORD 21-22=0/1169, 19-21=0/2719, 18-19=0/3607, 17-18=0/3793, 16-17=0/3607, 15-16=0/2719, 14-15=0/1169
WEBS 2-22=-1467/0, 2-21=0/1031, 3-21=-986/0, 3-19=0/668, 12-14=-1467/0, 12-15=0/1031, 11-15=-986/0, 11-16=0/668, 5-19=-466/0, 8-16=-466/0, 8-17=-99/572, 7-17=-301/10, 5-18=-99/572, 6-18=-301/10

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 3x4 MT20 unless otherwise indicated.
4) Plates checked for a plus or minus 1 degree rotation about its center.
5) Refer to girder(s) for truss to truss connections.
6) 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.

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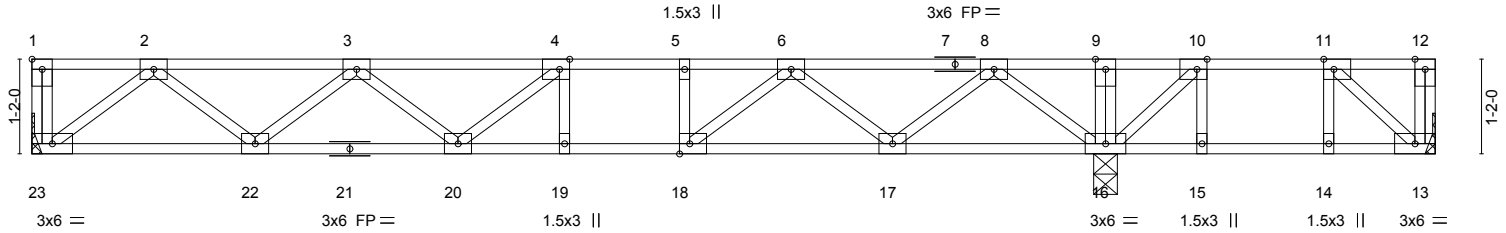
Job	Truss	Truss Type	Qty	Ply	Lot 16 Magnolia Hills
J1224-6434	F3	FLOOR	6	1	I72278242
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Mar 25 13:54:04 2025 Page 1
ID:0HpugN1S_QSTWxS0z0zGz9z5iCa-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

1-3-0 | 1-4-4 | 1-0-0 | 1-5-4 | 1-0-0

Scale = 1:28.4



13-2-12 | 17-3-8
13-2-12 | 4-0-12

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [4:0-1-8,Edge], [10:0-1-8,Edge], [11:0-1-8,Edge], [18:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.37	Vert(LL)	-0.11	19-20	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.65	Vert(CT)	-0.15	19-20	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.03	16	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 90 lb	FT = 20%F, 11%E

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

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

REACTIONS. (size) 23=Mechanical, 13=Mechanical, 16=0-3-8
Max Uplift 13=-63(LC 3)
Max Grav 23=686(LC 10), 13=180(LC 4), 16=1100(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1338/0, 3-4=-1948/0, 4-5=-1992/0, 5-6=-1992/0, 6-8=-1059/0, 8-9=0/507, 9-10=0/507
BOT CHORD 22-23=0/829, 20-22=0/1819, 19-20=0/1992, 18-19=0/1992, 17-18=0/1617, 16-17=0/498
WEBS 2-23=-1041/0, 2-22=0/662, 3-22=-626/0, 8-16=-1167/0, 8-17=0/740, 6-17=-739/0, 6-18=0/605, 10-16=-560/0

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 63 lb uplift at joint 13.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
7) CAUTION, Do not erect truss backwards.

March 26,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 16 Magnolia Hills
J1224-6434	F4	FLOOR	1	1	I72278243
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Mar 25 13:54:05 2025 Page 1
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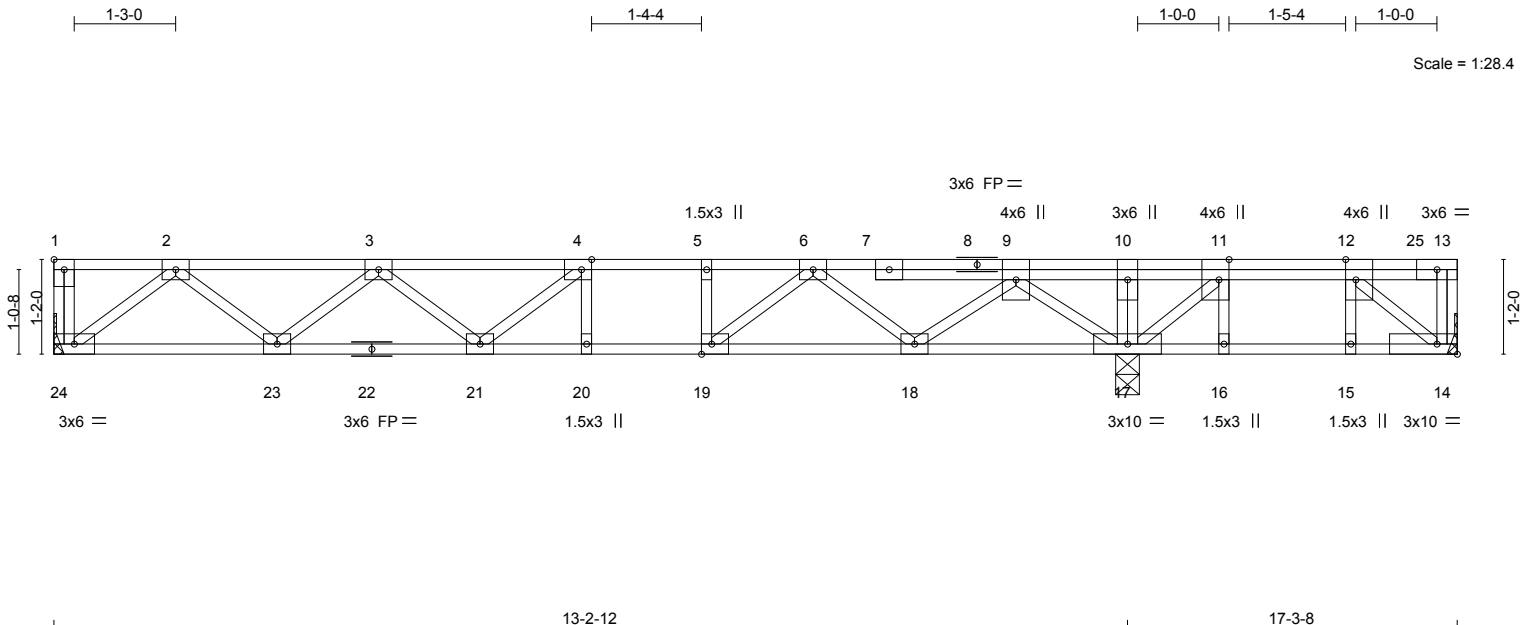

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [4:0-1-8,Edge], [11:0-3-0,Edge], [12:0-3-0,Edge], [19:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.41	Vert(LL)	-0.10	20-21	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.66	Vert(CT)	-0.13	20-21	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.46	Horz(CT)	0.03	14	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 99 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP 2400F 2.0E(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

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

REACTIONS. (size) 24=Mechanical, 14=Mechanical, 17=0-3-8
Max Grav 24=700(LC 10), 14=2508(LC 4), 17=1748(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 13-14=-1282/0, 2-3=-1374/0, 3-4=-2016/0, 4-5=-2093/0, 5-6=-2093/0, 6-9=-1230/0, 9-10=-296/671, 10-11=-295/671, 11-12=-1522/0
BOT CHORD 23-24=0/848, 21-23=0/1871, 20-21=0/2093, 19-20=0/2093, 18-19=0/1719, 17-18=0/695, 16-17=0/1522, 15-16=0/1522, 14-15=0/1522
WEBS 2-24=-1064/0, 2-23=0/684, 3-23=-647/0, 3-21=0/282, 9-17=-1207/0, 9-18=0/736, 6-18=-707/0, 6-19=0/558, 4-21=-284/37, 12-14=-1972/0, 11-17=-1955/0

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) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
7) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 1-10=-100, 10-25=-220, 13-25=-100, 14-24=-10
Concentrated Loads (lb)
Vert: 12=-1250 25=-1250
2) Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 1-10=-100, 10-25=-220, 13-25=-100, 14-24=-10
Concentrated Loads (lb)
Vert: 12=-1250 25=-1250
3) 1st Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00

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LOAD CASE(S) Standard

Uniform Loads (plf)
Vert: 1-10=-100, 10-25=-140, 13-25=-20, 14-24=-10
Concentrated Loads (lb)
Vert: 12=-341 25=-341

4) 2nd Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 1-10=-20, 10-25=-220, 13-25=-100, 14-24=-10
Concentrated Loads (lb)
Vert: 12=-1250 25=-1250

5) 3rd unbalanced Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 1-10=-100, 10-25=-140, 13-25=-20, 14-24=-10
Concentrated Loads (lb)
Vert: 12=-341 25=-341

6) 4th unbalanced Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 1-10=-20, 10-25=-220, 13-25=-100, 14-24=-10
Concentrated Loads (lb)
Vert: 12=-1250 25=-1250

7) 1st chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 1-5=-100, 5-10=-20, 10-25=-220, 13-25=-100, 14-24=-10
Concentrated Loads (lb)
Vert: 12=-1250 25=-1250

8) 2nd chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 1-4=-20, 4-10=-100, 10-25=-220, 13-25=-100, 14-24=-10
Concentrated Loads (lb)
Vert: 12=-1250 25=-1250

9) 3rd chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 1-10=-100, 10-12=-220, 12-25=-140, 13-25=-20, 14-24=-10
Concentrated Loads (lb)
Vert: 12=-1250 25=-341

10) 4th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 1-10=-100, 10-11=-140, 11-25=-220, 13-25=-100, 14-24=-10
Concentrated Loads (lb)
Vert: 12=-1250 25=-1250

11) 5th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 1-5=-100, 5-10=-20, 10-25=-220, 13-25=-100, 14-24=-10
Concentrated Loads (lb)
Vert: 12=-1250 25=-1250

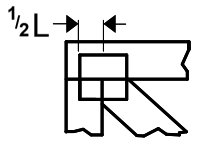
12) 6th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 1-4=-20, 4-10=-100, 10-25=-220, 13-25=-100, 14-24=-10
Concentrated Loads (lb)
Vert: 12=-1250 25=-1250

13) 7th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 1-10=-100, 10-12=-220, 12-25=-140, 13-25=-20, 14-24=-10
Concentrated Loads (lb)
Vert: 12=-1250 25=-341

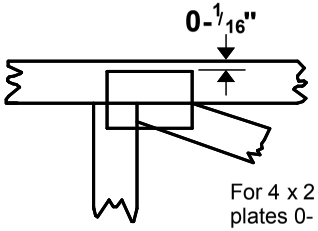
14) 8th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 1-10=-100, 10-11=-140, 11-25=-220, 13-25=-100, 14-24=-10
Concentrated Loads (lb)
Vert: 12=-1250 25=-1250

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

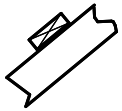
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

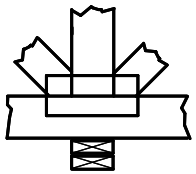
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

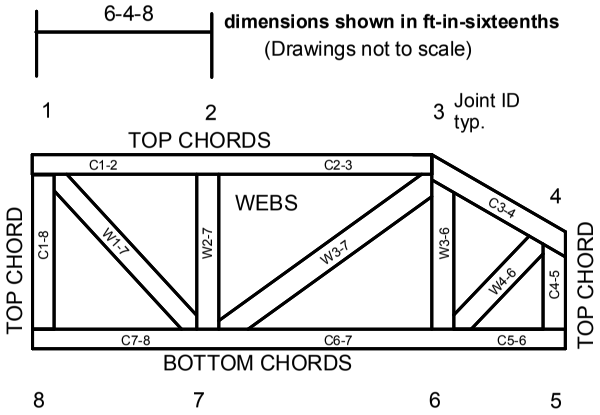


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

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

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

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

MiTek®

ENGINEERING BY TRENCO
A MiTek Affiliate

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. 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.