

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: J0325-1251  
Lot 15 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: I72160374 thru I72160403

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

North Carolina COA: C-0844



March 20, 2025

Gilbert, Eric

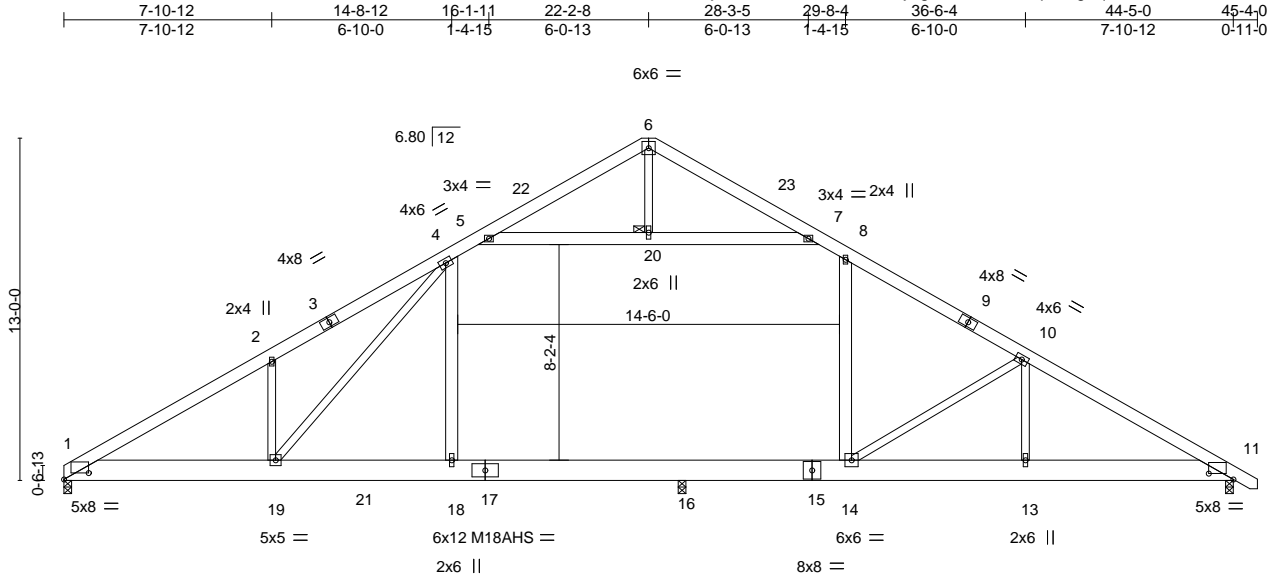
**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes),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

Job	Truss	Truss Type	Qty	Ply	Lot 15 Mabry Ridge
J0325-1251	A1	ATTIC	9	1	172160374
Job Reference (optional)					

Comtech, Inc., Fayetteville, NC - 28314,

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ID:8dj5ATJSW1LrT2dlx\_6?K2zjclg-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f



Scale = 1:87.5

Plate Offsets (X,Y)--	[1:0-11-4,0-2-15], [11:0-11-4,0-2-11]
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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 0.53	Vert(LL)	-0.43 18-19	>655	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.85	Vert(CT)	-0.62 18-19	>449	240	M18AHS	186/179
BCLL 0.0 *	Rep Stress Incr	YES	WB 1.00	Horz(CT)	0.06 11	n/a	n/a		
BCDL 10.0	Code IRC2021/TPI2014		Matrix-S	Wind(LL)	0.23 18-19	>999	240	Weight: 405 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x10 SP No.1  
WEBS 2x4 SP No.2 \*Except\*  
5-7,4-18,8-14: 2x6 SP No.1

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-5-10 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 9-11-1 oc bracing.  
JOINTS 1 Brace at Jt(s): 20

#### REACTIONS.

(size) 1=0-3-8, 11=0-3-8, 16=0-3-8  
Max Horz 1=-289(LC 10)  
Max Grav 1=2127(LC 20), 11=1980(LC 21), 16=1490(LC 21)

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

TOP CHORD 1-2=-3791/174, 2-4=-3903/355, 4-5=-2265/245, 5-6=-569/105, 6-7=-579/103,  
7-8=-2330/252, 8-10=-2847/191, 10-11=-3362/218  
BOT CHORD 1-19=-42/3426, 18-19=0/2441, 16-18=0/2441, 14-16=0/2441, 13-14=-62/2825,  
11-13=-62/2825  
WEBS 5-20=-2045/232, 7-20=-2045/232, 4-18=-274/289, 8-14=-60/642, 2-19=-615/285,  
10-13=-96/445, 10-14=-929/268, 4-19=-259/1546

#### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 22-2-8, Exterior(2R) 22-2-8 to 26-7-5, Interior(1) 26-7-5 to 45-2-5 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, with BCDL = 10.0psf.
- 6) Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-20, 7-20; Wall dead load (5.0psf) on member(s).4-18, 8-14
- 7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 16-18, 14-16
- 8) Attic room checked for L/360 deflection.



March 20,2025

**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 15 Mabry Ridge
J0325-1251	A1GE	GABLE	2	1	172160375
Job Reference (optional)					

Comtech, Inc., Fayetteville, NC - 28314,

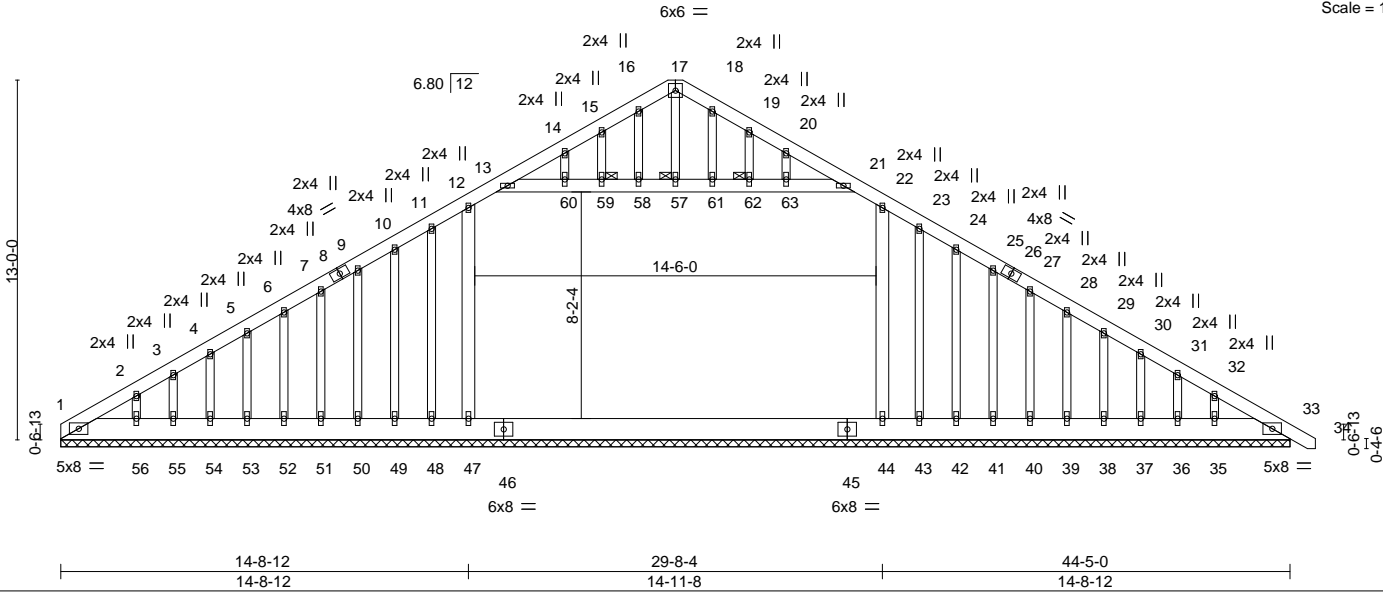
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14-8-12 16-1-11 22-2-8 28-3-5 29-8-4 44-5-0 45-4-0

14-8-12 1-4-15 6-0-13 6-0-13 1-4-15 14-8-12 0-11-0

Scale = 1:83.3



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 0.20	Vert(LL)	0.00	33	n/r	120	MT20	244/190
BCDL 10.0	Lumber DOL	1.15	BC 0.44	Vert(CT)	0.00	33	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.45	Horz(CT)	0.01	33	n/a	n/a		
BCDL 10.0	Code IRC2021/TPI2014		Matrix-S							
										Weight: 489 lb FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x10 SP No.1  
WEBS 2x6 SP No.1 \*Except\*  
17-57: 2x4 SP No.2  
OTHERS 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
JOINTS 1 Brace at Jt(s): 57, 59, 62

REACTIONS.

All bearings 44-5-0.  
(lb) - Max Horz 1=-359(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 33, 50, 51, 52, 53, 54, 55, 56, 41, 40, 39, 38, 37, 36, 35 except 48=-1693(LC 18), 43=-1693(LC 18)  
Max Grav All reactions 250 lb or less at joint(s) 50, 51, 52, 53, 54, 55, 41, 40, 39, 38, 37, 36 except 1=351(LC 21), 47=2342(LC 18), 44=2342(LC 18), 33=354(LC 1), 49=512(LC 18), 56=275(LC 20), 42=512(LC 18), 35=263(LC 21)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-592/116, 2-3=-578/110, 3-4=-564/128, 4-5=-555/151, 5-6=-546/174, 6-7=-537/197, 7-9=-530/220, 9-10=-523/243, 10-11=-499/271, 11-12=-440/301, 12-13=-634/305, 13-14=-706/129, 14-15=-669/164, 15-16=-647/193, 16-17=-618/221, 17-18=-618/221, 18-19=-647/193, 19-20=-669/164, 20-21=-706/129, 21-22=-634/305, 22-23=-395/259, 23-24=-448/236, 24-25=-472/199, 25-27=-469/159, 27-28=-467/129, 28-29=-475/106, 29-30=-484/83, 30-31=-493/60, 31-32=-506/39, 32-33=-524/26  
BOT CHORD 1-56=-9/448, 55-56=-9/448, 54-55=-9/448, 53-54=-9/448, 52-53=-9/448, 51-52=-9/448, 50-51=-9/448, 49-50=-9/448, 48-49=-9/448, 47-48=-9/448, 44-47=-9/448, 43-44=-9/448, 42-43=-9/448, 41-42=-9/448, 40-41=-9/448, 39-40=-9/448, 38-39=-9/448, 37-38=-9/448, 36-37=-9/448, 35-36=-9/448, 33-35=-9/448  
WEBS 12-47=-738/72, 22-44=-691/27, 17-57=-103/333

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; 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 Corner(3E) 0-0-0 to 4-4-13, Exterior(2N) 4-4-13 to 22-2-8, Corner(3R) 22-2-8 to 26-7-5, Exterior(2N) 26-7-5 to 45-2-5 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 2x6 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.



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ENGINEERING BY  
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A MiTek Affiliate  
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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 15 Mabry Ridge
J0325-1251	A1GE	GABLE	2	1	I72160375
					Job Reference (optional)

- NOTES-**
- 9) Ceiling dead load (10.0 psf) on member(s). 12-13, 21-22, 13-60, 59-60, 58-59, 57-58, 57-61, 61-62, 62-63, 21-63; Wall dead load (5.0psf) on member(s).12-47, 22-44
  - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 33, 50, 51, 52, 53, 54, 55, 56, 41, 40, 39, 38, 37, 36, 35 except (jt=lb) 48=1693, 43=1693.
  - 11) 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.
  - 12) Attic room checked for L/360 deflection.

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 15 Mabry Ridge
J0325-1251	A1GRD	ATTIC	1	2	172160376

Comtech, Inc, Fayetteville, NC - 28314,

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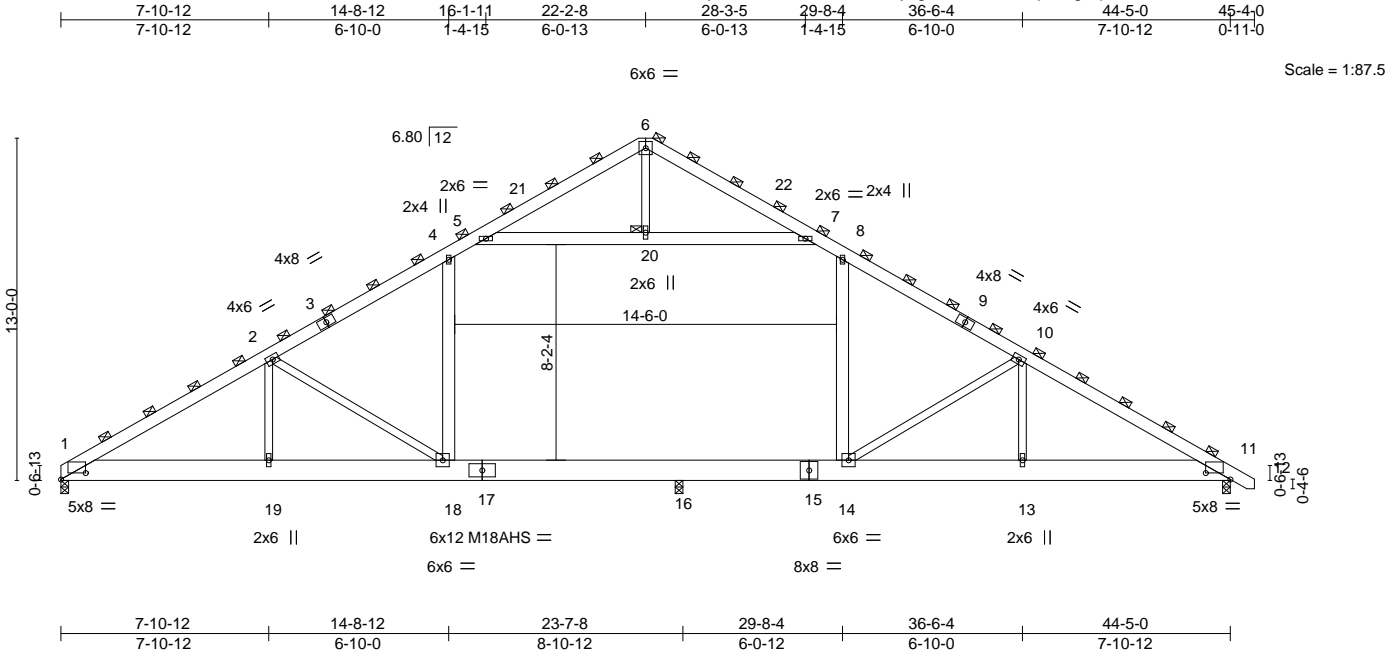


Plate Offsets (X, Y)--	[1:0-11-4,0-2-15], [11:0-11-4,0-2-15]											
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-9-0	<b>CSI.</b>		<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>		
TCLL 20.0	Plate Grip DOL	1.15	TC 0.49		Vert(LL)	-0.37 18-19	>767	360	MT20	244/190		
TCDL 10.0	Lumber DOL	1.15	BC 0.82		Vert(CT)	-0.55 18-19	>513	240	M18AHS	186/179		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.51		Horz(CT)	0.05 11	n/a	n/a				
BCDL 10.0	Code IRC2021/TP12014		Matrix-S		Wind(LL)	0.15 18	>999	240			Weight: 804 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD 2-0-0 oc purlins (6-0-0 max.)
BOT CHORD 2x10 SP No.1	(Switched from sheeted: Spacing > 2-8-0).
WEBS 2x4 SP No.2 *Except*	Rigid ceiling directly applied or 10-0-0 oc bracing.
5-7,4-18,8-14: 2x6 SP No.1	JOINTS 1 Brace at Jt(s): 6, 20

<b>REACTIONS.</b>	(size) 1=0-3-8, 11=0-3-8, 16=0-3-8
	Max Horz 1=-398(LC 10)
	Max Grav 1=3401(LC 20), 11=2585(LC 21), 16=1978(LC 21)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-5951/0, 2-4=-3979/108, 4-5=-3217/238, 5-6=-769/157, 6-7=-794/148, 7-8=-3326/241, 8-10=-4055/132, 10-11=-4430/224
BOT CHORD	1-19=0/5360, 18-19=0/5360, 16-18=0/3485, 14-16=0/3485, 13-14=-19/3715, 11-13=-19/3715
WEBS	5-20=-2946/193, 7-20=-2946/193, 4-18=0/1062, 8-14=-30/949, 2-19=0/1455, 10-13=-323/527, 10-14=-1190/425, 2-18=-2229/93

- 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: 2x10 - 2 rows staggered at 0-9-0 oc.  
Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
  - 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=130mph (3-second gust) Vasd=103mph; TC DL=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 22-2-8, Exterior(2R) 22-2-8 to 26-7-5, Interior(1) 26-7-5 to 45-2-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - All plates are MT20 plates unless otherwise indicated.
  - 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, 7-8, 5-20, 7-20; Wall dead load (5.0psf) on member(s).4-18, 8-14
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 16-18, 14-16
  - 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.

**LOAD CASE(S)** Standard



March 20,2025

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Lot 15 Mabry Ridge
J0325-1251	A1GRD	ATTIC	1	2	I72160376
					Job Reference (optional)

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-18=-54(F=-26), 14-18=-55, 11-14=-27, 1-4=-82, 4-5=-110, 5-6=-82, 6-7=-82, 7-8=-110, 8-12=-83, 5-7=-27

Drag: 4-18=-14, 8-14=-14

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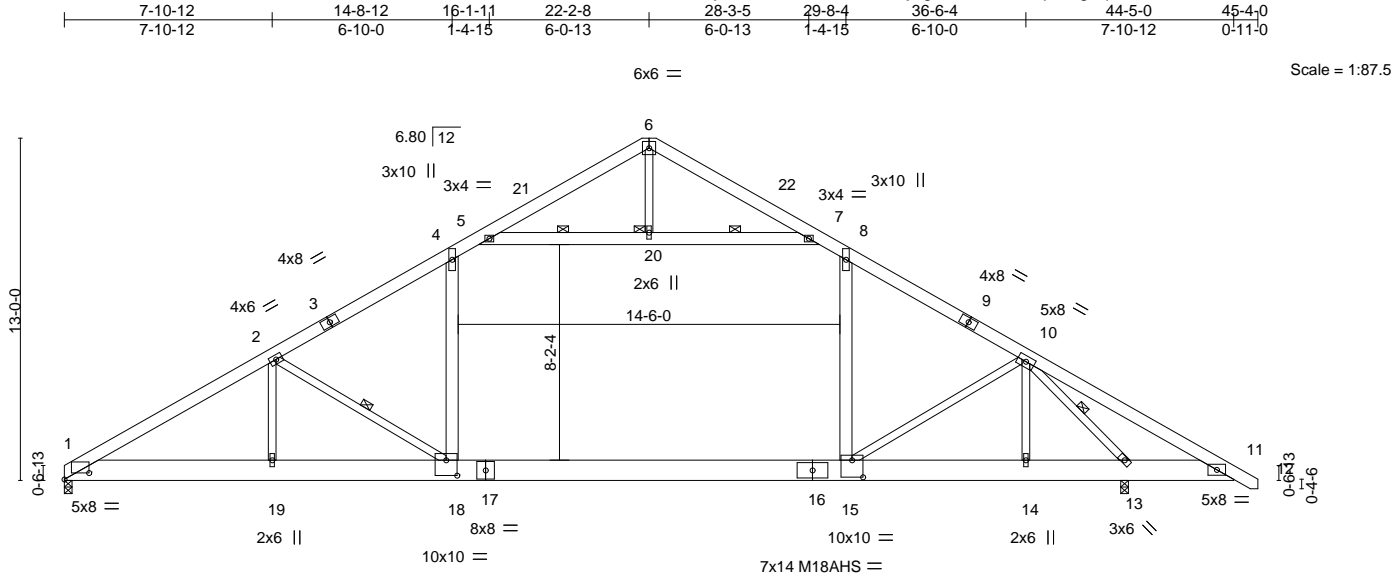
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 15 Mabry Ridge
J0325-1251	A2	ATTIC	1	1	172160377
Job Reference (optional)					

Comtech, Inc., Fayetteville, NC - 28314,

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	7-10-12	14-8-12	29-8-4	36-6-4	40-5-0	44-5-0
	7-10-12	6-10-0	14-11-8	6-10-0	3-10-12	4-0-0
Plate Offsets (X,Y)--	[1:0-11-4,0-2-15], [15:0-5-0,0-7-12], [18:0-5-0,0-7-0]					

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.41	Vert(LL)	-0.35 15-18	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.57	Vert(CT)	-0.63 15-18	>772	240	M18AHS	186/179
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.40	Horz(CT)	0.05 13	n/a	n/a		
BCDL 10.0	Code IRC2021/TPI2014		Matrix-S	Wind(LL)	0.22 18	>999	240	Weight: 410 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied or 5-0-10 oc purlins.
BOT CHORD 2x10 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except*	WEBS 1 Row at midpt 5-20, 7-20, 2-18, 10-13
5-7,4-18,8-15: 2x6 SP No.1	JOINTS 1 Brace at Jt(s): 20

**REACTIONS.** (size) 1=0-3-8, 13=0-3-8  
Max Horz 1=-289(LC 8)  
Max Grav 1=2243(LC 20), 13=2690(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-4101/15, 2-4=-3459/0, 4-5=-2728/58, 5-6=-543/119, 6-7=-574/122, 7-8=-2785/54, 8-10=-3445/0, 10-11=-320/200  
BOT CHORD 1-19=0/3703, 18-19=0/3703, 15-18=0/2954, 14-15=0/1715, 13-14=0/1715, 11-13=-75/373  
WEBS 5-20=-2589/0, 7-20=-2589/0, 4-18=0/1100, 8-15=0/975, 2-19=-67/400, 10-14=-1093/97, 2-18=-989/286, 10-15=0/1547, 10-13=-2470/161

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCCL=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 22-2-8, Exterior(2R) 22-2-8 to 26-7-5, Interior(1) 26-7-5 to 45-2-5 zone; cantilever right exposed :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). 4-5, 7-8, 5-20, 7-20; Wall dead load (5.0psf) on member(s).4-18, 8-15
  - 7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 15-18
  - 8) Attic room checked for L/360 deflection.



March 20,2025

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ENGINEERING BY  
**TRENCO**  
A MITEK Affiliate

818 Soundside Road  
Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	Lot 15 Mabry Ridge
J0325-1251	A2GRD	ATTIC	1	2	172160378

Comtech, Inc, Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Mar 19 15:24:06 2025 Page 1

ID:8dj5ATJSW1LrT2dlx\_6?K2zjclg-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f

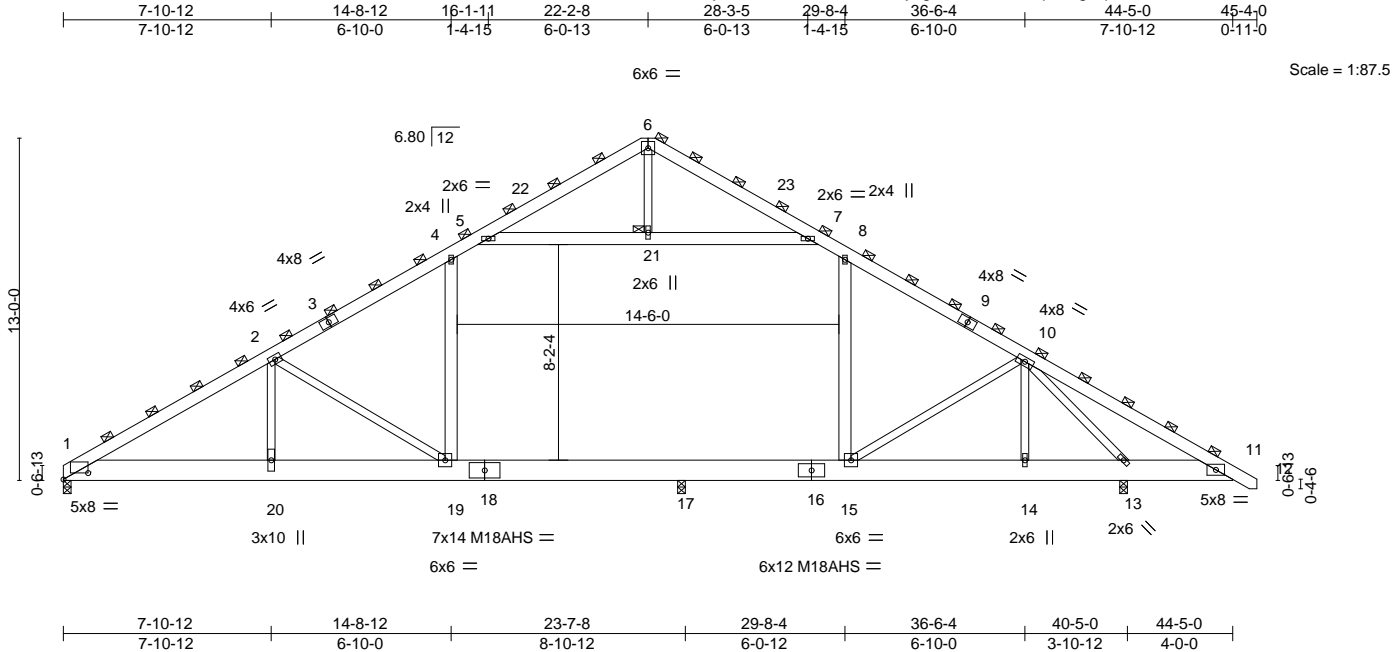


Plate Offsets (X,Y)-- [1:0-11-4,0-2-15]											
LOADING (psf)		SPACING- 2-10-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP			
TCLL	20.0	Plate Grip DOL	1.15	TC	0.51	Vert(LL)	-0.39 19	>720	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.96	Vert(CT)	-0.65 19-20	>434	240	M18AHS	186/179
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.58	Horz(CT)	0.03 13	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-S		Wind(LL)	0.17 19	>999	240	Weight: 819 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x10 SP 2400F 2.0E \*Except\*  
16-18: 2x10 SP No.1  
WEBS 2x4 SP No.2 \*Except\*  
5-7,4-19,8-15: 2x6 SP No.1

BRACING-

TOP CHORD 2-0-0 oc purlins (6-0-0 max.)  
(Switched from sheeted: Spacing > 2-8-0).  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:  
6-0-0 oc bracing: 11-13.  
JOINTS 1 Brace at Jt(s): 6, 21

REACTIONS.

(size) 1=0-3-8, 13=0-3-8, 17=0-3-8  
Max Horz 1=410(LC 10)  
Max Grav 1=3290(LC 20), 13=2971(LC 21), 17=1848(LC 18)

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

TOP CHORD 1-2=-5771/0, 2-4=-3536/96, 4-5=-2843/229, 5-6=-808/161, 6-7=-862/157,  
7-8=-2979/223, 8-10=-3544/95, 10-11=-422/368  
BOT CHORD 1-20=0/5210, 19-20=0/5210, 17-19=0/3063, 15-17=0/3063, 14-15=0/1742, 13-14=0/1742,  
11-13=-184/500  
WEBS 5-21=-2462/167, 7-21=-2462/167, 4-19=0/892, 8-15=-104/643, 2-20=0/1711,  
10-14=-1157/193, 2-19=-2552/134, 10-15=-39/1645, 10-13=-2695/349

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: 2x10 - 2 rows staggered at 0-9-0 oc.  
Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
- 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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 22-2-8, Exterior(2R) 22-2-8 to 26-7-5, Interior(1) 26-7-5 to 45-2-4 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- 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, 7-8, 5-21, 7-21; Wall dead load (5.0psf) on member(s).4-19, 8-15
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 17-19, 15-17
- 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.

LOAD CASE(S) Standard

Continued on page 2



March 20,2025

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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	Lot 15 Mabry Ridge
J0325-1251	A2GRD	ATTIC	1	2	I72160378
					Job Reference (optional)

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-19=-55(F=26), 15-19=-57, 11-15=-28, 1-4=-85, 4-5=-113, 5-6=-85, 6-7=-85, 7-8=-113, 8-12=-85, 5-7=-28

Drag: 4-19=-14, 8-15=-14

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818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 15 Mabry Ridge
J0325-1251	A3	ATTIC	7	1	172160379
Job Reference (optional)					

Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Mar 19 15:24:07 2025 Page 1  
ID:8dj5ATJSW1LrT2dlx\_6?K2zjclg-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f

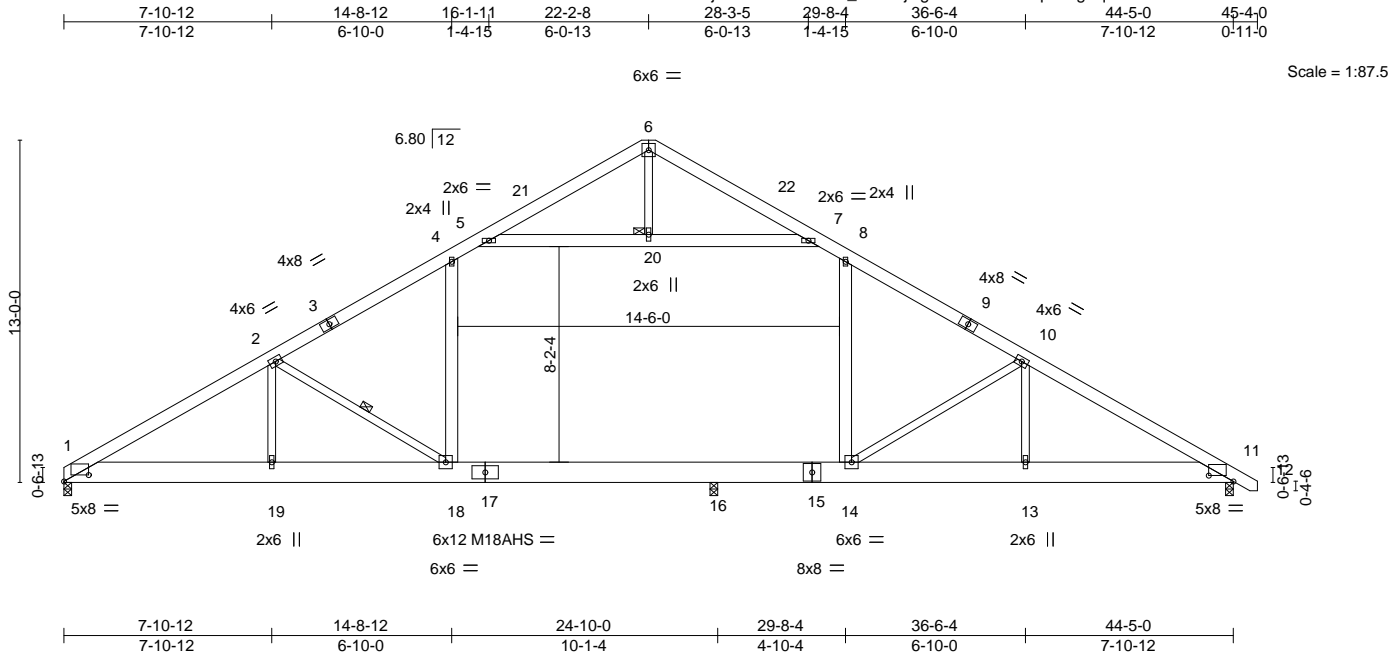


Plate Offsets (X,Y)-- [1:0-11-4,0-2-15], [11:0-11-4,0-2-11]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP			
TCLL	20.0	Plate Grip DOL 1.15		TC	0.50	Vert(LL)	-0.37 16-18	>793	360	MT20	244/190
TCDL	10.0	Lumber DOL 1.15		BC	0.75	Vert(CT)	-0.62 18	>477	240	M18AHS	186/179
BCLL	0.0 *	Rep Stress Incr YES		WB	0.91	Horz(CT)	0.06 11	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-S		Wind(LL)	0.21 18	>999	240	Weight: 402 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x10 SP No.1  
WEBS 2x4 SP No.2 \*Except\*  
5-7,4-18,8-14: 2x6 SP No.1

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-0-2 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 2-18  
JOINTS 1 Brace at Jt(s): 20

REACTIONS.

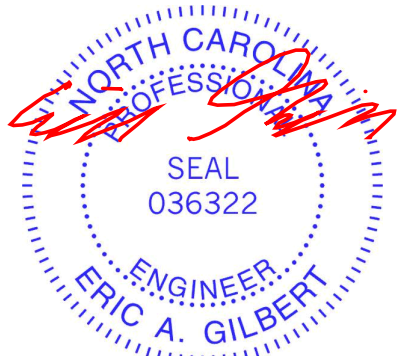
(size) 1=0-3-8, 11=0-3-8, 16=0-3-8  
Max Horz 1=-289(LC 8)  
Max Grav 1=1970(LC 20), 11=1759(LC 1), 16=1390(LC 21)

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

TOP CHORD 1-2=-3596/153, 2-4=-2743/137, 4-5=-2236/215, 5-6=-563/109, 6-7=-582/105,  
7-8=-2306/227, 8-10=-2810/160, 10-11=-3038/207  
BOT CHORD 1-19=-25/3259, 18-19=-25/3259, 16-18=0/2410, 14-16=0/2410, 13-14=-49/2587,  
11-13=-49/2587  
WEBS 5-20=-2007/202, 7-20=-2007/202, 4-18=0/612, 8-14=-102/630, 2-19=0/448,  
10-13=-182/379, 2-18=-1009/204, 10-14=-845/291

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=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 22-2-8, Exterior(2R) 22-2-8 to 26-7-5, Interior(1) 26-7-5 to 45-2-5 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). 4-5, 7-8, 5-20, 7-20; Wall dead load (5.0psf) on member(s).4-18, 8-14
- 7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 16-18, 14-16
- 8) Attic room checked for L/360 deflection.



March 20,2025

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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 15 Mabry Ridge
J0325-1251	B1	COMMON	7	1	I72160380
Job Reference (optional)					

Comtech, Inc., Fayetteville, NC - 28314,

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ID:8dj5ATJSW1LrT2dlx\_6?K2zjclg-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f

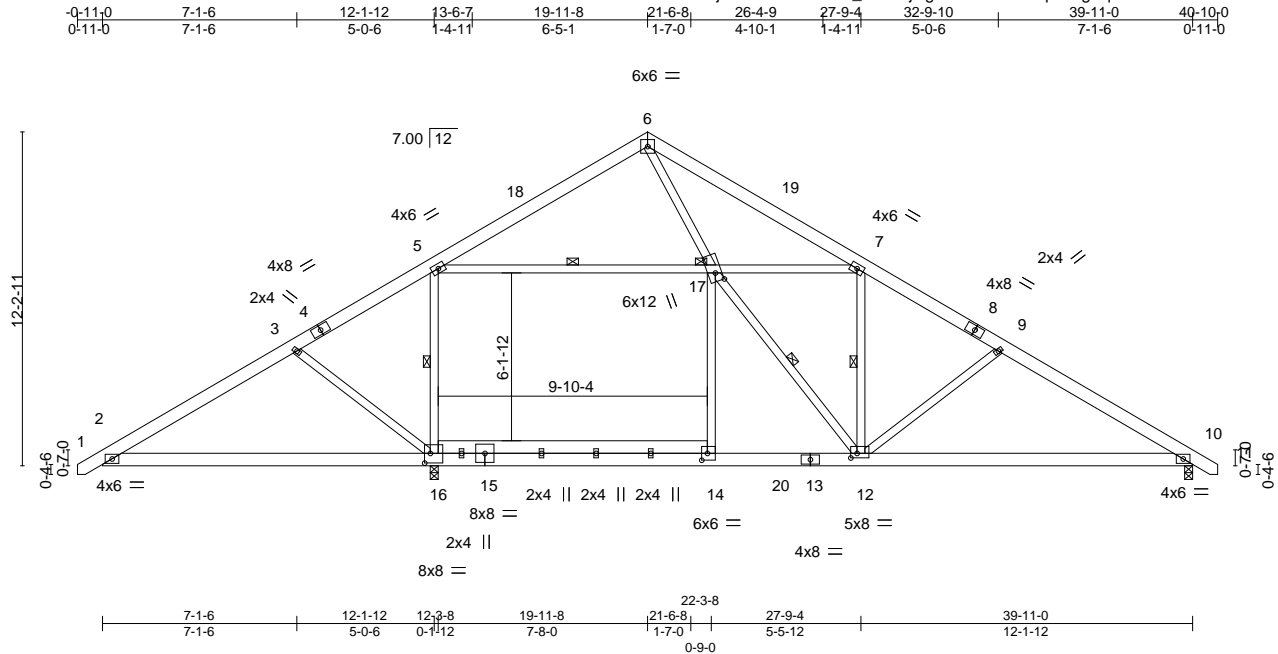


Plate Offsets (X,Y)--		[12:0-2-12,0-2-0], [14:0-2-8,0-3-0], [16:0-2-8,0-4-4], [17:0-3-12,0-2-13]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP	
TCLL	20.0	Plate Grip DOL 1.15		TC 0.40		Vert(LL) -0.16 10-12 >999 360				MT20 244/190	
TCDL	10.0	Lumber DOL 1.15		BC 0.50		Vert(CT) -0.34 10-12 >976 240					
BCLL	0.0 *	Rep Stress Incr YES		WB 0.66		Horz(CT) 0.01 10 n/a n/a					
BCDL	10.0	Code IRC2021/TPI2014		Matrix-S		Wind(LL) 0.11 12-14 >999 240				Weight: 321 lb FT = 20%	

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x6 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 3-11-6 oc purlins.
BOT CHORD	2x6 SP No.1	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing, Except:
WEBS	2x4 SP No.2 *Except*		10-0-0 oc bracing: 10-12.
	14-16: 2x6 SP No.1	WEBS	1 Row at midpt 7-12, 5-16, 5-17, 12-17
		JOINTS	1 Brace at Jt(s): 17

<b>REACTIONS.</b>		(size) 16=0-3-8, 10=0-3-8
		Max Horz 16=-290(LC 10)
		Max Uplift 16=-147(LC 12), 10=-97(LC 13)
		Max Grav 16=2531(LC 2), 10=1121(LC 20)

<b>FORCES.</b>		(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-696/768, 3-5=-759/1008, 5-6=-2118/571, 6-7=-3362/822, 7-9=-1154/154, 9-10=-1451/180	
BOT CHORD	2-16=-566/653, 14-16=-894/880, 12-14=-894/880, 10-12=-57/1178	
WEBS	3-16=-351/279, 7-12=-1564/665, 9-12=-391/203, 5-16=-1837/838, 5-17=-971/2478, 7-17=-635/1838, 12-17=-922/2858, 6-17=-530/2549	

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-5 to 3-7-8, Interior(1) 3-7-8 to 19-11-8, Exterior(2R) 19-11-8 to 24-4-5, Interior(1) 24-4-5 to 40-8-5 zone; cantilever 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 except (jt=lb) 16=147.



March 20,2025

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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 15 Mabry Ridge
J0325-1251	B1GE	GABLE	1	1	172160381
Job Reference (optional)					

Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Mar 19 15:24:09 2025 Page 1  
ID:8dj5ATJSW1LrT2dlx\_6?K2zjclg-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

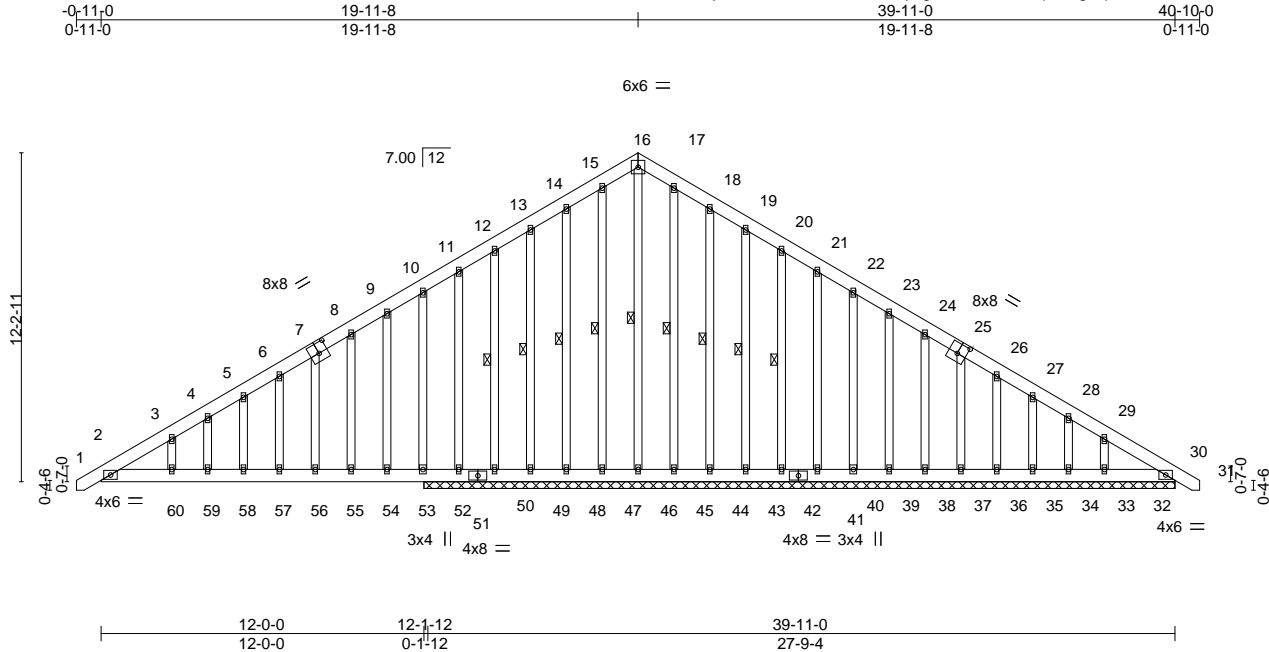


Plate Offsets (X,Y)-- [7:0-4-0,0-4-8], [25:0-4-0,0-4-8]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES GRIP		
TCLL	20.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	0.00	30	n/r	120	MT20 244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	0.00	30	n/r	120	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.44	Horz(CT)	0.02	30	n/a	n/a	
BCDL	10.0	Code IRC2021/TPI2014		Matrix-S							Weight: 451 lb FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 7-4-12 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 16-46, 15-47, 14-48, 13-49, 12-50, 17-45, 18-44, 19-43, 20-42

REACTIONS.

All bearings 27-11-0.  
(lb) - Max Horz 53=362(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 48, 49, 45, 44, 43, 42, 40, 39, 38, 37, 36, 35, 34, 33 except  
30=367(LC 25), 50=150(LC 12), 52=1234(LC 1), 53=849(LC 12), 32=101(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 30, 48, 49, 44, 43, 42, 40, 39, 38, 37, 36, 35, 34, 33, 32  
except 46=612(LC 1), 47=285(LC 1), 50=316(LC 1), 52=563(LC 12), 53=1825(LC 1), 45=289(LC 1)

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

TOP CHORD 2-3=-899/888, 3-4=-880/800, 4-5=-872/823, 5-6=-871/853, 6-7=-839/859, 7-8=-869/917,  
8-9=-856/939, 9-10=-742/880, 10-11=-417/651, 11-12=-556/796, 12-13=-561/829,  
13-14=-521/839, 14-15=-480/840, 15-16=-393/748, 16-17=-393/748, 17-18=-480/839,  
18-19=-517/835, 19-20=-552/825, 20-21=-591/824, 21-22=-631/824, 22-23=-671/824,  
23-24=-711/824, 24-25=-751/825, 25-26=-790/825, 26-27=-831/826, 27-28=-870/837,  
28-29=-906/842, 29-30=-988/896  
BOT CHORD 2-60=-695/895, 59-60=-695/895, 58-59=-695/895, 57-58=-695/895, 56-57=-695/895,  
55-56=-695/896, 54-55=-695/896, 53-54=-695/896, 52-53=-746/885, 50-52=-746/885,  
49-50=-746/885, 48-49=-746/885, 47-48=-746/885, 46-47=-746/885, 45-46=-746/885,  
44-45=-746/885, 43-44=-746/885, 42-43=-746/885, 40-42=-746/885, 39-40=-746/885,  
38-39=-746/885, 37-38=-746/885, 36-37=-746/885, 35-36=-747/885, 34-35=-747/885,  
33-34=-747/885, 32-33=-747/885, 30-32=-747/885  
WEBS 16-46=-584/318, 15-47=-263/157, 11-52=-292/201, 10-53=-527/631, 17-45=-262/156

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-9-5 to 3-7-8, Exterior(2N) 3-7-8 to 19-11-8, Corner(3R) 19-11-8 to 24-4-5, Exterior(2N) 24-4-5 to 40-8-5 zone; cantilever 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) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable studs spaced at 1-4-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 48, 49, 45, 44, 43, 30, 48, 49, 38, 37, 36, 35, 34, 33 except (it=lb) 30=367, 50=150, 52=1234, 53=849, 32=101.



March 20,2025

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

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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 15 Mabry Ridge
J0325-1251	B1GE	GABLE	1	1	I72160381
					Job Reference (optional)

- NOTES-**
- 9) Non Standard bearing condition. Review required.
  - 10) 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.

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Edenton, NC 27932

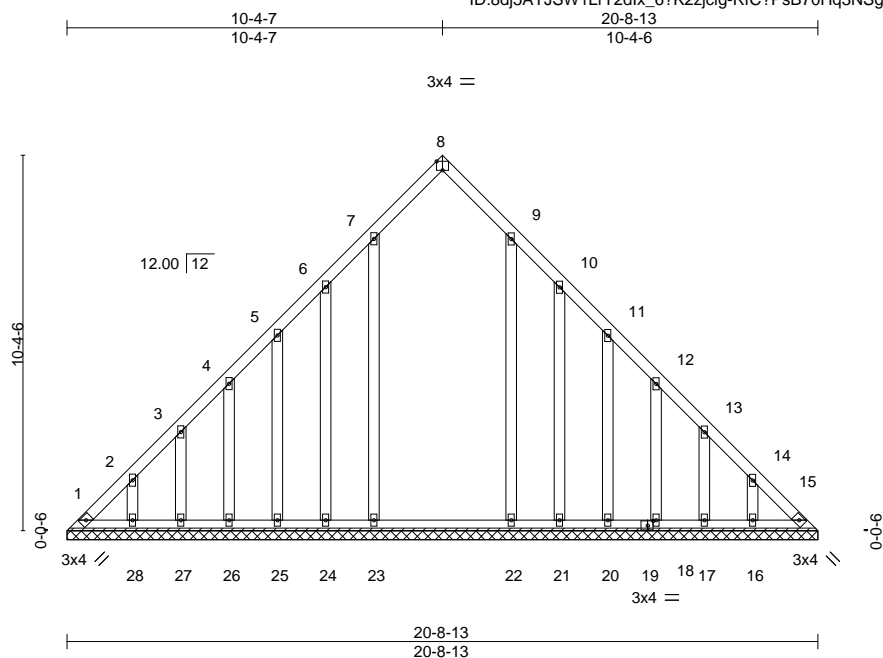


Plate Offsets (X,Y)--		[8:0-2-0,Edge], [19:0-1-13,0-1-8]										
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.01	15	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-S						Weight: 155 lb FT = 20%		

<b>LUMBER-</b>		<b>BRACING-</b>	
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 20-8-13.  
(lb) - Max Horz 1=300(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 15, 23, 25, 26, 27, 22, 20, 18, 17 except 1=108(LC 10),  
24=116(LC 12), 28=111(LC 12), 21=120(LC 13), 16=110(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 24, 25, 26, 27, 28, 21, 20, 18, 17, 16 except 1=352(LC 12),  
15=346(LC 13), 23=345(LC 19), 22=334(LC 20)

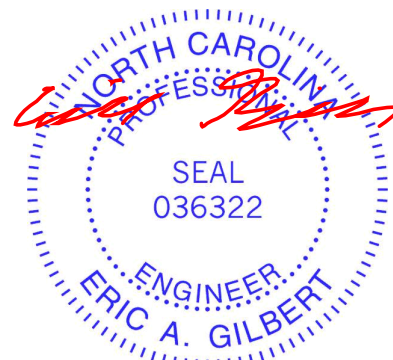
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**TOP CHORD** 1-2=-517/237, 2-3=-419/180, 3-4=-333/141, 12-13=-325/134, 13-14=-411/180,  
14-15=-509/237

**BOT CHORD** 1-28=-176/387, 27-28=-176/387, 26-27=-176/387, 25-26=-176/387, 24-25=-176/387,  
23-24=-176/387, 22-23=-176/387, 21-22=-176/387, 20-21=-176/387, 18-20=-176/387,  
17-18=-176/387, 16-17=-176/387, 15-16=-176/387

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-4 to 4-5-11, Interior(1) 4-5-11 to 10-4-7, Exterior(2R) 10-4-7 to 14-11-3, Interior(1) 14-11-3 to 20-4-9 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 23, 25, 26, 27, 22, 20, 18, 17 except (it=lb) 1=108, 24=116, 28=111, 21=120, 16=110.



March 20, 2025

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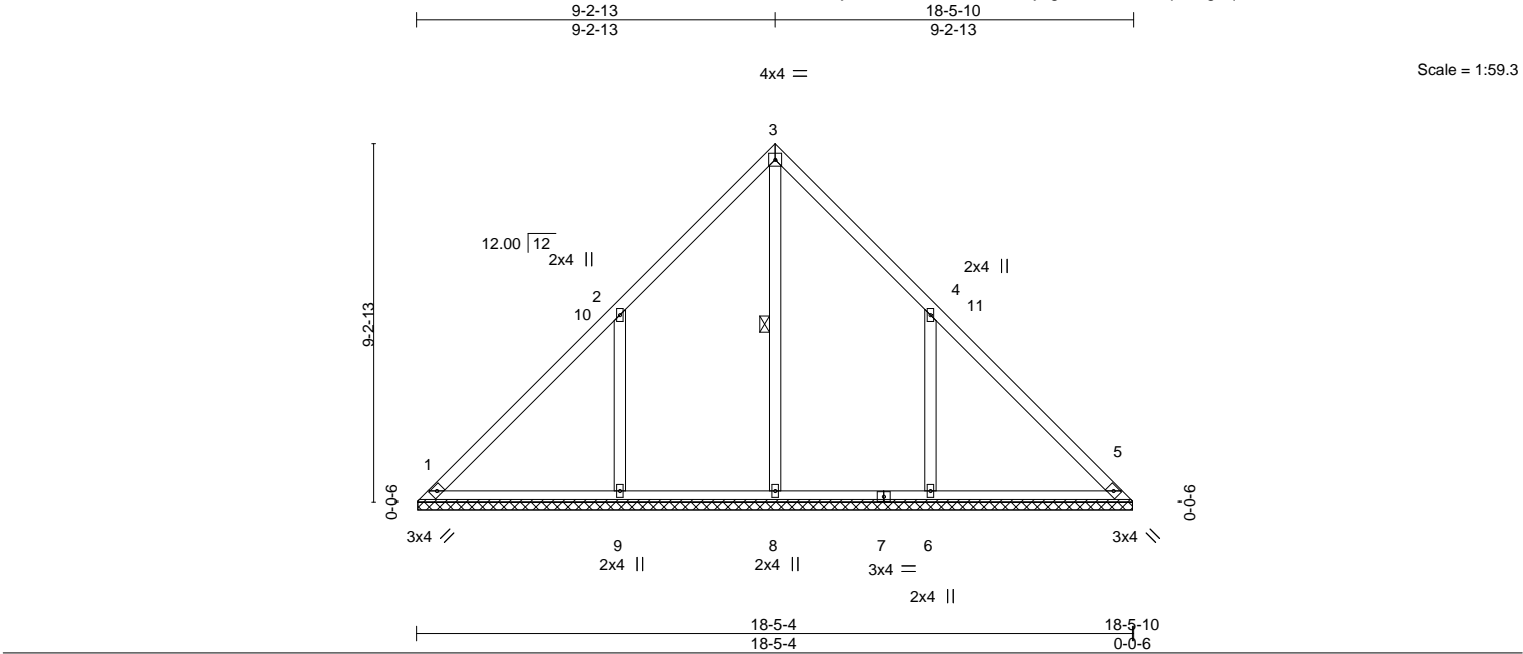
818 Soundside Road  
Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	Lot 15 Mabry Ridge
J0325-1251	VA2	VALLEY	1	1	172160383
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Mar 19 15:24:10 2025 Page 1  
ID:8dj5ATJSW1LrT2dlx\_6?K2zjclg-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f



**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 3-8

**REACTIONS.**

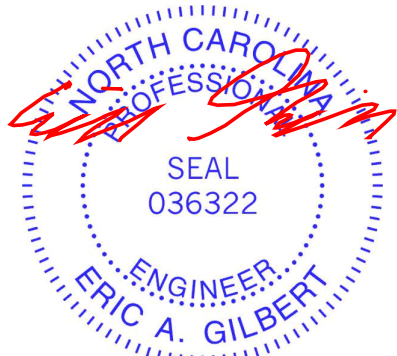
All bearings 18-4-14.  
(lb) - Max Horz 1=213(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 1 except 9=227(LC 12), 6=227(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=390(LC 22), 9=633(LC 19), 6=633(LC 20)

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

WEBS 2-9=-382/367, 4-6=-382/366

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 9-2-13, Exterior(2R) 9-2-13 to 13-7-10, Interior(1) 13-7-10 to 18-1-6 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 9=227, 6=227.



March 20,2025

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Edenton, NC 27932

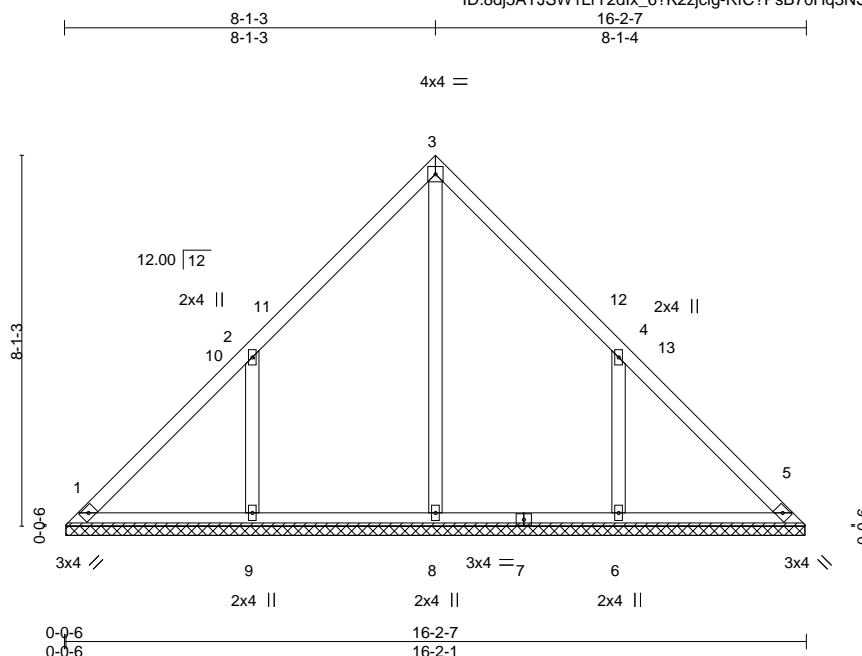


Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES	GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-S							Weight: 78 lb	FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>	
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 16-1-11.  
(lb) - Max Horz 1=186(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1 except 9=194(LC 12), 6=194(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1. 5 except 8=406(LC 22), 9=545(LC 19), 6=544(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 2-9=-327/346. 4-6=-327/346

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 8-1-3, Exterior(2R) 8-1-3 to 12-6-0, Interior(1) 12-6-0 to 15-10-3 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb)  
9=194. 6=194.



March 20, 2025

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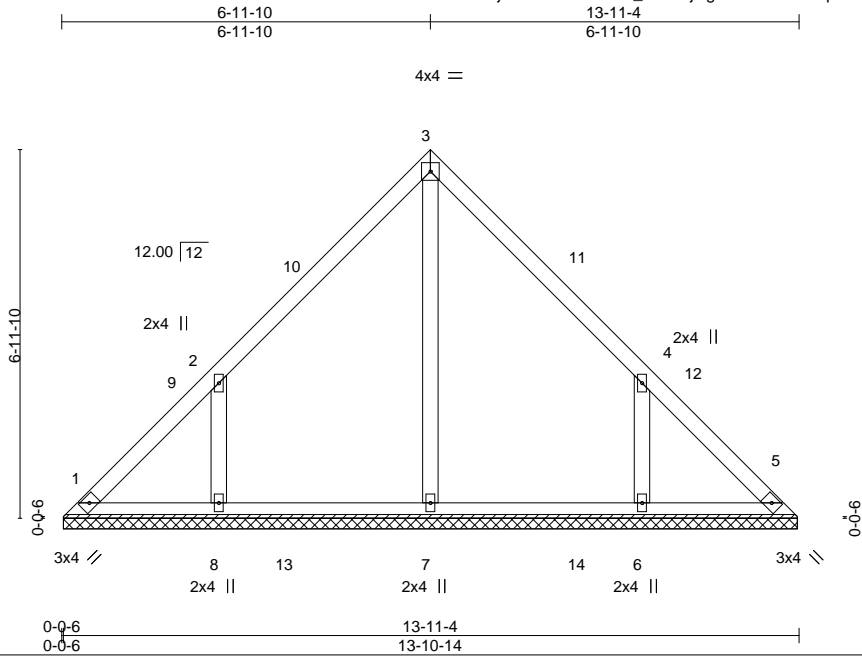


818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 15 Mabry Ridge
J0325-1251	VA4	VALLEY	1	1	172160385
Job Reference (optional)					

Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Mar 19 15:24:11 2025 Page 1  
ID:8dj5ATJSW1LrT2dlx\_6?K2zjclg-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f



Scale = 1:43.6

Plate Offsets (X,Y)--		[4:0-0-0,0-0-0]										
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-S							Weight: 65 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

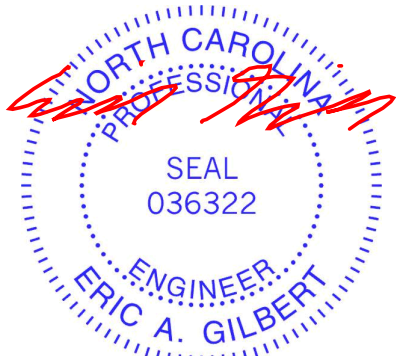
All bearings 13-10-8.  
(lb) - Max Horz 1=-159(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-169(LC 12), 6=-169(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=401(LC 19), 8=444(LC 19), 6=444(LC 20)

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

WEBS 2-8=-299/354, 4-6=-299/354

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 6-11-10, Exterior(2R) 6-11-10 to 11-4-7, Interior(1) 11-4-7 to 13-7-0 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) 1, 5 except (jt=lb) 8=169, 6=169.
- Non Standard bearing condition. Review required.



March 20,2025

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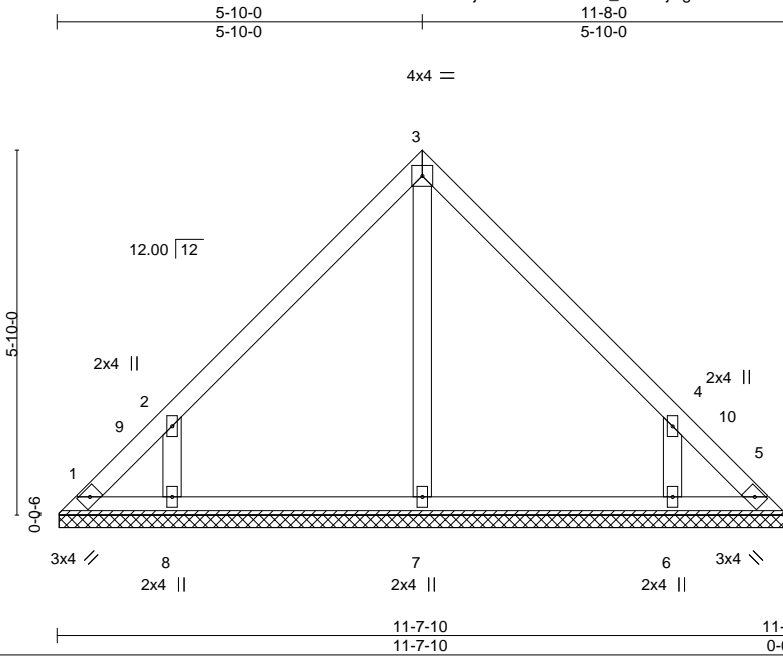
ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 15 Mabry Ridge
J0325-1251	VA5	VALLEY	1	1	172160386
Job Reference (optional)					

Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Mar 19 15:24:11 2025 Page 1  
ID:8dj5ATJSW1LrT2dlx\_6?K2zjclg-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWRCDoi7J4zJC?f



Scale = 1:36.8

Plate Offsets (X,Y)--		[4:0-0-0,0-0-0]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 20.0	Plate Grip DOL	1.15	TC 0.17
TCDL 10.0	Lumber DOL	1.15	BC 0.09
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07
BCDL 10.0	Code IRC2021/TPI2014		Matrix-S
DEFL.	in (loc)	l/defl	L/d
Vert(LL)	n/a	-	n/a 999
Vert(CT)	n/a	-	n/a 999
Horz(CT)	0.00	5	n/a n/a
PLATES	GRIP		
MT20	244/190		
Weight: 52 lb		FT = 20%	

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

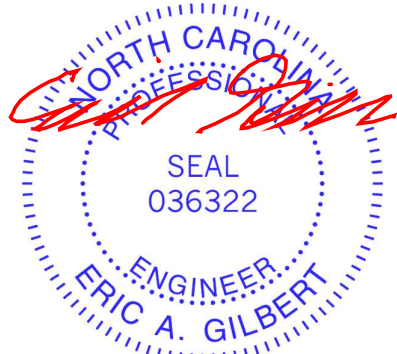
All bearings 11-7-4.  
(lb) - Max Horz 1=-131(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-161(LC 12), 6=-161(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=339(LC 19), 6=338(LC 20)

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

WEBS 2-8=-305/411, 4-6=-305/411

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 5-10-0, Exterior(2R) 5-10-0 to 10-2-13, Interior(1) 10-2-13 to 11-3-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=161, 6=161.



March 20,2025

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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

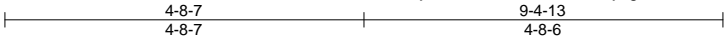
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 15 Mabry Ridge
J0325-1251	VA6	VALLEY	1	1	172160387
Job Reference (optional)					

Comtech, Inc., Fayetteville, NC - 28314,

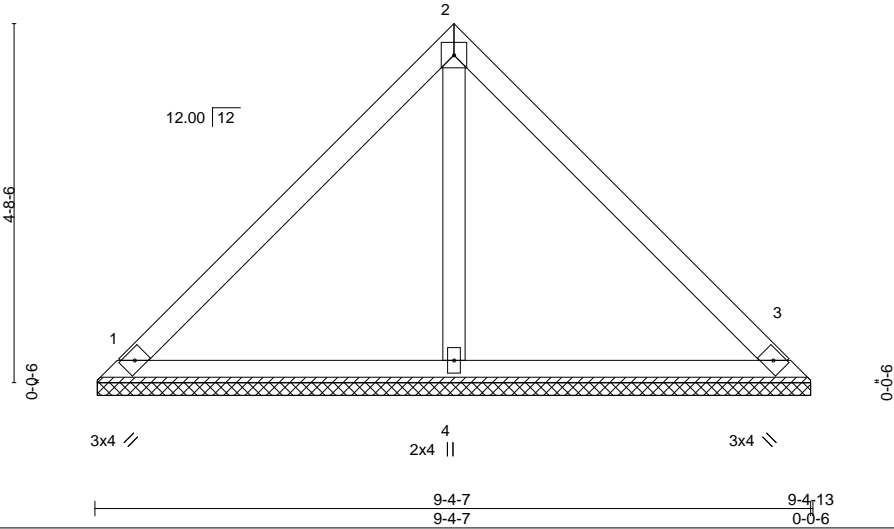
8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Mar 19 15:24:12 2025 Page 1

ID:8dj5ATJSW1LrT2dlx\_6?K2zjclg-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f



4x4 =

Scale = 1:30.2



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.28	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2021/TPI2014		Matrix-S						Weight: 38 lb	FT = 20%

LUMBER-

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

BRACING-

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

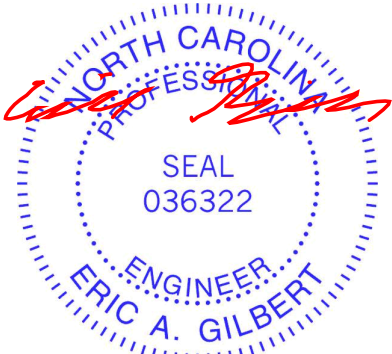
REACTIONS.

(size) 1=9-4-1, 3=9-4-1, 4=9-4-1  
Max Horz 1=104(LC 8)  
Max Uplift 1=26(LC 13), 3=26(LC 13)  
Max Grav 1=197(LC 1), 3=197(LC 1), 4=301(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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



March 20,2025

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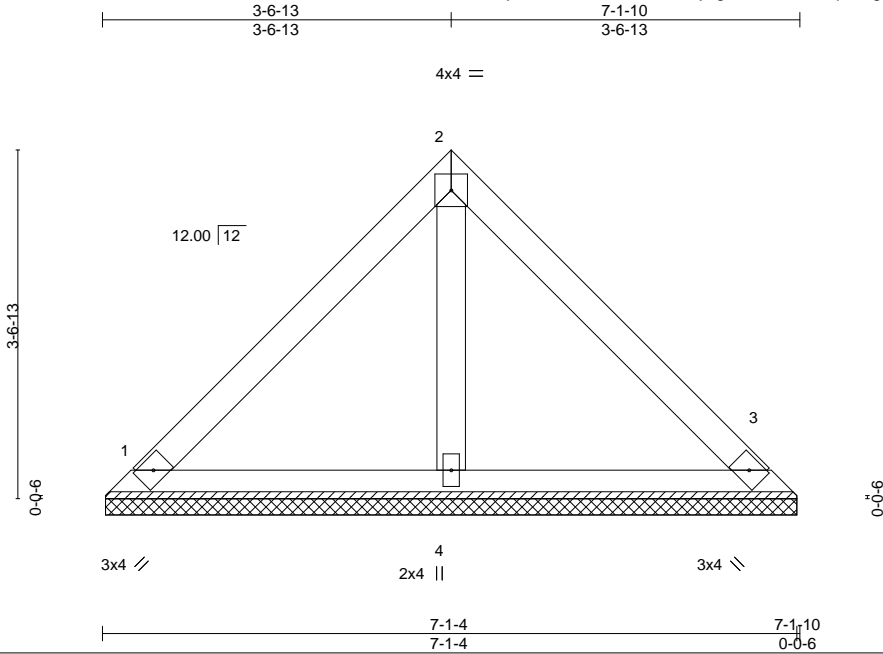
ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 15 Mabry Ridge
J0325-1251	VA7	VALLEY	1	1	I72160388
Job Reference (optional)					

Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Mar 19 15:24:12 2025 Page 1  
ID:8dj5ATJSW1LrT2dlx\_6?K2zjclg-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.27	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2021/TPI2014		Matrix-P						Weight: 28 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

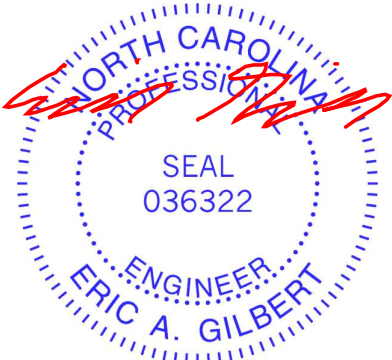
**REACTIONS.**

(size) 1=7-0-14, 3=7-0-14, 4=7-0-14  
Max Horz 1=-77(LC 8)  
Max Uplift 1=-28(LC 13), 3=-28(LC 13)  
Max Grav 1=157(LC 1), 3=157(LC 1), 4=201(LC 1)

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

**NOTES-**

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



March 20,2025

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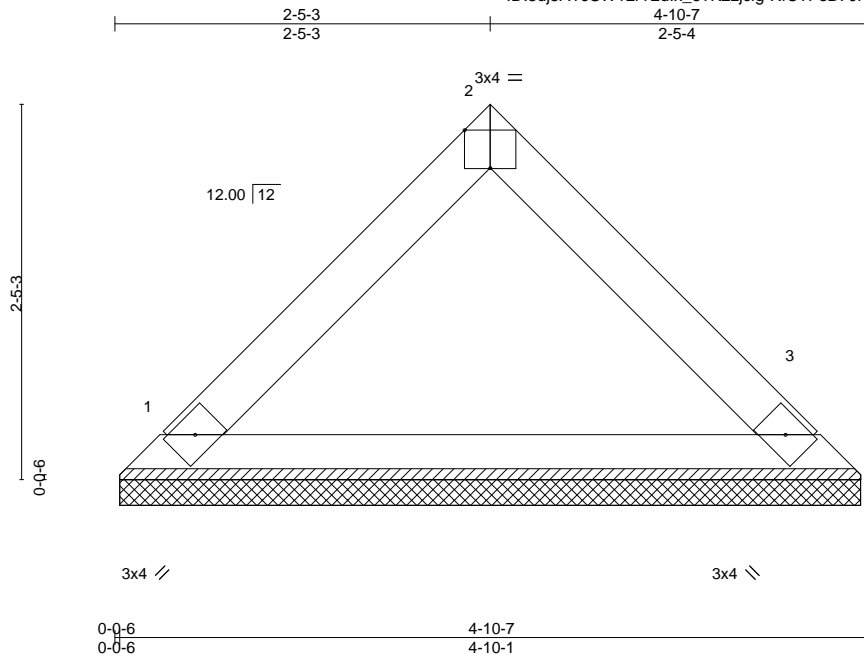
ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	Lot 15 Mabry Ridge
J0325-1251	VA8	VALLEY	1	1	I72160389
Comtech, Inc., Fayetteville, NC - 28314,					Job Reference (optional)

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Mar 19 15:24:12 2025 Page 1  
ID:8dj5ATJSW1LrT2dlx\_6?K2zjclg-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f



Scale = 1:14.9

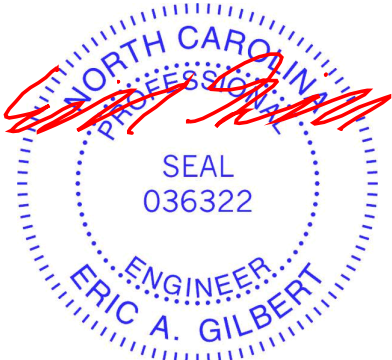
Plate Offsets (X,Y)--		[2:0-2-0,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 20.0	Plate Grip DOL	1.15	TC 0.13
TCDL 10.0	Lumber DOL	1.15	BC 0.16
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00
BCDL 10.0	Code	IRC2021/TPI2014	Matrix-P
DEFL.	in (loc)	l/defl	L/d
Vert(LL)	n/a	-	n/a 999
Vert(CT)	n/a	-	n/a 999
Horz(CT)	0.00	3	n/a n/a
PLATES	GRIP		
MT20	244/190		
Weight: 16 lb		FT = 20%	

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-10-7 oc purlins.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-9-11, 3=4-9-11  
Max Horz 1=50(LC 8)  
Max Uplift 1=5(LC 13), 3=5(LC 13)  
Max Grav 1=167(LC 1), 3=167(LC 1)

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

- NOTES-
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=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
  - 3) Gable requires continuous bottom chord bearing.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



March 20,2025

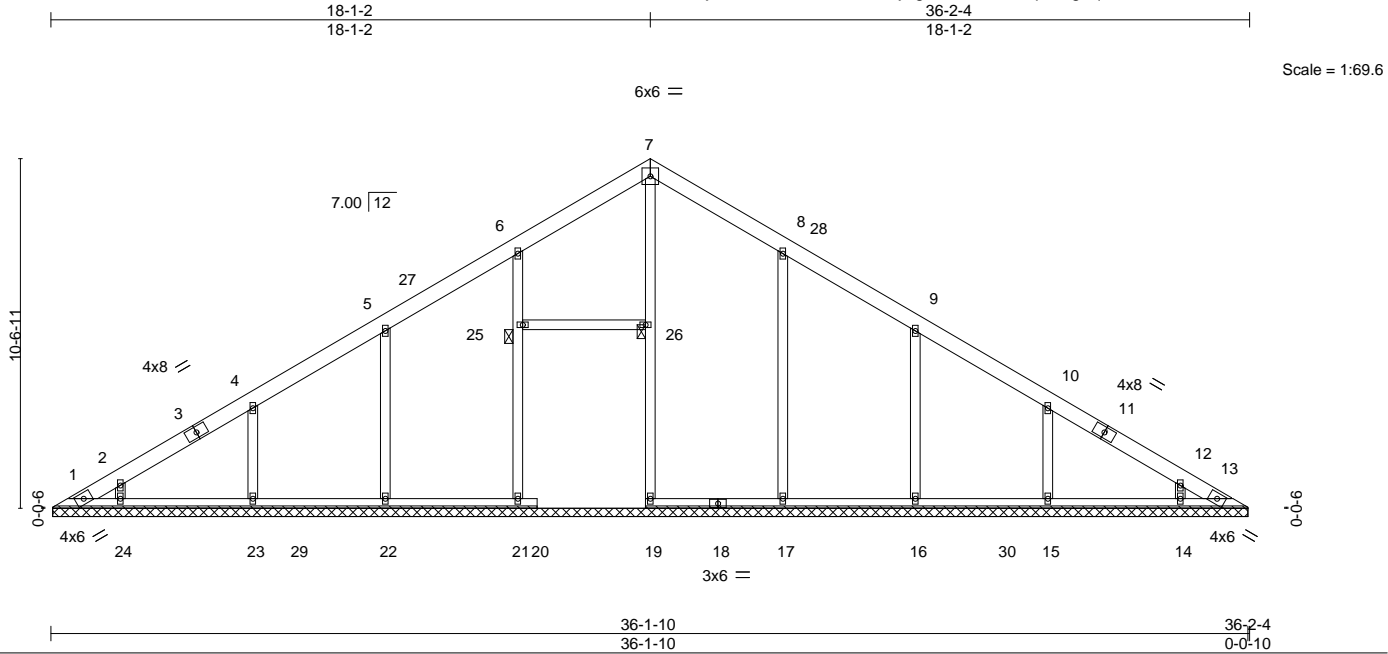
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**  
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ENGINEERING BY  
**TRENCO**  
A MITEK Affiliate  
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 15 Mabry Ridge	172160390
J0325-1251	VB1	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Mar 19 15:24:13 2025 Page 1  
ID:8dj5ATJSW1LrT2dlx\_6?K2zjclg-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.20	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.28	Horz(CT)	0.02	13	n/a		
BCDL 10.0	Code IRC2021/TPI2014		Matrix-S					Weight: 211 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
JOINTS 1 Brace at Jt(s): 25, 26

**REACTIONS.**

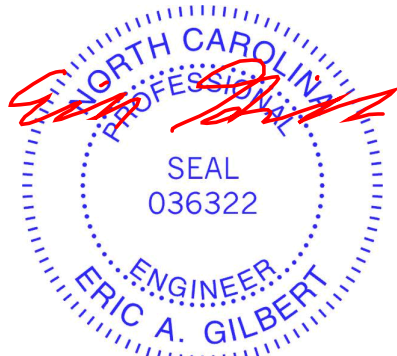
All bearings 36-1-0.  
(lb) - Max Horz 1=243(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 19, 21, 22, 23, 24, 17, 16, 15, 14, 13 except 1=144(LC 10),  
20=145(LC 18)  
Max Grav All reactions 250 lb or less at joint(s) 1, 13 except 19=398(LC 22), 21=543(LC 19), 22=517(LC 19),  
23=434(LC 19), 24=326(LC 19), 17=568(LC 20), 16=505(LC 20), 15=438(LC 20), 14=324(LC 20)

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

TOP CHORD 1-2=-282/295, 2-4=-280/291, 4-5=-255/287, 5-6=-230/318, 6-7=-286/413, 7-8=-287/405,  
8-9=-216/295  
WEBS 19-26=-295/93, 7-26=-295/93, 21-25=-280/172, 6-25=-280/172, 5-22=-252/152,  
4-23=-268/153, 8-17=-273/172, 9-16=-255/152, 10-15=-267/153

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-8-7 to 5-1-4, Interior(1) 5-1-4 to 18-1-2, Exterior(2R) 18-1-2 to 22-5-15, Interior(1) 22-5-15 to 35-5-13 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 21, 22, 23, 24, 17, 16, 15, 14, 13 except (jt=lb) 1=144, 20=145.



March 20,2025

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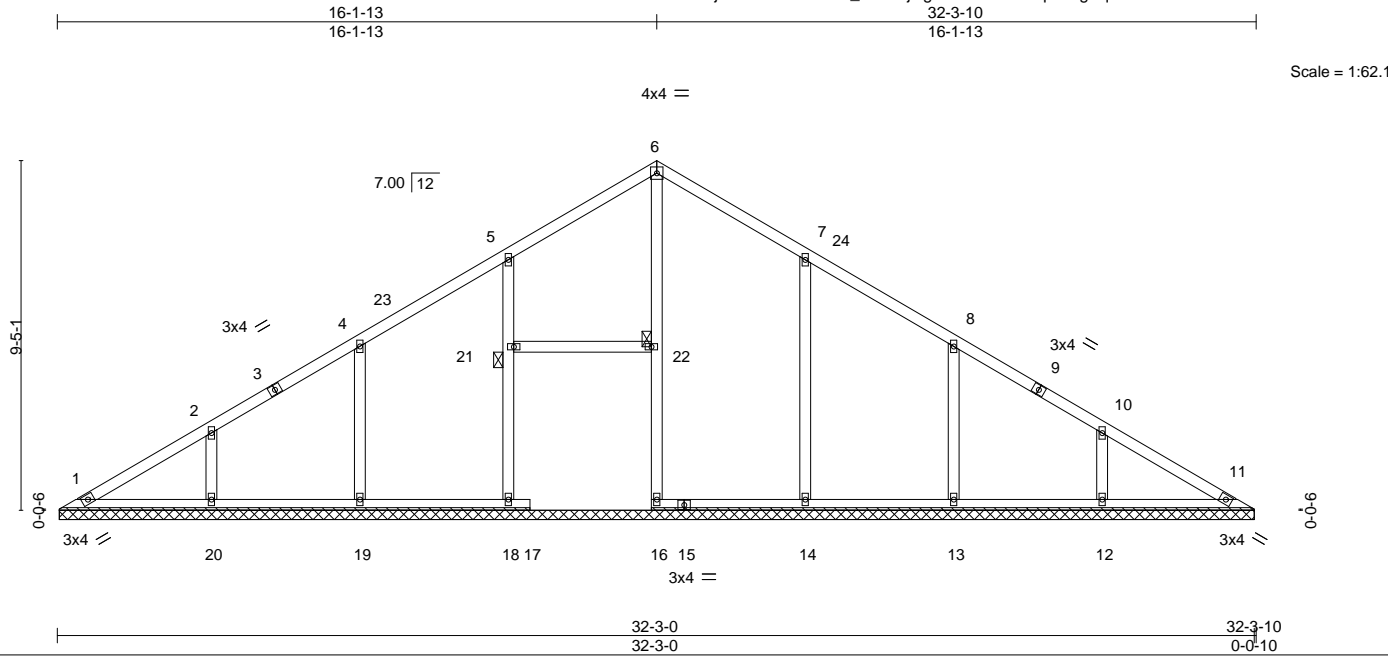
ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 15 Mabry Ridge
J0325-1251	VB2	VALLEY	1	1	I72160391
Job Reference (optional)					

Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Mar 19 15:24:14 2025 Page 1  
ID:8dj5ATJSW1LT2dlx\_6?K2zjclg-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.21	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.22	Horz(CT)	0.02	11	n/a	n/a		
BCDL 10.0	Code IRC2021/TPI2014		Matrix-S						Weight: 153 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
JOINTS 1 Brace at Jt(s): 21, 22

**REACTIONS.**

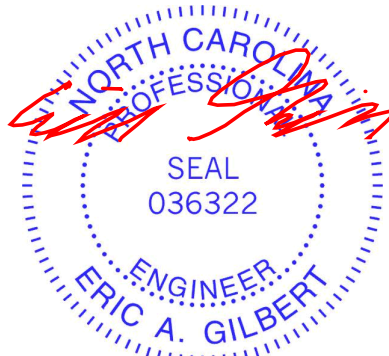
All bearings 32-2-6.  
(lb) - Max Horz 1=218(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 16, 18, 19, 20, 14, 13, 12, 11 except 17=167(LC 18)  
Max Grav All reactions 250 lb or less at joint(s) 1, 11 except 16=383(LC 22), 18=569(LC 19), 19=451(LC 19), 20=417(LC 19), 14=581(LC 20), 13=440(LC 20), 12=419(LC 20)

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

TOP CHORD 1-2=-254/265, 2-4=-237/259, 4-5=-212/272, 5-6=-257/371, 6-7=-258/364  
WEBS 16-22=-282/72, 6-22=-282/72, 18-21=-280/182, 5-21=-280/182, 4-19=-251/148, 2-20=-273/153, 7-14=-278/183, 8-13=-252/148, 10-12=-272/153

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-6-12 to 4-11-9, Interior(1) 4-11-9 to 16-1-13, Exterior(2R) 16-1-13 to 20-6-10, Interior(1) 20-6-10 to 31-8-14 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 16, 18, 19, 20, 14, 13, 12, 11 except (jt=lb) 17=167.



March 20,2025

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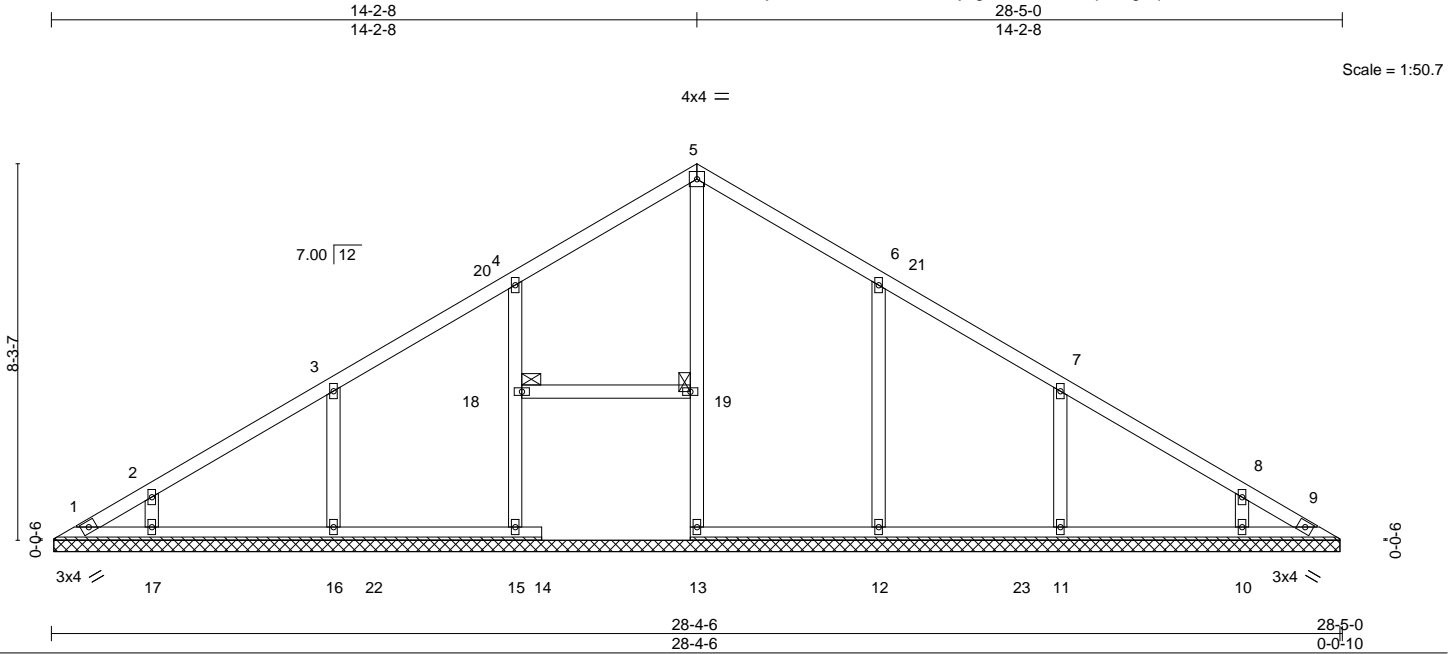
ENGINEERING BY  
**TRENCO**  
A MITEK Affiliate

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 15 Mabry Ridge
J0325-1251	VB3	VALLEY	1	1	172160392
Job Reference (optional)					

Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Mar 19 15:24:14 2025 Page 1  
ID:8dj5ATJSW1LrT2dlx\_6?K2zjclg-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.20	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.15	Horz(CT)	0.01	9	n/a	n/a		
BCDL 10.0	Code IRC2021/TPI2014		Matrix-S						Weight: 129 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
JOINTS 1 Brace at Jt(s): 18, 19

**REACTIONS.**

All bearings 28-3-12.  
(lb) - Max Horz 1=191(LC 11)  
Max Uplift All uplift 100 lb or less at joint(s) 9, 13, 15, 16, 17, 12, 11, 10 except 1=107(LC 8), 14=156(LC 18)  
Max Grav All reactions 250 lb or less at joint(s) 1, 9 except 13=366(LC 22), 15=552(LC 19), 16=446(LC 19), 17=325(LC 19), 12=574(LC 20), 11=433(LC 20), 10=329(LC 20)

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

TOP CHORD 4-5=-224/322, 5-6=-224/315  
WEBS 13-19=-264/48, 5-19=-264/48, 15-18=-277/182, 4-18=-277/182, 3-16=-262/153, 6-12=-275/183, 7-11=-262/152

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-6-12 to 4-11-9, Interior(1) 4-11-9 to 14-2-8, Exterior(2R) 14-2-8 to 18-7-5, Interior(1) 18-7-5 to 27-10-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 13, 15, 16, 17, 12, 11, 10 except (jt=lb) 1=107, 14=156.



March 20,2025

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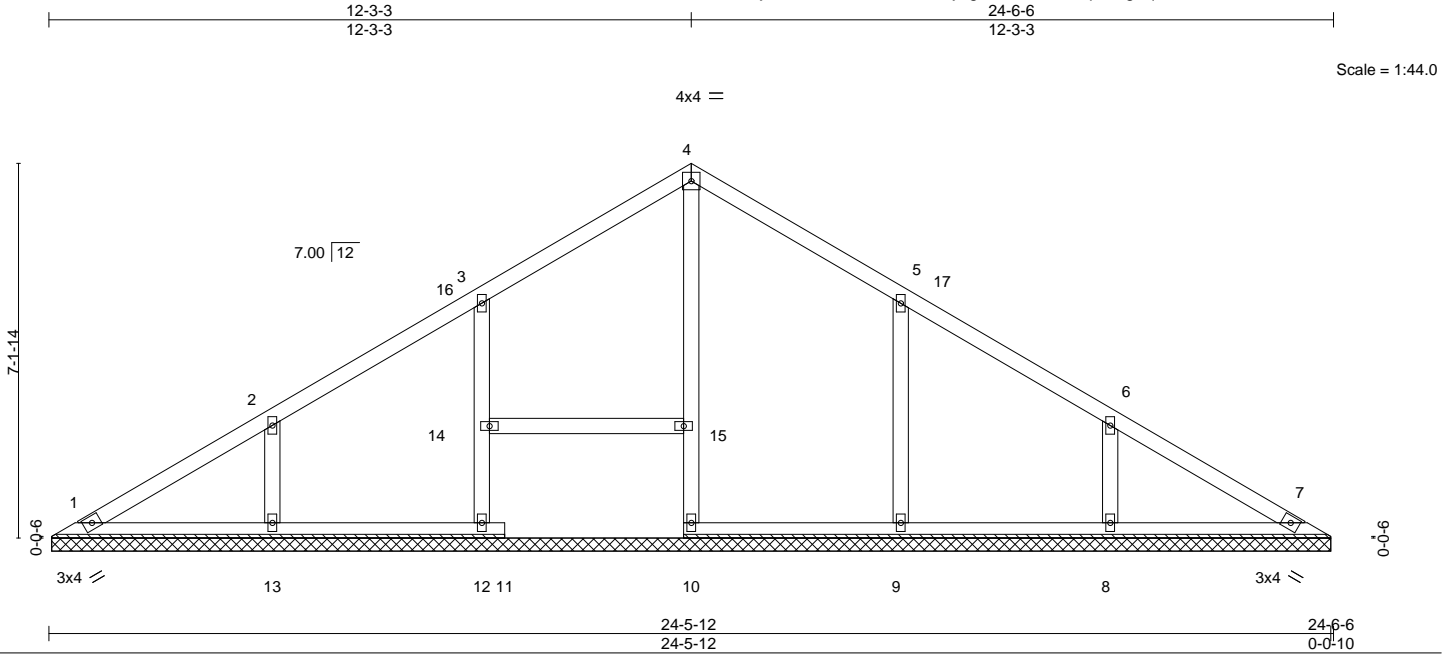
ENGINEERING BY  
**TRENCO**  
A MITEK Affiliate

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 15 Mabry Ridge
J0325-1251	VB4	VALLEY	1	1	172160393
Job Reference (optional)					

Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Mar 19 15:24:15 2025 Page 1  
ID:8dj5ATJSW1LrT2dlx\_6?K2zjclg-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWRCDoi7J4zJC?f



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.19	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.09	Horz(CT)	0.01	7	n/a	n/a		
BCDL 10.0	Code IRC2021/TPI2014		Matrix-S						Weight: 105 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

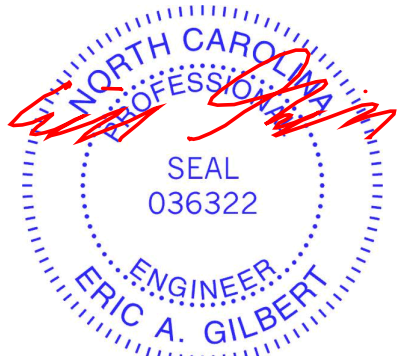
All bearings 24-5-2.  
(lb) - Max Horz 1=164(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 11, 12, 13, 9, 8  
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=352(LC 19), 12=432(LC 19), 13=430(LC 19), 9=507(LC 20), 8=409(LC 20)

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

TOP CHORD 3-4=-189/272, 4-5=-190/265  
WEBS 12-14=-275/182, 3-14=-275/182, 2-13=-270/153, 5-9=-274/183, 6-8=-271/153

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-6-12 to 4-11-9, Interior(1) 4-11-9 to 12-3-3, Exterior(2R) 12-3-3 to 16-8-0, Interior(1) 16-8-0 to 23-11-10 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 11, 12, 13, 9, 8.



March 20,2025

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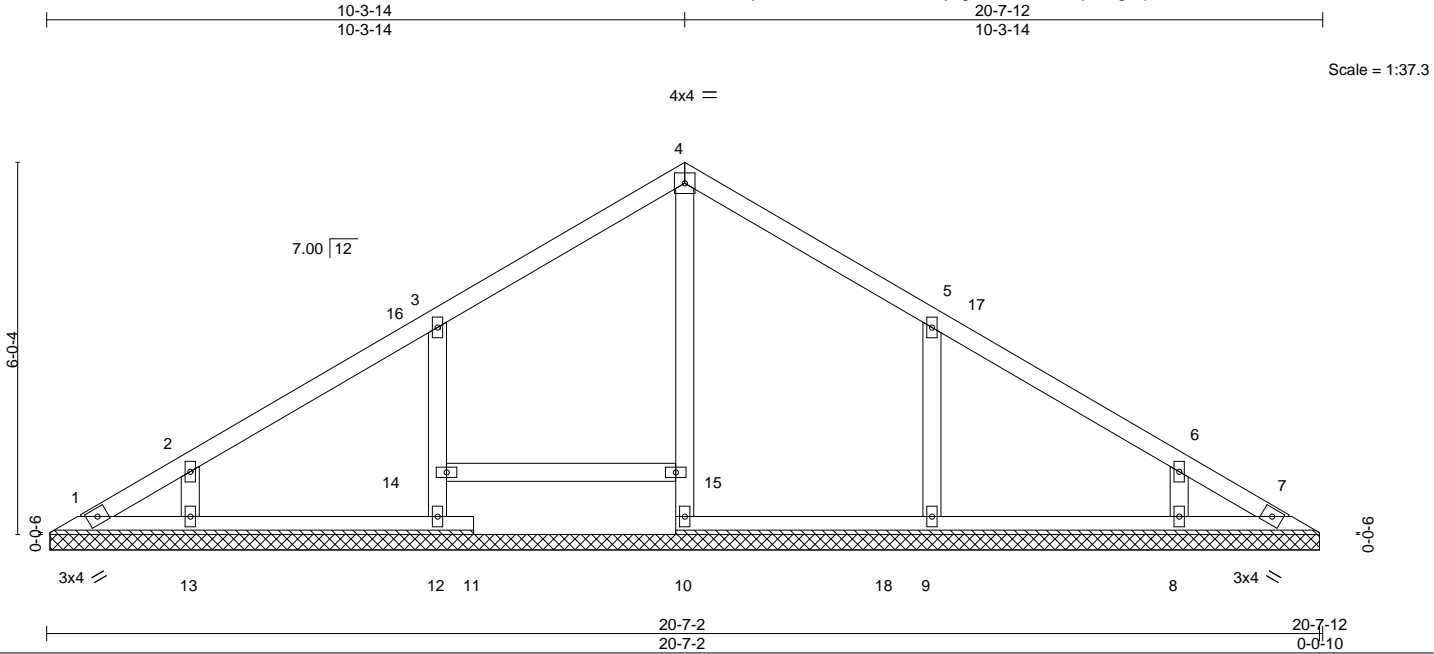
ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 15 Mabry Ridge	I72160394
J0325-1251	VB5	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Mar 19 15:24:15 2025 Page 1  
ID:8dj5ATJSW1LrT2dlx\_6?K2zjclg-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.16	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.01	7	n/a		
BCDL 10.0	Code IRC2021/TPI2014		Matrix-S					Weight: 85 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

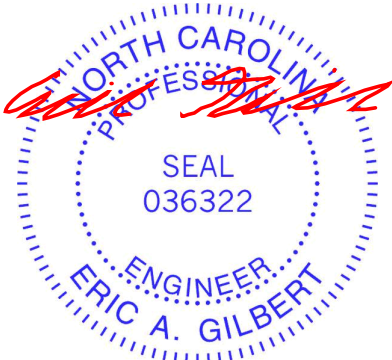
All bearings 20-6-8.  
(lb) - Max Horz 1=-137(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 11, 12, 13, 9, 8  
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=328(LC 19), 12=448(LC 19), 13=331(LC 19), 9=506(LC 20), 8=306(LC 20)

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

WEBS 12-14=-288/188, 3-14=-288/188, 5-9=-286/190

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-6-12 to 4-11-9, Interior(1) 4-11-9 to 10-3-14, Exterior(2R) 10-3-14 to 14-8-11, Interior(1) 14-8-11 to 20-1-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 11, 12, 13, 9, 8.



March 20,2025

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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932



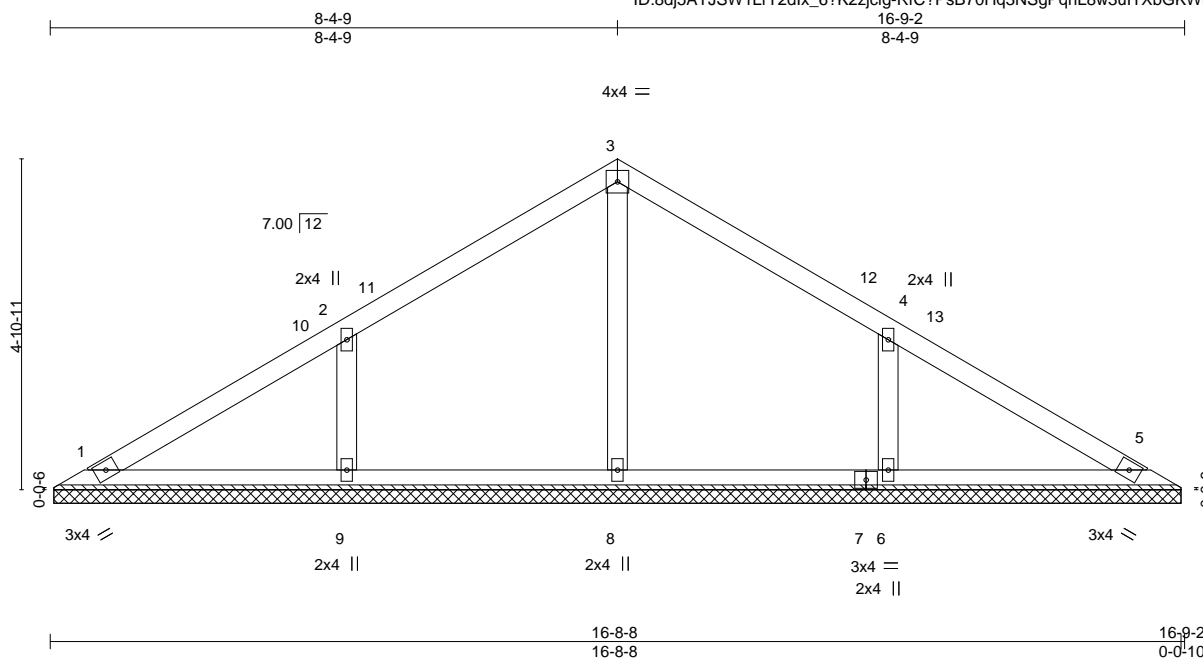


Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]												
<b>LOADING</b> (psf)		<b>SPACING-</b> 2-0-0		<b>CSI.</b>		<b>DEFL.</b> in (loc) l/defl L/d				<b>PLATES</b>	<b>GRIP</b>	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-S							Weight: 64 lb	FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>	
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 16-7-14.  
(lb) - Max Horz 1=110(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 6  
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 8 except 9=392(LC 19), 6=392(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 2-9=-297/199, 4-6=-297/199

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-6-12 to 4-11-9, Interior(1) 4-11-9 to 8-4-9, Exterior(2R) 8-4-9 to 12-9-6, Interior(1) 12-9-6 to 16-2-6 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9, 6.



March 20, 2025

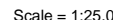
 **WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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818 Soundside Road  
Edenton, NC 27932

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Mar 19 15:24:16 2025 Page 1  
ID:8dj5ATJ5W1LrT2dJx 6?K2zicq-RfC?PsB70Hq3NSqPqnL8w3uITxbGKWrCDoi7J4zJC?f

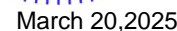


<b>BRACING-</b>	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCFL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-6-12 to 4-11-9, Interior(1) 4-11-9 to 6-5-4, Exterior(2R) 6-5-4 to 10-10-1, Interior(1) 10-10-1 to 12-3-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 8, 6.



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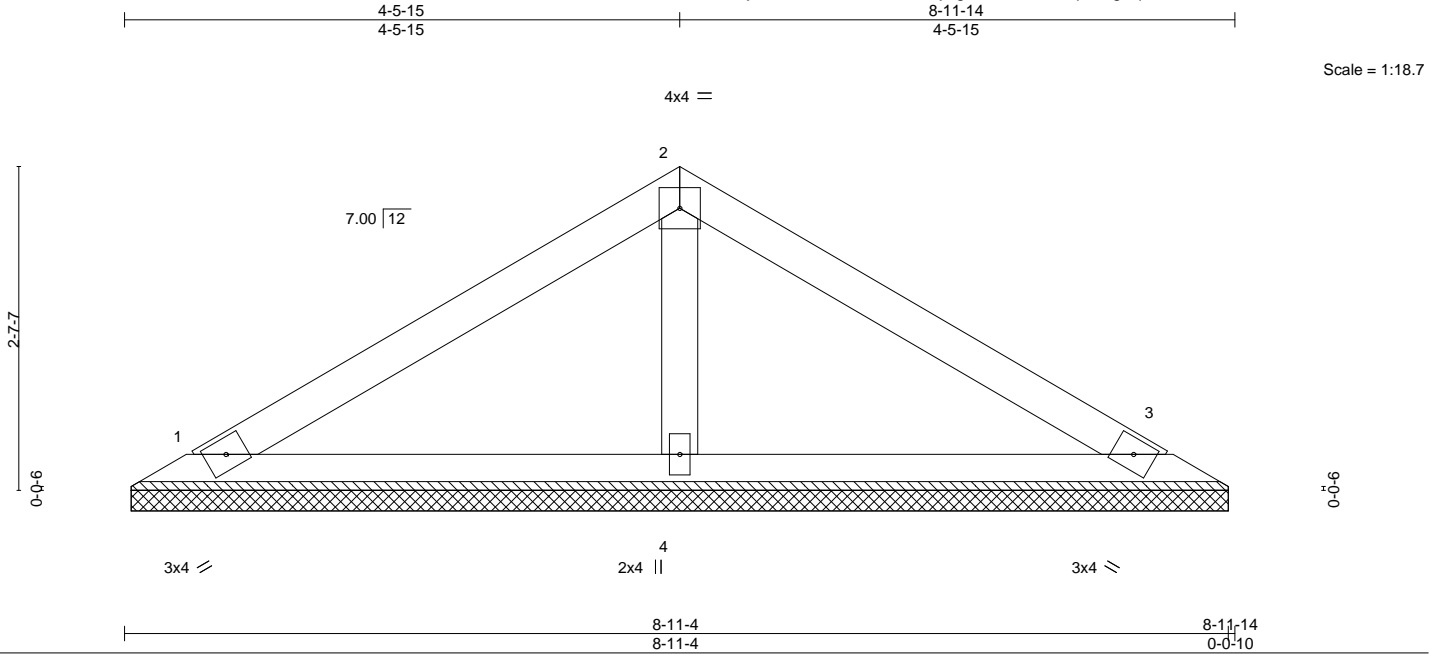


818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 15 Mabry Ridge	172160397
J0325-1251	VB8	VALLEY	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Mar 19 15:24:17 2025 Page 1  
ID:8dj5ATJSW1LrT2dlx\_6?K2zjclg-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.22	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2021/TPI2014		Matrix-P					Weight: 30 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 1=8-10-9, 3=8-10-9, 4=8-10-9  
Max Horz 1=55(LC 9)  
Max Uplift 1=26(LC 12), 3=32(LC 13)  
Max Grav 1=166(LC 1), 3=166(LC 1), 4=298(LC 1)

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

**NOTES-**

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



March 20,2025

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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 15 Mabry Ridge
J0325-1251	VB9	VALLEY	1	1	172160398
Job Reference (optional)					

Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Mar 19 15:24:17 2025 Page 1  
ID:8dj5ATJSW1LrT2dlx\_6?K2zjclg-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

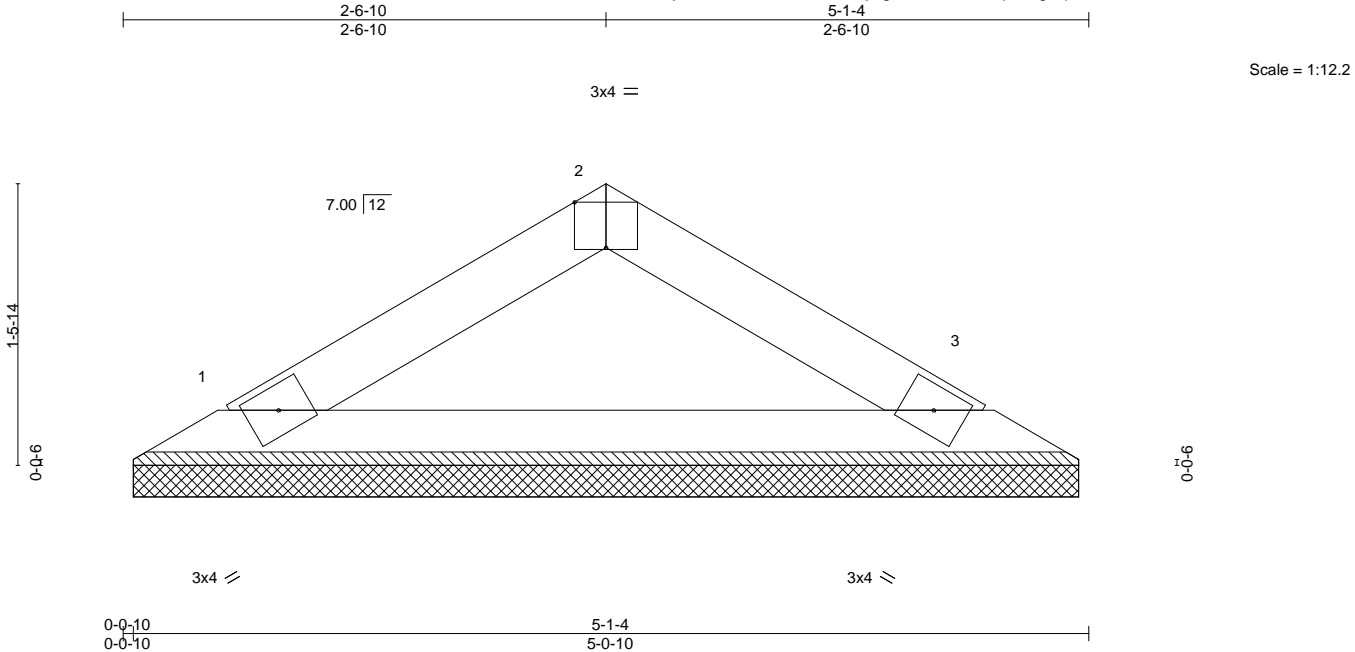


Plate Offsets (X,Y)--		[2:0-2-0,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 20.0	Plate Grip DOL	1.15	TC 0.07
TCDL 10.0	Lumber DOL	1.15	BC 0.14
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00
BCDL 10.0	Code	IRC2021/TPI2014	Matrix-P
DEFL.	in (loc)	l/defl	L/d
Vert(LL)	n/a	-	n/a 999
Vert(CT)	n/a	-	n/a 999
Horz(CT)	0.00	3	n/a n/a
PLATES	GRIP		
MT20	244/190		
Weight: 14 lb		FT = 20%	

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-1-4 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-11-15, 3=4-11-15  
Max Horz 1=28(LC 11)  
Max Uplift 1=9(LC 12), 3=9(LC 13)  
Max Grav 1=159(LC 1), 3=159(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=130mph (3-second gust) Vasd=103mph; TC DL=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
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



March 20,2025

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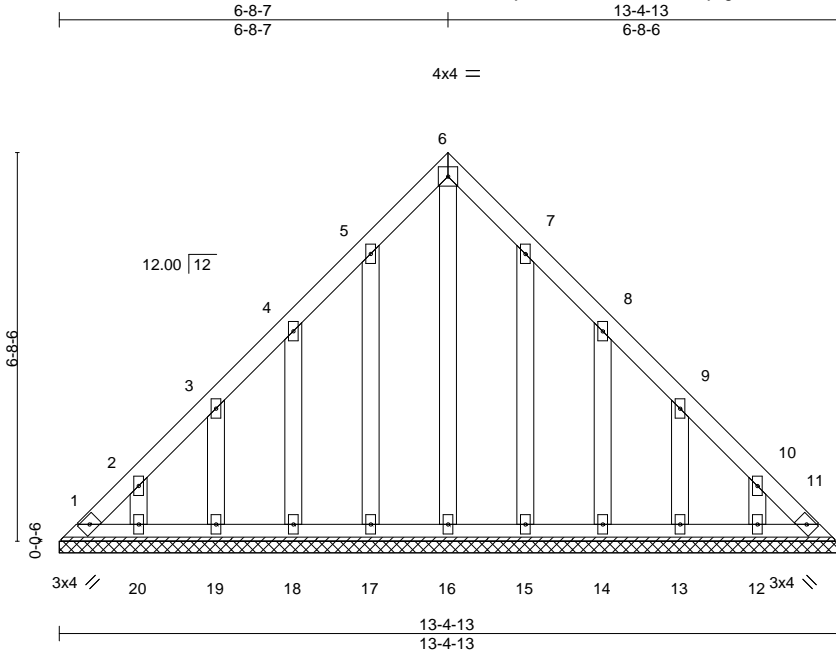
ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 15 Mabry Ridge
J0325-1251	VC1GE	GABLE	1	1	172160399
Job Reference (optional)					

Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Mar 19 15:24:18 2025 Page 1  
ID:8dj5ATJSW1LrT2dlx\_6?K2zjclg-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDdi7J4zJC?f



Scale = 1:39.7

Plate Offsets (X,Y)--		[7:0-0-0,0-0-0], [8:0-0-0,0-0-0], [9:0-0-0,0-0-0], [10:0-0-0,0-0-0]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 20.0	Plate Grip DOL	1.15	TC 0.04
TCDL 10.0	Lumber DOL	1.15	BC 0.02
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.10
BCDL 10.0	Code	IRC2021/TPI2014	Matrix-S
DEFL.	in (loc)	l/defl	L/d
Vert(LL)	n/a	-	n/a
Vert(CT)	n/a	-	n/a
Horz(CT)	0.00	11	n/a
PLATES	GRIP		
MT20	244/190		
Weight: 89 lb		FT = 20%	

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

All bearings 13-4-13.  
(lb) - Max Horz 1=-190(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 11, 17, 18, 19, 20, 15, 13, 12 except 14=-101(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 11, 16, 17, 18, 19, 20, 15, 14, 13, 12

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

TOP CHORD 1-2=-254/158

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 6-8-7, Exterior(2R) 6-8-7 to 11-1-3, Interior(1) 11-1-3 to 13-0-9 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 11, 17, 18, 19, 20, 15, 13, 12 except (jt=lb) 14=101.



March 20,2025

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

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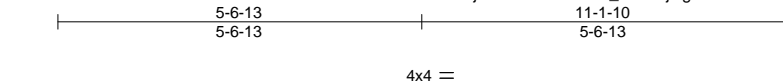
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**TRENCO**  
A MITEK Affiliate

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 15 Mabry Ridge
J0325-1251	VC2	VALLEY	1	1	172160400
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Mar 19 15:24:18 2025 Page 1  
ID:8dj5ATJSW1LrT2dlx\_6?K2zjclg-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDdi7J4zJC?f



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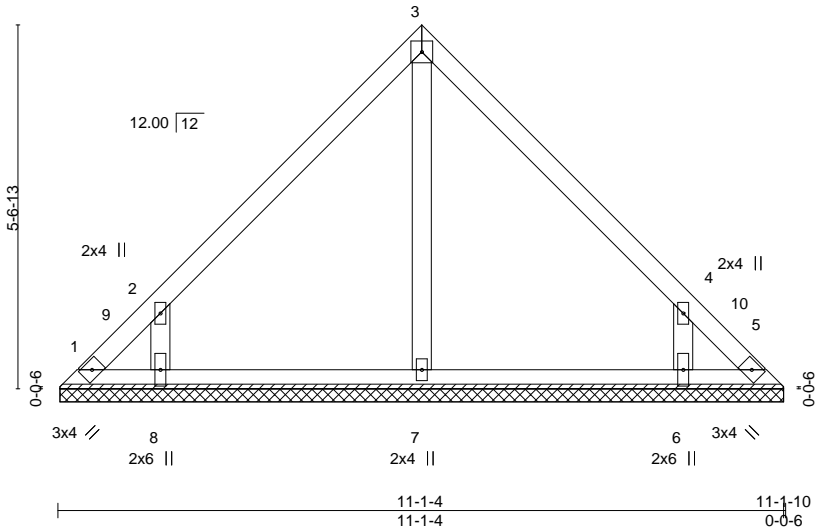


Plate Offsets (X,Y)--	[4:0-0-0,0-0-0]							PLATES	GRIP
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.18	Vert(LL)	n/a	-	n/a	999	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	n/a	-	n/a	999	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.08	Horz(CT)	0.00	5	n/a	n/a	
BCDL 10.0	Code IRC2021/TPI2014		Matrix-S						Weight: 49 lb
									FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

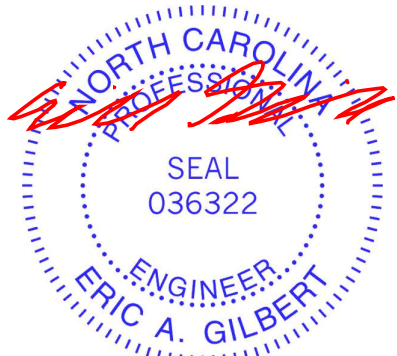
All bearings 11-0-14.  
(lb) - Max Horz 1=-125(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-166(LC 12), 6=-166(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=346(LC 19), 6=346(LC 20)

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

WEBS 2-8=-319/445, 4-6=-319/445

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 5-6-13, Exterior(2R) 5-6-13 to 9-11-10, Interior(1) 9-11-10 to 10-9-6 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=166, 6=166.



March 20,2025

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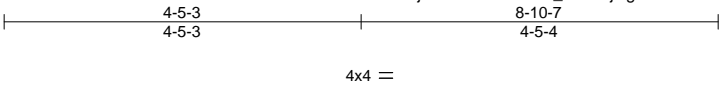
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**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	Lot 15 Mabry Ridge
J0325-1251	VC3	VALLEY	1	1	172160401
Comtech, Inc., Fayetteville, NC - 28314,					Job Reference (optional)

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Mar 19 15:24:19 2025 Page 1  
ID:8dj5ATJSW1LrT2dlx\_6?K2zjclg-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f



Scale = 1:28.6

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.40	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2021/TPI2014		Matrix-P						Weight: 36 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 1=8-9-11, 3=8-9-11, 4=8-9-11  
Max Horz 1=98(LC 11)  
Max Uplift 1=35(LC 13), 3=35(LC 13)  
Max Grav 1=199(LC 1), 3=199(LC 1), 4=255(LC 1)

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

**NOTES-**

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



March 20,2025

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

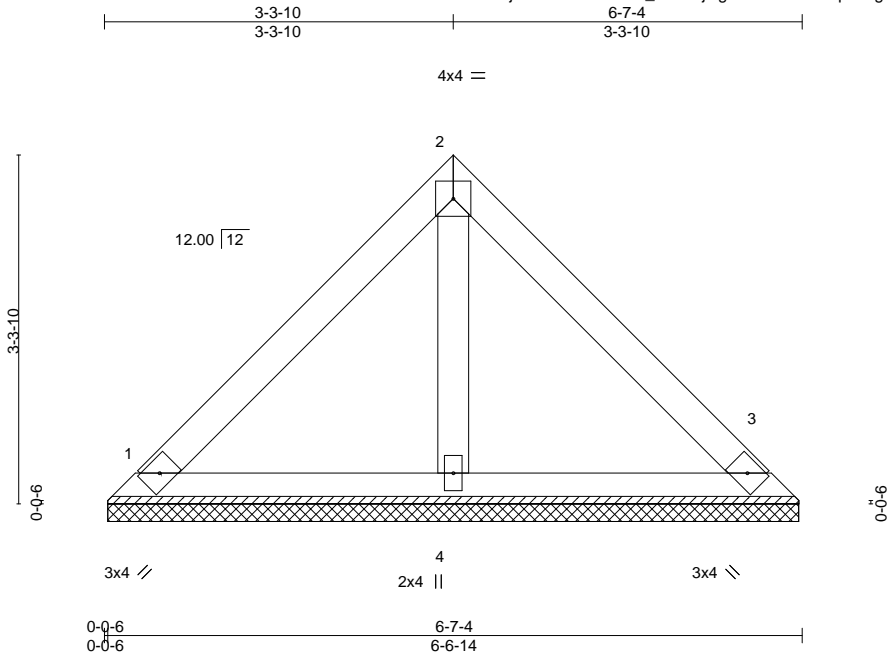
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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Job J0325-1251	Truss VC4	Truss Type VALLEY	Qty 1	Ply 1	Lot 15 Mabry Ridge 172160402
Comtech, Inc., Fayetteville, NC - 28314,					Job Reference (optional)

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Mar 19 15:24:19 2025 Page 1  
ID:8dj5ATJSW1LrT2dlx\_6?K2zjclg-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.23	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2021/TPI2014		Matrix-P						Weight: 26 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

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

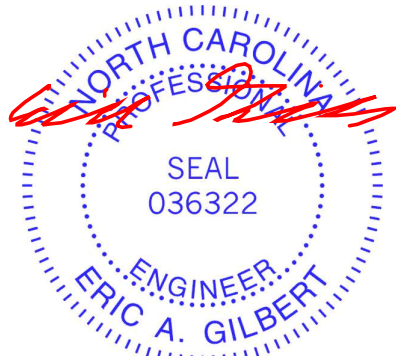
#### REACTIONS.

(size) 1=6-6-8, 3=6-6-8, 4=6-6-8  
Max Horz 1=-71(LC 8)  
Max Uplift 1=-26(LC 13), 3=-26(LC 13)  
Max Grav 1=144(LC 1), 3=144(LC 1), 4=185(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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- Non Standard bearing condition. Review required.



March 20,2025

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

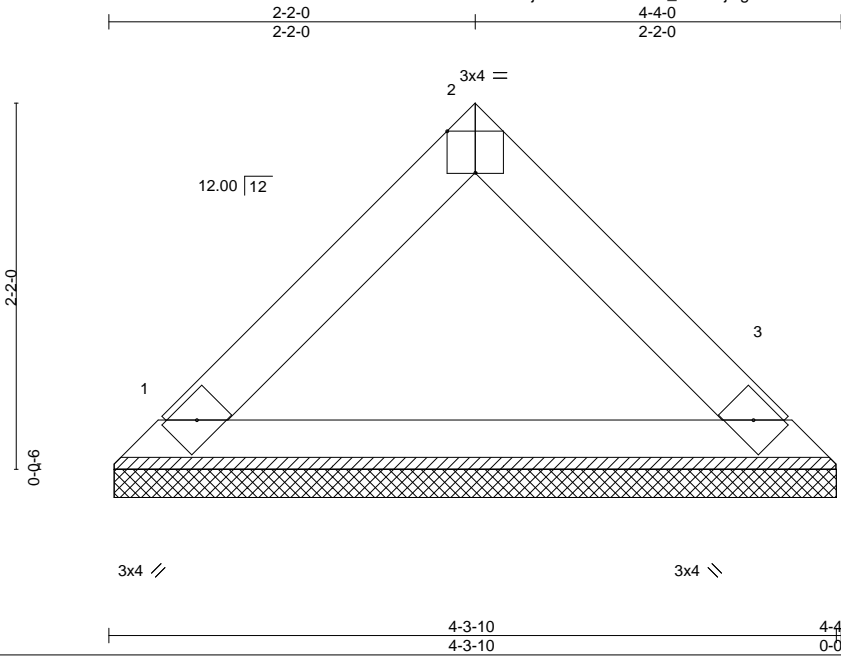
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Job	Truss	Truss Type	Qty	Ply	Lot 15 Mabry Ridge
J0325-1251	VC5	VALLEY	1	1	172160403
Comtech, Inc., Fayetteville, NC - 28314,					Job Reference (optional)

8.630 s Sep 26 2024 MiTek Industries, Inc. Wed Mar 19 15:24:19 2025 Page 1  
ID:8dj5ATJSW1LrT2dlx\_6?K2zjclg-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:13.6

Plate Offsets (X,Y)--		[2:0-2-0,Edge]									
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 0.10		Vert(LL)	n/a -	n/a	999	MT20	244/190
TCDL 10.0		Lumber DOL 1.15		BC 0.12		Vert(CT)	n/a -	n/a	999		
BCLL 0.0 *		Rep Stress Incr YES		WB 0.00		Horz(CT)	0.00 3	n/a	n/a		
BCDL 10.0		Code IRC2021/TPI2014		Matrix-P						Weight: 14 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-4-0 oc purlins.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-3-4, 3=4-3-4  
Max Horz 1=44(LC 9)  
Max Uplift 1=5(LC 12), 3=5(LC 12)  
Max Grav 1=145(LC 1), 3=145(LC 1)

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

- NOTES-
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=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
  - 3) Gable requires continuous bottom chord bearing.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



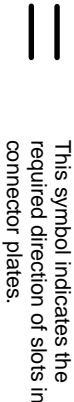
March 20,2025

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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.

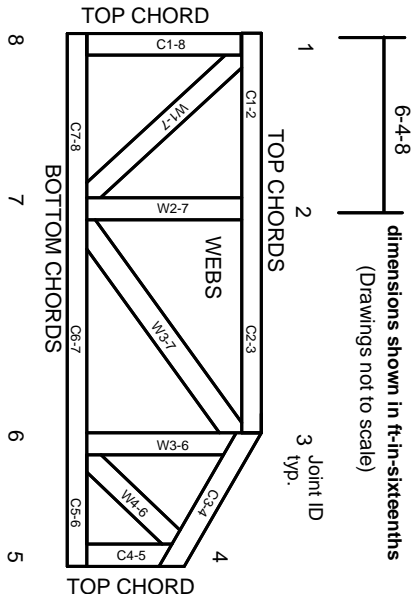
## BEARING



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