

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: J0325-1249  
Lot 2 Mabry Ridge

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: I71869003 thru I71869028

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

North Carolina COA: C-0844

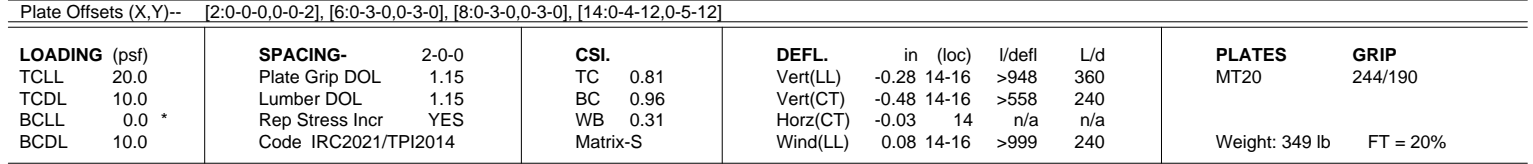


March 7, 2025

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.

Comtech, Inc. Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Thu Mar 6 14:04:08 2025 Page 1  
 ID:wAaOiCu7enbzDlvzeiq6d3fZeT-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWRcDoi7J4zJc?f



**REACTIONS.** (size) 14=0-3-8, 13=0-3-8, 2=0-5-4  
 Max Horz 2=202(LC 9)  
 Max Uplift 14=-14(LC 13)  
 Max Grav 14=944(LC 21), 13=1300(LC 20), 2=1705(LC 20)

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

TOP CHORD	2-4=-1790/0, 4-5=-1218/58, 5-6=-377/233, 8-9=-415/207, 9-10=-1242/69, 10-11=-1723/0, 11-13=-1821/0, 6-7=-251/401, 7-8=-251/401
BOT CHORD	2-16=0/1237, 14-16=0/1215
WEBS	5-19=-1458/0, 9-19=-1458/0, 4-16=0/653, 10-14=-199/490, 11-14=0/1316

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

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**ENGINEERING BY**  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 2 Mabry Ridge
J0325-1249	A01A	ATTIC	3	1	171869004

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ID:wAaOiCu?enbzDlvzeiq6d3zFzeT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

Job Reference (optional)

0-11-0 7-0-12 9-11-11 11-2-3 14-9-8 18-4-13 19-7-5 22-6-4 27-11-8  
0-11-0 7-0-12 2-10-15 1-2-8 3-7-5 3-7-5 1-2-8 2-10-15 5-5-4

Scale = 1:70.3

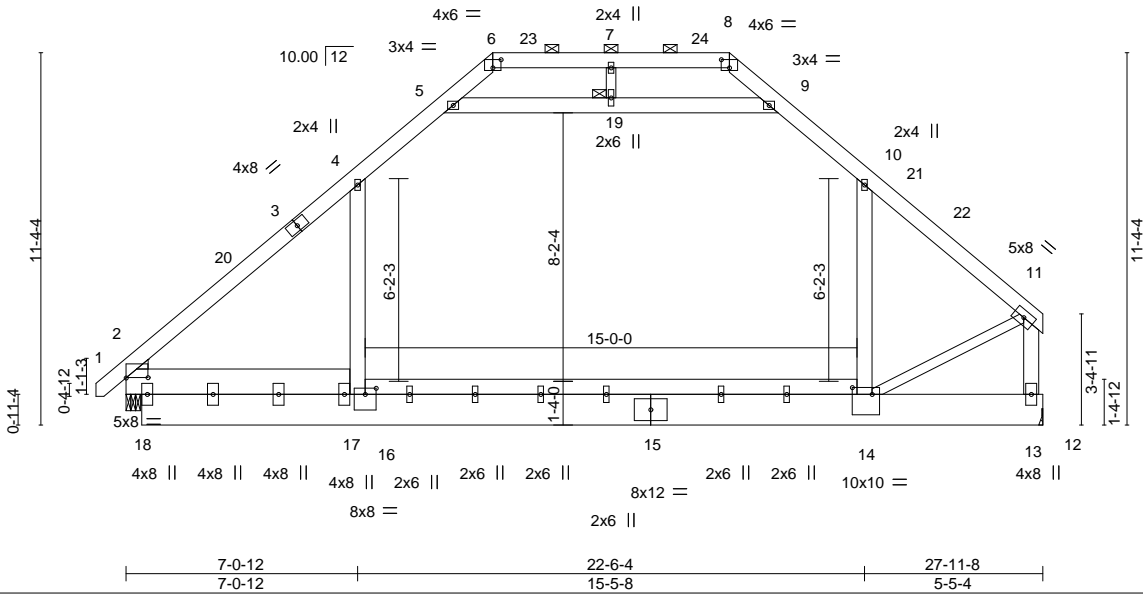


Plate Offsets (X,Y)--	[2:0-8-0,0-0-2], [6:0-3-0,0-3-0], [8:0-3-0,0-3-0], [14:0-7-4,0-2-8], [16:0-4-0,0-2-4]
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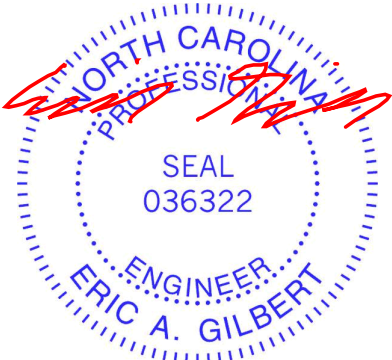
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.96	Vert(LL) -0.28	14-16	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.80	Vert(CT) -0.47	14-16	>698	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.40	Horz(CT) -0.02	13	n/a	n/a		
BCDL 10.0	Code IRC2021/TPI2014	Matrix-S	Wind(LL) 0.07	14-16	>999	240	Weight: 347 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1 *Except* 8-11: 2x6 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-8.
BOT CHORD 2x12 SP No.1 *Except* 14-16: 2x6 SP No.1, 2-17: 2x10 SP No.1	BOT CHORD Rigid ceiling directly applied or 7-8-13 oc bracing.
WEBS 2x6 SP No.1 *Except* 11-14,7-19: 2x4 SP No.2	JOINTS 1 Brace at Jt(s): 19
WEDGE Left: 2x4 SP No.3	

**REACTIONS.** (size) 13=Mechanical, 2=0-5-4  
Max Horz 2=202(LC 9)  
Max Grav 13=1863(LC 2), 2=1810(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-2152/0, 4-5=-1400/44, 5-6=-289/389, 8-9=-317/380, 9-10=-1410/40,  
10-11=-2003/0, 11-13=-2212/0, 6-7=-127/621, 7-8=-127/621  
BOT CHORD 2-16=0/1411, 14-16=0/1401  
WEBS 5-19=-1884/0, 9-19=-1884/0, 4-16=0/914, 10-14=-9/815, 11-14=0/1536

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-9 to 3-7-4, Interior(1) 3-7-4 to 11-2-3, Exterior(2R) 11-2-3 to 17-4-14, Interior(1) 17-4-14 to 18-4-13, Exterior(2R) 18-4-13 to 24-7-8, Interior(1) 24-7-8 to 27-7-4 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Ceiling dead load (10.0 psf) on member(s). 4-5, 9-10, 5-19, 9-19; Wall dead load (5.0psf) on member(s).4-16, 10-14
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 14-16
  - Refer to girder(s) for truss to truss connections.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Attic room checked for L/360 deflection.



March 7,2025

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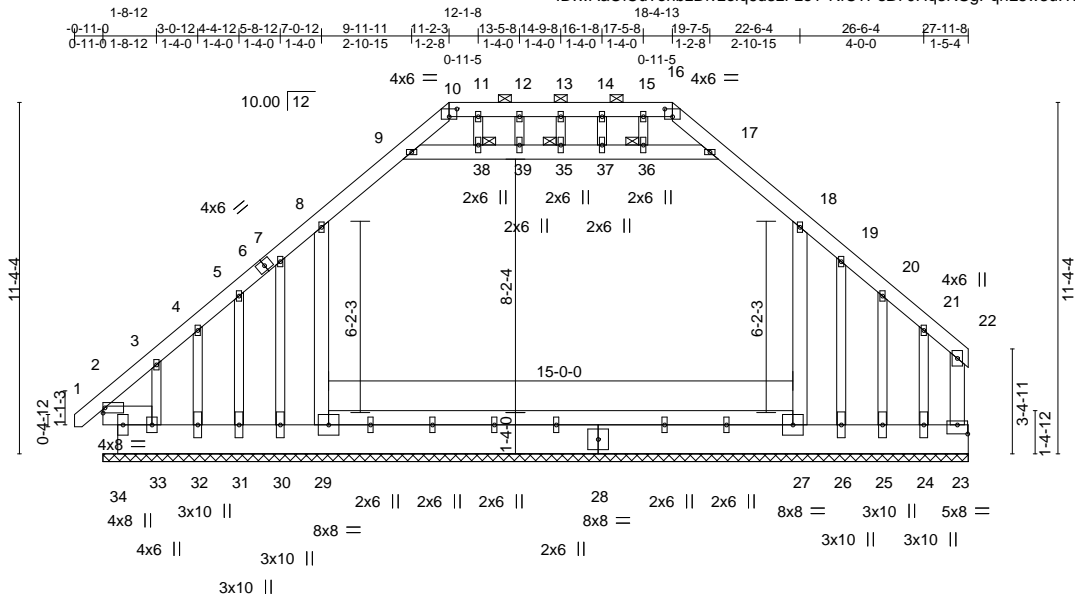
Job	Truss	Truss Type	Qty	Ply	Lot 2 Mabry Ridge
J0325-1249	A01AG	GABLE	1	1	171869005

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ID:wAaOiCu?enbzDlvzeiq6d3zFzeT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

Job Reference (optional)



Scale = 1:74.4

Plate Offsets (X,Y)--		[10:0-3-0,0-3-0], [16:0-3-0,0-3-0], [23:0-4-0,0-3-8]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 20.0	Plate Grip DOL	1.15	TC 0.42
TCDL 10.0	Lumber DOL	1.15	BC 0.33
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.35
BCDL 10.0	Code	IRC2021/TPI2014	Matrix-S
		DEFL.	in (loc) l/defl L/d
		Vert(LL)	-0.00 1 n/r 120
		Vert(CT)	-0.00 1 n/r 120
		Horz(CT)	0.00 23 n/a n/a
		PLATES	GRIP
		MT20	244/190
		Weight: 364 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	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.): 10-16.
BOT CHORD 2x12 SP No.1 *Except*	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except*	JOINTS 1 Brace at Jt(s): 35, 36, 38
9-17,8-29,18-27,22-23: 2x6 SP No.1	

**REACTIONS.** All bearings 27-11-8.  
(lb) - Max Horz 2=247(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 33, 32, 2 except 23=114(LC 9), 30=1862(LC 18), 26=1873(LC 18), 24=953(LC 23)  
Max Grav All reactions 250 lb or less at joint(s) 33, 32, 24 except 29=2491(LC 18), 27=2495(LC 18), 23=1153(LC 1), 31=551(LC 18), 2=509(LC 1), 25=603(LC 18)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-469/181, 3-4=-433/174, 4-5=-423/166, 5-7=-392/174, 7-8=-306/226, 8-9=-615/136, 9-10=-880/107, 16-17=-880/148, 17-18=-615/136, 19-20=-371/44, 20-21=-417/44, 21-22=-590/69, 22-23=-580/56, 10-11=-804/120, 11-12=-804/120, 12-13=-804/120, 13-14=-804/120, 14-15=-804/120, 15-16=-804/120  
BOT CHORD 2-33=-41/333, 32-33=-34/285, 31-32=-34/285, 30-31=-34/285, 29-30=-34/285, 27-29=-34/285, 26-27=-34/285, 25-26=-34/285, 24-25=-34/285, 23-24=-34/285  
WEBS 9-38=-109/542, 38-39=-109/542, 35-39=-109/542, 35-37=-109/542, 36-37=-109/542, 17-36=-109/542, 8-29=-788/117, 18-27=-789/0, 15-36=-46/255, 11-38=-55/255, 21-24=-56/251

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-9-9 to 3-7-4, Interior(1) 3-7-4 to 11-2-3, Exterior(2R) 11-2-3 to 15-7-0, Interior(1) 15-7-0 to 18-4-13, Exterior(2R) 18-4-13 to 22-6-4, Interior(1) 22-6-4 to 27-7-4 zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) Provide adequate drainage to prevent water ponding.
  - 5) All plates are 2x4 MT20 unless otherwise indicated.
  - 6) Gable requires continuous bottom chord bearing.
  - 7) Gable studs spaced at 2-0-0 oc.
  - 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 9) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 10) Ceiling dead load (10.0 psf) on member(s). 8-9, 17-18, 9-38, 38-39, 35-39, 35-37, 36-37, 17-36; Wall dead load (5.0psf) on

Continued on page 2, 18-27



March 7, 2025

Job	Truss	Truss Type	Qty	Ply	Lot 2 Mabry Ridge
J0325-1249	A01AG	GABLE	1	1	171869005
Job Reference (optional)					

- NOTES-**
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 33, 32, 2 except (jt=lb) 23=114, 30=1862, 26=1873, 24=953.
  - 12) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
  - 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 14) This truss has large uplift reaction(s) from gravity load case(s). Proper connection is required to secure truss against upward movement at the bearings. Building designer must provide for uplift reactions indicated.
  - 15) Attic room checked for L/360 deflection.

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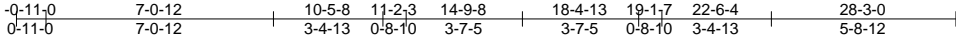
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 2 Mabry Ridge
J0325-1249	A02	ATTIC	1	2	171869006

Comtech, Inc., Fayetteville, NC - 28314,

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ID:wAaOiCu?enbzDlvzeiq6d3zFzeT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:71.5

Plate Offsets (X,Y)--	[2:0-0-0,0-0-6], [3:0-6-0,Edge], [4:0-0-3,0-2-8], [6:0-0-2,Edge], [8:0-0-2,Edge], [10:0-8-5,0-0-4], [11:0-1-12,0-3-0], [14:0-8-12,0-4-0], [16:0-5-0,0-1-12]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.67	Vert(LL) -0.29	14-16	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.90	Vert(CT) -0.46	14-16	>720	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.64	Horz(CT) -0.02	13	n/a	n/a		
BCDL 10.0	Code IRC2021/TPI2014	Matrix-S	Wind(LL) 0.07	14-16	>999	240	Weight: 760 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x10 SP 2400F 2.0E *Except* 6-8: 2x6 SP No.1, 1-3: 2x6 SP 2400F 2.0E	TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals (Switched from sheeted: Spacing > 2-8-0).
BOT CHORD 2x12 SP No.1 *Except* 12-15: 2x12 SP 2400F 2.0E, 16-20: 2x6 SP No.1, 2-17: 2x10 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x6 SP No.1 *Except* 11-14,7-19: 2x4 SP No.2	JOINTS 1 Brace at Jt(s): 6, 8, 11, 19
WEDGE Left: 2x4 SP No.3	

REACTIONS.	(size) 13=0-3-8, 2=0-5-4
Max Horz 2=522(LC 9)	
Max Grav 13=6088(LC 2), 2=7190(LC 2)	

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=6877/0, 4-5=4324/53, 5-6=502/1810, 8-9=574/1709, 9-10=4427/33, 10-11=6487/0, 11-13=6667/0, 6-7=20/2640, 7-8=20/2640	
BOT CHORD 2-16=0/4684, 14-16=0/4528	
WEBS 5-19=6968/0, 9-19=6968/0, 4-16=0/3748, 10-14=0/3255, 11-14=0/4736, 7-19=0/485	

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x10 - 2 rows staggered at 0-9-0 oc. Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc, 2x12 - 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 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-9 to 3-7-4, Interior(1) 3-7-4 to 11-6-2, Exterior(2R) 11-6-2 to 17-8-12, Interior(1) 17-8-12 to 18-0-14, Exterior(2R) 18-0-14 to 24-3-9, Interior(1) 24-3-9 to 27-10-15 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Ceiling dead load (10.0 psf) on member(s). 4-5, 9-10, 5-19, 9-19; Wall dead load (5.0psf) on member(s).4-16, 9-10-14
9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 14-16
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Attic room checked for L/360 deflection.



March 7,2025

LOAD CASE(S) Standard	WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.	ENGINEERING BY <b>TRENCO</b> A MiTek Affiliate 818 Soundside Road Edenton, NC 27932
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Job	Truss	Truss Type	Qty	Ply	Lot 2 Mabry Ridge
J0325-1249	A02	ATTIC	1	2	171869006
					Job Reference (optional)

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 2-16=-155(F=-104), 14-16=-103, 13-14=-117(F=-65), 12-13=-52, 1-4=-155, 4-5=-207, 5-6=-155, 8-9=-155, 9-10=-207, 10-11=-155, 5-9=-52, 6-8=-155
- Drag: 4-16=-26, 10-14=-26

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ID:wAaOiCu?enbzDlvzeiq6d3zFzeT-RIC?PsB70Hq3NSgPqnL8w3uitXbGKWrCdoi7J4zJC?f

Scale = 1:73.2

Plate Offsets (X,Y)-- [2:0-0-0,0-0-6], [3:0-6-0,Edge], [4:0-0-7,0-2-12], [6:0-0-2,Edge], [8:0-0-2,Edge], [10:0-8-1,0-0-4], [13:0-3-8,0-2-12], [14:0-8-12,0-4-0], [16:0-5-0,0-1-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.67	Vert(LL) -0.28	14-16	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.90	Vert(CT) -0.46	14-16	>711	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.65	Horz(CT) -0.02	13	n/a	n/a		
BCDL 10.0	Code IRC2021/TPI2014	Matrix-S	Wind(LL) 0.07	14-16	>999	240	Weight: 755 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x10 SP 2400F 2.0E \*Except\*  
6-8: 2x6 SP No.1, 1-3: 2x6 SP 2400F 2.0E  
BOT CHORD 2x12 SP No.1 \*Except\*  
12-15: 2x12 SP 2400F 2.0E, 16-20: 2x6 SP No.1, 2-17: 2x10 SP No.1  
WEBS 2x6 SP No.1 \*Except\*  
11-14,7-19: 2x4 SP No.2  
WEDGE  
Left: 2x4 SP No.3

**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): 6, 8, 11, 19

**REACTIONS.** (size) 13=Mechanical, 2=0-5-4  
Max Horz 2=522(LC 9)  
Max Grav 13=6043(LC 2), 2=7126(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=6727/0, 4-5=4233/59, 5-6=548/1746, 8-9=630/1632, 9-10=4349/38,  
10-11=6317/0, 11-13=6830/0, 6-7=88/2546, 7-8=88/2546  
BOT CHORD 2-16=0/4581, 14-16=0/4419  
WEBS 5-19=6771/0, 9-19=6771/0, 4-16=0/3661, 10-14=0/3154, 11-14=0/4830, 7-19=0/478

**NOTES-**  
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x10 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc, 2x12 - 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 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed;  
MWFRS (envelope) and C-C Exterior(2E) -0-9-9 to 3-7-4, Interior(1) 3-7-4 to 11-6-2, Exterior(2R) 11-6-2 to 17-8-12, Interior(1) 17-8-12 to 18-0-14, Exterior(2R) 18-0-14 to 24-3-9, Interior(1) 24-3-9 to 27-7-7 zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60  
5) Provide adequate drainage to prevent water ponding.  
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.  
7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.  
8) Ceiling dead load (10.0 psf) on member(s). 4-5, 9-10, 5-19, 9-19; Wall dead load (5.0psf) on member(s).4-16, 10-14  
9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 14-16  
10) Refer to girder(s) for truss to truss connections.  
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.  
12) Attic room checked for L/360 deflection.

Continued on page 2

**LOAD CASE(S) Standard**  
WARNING: Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.  
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

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

March 7, 2025



Job	Truss	Truss Type	Qty	Ply	Lot 2 Mabry Ridge
J0325-1249	A02A	ATTIC	1	2	Job Reference (optional)

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 2-16=-155(F=-104), 14-16=-103, 13-14=-117(F=-65), 12-13=-52, 1-4=-155, 4-5=-207, 5-6=-155, 8-9=-155, 9-10=-207, 10-11=-155, 5-9=-52, 6-8=-155
- Drag: 4-16=-26, 10-14=-26

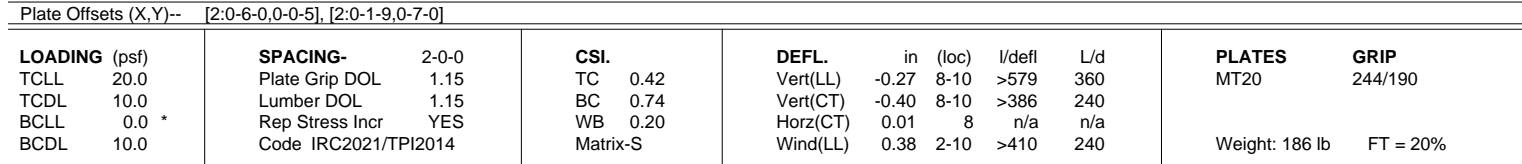
 **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria and DSB-22** available from Truss Plate Institute ([www.tpinst.org](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacomponents.com](http://www.sbcacomponents.com))



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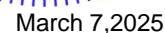
Comtech, Inc. Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Thu Mar 6 14:04:12 2025 Page 1  
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 -0-10-8 6-7-11 13-0-0 19-4-5 25-11-8  
 0-10-8 6-7-11 6-4-5 6-4-5 6-7-3  
 5x5 = Scale = 1:71.8



**REACTIONS.** (size) 10=0-3-8, 8=0-3-8, 2=0-3-0  
 Max Horz 2=232(LC 9)  
 Max Uplift 10=-32(LC 12), 2=-21(LC 8)  
 Max Grav 10=1404(LC 2), 8=555(LC 20), 2=563(LC 27)

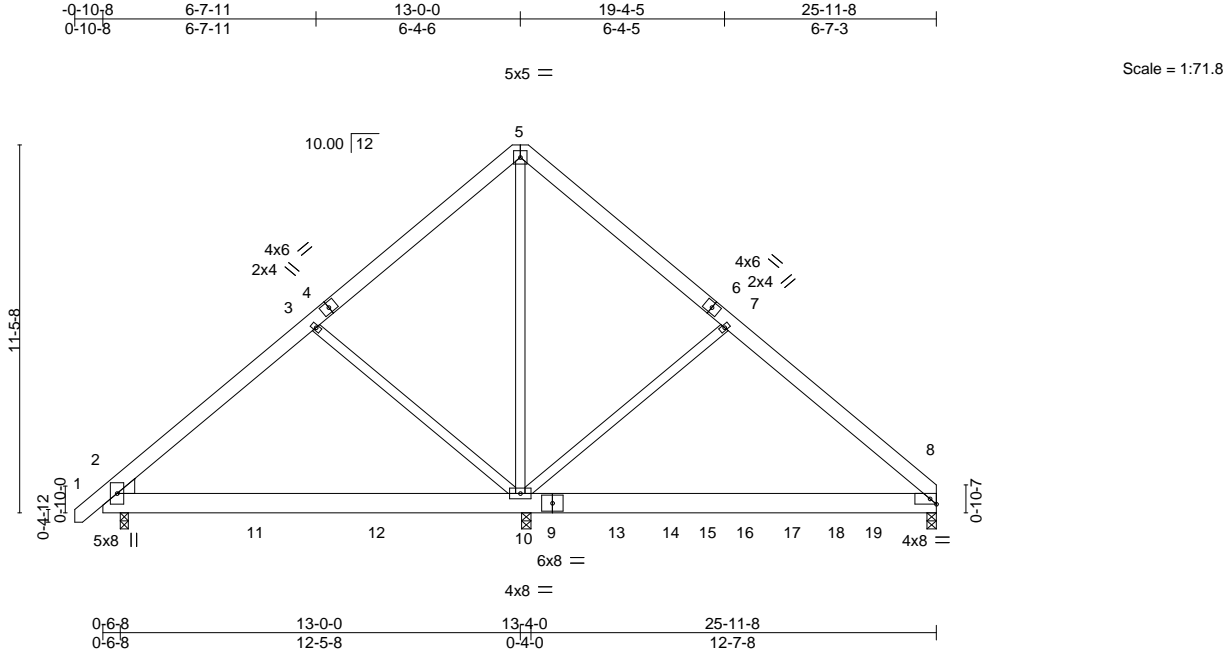
TOP CHORD 2-3=-411/95, 7-8=-409/69  
BOT CHORD 2-10=-138/340, 8-10=0/255  
WEBS 3-10=-401/310, 5-10=-361/42, 7-10=-415/235

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0.9-1 to 3-7-12, Interior(1) 3-7-12 to 13-0-0, Exterior(2R) 13-0-0 to 17-4-13, Interior(1) 17-4-13 to 25-9-12 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 2.



Job	Truss	Truss Type	Qty	Ply	Lot 2 Mabry Ridge
J0325-1249	B01GR	COMMON	1	2	171869009

Comtech, Inc., Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Thu Mar 6 14:04:12 2025 Page 1  
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LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	-0.16 8-10 >964 360	MT20		244/190	
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.32 8-10 >476 240				
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.15	Horz(CT)	0.00 8 n/a n/a				
BCDL	10.0	Code IRC2021/TP12014		Matrix-S		Wind(LL)	-0.12 8-10 >999 240				
								Weight: 407 lb		FT = 20%	

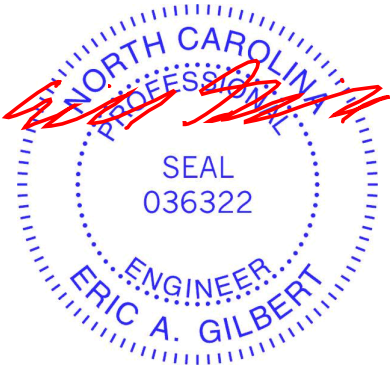
LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	2x8 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.2		
WEDGE			
Left: 2x6 SP No.1			

**REACTIONS.** (size) 10=0-3-8, 8=0-3-8, 2=0-3-0  
Max Horz 2=232(LC 5)  
Max Uplift 2=102(LC 26)  
Max Grav 10=2275(LC 35), 8=1120(LC 36), 2=493(LC 18)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-429/70, 7-8=-432/41  
BOT CHORD 2-10=-162/340, 8-10=0/312  
WEBS 3-10=-380/222, 5-10=-346/18, 7-10=-478/178

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=102.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 239 lb down at 13-10-12, 238 lb down at 15-10-12, 238 lb down at 17-10-12, 238 lb down at 19-10-12, and 238 lb down at 21-10-12, and 238 lb down at 23-10-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard  
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-5=-60, 5-8=-60, 2-8=-20



March 7, 2025

Continued on page 2

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**  
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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate  
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 2 Mabry Ridge
J0325-1249	B01GR	COMMON	1	2	171869009
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Thu Mar 6 14:04:12 2025 Page 2  
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**LOAD CASE(S)** Standard  
Concentrated Loads (lb)  
Vert: 9=-234(F) 13=-234(F) 15=-234(F) 16=-234(F) 18=-234(F) 19=-234(F)

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

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818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 2 Mabry Ridge
J0325-1249	B01SG	GABLE	1	1	171869010

Comtech, Inc, Fayetteville, NC - 28314,

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8.630 s Aug 30 2023 MiTek Industries, Inc. Fri Mar 7 14:51:27 2025 Page 1

Job Reference (optional)

-0-10-8  
0-10-8
7-4-3  
7-4-3
13-0-0  
5-7-13
25-11-8  
12-11-8

4x6 ==

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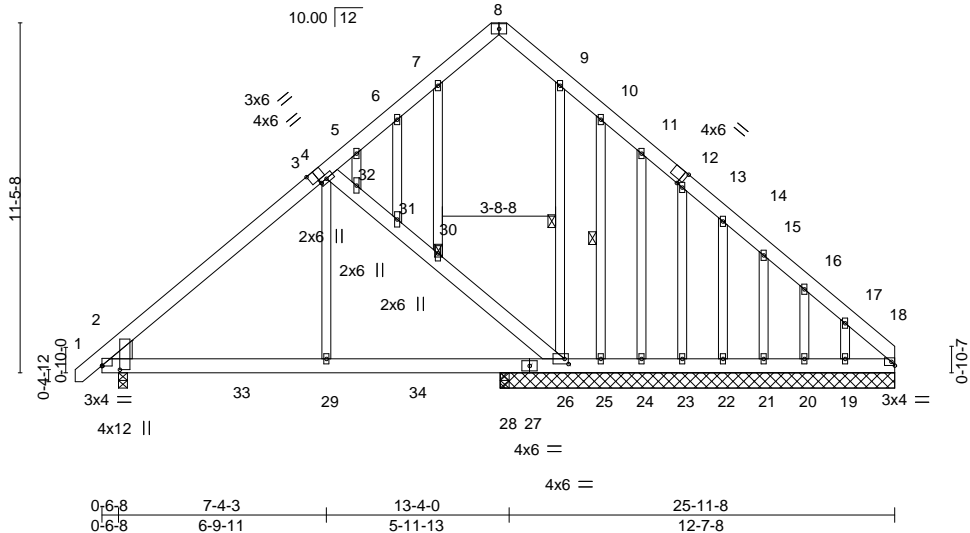


Plate Offsets (X,Y)-- [2:0-1-9,0-7-0], [2:0-0-0,0-0-3], [3:0-3-0,Edge], [12:0-1-8,Edge], [26:0-1-8,0-2-0]									
<b>LOADING</b> (psf)		<b>SPACING-</b> 2-0-0		<b>CSI.</b>		<b>DEFL.</b> in (loc) l/defl L/d		<b>PLATES</b>	<b>GRIP</b>
TCLL	20.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	-0.03 2-29 >999 360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Horz(CT)	-0.06 2-29 >999 240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.01 18 n/a n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-S		Wind(LL)	0.04 2-29 >999 240	Weight: 254 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x6 SP No.1 *Except*	WEBS 1 Row at midpt 9-26, 10-25
OTHERS 2x4 SP No.2	JOINTS 1 Brace at Jt(s): 30
WEDGE Left: 2x8 SP No.1	

**REACTIONS.** All bearings 12-11-0 except (jt=length) 2=0-3-8, 28=0-3-8.

(lb) - Max Horz 2=287(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 18, 25, 24, 23, 22, 21, 20, 2, 28 except 26=194(LC 12), 19=139(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 25, 24, 23, 22, 21, 20, 19, 28 except 18=314(LC 13), 26=543(LC 19), 2=786(LC 2)

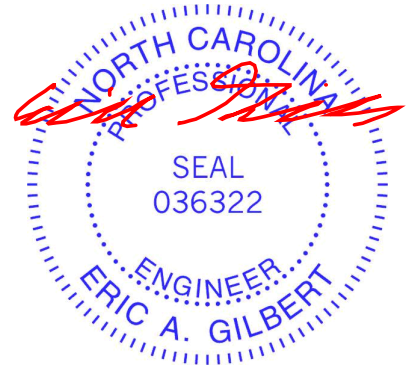
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-4=-799/301, 4-5=-307/73, 15-16=-276/105, 16-17=-336/126, 17-18=-450/171

BOT CHORD 2-29=-213/668, 28-29=-213/668, 26-28=-213/668, 25-26=-128/343, 24-25=-128/343, 23-24=-128/343, 22-23=-128/343, 21-22=-128/343, 20-21=-128/343, 19-20=-128/343, 18-19=-128/343

WEBS 4-32=-697/522, 31-32=-588/451, 30-31=-636/484, 26-30=-655/486, 4-29=-306/496

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 13-0-0, Exterior(2R) 13-0-0 to 17-8-0, Interior(1) 17-8-0 to 25-11-8 zone; cantilever left exposed ; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable studs spaced at 1-4-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18, 25, 24, 23, 22, 21, 20, 2, 28 except (jt=lb) 26=194, 19=139.



March 7,2025

Job	Truss	Truss Type	Qty	Ply	Lot 2 Mabry Ridge
J0325-1249	C01	ROOF SPECIAL	6	1	171869011

Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Thu Mar 6 14:04:14 2025 Page 1

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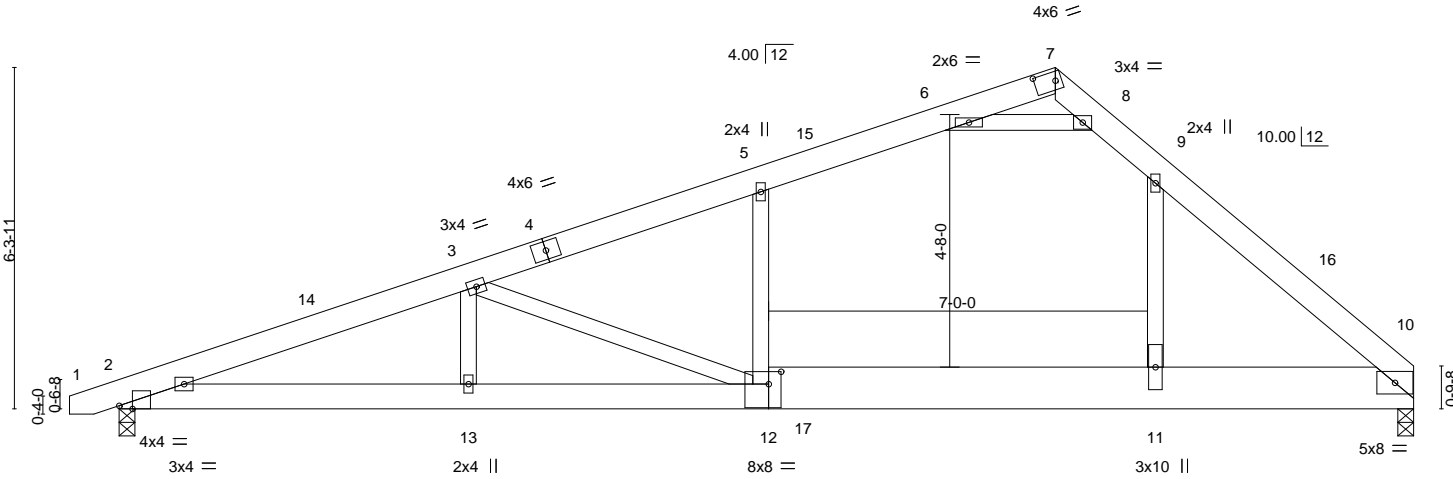


Plate Offsets (X,Y)--	[2:0-2-15,Edge], [7:0-4-10,0-2-0], [12:0-2-12,0-2-12]
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LOADING (psf)	SPACING-		CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15		TC 0.62	Vert(LL) -0.23	12-13	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15		BC 0.60	Vert(CT) -0.41	12-13	>690	240		
BCLL 0.0 *	Rep Stress Incr YES		WB 0.70	Horz(CT) 0.03	10	n/a	n/a		
BCDL 10.0	Code IRC2021/TP12014		Matrix-S	Wind(LL) 0.13	12-13	>999	240	Weight: 166 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-9-2 oc purlins.
BOT CHORD 2x6 SP 2400F 2.0E *Except*	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except*	
5-12,6-8: 2x4 SP No.1	

**REACTIONS.** (size) 10=0-3-8, 2=0-3-8  
Max Horz 2=129(LC 9)  
Max Uplift 10=-4(LC 8), 2=-56(LC 8)  
Max Grav 10=1133(LC 2), 2=1112(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2641/455, 3-5=-1510/303, 5-6=-1334/330, 6-7=-199/968, 7-8=-117/682,  
8-9=-1174/331, 9-10=-1925/339  
BOT CHORD 2-13=-385/2462, 12-13=-385/2462, 11-12=-153/1360, 10-11=-152/1354  
WEBS 3-13=0/371, 5-12=0/372, 6-8=-2351/561, 3-12=-1214/247, 9-11=-30/966

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-8-5 to 3-8-8, Interior(1) 3-8-8 to 17-3-9, Exterior(2R) 17-3-9 to 21-8-6, Interior(1) 21-8-6 to 23-9-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 2.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



March 7, 2025

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ENGINEERING BY  
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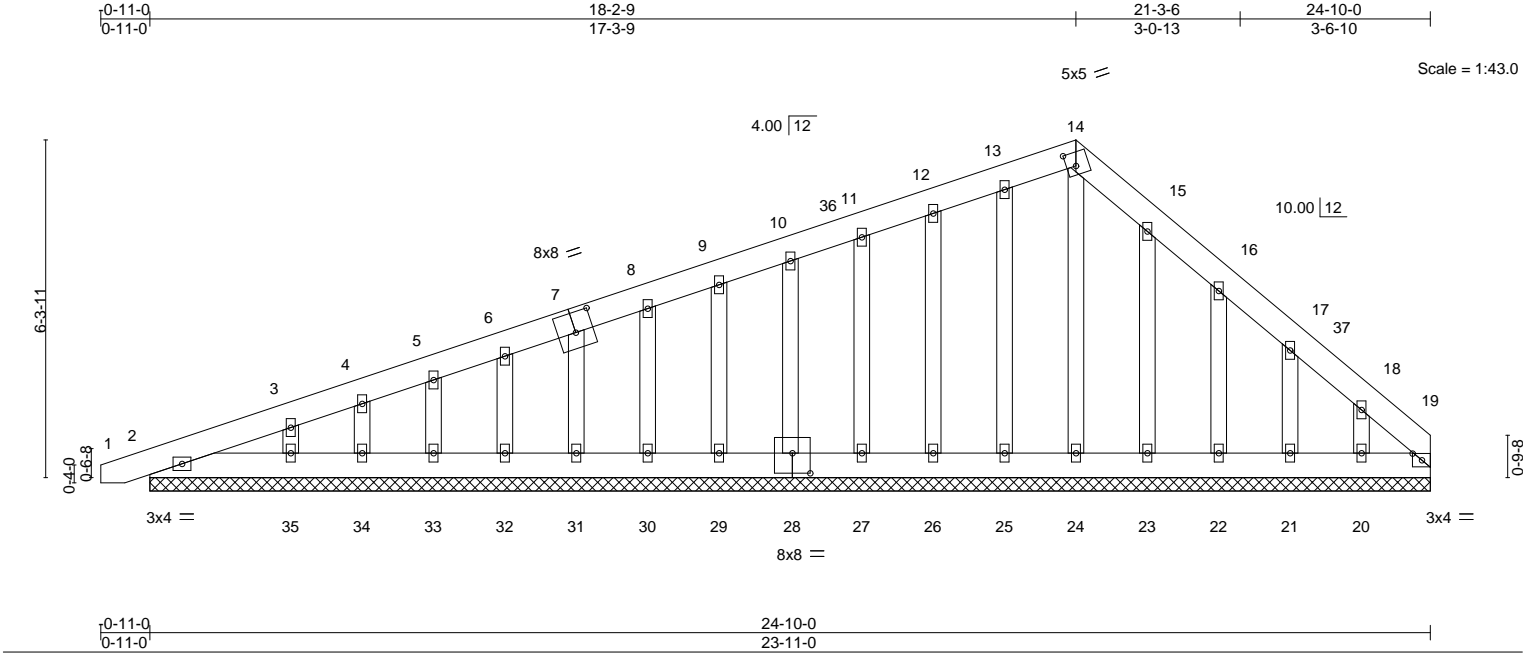
818 Soundside Road  
Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	Lot 2 Mabry Ridge
J0325-1249	C01GE	GABLE	1	1	171869012

Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Thu Mar 6 14:04:14 2025 Page 1  
ID:wAaOiCu?enbzDlvzeiq6d3zFzeT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



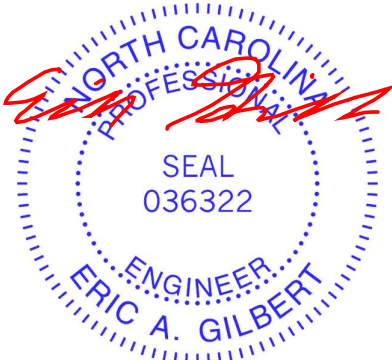
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	-0.00	MT20		244/190	
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00				
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S							
								Weight: 190 lb		FT = 20%	

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

**REACTIONS.** All bearings 23-11-0.  
(lb) - Max Horz 2=178(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 19, 2, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 23, 22, 21, 20  
Max Grav All reactions 250 lb or less at joint(s) 19, 2, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 23, 22, 21, 20

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-8-5 to 3-11-9, Exterior(2N) 3-11-9 to 17-3-9, Corner(3R) 17-3-9 to 21-8-6, Exterior(2N) 21-8-6 to 23-11-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 1'-4" oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3'-6" tall by 2'-0" wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 2, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 23, 22, 21, 20.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

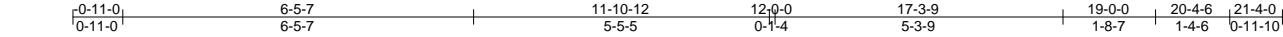


March 7, 2025

Job	Truss	Truss Type	Qty	Ply	Lot 2 Mabry Ridge
J0325-1249	C02	ROOF SPECIAL	6	1	171869013

Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Thu Mar 6 14:04:15 2025 Page 1  
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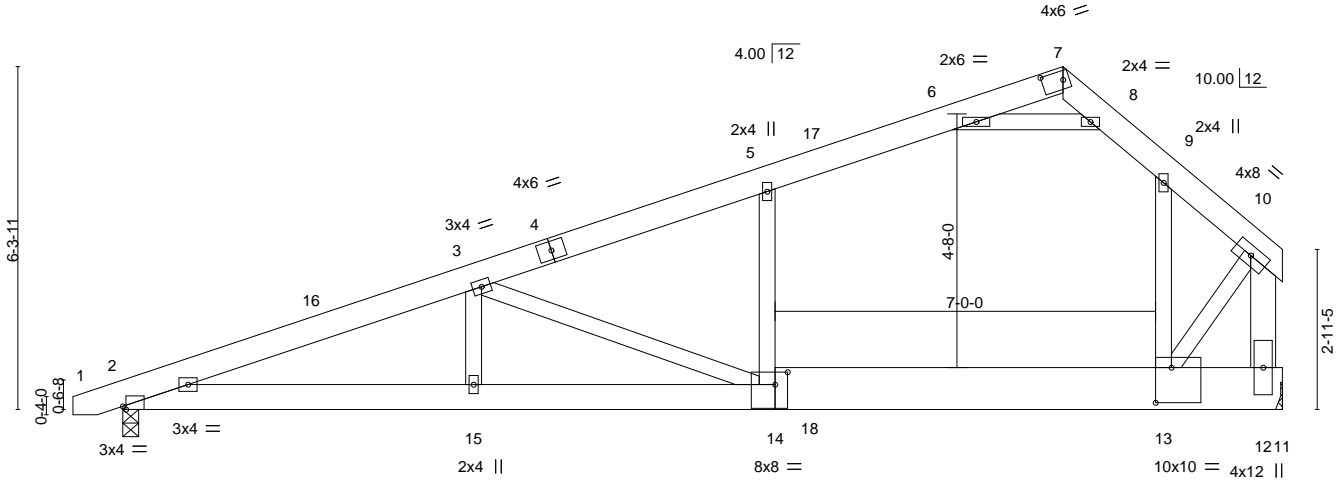


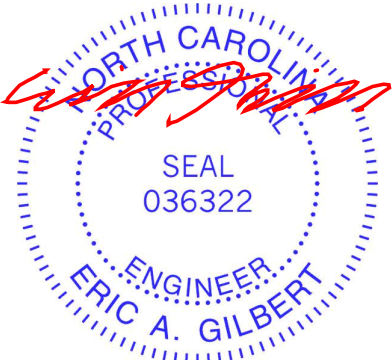
Plate Offsets (X,Y)--		[2:0-0-11,Edge], [7:0-4-10,0-2-0], [13:0-3-8,0-7-12], [14:0-2-12,0-2-12]
LOADING (psf)	SPACING-	2-0-0
TCLL 20.0	Plate Grip DOL	1.15
TCDL 10.0	Lumber DOL	1.15
BCLL 0.0 *	Rep Stress Incr	YES
BCDL 10.0	Code	IRC2021/TPI2014
	CSI.	
	TC	0.50
	BC	0.75
	WB	0.71
	Matrix-S	
	DEFL.	
	in (loc)	l/defl L/d
	Vert(LL)	-0.22 14-15 >999 360
	Vert(CT)	-0.40 14-15 >632 240
	Horz(CT)	0.02 12 n/a n/a
	Wind(LL)	0.13 14-15 >999 240
	PLATES	GRIP
	MT20	244/190
	Weight: 157 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-1-14 oc purlins, except end verticals.
BOT CHORD 2x6 SP 2400F 2.0E *Except* 11-14: 2x10 SP No.1	BOT CHORD Rigid ceiling directly applied or 7-3-4 oc bracing.
WEBS 2x4 SP No.2 *Except* 10-12: 2x6 SP No.1, 5-14,6-8: 2x4 SP No.1	

REACTIONS. (size) 2=0-3-8, 12=Mechanical  
Max Horz 2=126(LC 9)  
Max Uplift 2=-51(LC 8), 12=-17(LC 8)  
Max Grav 2=975(LC 2), 12=1013(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2254/382, 3-5=-1070/215, 5-6=-933/258, 6-7=-103/732, 7-8=-34/459, 8-9=-869/276, 9-10=-1239/256, 10-12=-2096/405  
BOT CHORD 2-15=-413/2086, 14-15=-413/2085, 13-14=-173/947  
WEBS 3-15=0/408, 5-14=0/264, 6-8=-1659/383, 3-14=-1239/256, 9-13=0/531, 10-13=-288/1585

- NOTES-
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-8-5 to 3-8-8, Interior(1) 3-8-8 to 17-3-9, Exterior(2E) 17-3-9 to 20-11-12 zone;C/C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



March 7,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 2 Mabry Ridge
J0325-1249	C02GE	GABLE	1	1	171869014

Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Thu Mar 6 14:04:15 2025 Page 1  
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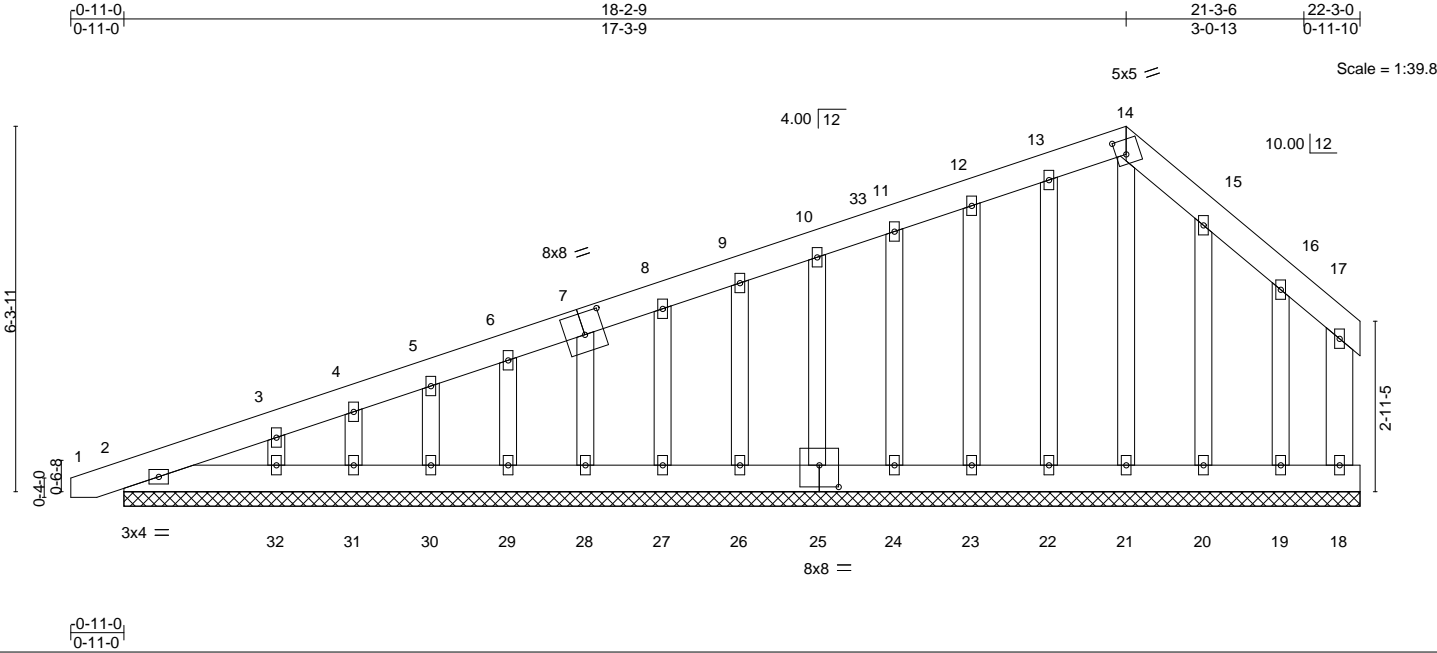


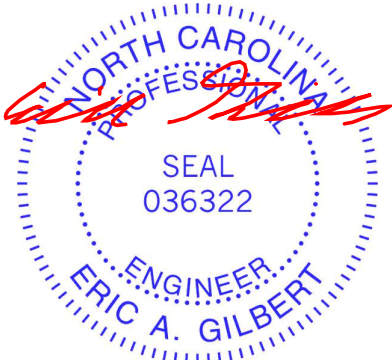
Plate Offsets (X,Y)-- [7:0-4-0,0-4-8], [14:0-2-1,0-3-0], [25:0-4-0,0-4-8]									
<b>LOADING</b> (psf)		<b>SPACING-</b>		<b>CSI.</b>		<b>DEFL.</b>		<b>PLATES</b>	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.02	in (loc)	l/defl	MT20	GRIP
TCDL	10.0	Lumber DOL	1.15	BC	0.02	1	n/r		244/190
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	1	n/r		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S		18	n/a		
								Weight: 178 lb	FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x6 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	2x6 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x6 SP No.1		
OTHERS	2x4 SP No.2		

**REACTIONS.** All bearings 21-4-0.  
(lb) - Max Horz 2=171(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 18, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 20, 19  
Max Grav All reactions 250 lb or less at joint(s) 2, 18, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 20, 19

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-8-5 to 3-11-9, Exterior(2N) 3-11-9 to 17-3-9, Corner(3E) 17-3-9 to 20-11-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 1-4-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 18, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 20, 19.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



March 7, 2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 2 Mabry Ridge
J0325-1249	D01	ROOF TRUSS	1	1	171869015

Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Thu Mar 6 14:04:16 2025 Page 1

ID:wAaOiCu?enbzDlvzeiq6d3zFzeT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

-0-11-0 6-1-12 11-1-12 16-1-12 22-3-8 23-2-8  
0-11-0 6-1-12 5-0-0 5-0-0 6-1-12 0-11-0

5x10 M18AHS =

Scale = 1:77.1

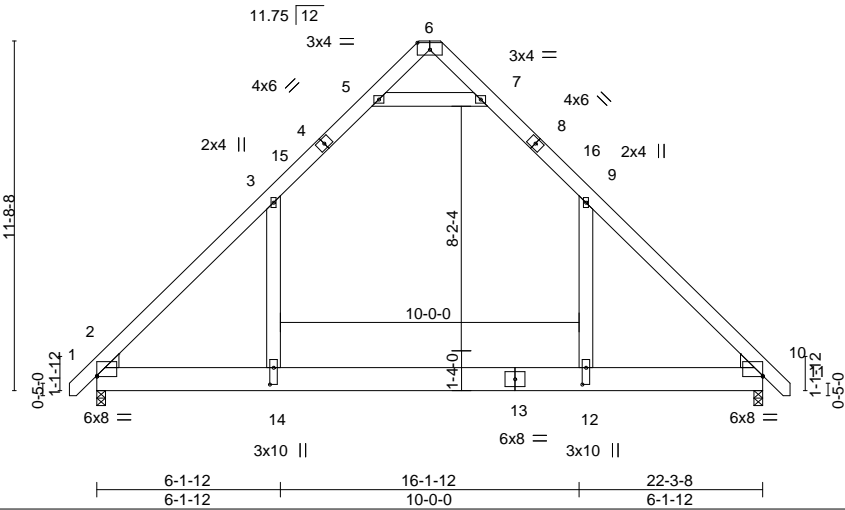


Plate Offsets (X,Y)--		[2:0-0-0,0-0-6], [6:0-5-0,Edge], [10:Edge,0-0-6], [12:0-6-12,0-1-8], [14:0-6-12,0-1-8]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 20.0	Plate Grip DOL	1.15	TC 0.58
TCDL 10.0	Lumber DOL	1.15	BC 0.68
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.11
BCDL 10.0	Code	IRC2021/TP12014	Matrix-S
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.22 12-14 >999 360
			Vert(CT) -0.42 12-14 >630 240
			Horz(CT) 0.01 10 n/a n/a
			Wind(LL) 0.09 12-14 >999 240
			PLATES GRIP
			MT20 244/190
			M18AHS 186/179
			Weight: 205 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x10 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x6 SP No.1	
WEDGE	
Left: 2x6 SP No.2 , Right: 2x6 SP No.2	

REACTIONS. (size) 2=0-3-8, 10=0-3-8  
Max Horz 2=235(LC 10)  
Max Grav 2=1425(LC 20), 10=1425(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1777/0, 3-5=-971/83, 5-6=-4/618, 6-7=-4/618, 7-9=-971/83, 9-10=-1777/0  
BOT CHORD 2-14=0/1036, 12-14=0/1036, 10-12=0/1036  
WEBS 3-14=0/810, 9-12=0/810, 5-7=-1761/114

- NOTES-
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-10 to 3-7-3, Interior(1) 3-7-3 to 11-1-12, Exterior(2R) 11-1-12 to 15-6-9, Interior(1) 15-6-9 to 23-1-2 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) All plates are MT20 plates unless otherwise indicated.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Ceiling dead load (10.0 psf) on member(s). 3-5, 7-9, 5-7; Wall dead load (5.0psf) on member(s).3-14, 9-12
  - 7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-14
  - 8) Attic room checked for L/360 deflection.



March 7,2025

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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 2 Mabry Ridge
J0325-1249	D01GE	GABLE	1	1	171869016

Comtech, Inc., Fayetteville, NC - 28314,

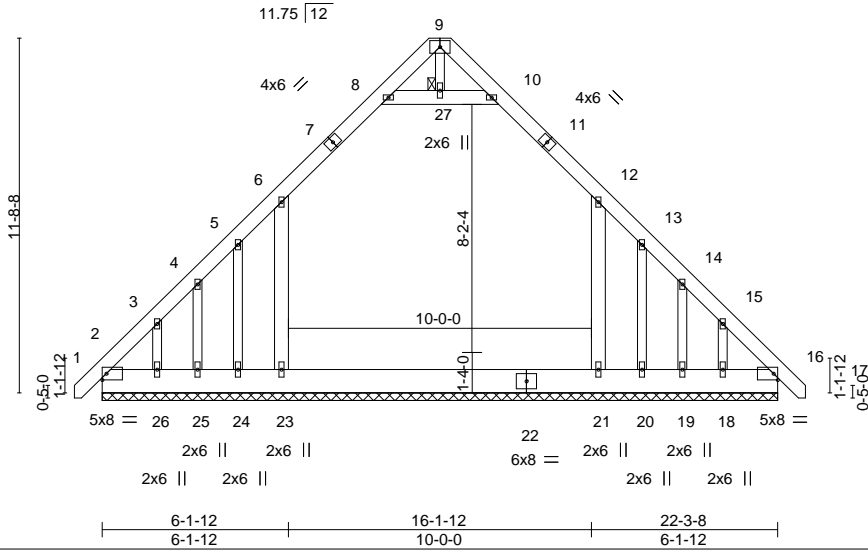
8.630 s Sep 26 2024 MiTek Industries, Inc. Thu Mar 6 14:04:17 2025 Page 1

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0-11-0 6-1-12 11-1-12 16-1-12 22-3-8 23-2-8  
0-11-0 6-1-12 5-0-0 5-0-0 6-1-12 0-11-0

5x8 =

Scale = 1:76.0



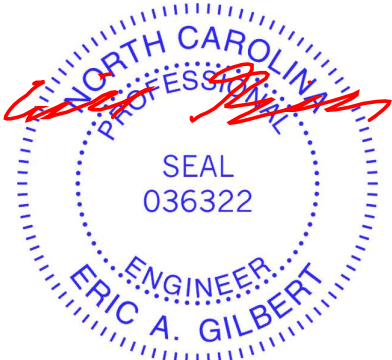
LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.07	Vert(LL)	0.00	16	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.21	Vert(CT)	-0.00	16	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.12	Horz(CT)	0.00	16	n/a	n/a		
BCDL 10.0	Code IRC2021/TPI2014	Matrix-S						Weight: 231 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x10 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x6 SP No.1	JOINTS 1 Brace at Jt(s): 27
OTHERS 2x4 SP No.2	

REACTIONS.	All bearings 22-3-8.
(lb) - Max Horz 2=-299(LC 10)	
Max Uplift	All uplift 100 lb or less at joint(s) 2, 25, 19 except 24=-707(LC 18), 26=-171(LC 12), 20=-707(LC 18), 18=-170(LC 13)
Max Grav	All reactions 250 lb or less at joint(s) 26, 18 except 2=518(LC 21), 23=1225(LC 20), 21=1219(LC 21), 16=515(LC 20), 25=300(LC 20), 19=300(LC 21)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-585/38, 3-4=-491/23, 4-5=-466/22, 5-6=-448/52, 6-8=-494/97, 10-12=-494/95, 12-13=-442/44, 13-14=-462/17, 14-15=-487/18, 15-16=-582/32
BOT CHORD	2-26=-16/387, 25-26=-16/387, 24-25=-15/387, 23-24=-15/387, 21-23=-15/387, 20-21=-15/387, 19-20=-16/387, 18-19=-15/387, 16-18=-15/386
WEBS	6-23=-377/127, 12-21=-371/121

NOTES-	
1) Unbalanced roof live loads have been considered for this design.	
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-9-10 to 3-7-3, Interior(1) 3-7-3 to 11-1-12, Exterior(2R) 11-1-12 to 15-6-9, Interior(1) 15-6-9 to 23-1-2 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 1-4-0 oc.	
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.	
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.	
9) Ceiling dead load (10.0 psf) on member(s). 6-8, 10-12, 8-27, 10-27; Wall dead load (5.0psf) on member(s).6-23, 12-21	
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 25, 19 except (jt=lb) 24=707, 26=171, 20=707, 18=170.	
11) Attic room checked for L/360 deflection.	



March 7,2025

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**  
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacompnents.com)

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



Job	Truss	Truss Type	Qty	Ply	Lot 2 Mabry Ridge
J0325-1249	D02	ROOF TRUSS	6	1	171869017

Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Thu Mar 6 14:04:17 2025 Page 1

ID:wAaOiCu?enbzDlvzeiq6d3zFzeT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



5x10 M18AHS =

Scale = 1:77.1

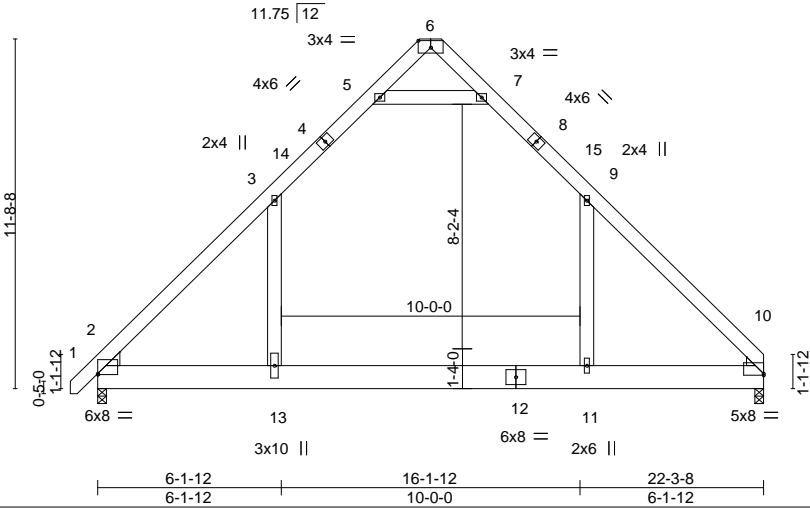


Plate Offsets (X,Y)--	[2:0-0-0,0-0-6], [6:0-5-0,Edge], [10:0-0-0,0-0-10]
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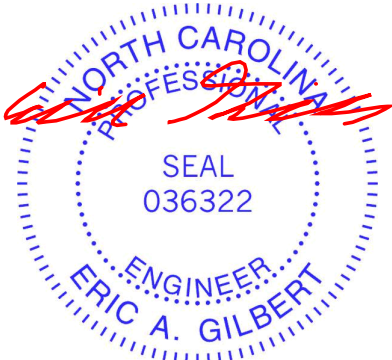
LOADING (psf)	SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.59		Vert(LL)	-0.23	11-13	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.69		Vert(CT)	-0.43	11-13	>620	240	M18AHS	186/179
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.11		Horz(CT)	0.01	10	n/a	n/a		
BCDL 10.0	Code IRC2021/TPI2014		Matrix-S		Wind(LL)	0.10	11-13	>999	240	Weight: 202 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x10 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x6 SP No.1	
WEDGE	
Left: 2x6 SP No.2 , Right: 2x4 SP No.3	

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
Max Horz 2=233(LC 9)  
Max Grav 2=1426(LC 20), 10=1374(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1780/0, 3-5=-968/82, 5-6=-8/628, 6-7=-5/623, 7-9=-974/84, 9-10=-1748/0  
BOT CHORD 2-13=0/1032, 11-13=0/1032, 10-11=0/1032  
WEBS 3-13=0/816, 9-11=0/771, 5-7=-1772/119

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-10 to 3-7-3, Interior(1) 3-7-3 to 11-1-12, Exterior(2R) 11-1-12 to 15-6-9, Interior(1) 15-6-9 to 22-1-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) All plates are MT20 plates unless otherwise indicated.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Ceiling dead load (10.0 psf) on member(s). 3-5, 7-9, 5-7; Wall dead load (5.0psf) on member(s).3-13, 9-11
  - 7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 11-13
  - 8) Attic room checked for L/360 deflection.



March 7,2025

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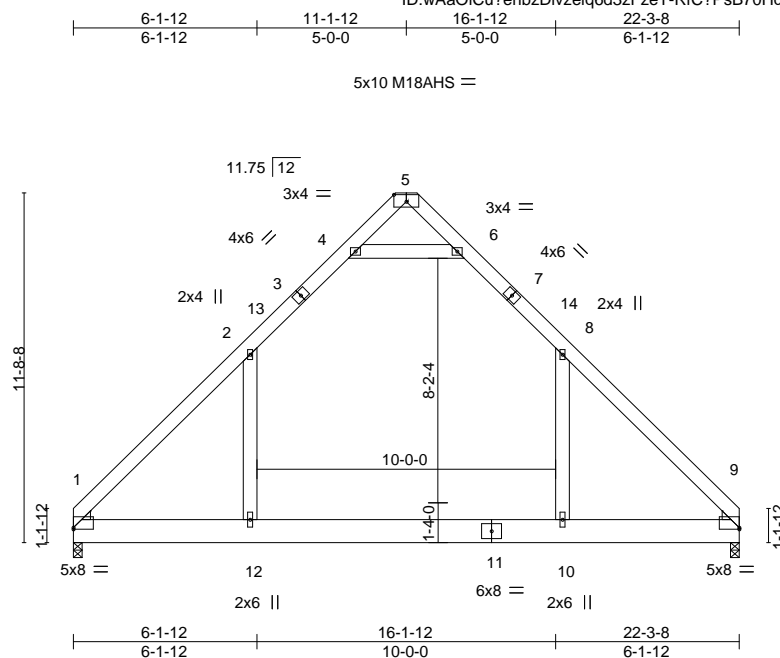


Comtech, Inc. Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Thu Mar 6 14:04:18 2025 Page 1

ID:wAaOiCu?enbzdIvzeiq6d3zfZeT-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f

6-1-12 11-1-12 16-1-12 22-3-8  
6-1-12 5-0-0 5-0-0 6-1-12

5x10 M18AHS = Scale = 1:77.



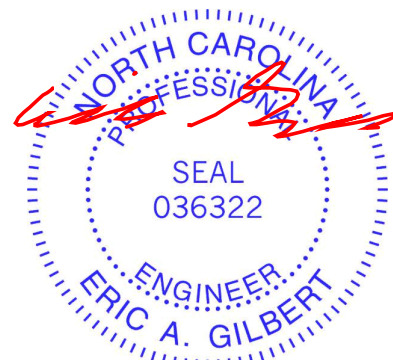
<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x6 SP 2400F 2.0E	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	2x10 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x6 SP No.1		
WEDGE			
Left: 2x4 SP No.3 , Right: 2x4 SP No.3			

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

TOP CHORD	1-2=1751/0, 2-4=971/84, 4-5=10/632, 5-6=10/633, 6-8=971/84, 8-9=1751/0
BOT CHORD	1-12=0/1032, 10-10=0/1032, 9-10=0/1032
WEBS	2-12=0/776, 8-10=0/776, 4-6=1781/122

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 11-1-12, Exterior(2R) 11-1-12 to 15-6-9, Interior(1) 15-6-9 to 22-1-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are MT20 plates unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Ceiling dead load (10.0 psf) on member(s). 2-4, 6-8, 4-6; Wall dead load (5.0psf) on member(s).2-12, 8-10
- 7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 10-12
- 8) Attic room checked for L/360 deflection.



March 7, 2025

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818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 2 Mabry Ridge
J0325-1249	E01	COMMON	1	1	171869019

Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Thu Mar 6 14:04:18 2025 Page 1  
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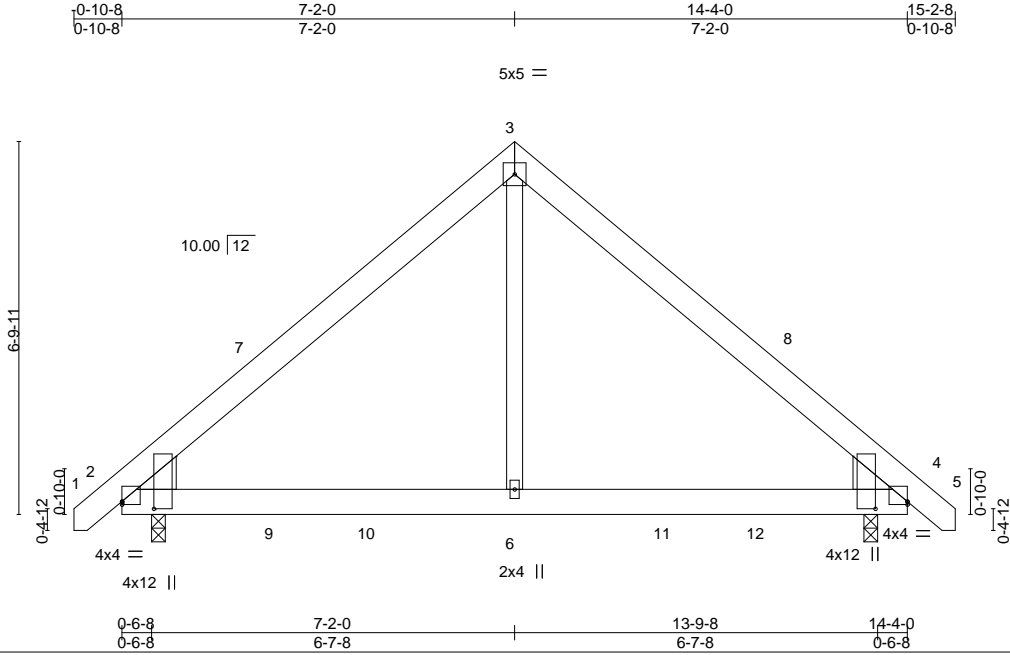


Plate Offsets (X,Y)-- [2:0-0-0,0-0-11], [2:0-1-9,0-7-0], [4:Edge,0-0-11], [4:0-1-9,0-7-0]									
<b>LOADING</b> (psf)		<b>SPACING-</b>		<b>CSI.</b>		<b>DEFL.</b>		<b>PLATES</b>	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	-0.03 2-6 >999 360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.05 2-6 >999 240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.01 4 n/a n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S		Wind(LL)	0.04 2-6 >999 240	Weight: 97 lb	FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x6 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	2x6 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.2		
WEDGE			
Left: 2x8 SP No.1 , Right: 2x8 SP No.1			

**REACTIONS.** (size) 2=0-3-0, 4=0-3-0  
Max Horz 2=-135(LC 10)  
Max Uplift 2=-39(LC 9), 4=-39(LC 8)  
Max Grav 2=724(LC 2), 4=724(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-749/523, 3-4=-749/523  
BOT CHORD 2-6=-244/492, 4-6=-244/492  
WEBS 3-6=-436/541

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 7-2-0, Exterior(2R) 7-2-0 to 11-6-13, Interior(1) 11-6-13 to 15-1-1 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.



March 7, 2025

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ENGINEERING BY  
**TRENCO**  
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818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 2 Mabry Ridge
J0325-1249	E01SG	GABLE	1	1	171869020

Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Thu Mar 6 14:04:19 2025 Page 1

ID:wAaOiCu?enbzDlvzeiq6d3zFzeT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRCDoi7J4zJC?f

Job Reference (optional)

0-10-8 7-2-0 14-4-0 15-2-8

0-10-8 7-2-0 7-2-0 0-10-8

5x5 =

Scale = 1:42.0

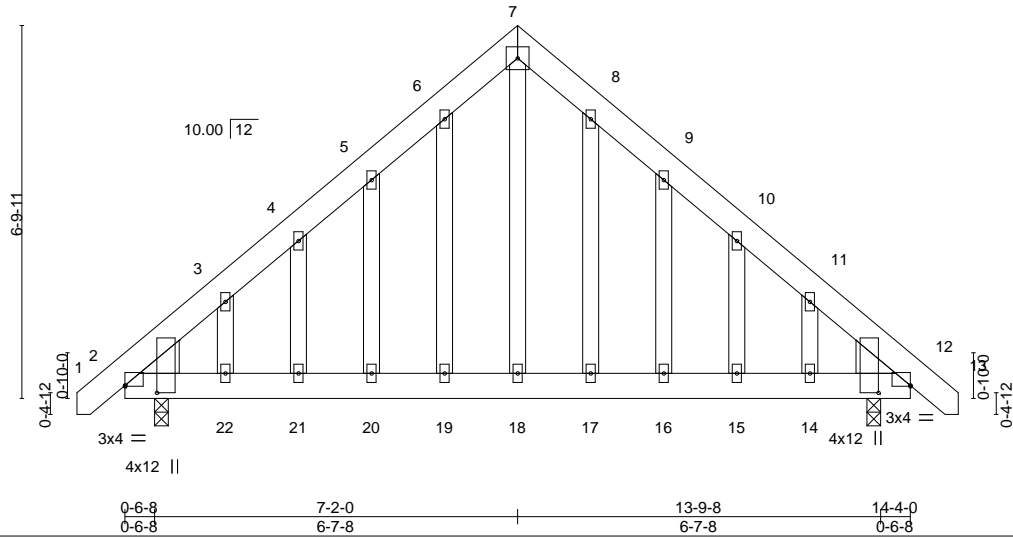


Plate Offsets (X,Y)-- [2:0-0-0,0-0-3], [2:0-1-9,0-7-0], [12:Edge,0-0-3], [12:0-1-9,0-7-0]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15		TC 0.14	Vert(LL) -0.03	21	>999	360		MT20	244/190
TCDL 10.0	Lumber DOL 1.15		BC 0.20	Vert(CT) -0.04	21	>999	240			
BCLL 0.0 *	Rep Stress Incr YES		WB 0.26	Horz(CT) 0.00	12	n/a	n/a			
BCDL 10.0	Code IRC2021/TPI2014		Matrix-S	Wind(LL) 0.04	21	>999	240		Weight: 133 lb	FT = 20%

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

**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=0-3-0, 12=0-3-0  
Max Horz 2=-169(LC 10)  
Max Uplift 2=-78(LC 12), 12=-78(LC 13)  
Max Grav 2=616(LC 1), 12=616(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-610/442, 3-4=-528/443, 4-5=-492/454, 5-6=-479/487, 6-7=-429/487, 7-8=-429/487, 8-9=-479/487, 9-10=-492/454, 10-11=-528/443, 11-12=-610/442  
BOT CHORD 2-22=-224/373, 21-22=-224/373, 20-21=-224/373, 19-20=-224/373, 18-19=-224/373, 17-18=-224/373, 16-17=-224/373, 15-16=-224/373, 14-15=-224/373, 12-14=-224/373  
WEBS 7-18=-408/302

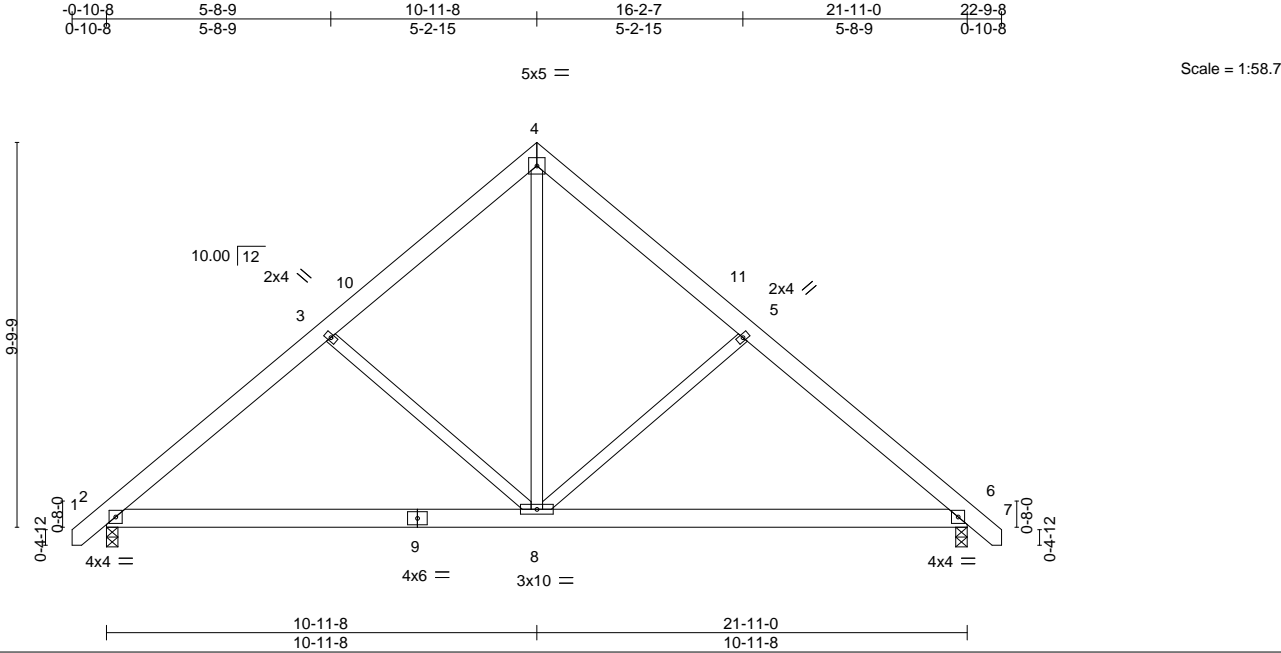
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 7-2-0, Exterior(2R) 7-2-0 to 11-6-13, Interior(1) 11-6-13 to 15-1-1 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable studs spaced at 1-4-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12.



March 7,2025

Job	Truss	Truss Type	Qty	Ply	Lot 2 Mabry Ridge
J0325-1249	G01	COMMON	5	1	171869021

Comtech, Inc., Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Thu Mar 6 14:04:19 2025 Page 1  
ID:wAaOiCu?enbzDlvzeiq6d3zFzeT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



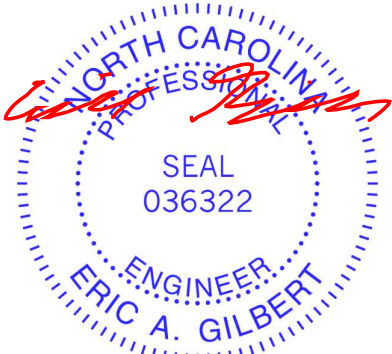
LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.13	Vert(LL)	-0.07	6-8	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.38	Vert(CT)	-0.14	2-8	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.26	Horz(CT)	0.01	6	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.01	2-8	>999	240		
	Code IRC2021/TPI2014							Weight: 157 lb	FT = 20%

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

**REACTIONS.** (size) 2=0-3-8, 6=0-3-8  
Max Horz 2=199(LC 11)  
Max Uplift 2=-2(LC 12), 6=-2(LC 13)  
Max Grav 2=919(LC 1), 6=919(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1047/183, 3-4=-816/199, 4-5=-816/199, 5-6=-1047/183  
BOT CHORD 2-8=-41/781, 6-8=-30/739  
WEBS 4-8=-109/637, 5-8=-303/204, 3-8=-303/204

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 10-11-8, Exterior(2R) 10-11-8 to 15-4-5, Interior(1) 15-4-5 to 22-8-1 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, 6.



March 7,2025

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A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 2 Mabry Ridge
J0325-1249	G01GE	GABLE	1	1	171869022

Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Thu Mar 6 14:04:20 2025 Page 1

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21-11-0

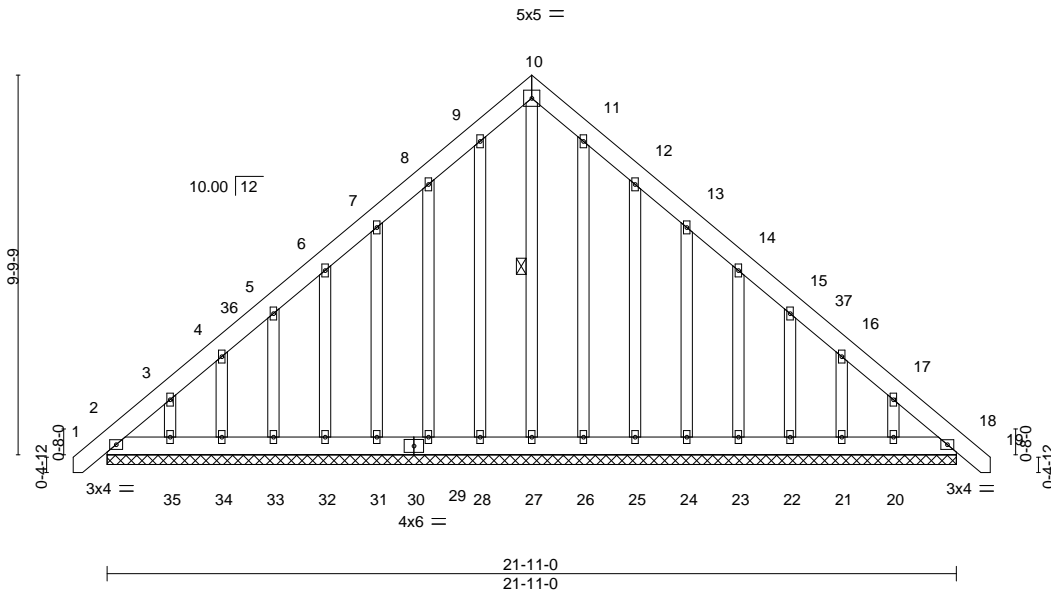
22-9-8

0-10-8

10-11-8

10-11-8

0-10-8



LOADING (psf)	SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	2-0-0	TC 0.04		Vert(LL)	-0.00	18	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.02		Vert(CT)	0.00	18	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.10		Horz(CT)	0.00	18	n/a	n/a		
BCDL 10.0	Code IRC2021/TPI2014		Matrix-S							Weight: 229 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	2x6 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS	2x4 SP No.2	WEBS	1 Row at midpt 10-27

**REACTIONS.** All bearings 21-11-0.  
(lb) - Max Horz 2=249(LC 11)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 18, 28, 29, 31, 32, 33, 34, 35, 25, 24, 23, 22, 21, 20  
Max Grav All reactions 250 lb or less at joint(s) 2, 18, 27, 28, 29, 31, 32, 33, 34, 35, 26, 25, 24, 23, 22, 21, 20

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-285/192

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-9-1 to 3-7-12, Exterior(2N) 3-7-12 to 10-11-8, Corner(3R) 10-11-8 to 15-4-5, Exterior(2N) 15-4-5 to 22-8-1 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 1-4-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 18, 28, 29, 31, 32, 33, 34, 35, 25, 24, 23, 22, 21, 20.



March 7,2025

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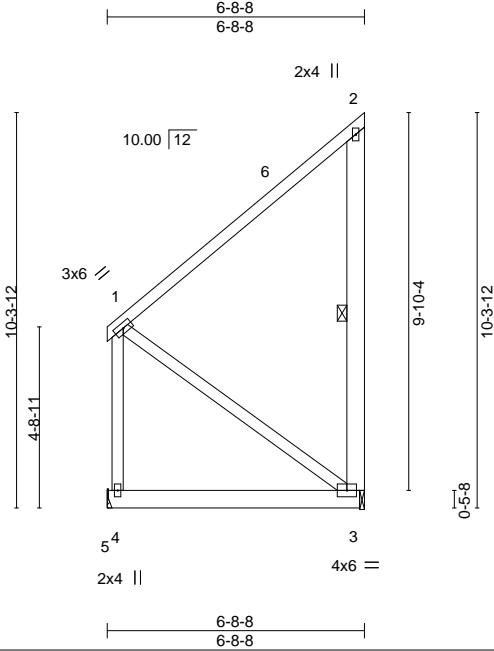
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**TRENCO**  
A MiTek Affiliate  
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Job	Truss	Truss Type	Qty	Ply	Lot 2 Mabry Ridge
J0325-1249	J07	Jack-Closed	6	1	171869023

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8.630 s Sep 26 2024 MiTek Industries, Inc. Thu Mar 6 14:04:20 2025 Page 1

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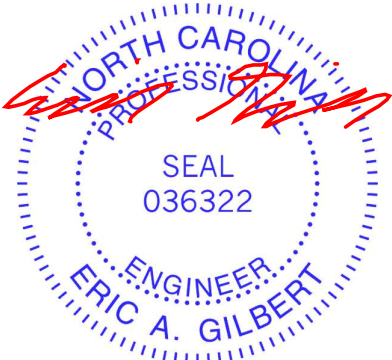
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.72	Vert(LL)	-0.02	3-4	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	-0.04	3-4	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.16	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2021/TPI2014		Matrix-P	Wind(LL)	0.00	4	****	240	Weight: 68 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except*	WEBS 1 Row at midpt 2-3
2-3: 2x6 SP No.1	

**REACTIONS.** (size) 4=Mechanical, 3=0-1-8  
Max Horz 4=144(LC 12)  
Max Uplift 3=176(LC 12)  
Max Grav 4=257(LC 21), 3=302(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-204/296  
BOT CHORD 3-4=-328/127  
WEBS 1-3=-158/405

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-3-4 to 4-8-1, Interior(1) 4-8-1 to 6-5-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Bearing at joint(s) 3 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 at joint(s) 3.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 3=176.



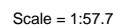
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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate  
818 Soundside Road  
Edenton, NC 27932



Comtech, Inc. Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Thu Mar 6 14:04:21 2025 Page 1  
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<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x6 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	2x6 SP No.1		
WEBS	2x4 SP No.2 *Except*	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
	6-7: 2x6 SP No.1	WEBS	1 Row at midpt 6-7, 5-8
OTHERS	2x4 SP No.2	JOINTS	1 Brace at Jt(s): 13

**REACTIONS.** All bearings 6-8-8.  
(lb) - Max Horz 12=206(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 7, 9, 8 except 12=152(LC 10), 10=476(LC 12)  
Max Grav All reactions 250 lb or less at joint(s) 7, 10, 9, 8, 11 except 12=481(LC 12)

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

TOP CHORD	1-12=907/371, 1-2=436/188, 2-3=-422/181, 3-4=-282/120
BOT CHORD	11-12=-391/167, 10-11=-391/167
WEBS	1-13=-339/796, 10-13=-358/838

**NOTES-**

- 1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-3-4 to 4-8-1, Exterior(2N) 4-8-1 to 6-5-12 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) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 6) Gable studs spaced at 1'-4" 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" tall by 2'-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) 7, 9, 8 except (jt=lb) 12=152, 10=476.



March 7, 2025



**WARNING – Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEL REFERENCE PAGE MIT-TR-17-0169: 1/2/2023 (FOR YOUR USE).**  
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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 2 Mabry Ridge
J0325-1249	M01	MONOPITCH	8	1	171869025

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8.630 s Sep 26 2024 MiTek Industries, Inc. Thu Mar 6 14:04:21 2025 Page 1  
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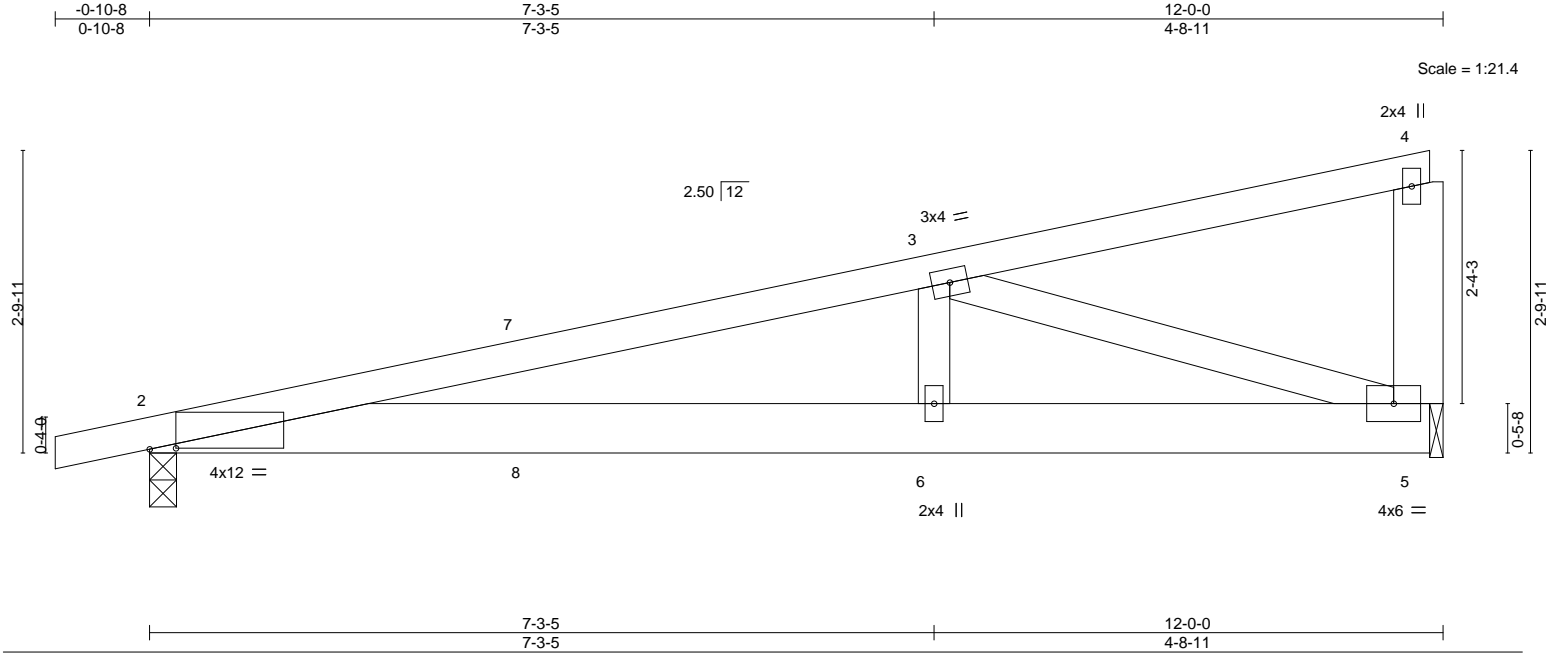


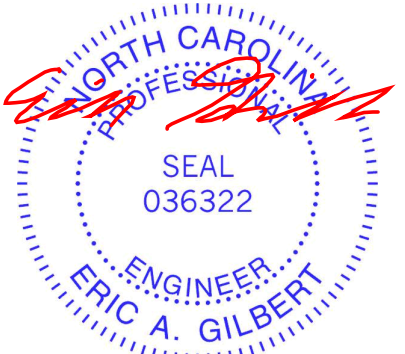
Plate Offsets (X,Y)--		[2:0-2-15,0-0-2]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 20.0	Plate Grip DOL	1.15	TC 0.39
TCDL 10.0	Lumber DOL	1.15	BC 0.29
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.39
BCDL 10.0	Code	IRC2021/TPI2014	Matrix-S
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.04 2-6 >999 360
			Vert(CT) -0.09 2-6 >999 240
			Horz(CT) 0.01 5 n/a n/a
			Wind(LL) 0.10 2-6 >999 240
			PLATES GRIP
			MT20 244/190
			Weight: 60 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-3-2 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 6-10-7 oc bracing.
WEBS 2x4 SP No.2 *Except* 4-5: 2x6 SP No.1	

**REACTIONS.** (size) 2=0-3-0, 5=0-1-8  
Max Horz 2=76(LC 8)  
Max Uplift 2=-156(LC 8), 5=-138(LC 8)  
Max Grav 2=528(LC 1), 5=463(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1094/1107  
BOT CHORD 2-6=-1158/1030, 5-6=-1158/1030  
WEBS 3-6=-360/272, 3-5=-1056/1182

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 11-9-4 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) 5 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) 5.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=156, 5=138.



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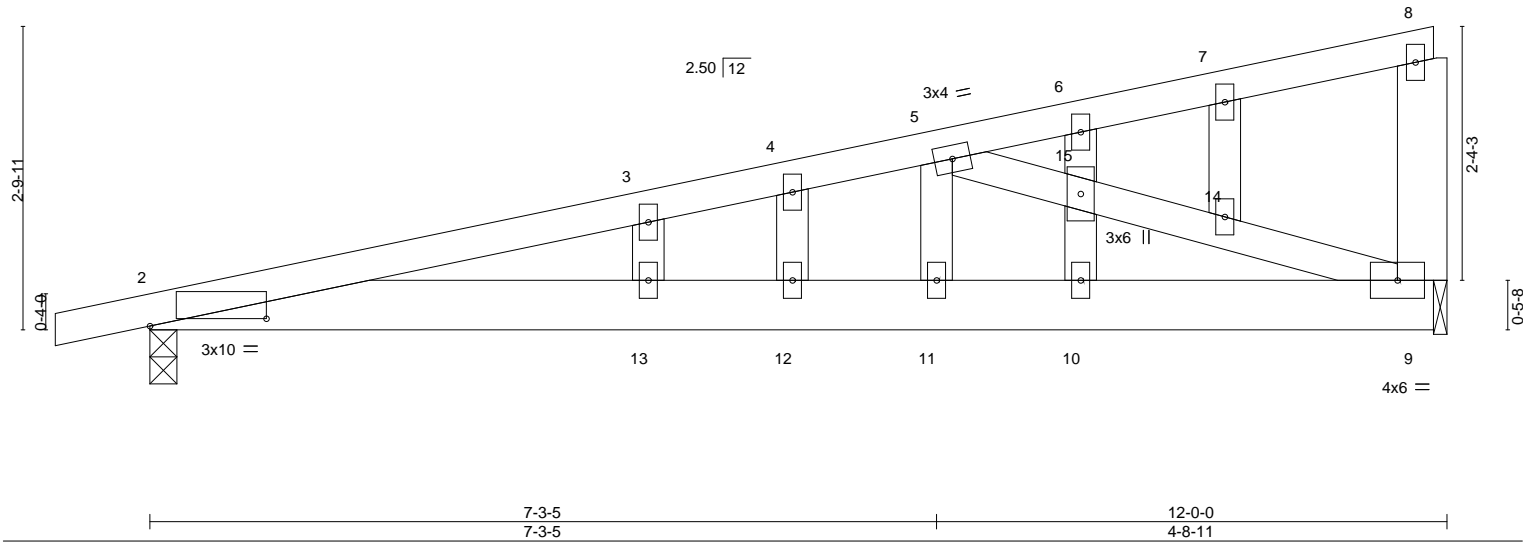
Job	Truss	Truss Type	Qty	Ply	Lot 2 Mabry Ridge
J0325-1249	M01SG	GABLE	1	1	171869026

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8.630 s Sep 26 2024 MiTek Industries, Inc. Thu Mar 6 14:04:22 2025 Page 1  
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Scale = 1:21.3



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	-0.06 13 >999 360	MT20		244/190	
TCDL	10.0	Lumber DOL	1.15	BC	0.38	Vert(CT)	-0.11 2-13 >999 240				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.01 9 n/a n/a				
BCDL	10.0	Code IRC2021/TPI2014		Matrix-S		Wind(LL)	0.11 2-13 >999 240	Weight: 66 lb		FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 5-8-8 oc purlins, except end verticals.
BOT CHORD	2x6 SP No.1	BOT CHORD	Rigid ceiling directly applied or 7-1-5 oc bracing.
WEBS	2x4 SP No.2 *Except*		
	8-9: 2x6 SP No.1		
OTHERS	2x4 SP No.2		

REACTIONS.	
(size)	2=0-3-0, 9=0-1-8
Max Horz	2=108(LC 8)
Max Uplift	2=-236(LC 8), 9=-211(LC 8)
Max Grav	2=528(LC 1), 9=463(LC 1)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-1058/1007, 3-4=-1039/1025, 4-5=-1022/1026
BOT CHORD	2-13=-1064/1006, 12-13=-1064/1006, 11-12=-1064/1006, 10-11=-1064/1006, 9-10=-1064/1006
WEBS	5-11=-335/288, 5-15=-1017/1076, 14-15=-1043/1109, 9-14=-1056/1115

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 11-9-4 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) 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) All plates are 2x4 MT20 unless otherwise indicated.
  - 4) Gable studs spaced at 1-4-0 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) 9 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 at joint(s) 9.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=236, 9=211.



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Job	Truss	Truss Type	Qty	Ply	Lot 2 Mabry Ridge
J0325-1249	PB01	PIGGYBACK	8	1	171869027

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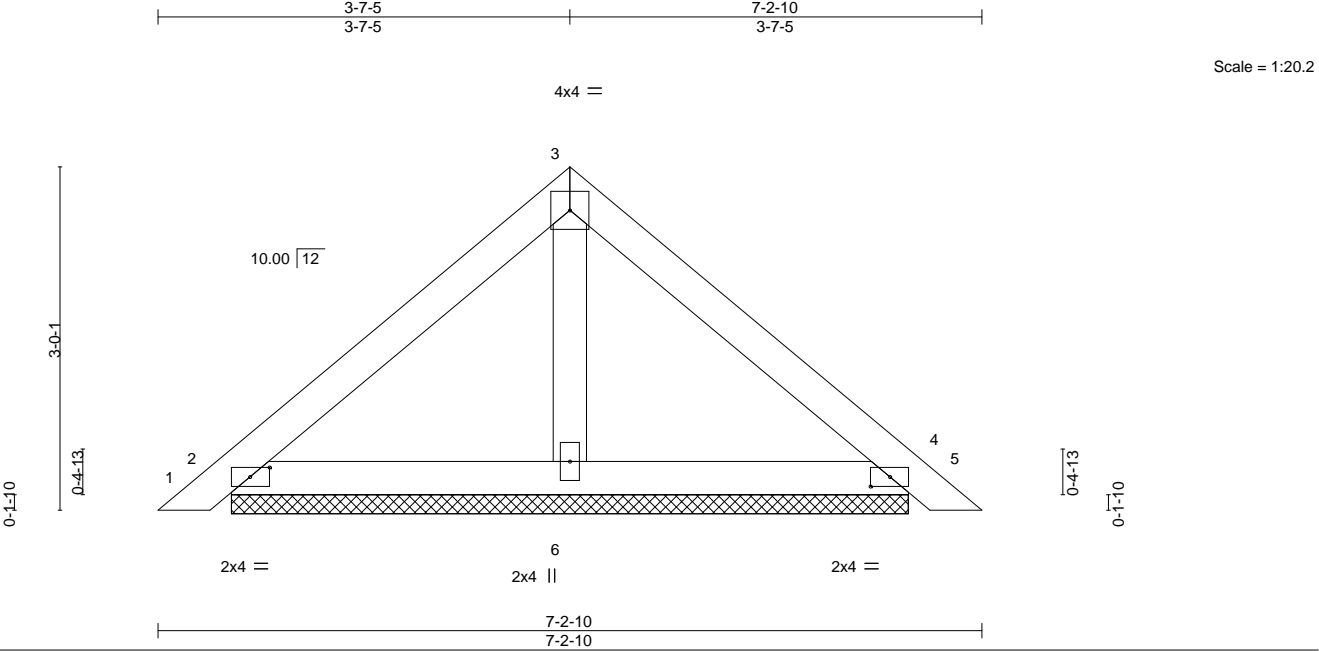


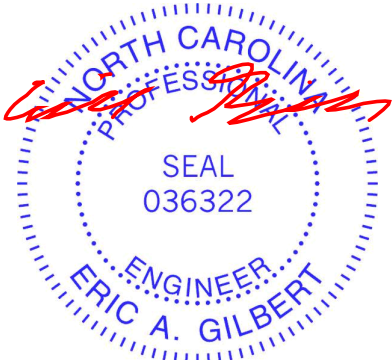
Plate Offsets (X,Y)--		[2:0-2-1,0-1-0], [4:0-2-1,0-1-0]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 20.0	Plate Grip DOL	1.15	TC 0.15
TCDL 10.0	Lumber DOL	1.15	BC 0.07
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02
BCDL 10.0	Code	IRC2021/TPI2014	Matrix-P
			DEFL.
			in (loc)
			l/defl
			L/d
			PLATES
			MT20
			GRIP
			244/190
			Weight: 26 lb
			FT = 20%

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

REACTIONS. (size) 2=5-11-3, 4=5-11-3, 6=5-11-3  
Max Horz 2=58(LC 11)  
Max Uplift 2=-17(LC 12), 4=-23(LC 13)  
Max Grav 2=164(LC 1), 4=164(LC 1), 6=196(LC 1)

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

- NOTES-
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
  - Non Standard bearing condition. Review required.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

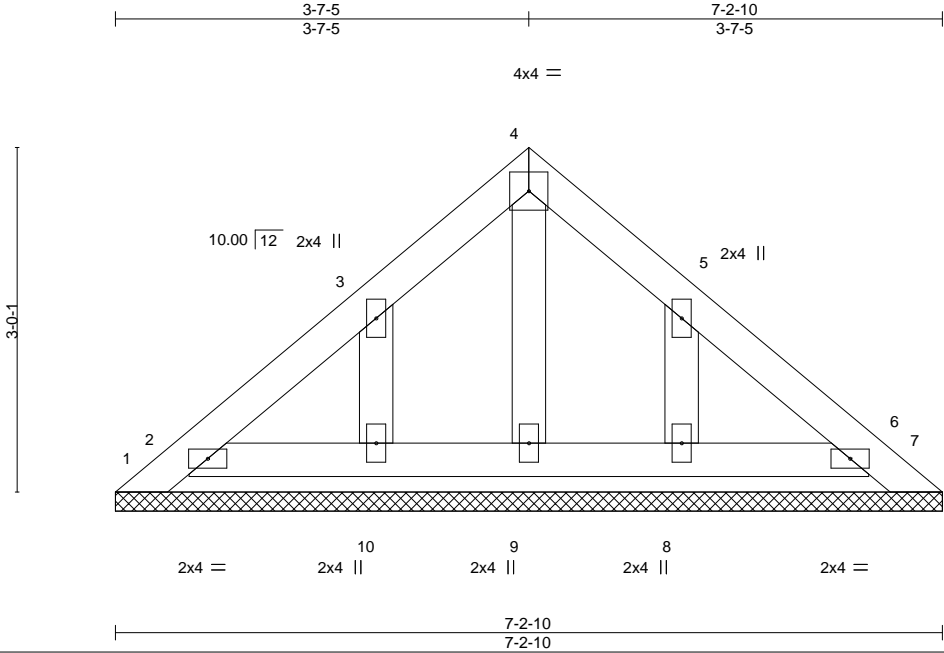


March 7,2025

Job	Truss	Truss Type	Qty	Ply	Lot 2 Mabry Ridge
J0325-1249	PB01GE	GABLE	1	1	171869028

Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Thu Mar 6 14:04:22 2025 Page 1  
ID:wAaOiCu?enbzDlvzeiq6d3zFzeT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



Scale = 1:20.1

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)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2021/TPI2014		Matrix-P						Weight: 30 lb	FT = 20%

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

**REACTIONS.** All bearings 7-2-10.  
(lb) - Max Horz 1=72(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 2, 6, 10, 8  
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 2, 6, 9, 10, 8

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 1-4-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 2, 6, 10, 8.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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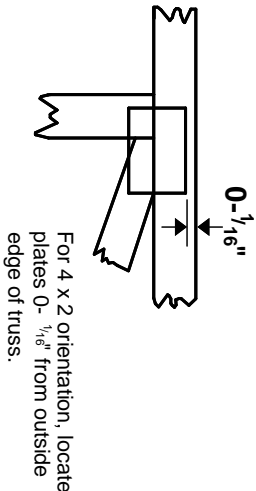
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**  
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

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**TRENCO**  
A MiTek Affiliate  
818 Soundside Road  
Edenton, NC 27932



# Symbols

## PLATE LOCATION AND ORIENTATION



\* 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.

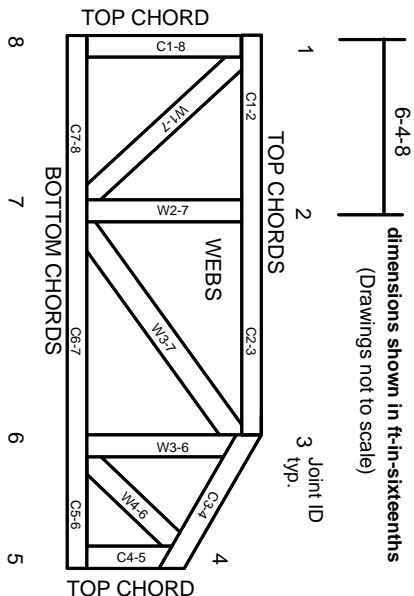
## BEARING



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/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-22: 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/TP1 section 6.3. These truss designs rely on lumber values established by others.

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# General Safety Notes

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

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 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/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.

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