

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: J0725-3355  
Cav&Cates/Lot 26 Ducks Landing/Harnett

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: I74872764 thru I74872774

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

North Carolina COA: C-0844



July 14, 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	Cav&Cates/Lot 26 Ducks Landing/Harnett	174872764
J0725-3355	A1	FINK	15	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

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ID:Bneafk58bCe7htVHgBow8Uz?rUL-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

0-10-8 7-9-1 15-0-0 22-2-15 30-0-0 30-10-8  
0-10-8 7-9-1 7-2-15 7-2-15 7-9-1 0-10-8

Scale: 3/16"=1'

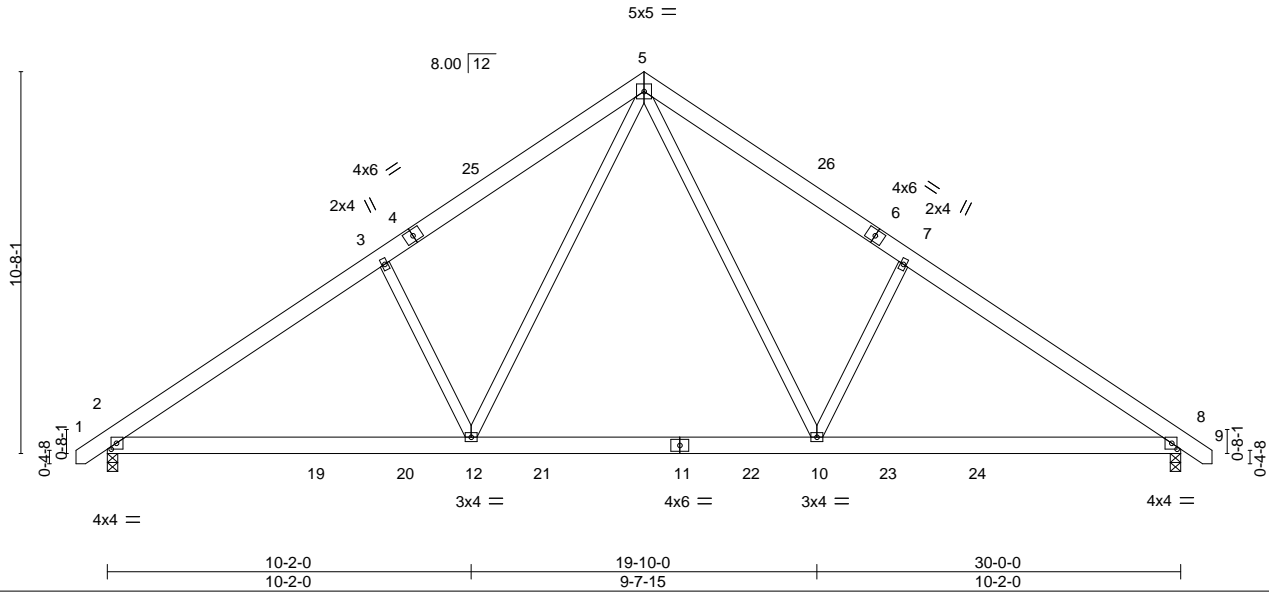


Plate Offsets (X,Y)-- [2:0-1-13,0-2-0], [8:0-1-13,0-2-0]

LOADING (psf)	SPACING-	CS.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.20	Vert(LL)	-0.12 10-12	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.48	Vert(CT)	-0.18 10-12	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.34	Horz(CT)	0.03 8	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Wind(LL)	0.04 12-15	>999	240		
	Code IRC2021/TPI2014						Weight: 208 lb	FT = 25%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied.

#### REACTIONS.

(size) 2=0-3-8, 8=0-3-8  
Max Horz 2=-252(LC 10)  
Max Uplift 2=-74(LC 12), 8=-74(LC 13)  
Max Grav 2=1545(LC 19), 8=1545(LC 20)

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

TOP CHORD 2-3=-2085/356, 3-5=-1972/442, 5-7=-1972/442, 7-8=-2086/356  
BOT CHORD 2-12=-168/1847, 10-12=0/1207, 8-10=-161/1676  
WEBS 3-12=-459/282, 5-12=-156/1028, 5-10=-156/1028, 7-10=-460/282

#### 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) -0-8-15 to 3-7-14, Interior(1) 3-7-14 to 15-0-0, Exterior(2R) 15-0-0 to 19-4-13, Interior(1) 19-4-13 to 30-8-15 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 74 lb uplift at joint 2 and 74 lb uplift at joint 8.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



July 14, 2025

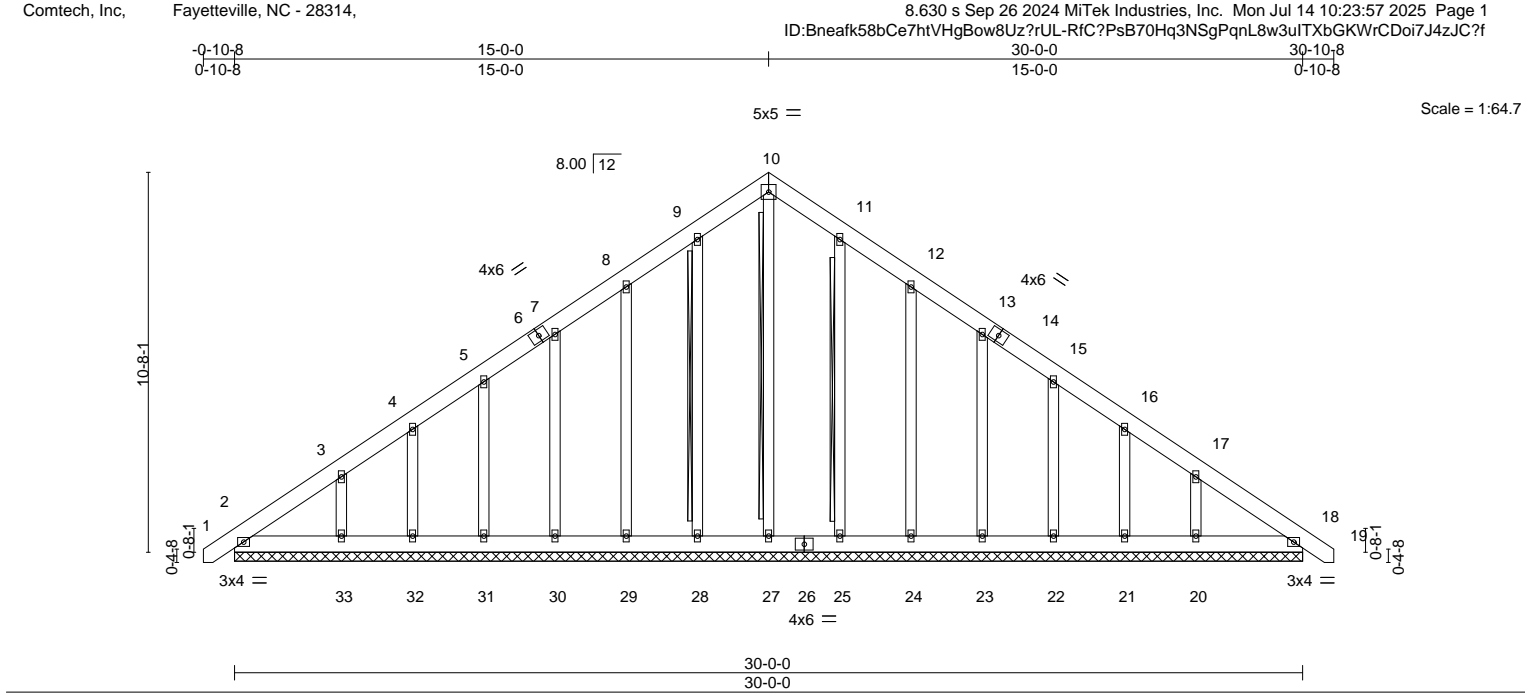
#### WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacomponents.com](http://www.sbcacomponents.com))

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cav&Cates/Lot 26 Ducks Landing/Harnett	174872765
J0725-3355	A1GE	GABLE	1	1	Job Reference (optional)	



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.04	Vert(LL)	0.00	18	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	0.00	18	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.13	Horz(CT)	0.01	18	n/a	n/a		
BCDL 10.0	Code IRC2021/TPI2014		Matrix-S						Weight: 265 lb	FT = 25%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.2	WEBS T-Brace: 2x4 SPF No.2 - 10-27, 9-28, 11-25
	Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c.,with 3in minimum end distance.
	Brace must cover 90% of web length.

**REACTIONS.** All bearings 30-0-0.

(lb) - Max Horz 2=315(LC 11)

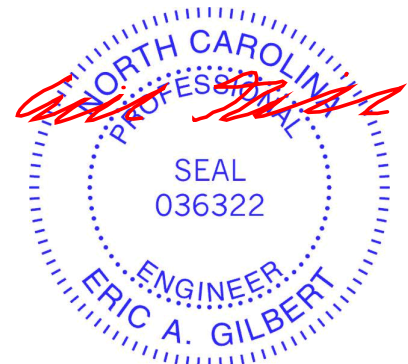
Max Uplift All uplift 100 lb or less at joint(s) 2, 18, 28, 29, 30, 31, 32, 25, 23, 22, 21 except 33=-143(LC 12), 24=-102(LC 13), 20=-140(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 2, 18, 27, 28, 29, 30, 31, 32, 25, 24, 23, 22, 21 except 33=267(LC 19), 20=263(LC 20)

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

TOP CHORD 2-3=-309/239, 9-10=-172/268, 10-11=-172/268

- 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) gable end zone and C-C Corner(3E) -0-8-15 to 3-7-14, Exterior(2N) 3-7-14 to 15-0-0, Corner(3R) 15-0-0 to 19-4-13, Exterior(2N) 19-4-13 to 30-8-15 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 18, 28, 29, 30, 31, 32, 25, 23, 22, 21 except (jt=lb) 33=143, 24=102, 20=140.
  - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



July 14,2025

Job	Truss	Truss Type	Qty	Ply	Cav&Cates/Lot 26 Ducks Landing/Harnett	174872766
J0725-3355	A2	FINK	7	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

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ID:Bneafk58bCe7htVHgBow8Uz?rUL-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

-0-10-8 10-0-0 15-0-0 20-0-0 30-0-0 30-10-8  
0-10-8 10-0-0 5-0-0 5-0-0 10-0-0 0-10-8

4x6 =

Scale = 1:65.4

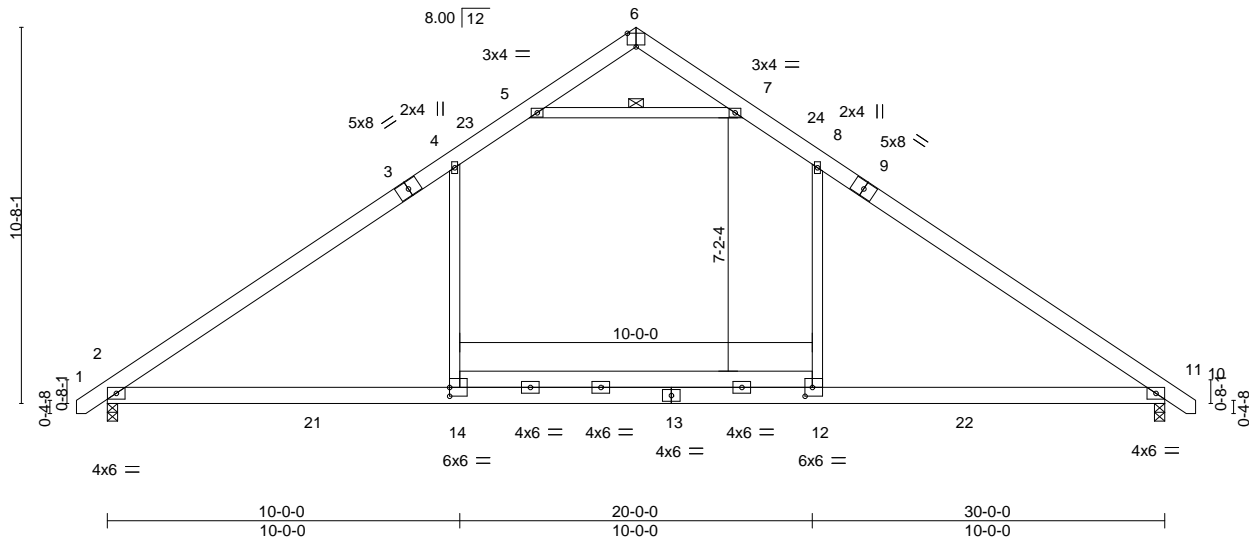


Plate Offsets (X,Y)-- [6:0-3-0,Edge], [12:0-2-8,0-3-0], [14:0-0-0,0-3-0]

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 0.53	Vert(LL)	-0.31 14-17	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.37	Vert(CT)	-0.42 14-17	>862	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.43	Horz(CT)	0.02 10	n/a	n/a		
BCDL 10.0	Code IRC2021/TPI2014		Matrix-AS	Wind(LL)	0.25 14-17	>999	240	Weight: 211 lb	FT = 25%

#### LUMBER-

TOP CHORD 2x6 SP 2400F 2.0E  
BOT CHORD 2x6 SP 2400F 2.0E  
WEBS 2x4 SP No.2 \*Except\*  
12-14: 2x6 SP No.1

#### BRACING-

TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied.  
WEBS 1 Row at midpt 5-7

#### REACTIONS.

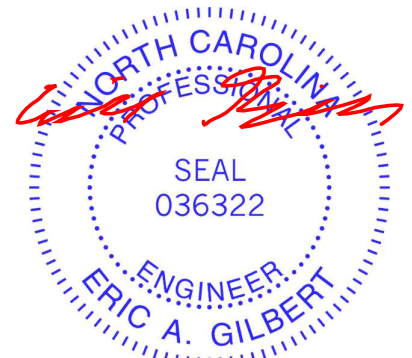
(size) 2=0-3-8, 10=0-3-8  
Max Horz 2=-252(LC 10)  
Max Uplift 2=-74(LC 12), 10=-74(LC 13)  
Max Grav 2=1660(LC 19), 10=1660(LC 20)

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

TOP CHORD 2-4=-2225/319, 4-5=-1555/381, 5-6=-82/561, 6-7=-82/562, 7-8=-1554/381,  
8-10=-2225/319  
BOT CHORD 2-14=-76/1739, 12-14=-76/1739, 10-12=-76/1739  
WEBS 4-14=0/794, 8-12=0/794, 5-7=-2304/535

#### 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) -0-8-15 to 3-7-14, Interior(1) 3-7-14 to 15-0-0, Exterior(2R) 15-0-0 to 19-4-13, Interior(1) 19-4-13 to 30-8-15 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) 2, 10.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cav&Cates/Lot 26 Ducks Landing/Harnett	174872767
J0725-3355	A3	FINK	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

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ID:Bneafk58bCe7htVHgBow8Uz?rUL-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

0-10-8 7-9-1 15-0-0 22-2-15 30-0-0 30-10-8  
0-10-8 7-9-1 7-2-15 7-2-15 7-9-1 0-10-8

Scale: 3/16"=1'

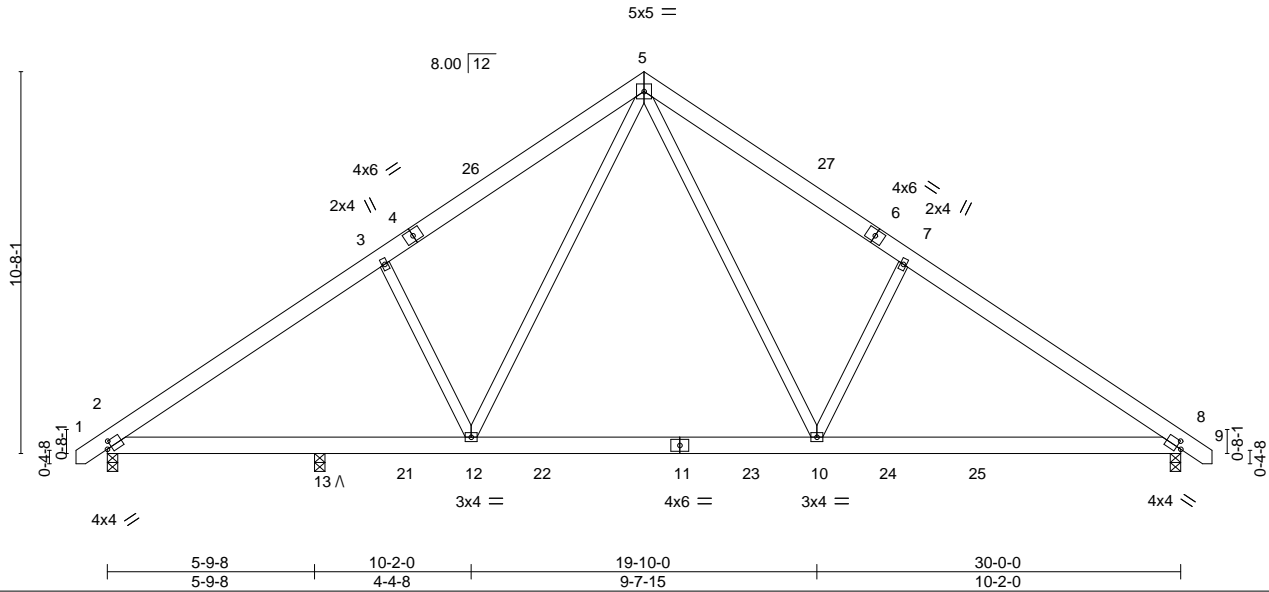


Plate Offsets (X,Y)-- [2:0-1-9,0-2-4], [8:0-1-9,0-2-4]

LOADING (psf)	SPACING-	2-0-0	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.19	Vert(LL)	-0.14 10-12	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.51	Vert(CT)	-0.22 10-12	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.34	Horz(CT)	0.03 8	n/a	n/a		
BCDL 10.0	Code IRC2021/TPI2014		Matrix-AS	Wind(LL)	0.04 10-19	>999	240		
								Weight: 208 lb	FT = 25%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied.

#### REACTIONS.

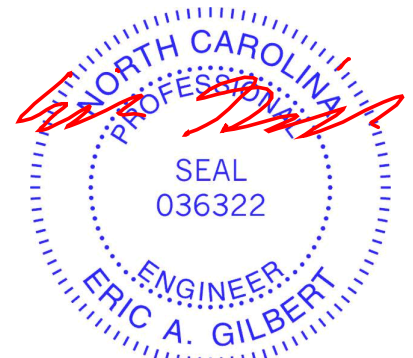
(size) 2=0-3-8, 8=0-3-8, 13=0-3-8  
Max Horz 2=-252(LC 10)  
Max Uplift 2=-79(LC 12), 8=-80(LC 13), 13=REL  
Max Grav 2=1303(LC 19), 8=1492(LC 20), 13=297(LC 19)

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

TOP CHORD 2-3=-1854/356, 3-5=-1715/442, 5-7=-1889/442, 7-8=-2004/356  
BOT CHORD 2-13=-168/1619, 12-13=-168/1619, 10-12=0/1112, 8-10=-160/1596  
WEBS 3-12=-417/281, 5-12=-155/761, 5-10=-155/1066, 7-10=-454/281

#### 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) -0-8-15 to 3-7-14, Interior(1) 3-7-14 to 15-0-0, Exterior(2R) 15-0-0 to 19-4-13, Interior(1) 19-4-13 to 30-8-15 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) 2, 8.
- "A" indicates Released bearing: allow for upward movement at joint(s) 13.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



July 14,2025

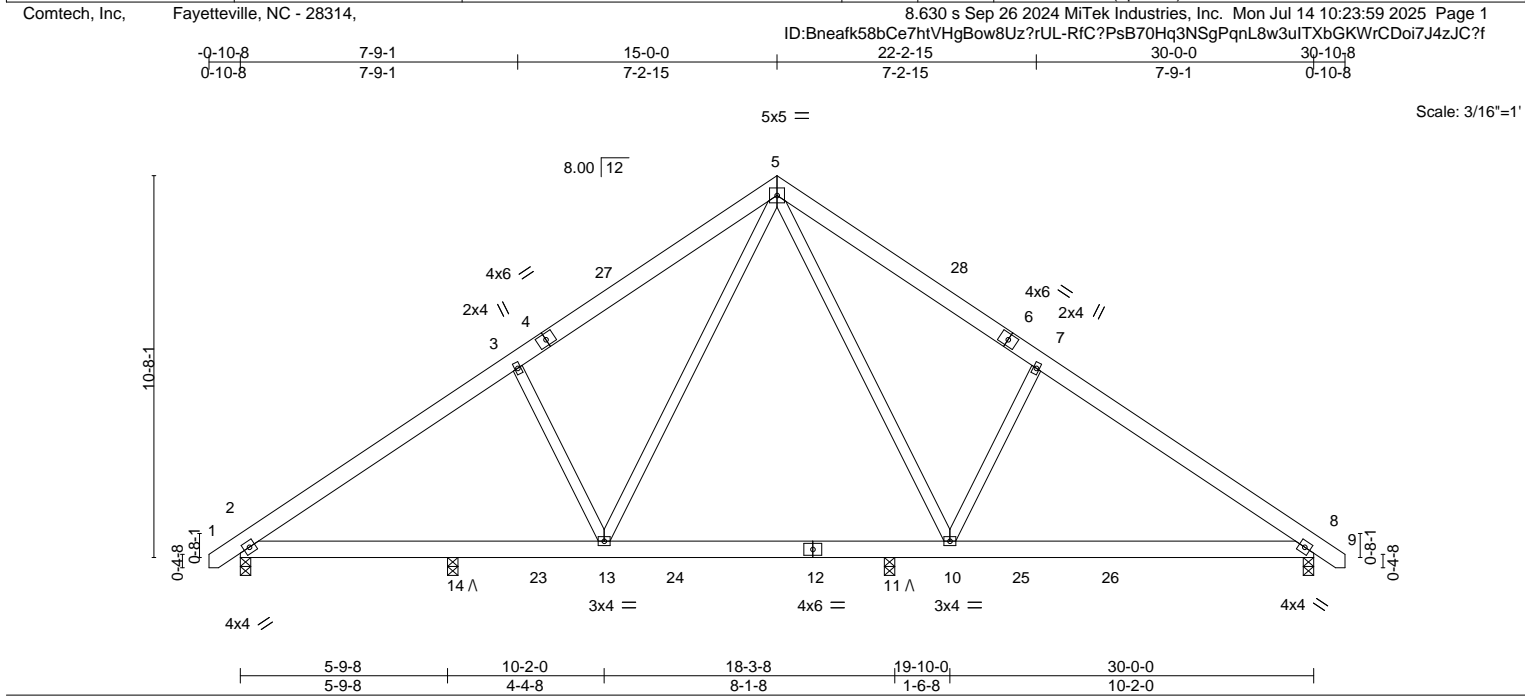
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818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cav&Cates/Lot 26 Ducks Landing/Harnett	174872768
J0725-3355	A4	FINK	1	1	Job Reference (optional)	



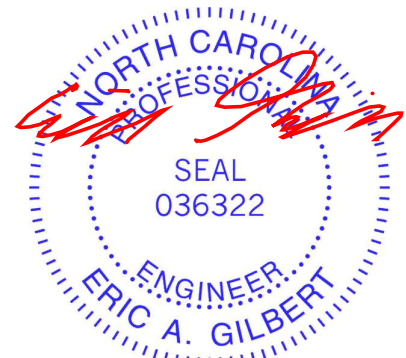
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.22	Vert(LL)	-0.11 10-20	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.49	Vert(CT)	-0.20 10-20	>727	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.34	Horz(CT)	0.02 8	n/a	n/a		
BCDL 10.0	Code IRC2021/TPI2014		Matrix-AS	Wind(LL)	0.05 10-20	>999	240	Weight: 208 lb	FT = 25%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.2	

**REACTIONS.** All bearings 0-3-8.  
 (lb) - Max Horz 2=-252(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 8  
 Max Grav All reactions 250 lb or less at joint(s) except 2=1020(LC 19), 8=1127(LC 20), 14=354(LC 19), 11=608(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1368/356, 3-5=-1227/442, 5-7=-1204/442, 7-8=-1313/356  
 BOT CHORD 2-14=-168/1216, 13-14=-168/1216, 11-13=0/767, 10-11=0/767, 8-10=-160/1027  
 WEBS 3-13=-430/281, 5-13=-155/615, 5-10=-155/510, 7-10=-489/281

- 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) -0-8-15 to 3-7-14, Interior(1) 3-7-14 to 15-0-0, Exterior(2R) 15-0-0 to 19-4-13, Interior(1) 19-4-13 to 30-8-15 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) 2, 8.
  - "A" indicates Released bearing: allow for upward movement at joint(s) 14, 11.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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ENGINEERING BY  
**TRENCO**  
 A MiTek Affiliate

818 Soundside Road  
 Edenton, NC 27932





[illegible]

<b>LUMBER-</b>			<b>BRACING-</b>	
TOP CHORD	2x6 SP No.1		TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	2x6 SP No.1		BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SP No.2 *Except*			
	3-18: 2x8 SP No.1			
OTHERS	2x4 SP No.2			

**REACTIONS.** All bearings 17-3-8 except (jt=length) 2=0-3-8.  
 (lb) - Max Horz 2=-315(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 17, 12, 11, 8 except 2=-159(LC 12), 13=-406(LC 13), 10=-224(LC 13), 18=-123(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 17, 15, 14, 12, 11 except 2=835(LC 19), 13=668(LC 20), 10=374(LC 20), 8=406(LC 19), 18=688(LC 19), 18=476(LC 1), 8=389(LC 1)

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

TOP CHORD	2-3=1000/192, 3-5=500/183, 5-6=461/221, 6-8=525/125
BOT CHORD	2-19=248/1006, 18-19=249/1002, 17-18=95/396, 15-17=95/396, 14-15=95/396, 13-14=95/396, 12-13=95/396, 11-12=95/396, 10-11=95/396, 8-10=95/396
WEBS	6-13=544/438, 3-19=0/277, 3-18=750/362

**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) gable end zone and C-C Exterior(2E) -0-8-15 to 3-7-14, Interior(1) 3-7-14 to 15-0-0, Exterior(2R) 15-0-0 to 19-4-13, Interior(1) 19-4-13 to 30-8-15 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 12, 11, 8, 8 except (jt=lb) 2=159, 13=406, 10=224, 18=123.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

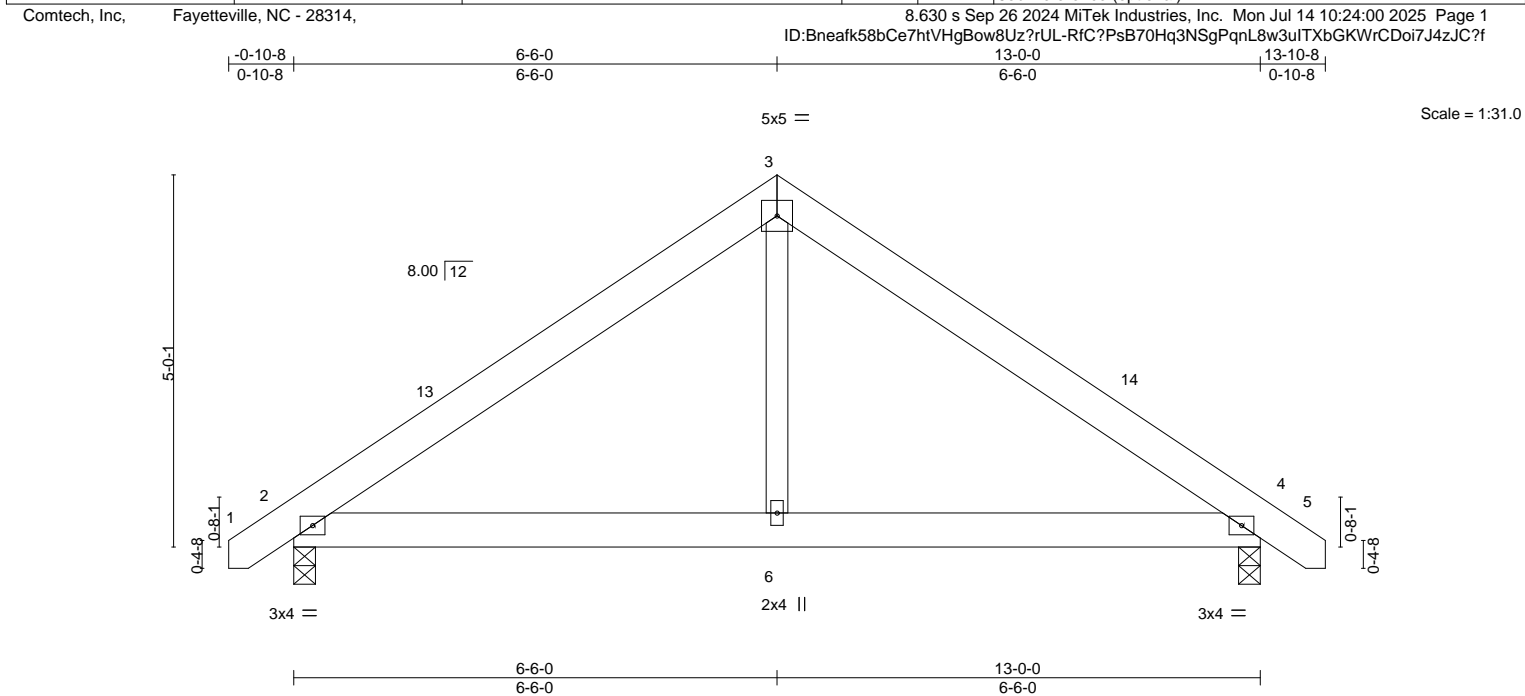
A circular blue professional engineer seal for the State of North Carolina. The outer ring contains the text "NORTH CAROLINA" at the top and "PROFESSIONAL ENGINEER" at the bottom. Inside the ring, the word "SEAL" is printed above the license number "036322". A red ink signature, which appears to be "J. H. Smith", is written across the seal from the upper left to the lower right.



July 14, 2025



Job	Truss	Truss Type	Qty	Ply	Cav&Cates/Lot 26 Ducks Landing/Harnett	174872771
J0725-3355	B1	COMMON	6	1	Job Reference (optional)	



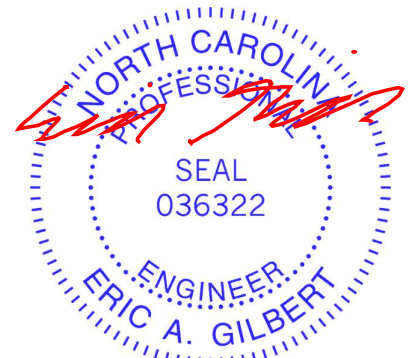
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL)	-0.01	6-9	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	-0.02	6-9	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2021/TPI2014		Matrix-AS	Wind(LL)	0.01	6-9	>999	240	Weight: 79 lb	FT = 25%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.2	

REACTIONS.	(size) 2=0-3-8, 4=0-3-8
Max Horz 2=116(LC 11)	
Max Uplift 2=-38(LC 12), 4=-38(LC 13)	
Max Grav 2=565(LC 1), 4=565(LC 1)	

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-616/208, 3-4=-616/208	
BOT CHORD 2-6=-24/438, 4-6=-24/438	
WEBS 3-6=0/291	

- 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) -0-8-15 to 3-7-14, Interior(1) 3-7-14 to 6-6-0, Exterior(2R) 6-6-0 to 10-10-13, Interior(1) 10-10-13 to 13-8-15 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



July 14,2025

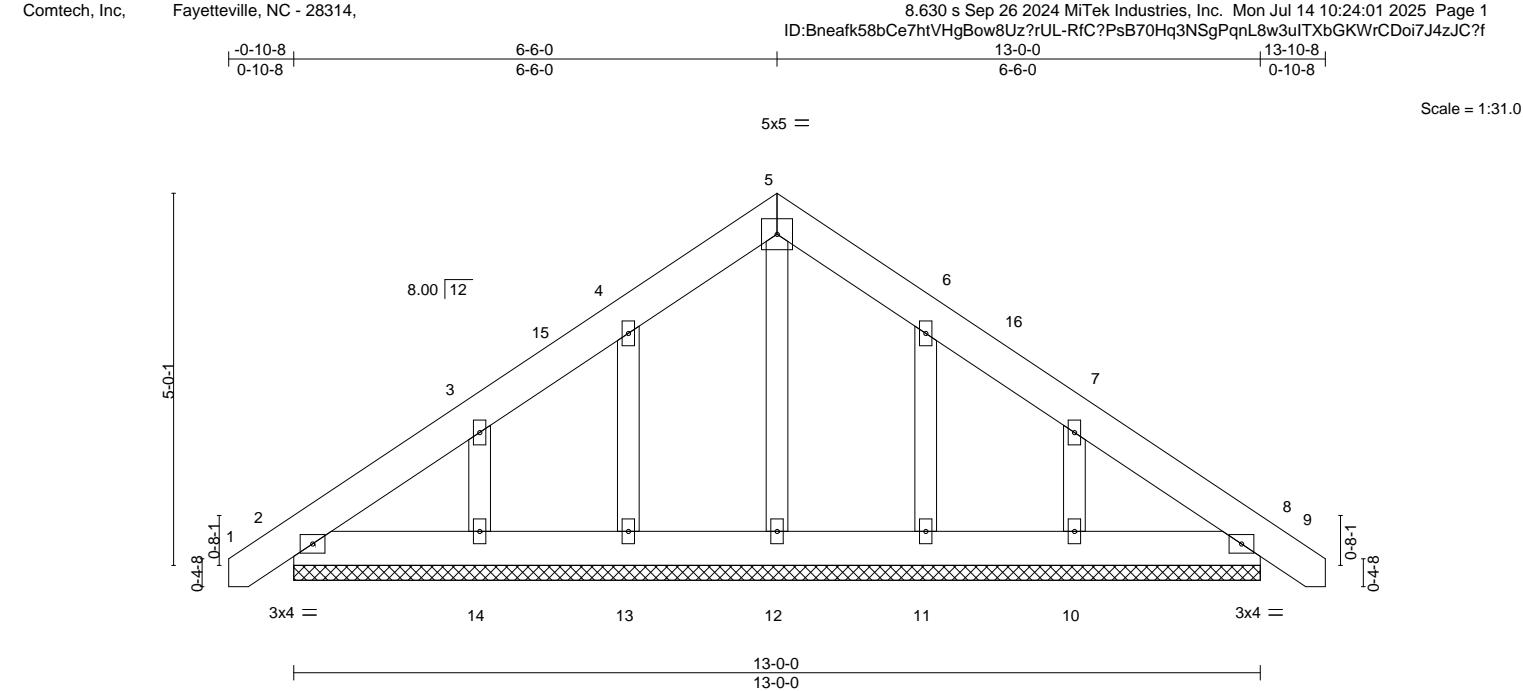
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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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818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cav&Cates/Lot 26 Ducks Landing/Harnett	174872772
J0725-3355	B1GE	GABLE	1	1	Job Reference (optional)	



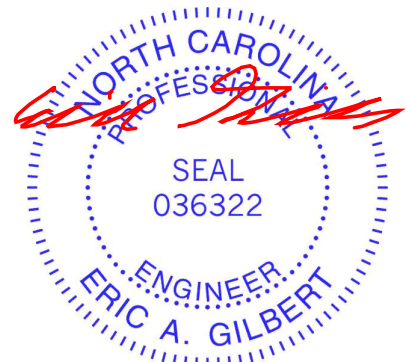
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.03	Vert(LL)	0.00	8	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	0.00	8	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	8	n/a	n/a		
BCDL 10.0	Code	IRC2021/TPI2014	Matrix-S						Weight: 91 lb	FT = 25%

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

**REACTIONS.** All bearings 13-0-0.  
 (lb) - Max Horz 2=-145(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 13, 11 except 14=-120(LC 12), 10=-120(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

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

- NOTES-**
- 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) gable end zone and C-C Corner(3E) -0-8-15 to 3-7-14, Exterior(2N) 3-7-14 to 6-6-0, Corner(3R) 6-6-0 to 10-10-13, Exterior(2N) 10-10-13 to 13-8-15 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8, 13, 11 except (jt=lb) 14=120, 10=120.



July 14,2025

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Job	Truss	Truss Type	Qty	Ply	Cav&Cates/Lot 26 Ducks Landing/Harnett	174872773
J0725-3355	P1	COMMON	4	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Jul 14 10:24:01 2025 Page 1  
ID:Bneafk58bCe7htVHgBow8Uz?rUL-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

-0-10-8

0-10-8

6-0-0

6-0-0

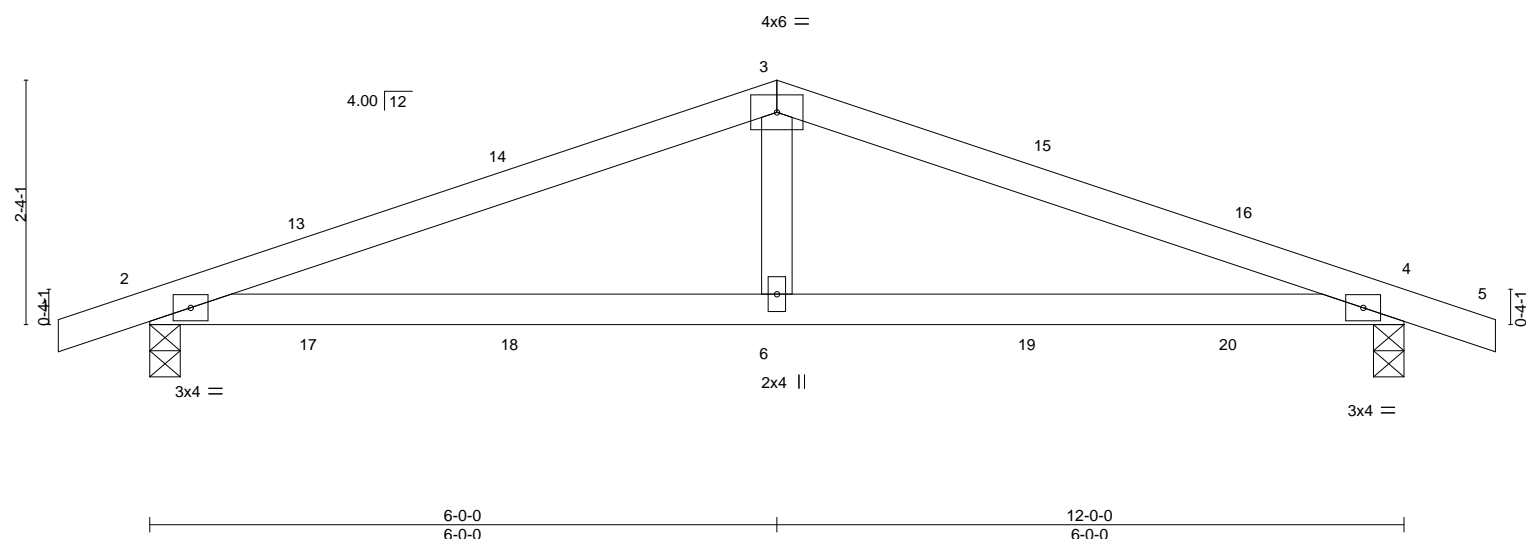
12-0-0

6-0-0

12-10-8

0-10-8

Scale = 1:22.0



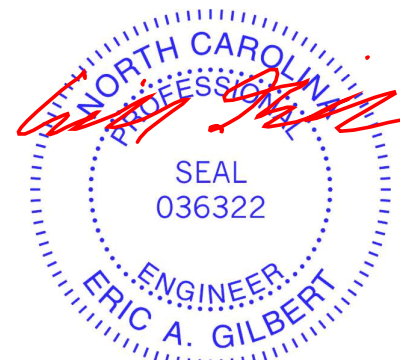
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	-0.04	MT20		244/190	
TCDL	10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.08				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	-0.02				
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS		Wind(LL)	0.14				
								Weight: 42 lb		FT = 25%	

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.1	TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	2x4 SP No.1	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SP No.2		

**REACTIONS.** (size) 2=0-3-8, 4=0-3-8  
Max Horz 2=27(LC 16)  
Max Uplift 2=-204(LC 8), 4=-204(LC 9)  
Max Grav 2=533(LC 1), 4=533(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-895/1485, 3-4=-895/1485  
BOT CHORD 2-6=-1323/819, 4-6=-1323/819  
WEBS 3-6=-540/267

- 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) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 6-0-0, Exterior(2R) 6-0-0 to 10-4-13, Interior(1) 10-4-13 to 12-10-8 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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) except (jt=lb) 2=204, 4=204.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

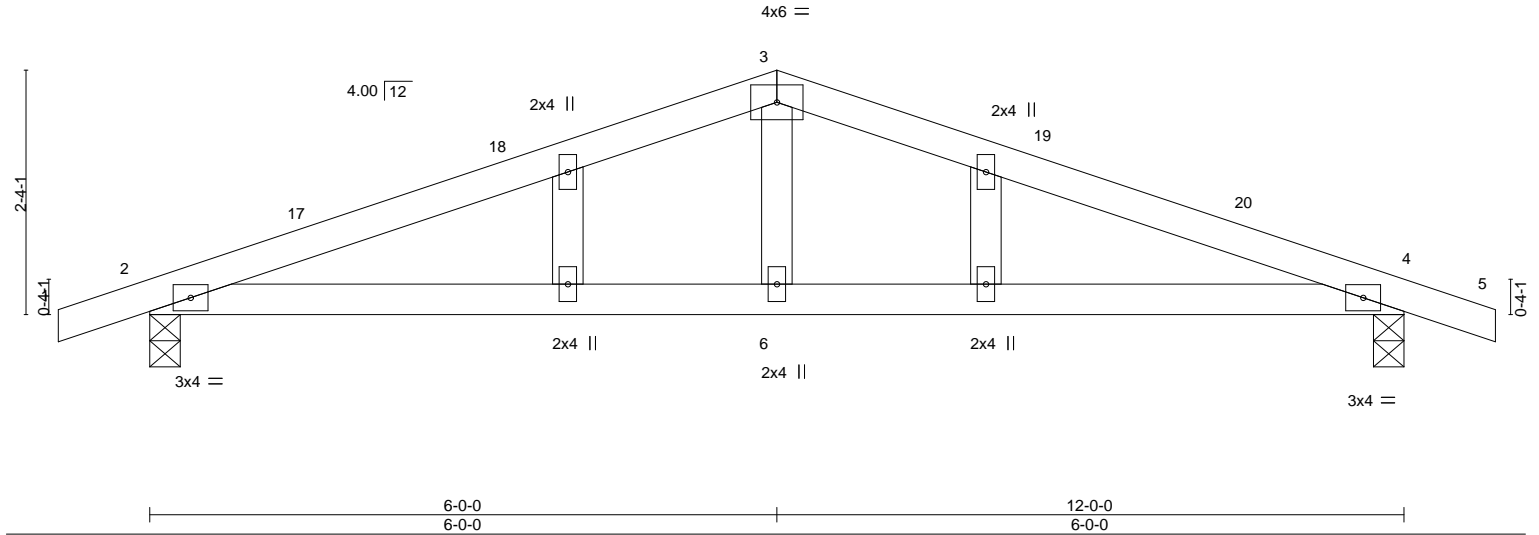


July 14,2025

Job	Truss	Truss Type	Qty	Ply	Cav&Cates/Lot 26 Ducks Landing/Harnett	
J0725-3355	P1GE	GABLE	1	1	Job Reference (optional)	I74872774

Comtech, Inc., Fayetteville, NC - 28314,

8.630 s Sep 26 2024 MiTek Industries, Inc. Mon Jul 14 10:24:02 2025 Page 1  
ID:Bneafk58bCe7htVHgBow8Uz?rUL-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 0.28	Vert(LL)	-0.04	6-13	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.30	Vert(CT)	-0.08	6-13	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.01	4	n/a	n/a		
BCDL 10.0	Code IRC2021/TPI2014		Matrix-AS	Wind(LL)	0.05	6-13	>999	240	Weight: 46 lb	FT = 25%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.2	
OTHERS 2x4 SP No.2	

**REACTIONS.** (size) 2=0-3-8, 4=0-3-8  
Max Horz 2=46(LC 12)  
Max Uplift 2=-157(LC 8), 4=-157(LC 9)  
Max Grav 2=533(LC 1), 4=533(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-895/499, 3-4=-895/499  
BOT CHORD 2-6=-378/819, 4-6=-378/819  
WEBS 3-6=0/267

- 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) gable end zone and C-C Exterior(2E) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 6-0-0, Exterior(2R) 6-0-0 to 10-4-13, Interior(1) 10-4-13 to 12-10-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=157, 4=157.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



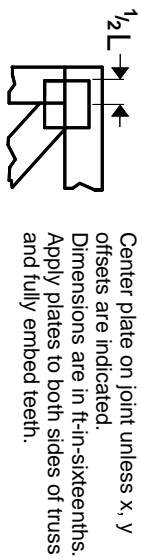
July 14, 2025

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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**

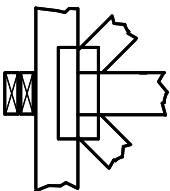
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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

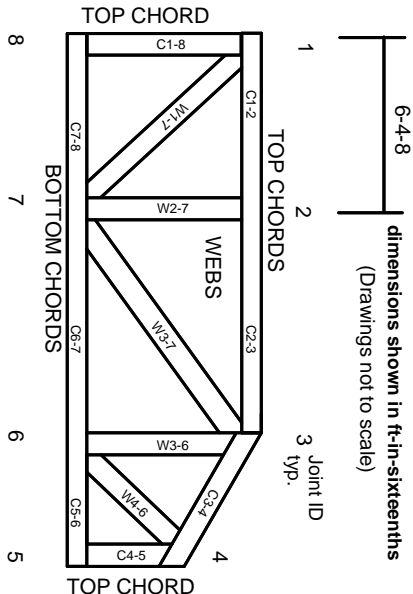


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

## 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