

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: 250116-A  
101 Ducks Landing

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: I75473146 thru I75473162

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

North Carolina COA: C-0844



August 8, 2025

Gilbert, Eric

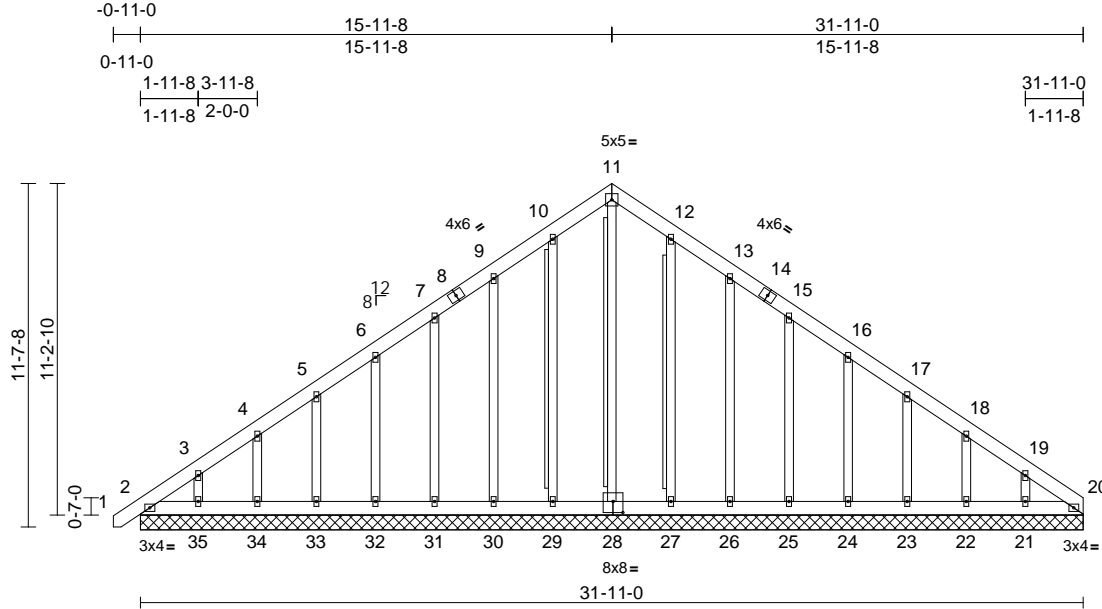
**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes),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

Job	Truss	Truss Type	Qty	Ply	101 Ducks Landing	I75473146
250116-A	A01GE	COMMON SUPPORTED GAB	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

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Page: 1



Scale = 1:78

Plate Offsets (X, Y): [28:0-4-0,0-4-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.01	20	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S							
Weight: 287 lb FT = 25%											

#### LUMBER

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
OTHERS	2x4 SP No.2 *Except* 0-0,0-0,0-0:2x4 SPF No.2(flat)

#### 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	T-Brace: 2x4 SPF No.2 - 11-28, 10-29, 12-27 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

#### REACTIONS

(size)	2=31-11-0, 20=31-11-0, 21=31-11-0, 22=31-11-0, 23=31-11-0, 24=31-11-0, 25=31-11-0, 26=31-11-0, 27=31-11-0, 28=31-11-0, 29=31-11-0, 30=31-11-0, 31=31-11-0, 32=31-11-0, 33=31-11-0, 34=31-11-0, 35=31-11-0
Max Horiz	2=330 (LC 9)
Max Uplift	2=-82 (LC 8), 20=-31 (LC 11), 21=-107 (LC 13), 22=-85 (LC 13), 23=-88 (LC 13), 24=-87 (LC 13), 25=-88 (LC 13), 26=-102 (LC 13), 27=-44 (LC 13), 29=-54 (LC 12), 30=-99 (LC 12), 31=-88 (LC 12), 32=-87 (LC 12), 33=-87 (LC 12), 34=-87 (LC 12), 35=-99 (LC 12)

#### FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/23, 2-3=-346/249, 3-4=-265/216, 4-5=-215/189, 5-6=-183/165, 6-7=-162/159, 7-9=-143/203, 9-10=-154/251, 10-11=-178/276, 11-12=-178/276, 12-13=-154/230, 13-15=-108/152, 15-16=-78/88, 16-17=-94/57, 17-18=-116/82, 18-19=-191/108, 19-20=-276/143
BOT CHORD	2-35=-116/250, 34-35=-116/250, 33-34=-116/250, 32-33=-116/250, 31-32=-116/250, 30-31=-116/250, 29-30=-116/250, 27-29=-116/250, 26-27=-116/250, 25-26=-116/250, 24-25=-116/250, 23-24=-116/250, 22-23=-116/250, 21-22=-116/250, 20-21=-116/250
WEBS	11-28=-194/73, 10-29=-142/79, 9-30=-138/123, 7-31=-136/112, 6-32=-137/111, 5-33=-136/111, 4-34=-137/112, 3-35=-141/120, 12-27=-129/68, 13-26=-141/126, 15-25=-136/112, 16-24=-136/111, 17-23=-137/111, 18-22=-135/110, 19-21=-149/126

#### 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) exterior zone and C-C Corner(3E) -0-9-7 to 3-7-6, Exterior(2N) 3-7-6 to 15-11-8, Corner(3R) 15-11-8 to 20-4-5, Exterior(2N) 20-4-5 to 31-11-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 (||) MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.



August 8,2025

Continued on page 2

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**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	101 Ducks Landing	I75473146
250116-A	A01GE	COMMON SUPPORTED GAB	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Thu Aug 07 09:46:23  
ID:wthNvmIRXnTiJBRs?cpWA9zC275-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f

Page: 2

- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 82 lb uplift at joint 2, 54 lb uplift at joint 29, 99 lb uplift at joint 30, 88 lb uplift at joint 31, 87 lb uplift at joint 32, 87 lb uplift at joint 33, 87 lb uplift at joint 34, 99 lb uplift at joint 35, 44 lb uplift at joint 27, 102 lb uplift at joint 26, 88 lb uplift at joint 25, 87 lb uplift at joint 24, 88 lb uplift at joint 23, 85 lb uplift at joint 22, 107 lb uplift at joint 21 and 31 lb uplift at joint 20.
- 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
- 11) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

LOAD CASE(S) Standard



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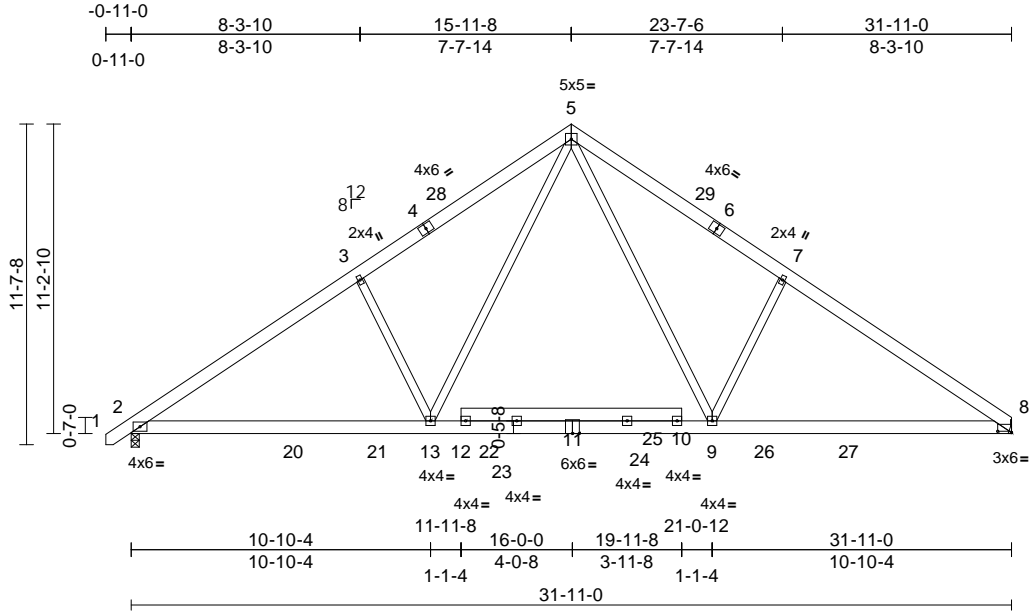
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	101 Ducks Landing	I75473147
250116-A	A02	FINK	10	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

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Page: 1



Scale = 1:83.5

Plate Offsets (X, Y): [2:0-0-14,Edge], [8:0-6-0,0-0-9]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	-0.13	9-19	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.22	9-19	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.32	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS		Wind(LL)	0.05	9-19	>999	240	Weight: 238 lb	FT = 25%

#### LUMBER

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

- 7) 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.

LOAD CASE(S) Standard

#### BRACING

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

#### REACTIONS

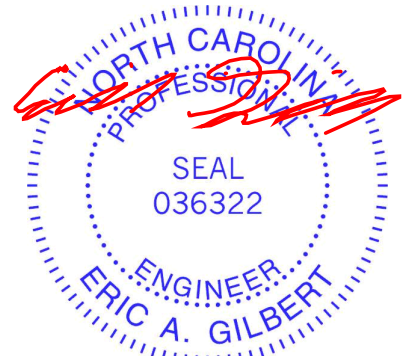
(size) 2=0-3-8, 8= Mechanical  
Max Horiz 2=263 (LC 11)  
Max Grav 2=1752 (LC 19), 8=1707 (LC 20)

#### FORCES

(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/26, 2-3=-2436/198, 3-5=-2319/290,  
5-7=-2321/293, 7-8=-2438/201  
BOT CHORD 2-13=-60/2148, 9-13=0/1397, 8-9=-61/1967  
WEBS 3-13=-508/305, 5-13=-57/1236,  
5-9=-59/1239, 7-9=-510/306

#### 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) -0-9-7 to 3-7-6, Interior (1) 3-7-6 to 15-11-8, Exterior(2R) 15-11-8 to 20-4-5, Interior (1) 20-4-5 to 31-11-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 200.0lb AC unit load placed on the bottom chord, 15-11-8 from left end, supported at two points, 5-0-0 apart.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.



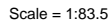
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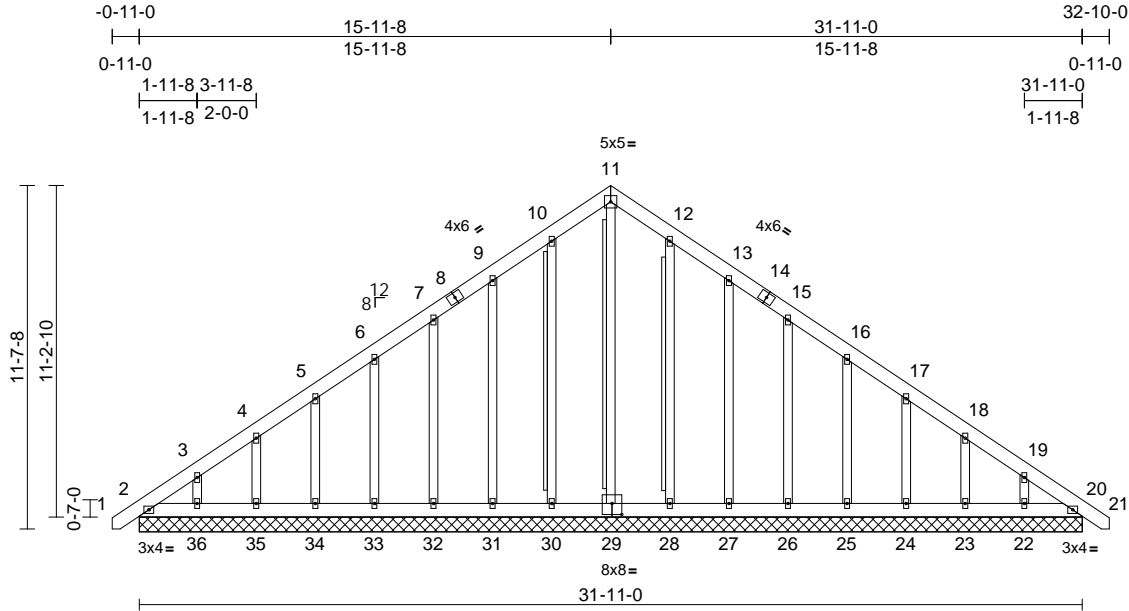
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	101 Ducks Landing	I75473149
250116-A	A04GE	COMMON SUPPORTED GAB	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

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Page: 1



Scale = 1:78

Plate Offsets (X, Y): [29:0-4-0,0-4-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.01	20	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S							
Weight: 289 lb FT = 25%											

#### LUMBER

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
OTHERS	2x4 SP No.2 *Except* 0-0,0-0,0-0:2x4 SPF No.2(flat)

#### 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	T-Brace: 2x4 SPF No.2 - 11-29, 10-30, 12-28 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

#### REACTIONS

(size)	2=31-11-0, 20=31-11-0, 22=31-11-0, 23=31-11-0, 24=31-11-0, 25=31-11-0, 26=31-11-0, 27=31-11-0, 28=31-11-0, 29=31-11-0, 30=31-11-0, 31=31-11-0, 32=31-11-0, 33=31-11-0, 34=31-11-0, 35=31-11-0, 36=31-11-0
Max Horiz	2=-334 (LC 10)
Max Uplift	2=-84 (LC 8), 20=-21 (LC 9), 22=-97 (LC 13), 23=-87 (LC 13), 24=-87 (LC 13), 25=-87 (LC 13), 26=-88 (LC 13), 27=-103 (LC 13), 28=-43 (LC 13), 30=-54 (LC 12), 31=-99 (LC 12), 32=-88 (LC 12), 33=-87 (LC 12), 34=-87 (LC 12), 35=-87 (LC 12), 36=-99 (LC 12)

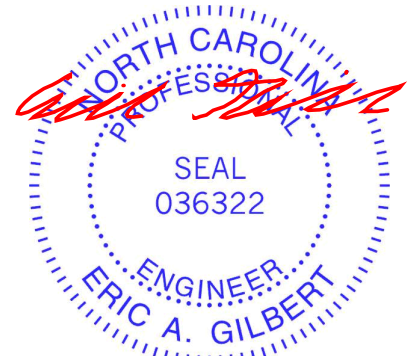
#### FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/23, 2-3=-343/252, 3-4=-262/219, 4-5=-213/192, 5-6=-185/167, 6-7=-164/165, 7-9=-144/208, 9-10=-157/257, 10-11=-180/285, 11-12=-181/286, 12-13=-157/240, 13-15=-111/162, 15-16=-76/91, 16-17=-91/59, 17-18=-112/80, 18-19=-186/108, 19-20=-266/138, 20-21=0/23
BOT CHORD	2-36=-119/263, 35-36=-119/263, 34-35=-119/263, 33-34=-119/263, 32-33=-119/263, 31-32=-119/263, 30-31=-119/263, 28-30=-119/263, 27-28=-119/263, 26-27=-119/263, 25-26=-119/263, 24-25=-119/263, 23-24=-119/263, 22-23=-119/263, 20-22=-119/263
WEBS	11-29=-200/75, 10-30=-142/78, 9-31=-138/123, 7-32=-136/112, 6-33=-137/111, 5-34=-136/111, 4-35=-137/112, 3-36=-141/120, 12-28=-129/67, 13-27=-142/127, 15-26=-136/112, 16-25=-136/111, 17-24=-137/111, 18-23=-137/112, 19-22=-139/118

#### 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) exterior zone and C-C Corner(3E) -0-9-7 to 3-7-6, Exterior(2N) 3-7-6 to 15-11-8, Corner(3R) 15-11-8 to 20-4-5, Exterior(2N) 20-4-5 to 32-8-7 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.



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Continued on page 2

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Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	101 Ducks Landing	I75473149
250116-A	A04GE	COMMON SUPPORTED GAB	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

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ID:wthNvmIRXnTiJBRs?cpWA9zC275-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 2

- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 84 lb uplift at joint 2, 54 lb uplift at joint 30, 99 lb uplift at joint 31, 88 lb uplift at joint 32, 87 lb uplift at joint 33, 87 lb uplift at joint 34, 87 lb uplift at joint 35, 99 lb uplift at joint 36, 43 lb uplift at joint 28, 103 lb uplift at joint 27, 88 lb uplift at joint 26, 87 lb uplift at joint 25, 87 lb uplift at joint 24, 87 lb uplift at joint 23, 97 lb uplift at joint 22 and 21 lb uplift at joint 20.
- 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 20.
- 11) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

LOAD CASE(S) Standard



August 8,2025

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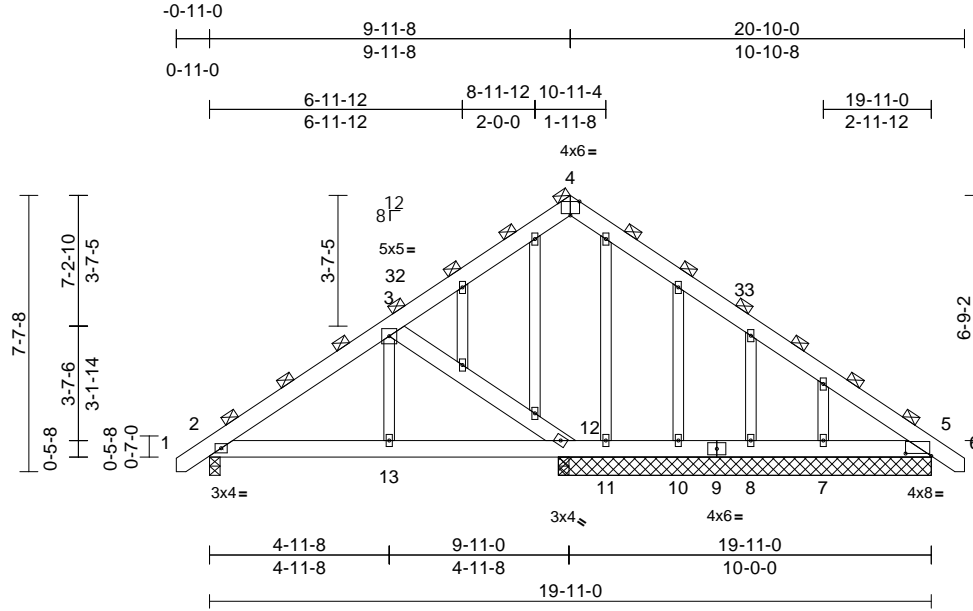
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**TRENCO**  
A MiTek Affiliate  
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	101 Ducks Landing	175473150
250116-A	B01GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

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Page: 1



Scale = 1:63.6

Plate Offsets (X, Y): [4:0-3-0,Edge], [5:0-8-8,0-0-13]

Loading	(psf)	Spacing	2-0-8	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	-0.01	7-24	>999	360	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.01	13-27	>999	240	
BCLL	0.0*	Rep Stress Incr	NO	WB	0.05	Horz(CT)	0.01	22	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS		Wind(LL)	0.01	7-24	>999	240	Weight: 159 lb FT = 25%

#### LUMBER

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

#### BRACING

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

REACTIONS	(size)	2=0-3-8, 5=10-3-8, 7=10-3-8, 8=10-3-8, 10=10-3-8, 11=10-3-8, 12=0-3-8
	Max Horiz	2=-219 (LC 10)
	Max Uplift	2=-149 (LC 12), 5=-25 (LC 12), 7=-349 (LC 13), 8=-122 (LC 26), 10=-10 (LC 13), 11=-13 (LC 26), 12=-68 (LC 12)
	Max Grav	2=652 (LC 19), 5=360 (LC 1), 7=569 (LC 20), 8=166 (LC 13), 10=192 (LC 20), 11=80 (LC 18), 12=438 (LC 19)

#### FORCES

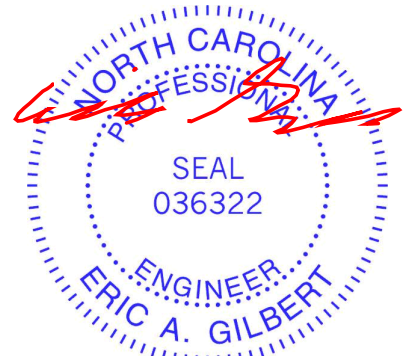
	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/27, 2-3=-781/215, 3-4=-457/246, 4-5=-554/187, 5-6=0/27, 3-12=-497/220
BOT CHORD	2-13=-176/724, 12-13=-176/724, 11-12=0/315, 10-11=0/315, 8-10=0/315, 7-8=0/315, 5-7=-10/315
WEBS	3-13=0/200

#### 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) exterior zone and C-C Exterior(2E) -0-9-7 to 3-7-6, Interior (1) 3-7-6 to 9-11-8, Exterior(2R) 9-11-8 to 14-4-5, Interior (1) 14-4-5 to 20-8-7 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 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 3-06-00 tall by 2-00-00 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 25 lb uplift at joint 5, 13 lb uplift at joint 11, 10 lb uplift at joint 10, 122 lb uplift at joint 8, 349 lb uplift at joint 7, 149 lb uplift at joint 2, 68 lb uplift at joint 12 and 25 lb uplift at joint 5.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



August 8, 2025

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Edenton, NC 27932

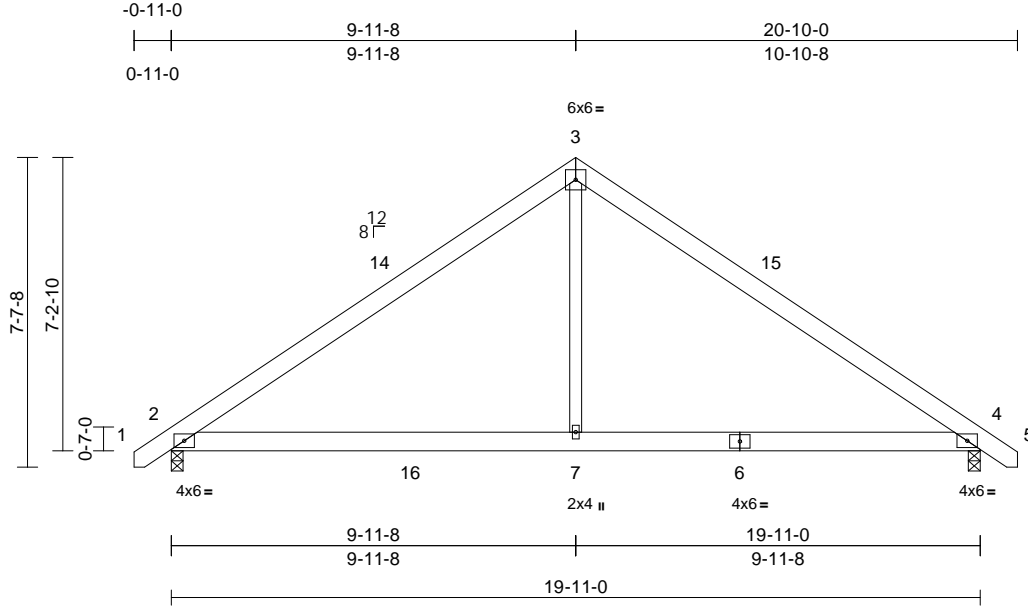


Job	Truss	Truss Type	Qty	Ply	101 Ducks Landing	I75473151
250116-A	B02	COMMON	4	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Thu Aug 07 09:46:25  
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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	-0.10	7-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.16	7-10	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS		Wind(LL)	0.06	7-10	>999	240	Weight: 118 lb	FT = 25%

#### LUMBER

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

- 6) 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.

LOAD CASE(S) Standard

#### BRACING

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

**REACTIONS** (size) 2=0-3-8, 4=0-3-8  
Max Horiz 2=-172 (LC 10)  
Max Uplift 2=-53 (LC 12), 4=-53 (LC 13)  
Max Grav 2=1056 (LC 19), 4=1056 (LC 20)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/26, 2-3=-1232/228, 3-4=-1232/228, 4-5=0/26  
BOT CHORD 2-7=-42/993, 4-7=-38/993  
WEBS 3-7=0/746

#### 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) -0-9-7 to 3-7-6, Interior (1) 3-7-6 to 9-11-8, Exterior(2R) 9-11-8 to 14-4-5, Interior (1) 14-4-5 to 20-8-7 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 3-06-00 tall by 2-00-00 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 53 lb uplift at joint 2 and 53 lb uplift at joint 4.



August 8, 2025

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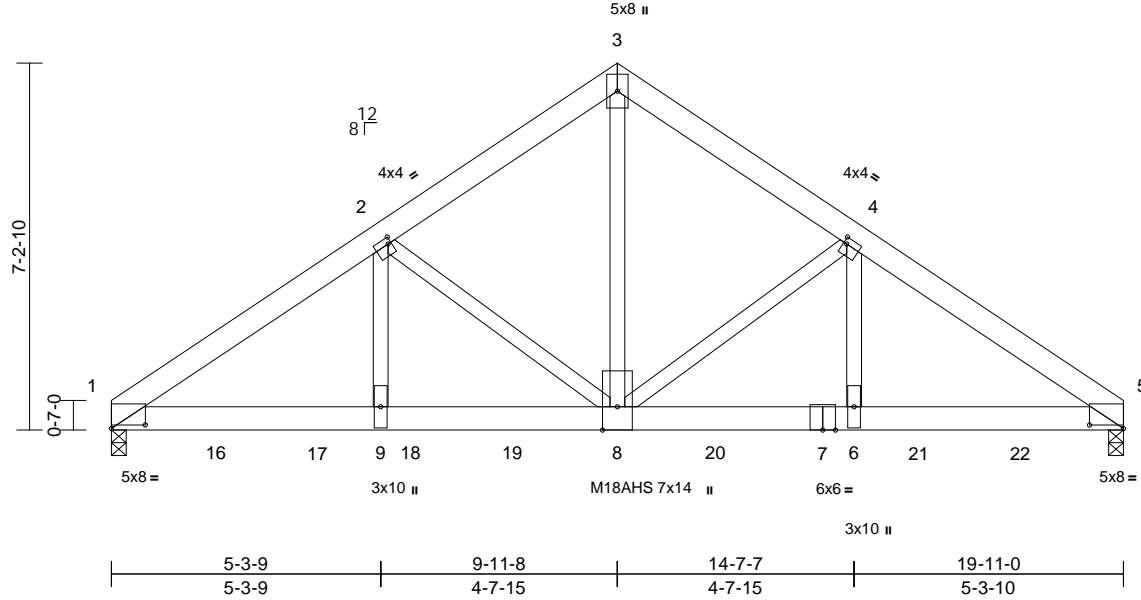
Job	Truss	Truss Type	Qty	Ply	101 Ducks Landing	175473152
250116-A	B03-GR	HOWE	1	2	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 E Jul 10 2025 Print: 25.2.0 E Jul 10 2025 MiTek Industries, Inc. Thu Aug 07 16:54:08

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Scale = 1:45.3

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	-0.11	8-9	>999	360	MT20 244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.20	8-9	>999	240	M18AHS 186/179
BCLL	0.0*	Rep Stress Incr	NO	WB	0.71	Horz(CT)	0.06	5	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS		Wind(LL)	-0.01	8-9	>999	240	Weight: 278 lb FT = 25%

#### LUMBER

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP 2400F 2.0E  
WEBS 2x4 SP No.2 \*Except\* 8-3:2x4 SP No.1

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 4-4-13 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (lb/size) 1=6903/0-3-8, 5=6895/0-3-8  
Max Horiz 1=159 (LC 7)  
Max Grav 1=8339 (LC 15), 5=8329 (LC 16)

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

TOP CHORD 1-2=-12302/0, 2-3=-8461/0, 3-4=-8462/0, 4-5=-12235/0  
BOT CHORD 1-16=0/10343, 16-17=0/10343, 9-17=0/10343, 9-18=0/10343, 18-19=0/10343, 8-19=0/10343, 8-20=0/10178, 7-20=0/10178, 6-7=0/10178, 6-21=0/10178, 21-22=0/10178, 5-22=0/10178

WEBS 2-9=0/4359, 3-8=0/8995, 4-6=0/4276, 2-8=-4150/0, 4-8=-4083/0

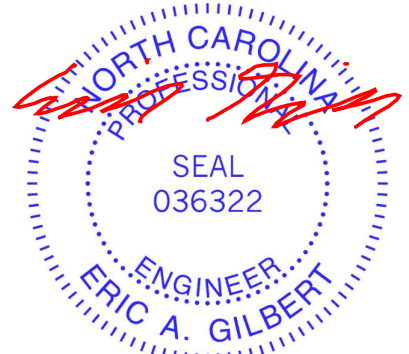
#### NOTES

- 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: 2x6 - 2 rows staggered at 0-6-0 oc.  
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1687 lb down at 2-0-12, 1687 lb down at 4-0-12, 1687 lb down at 5-10-12, 1687 lb down at 7-10-12, 1687 lb down at 9-10-12, 1687 lb down at 11-10-12, 1687 lb down at 13-10-12, and 1687 lb down at 15-10-12, and 1687 lb down at 17-10-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

#### LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (lb/ft)  
Vert: 10-13=-20, 1-3=-60, 3-5=-60  
Concentrated Loads (lb)  
Vert: 7=-1356 (B), 8=-1356 (B), 16=-1356 (B), 17=-1356 (B), 18=-1356 (B), 19=-1356 (B), 20=-1356 (B), 21=-1356 (B), 22=-1356 (B)



August 8, 2025

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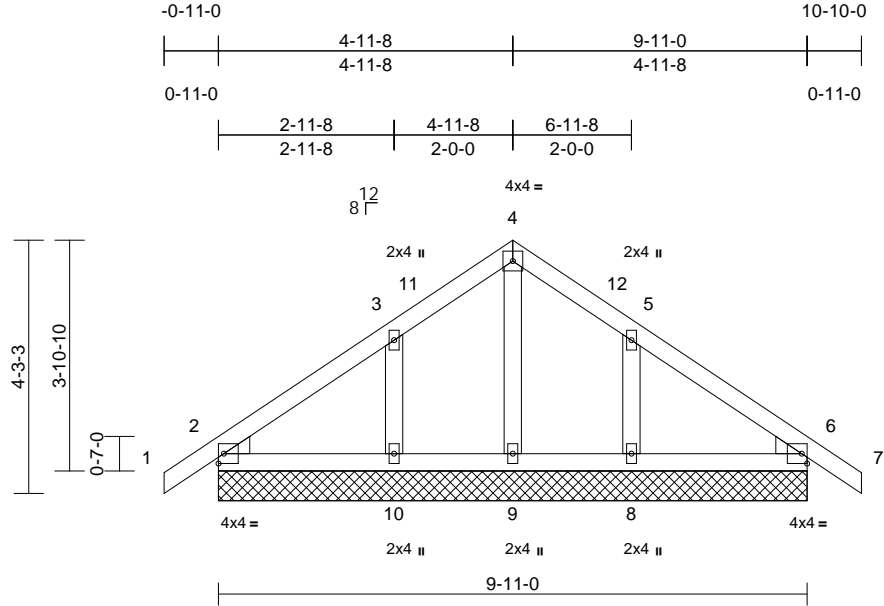
Job	Truss	Truss Type	Qty	Ply	101 Ducks Landing	I75473153
250116-A	D01GE	COMMON SUPPORTED GAB	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

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Scale = 1:38.8

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.09	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	6	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S						Weight: 48 lb	FT = 25%

#### LUMBER

TOP CHORD	2x4 SP No.1
BOT CHORD	2x4 SP No.1
OTHERS	2x4 SP No.2
WEDGE	Left: 2x4 SP No.2 Right: 2x4 SP No.2

#### BRACING

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

REACTIONS	(size)	2=9-11-0, 6=9-11-0, 8=9-11-0, 9=9-11-0, 10=9-11-0
	Max Horiz	2=117 (LC 11)
	Max Uplift	2=-30 (LC 13), 6=-37 (LC 13), 8=-137 (LC 13), 10=-140 (LC 12)
	Max Grav	2=173 (LC 1), 6=173 (LC 1), 8=265 (LC 20), 9=111 (LC 22), 10=267 (LC 19)

#### FORCES

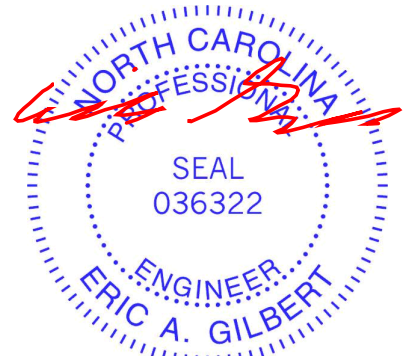
	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/20, 2-3=-106/84, 3-4=-95/171, 4-5=-94/173, 5-6=-76/53, 6-7=0/20
BOT CHORD	2-10=-45/140, 9-10=-45/140, 8-9=-45/140, 6-8=-45/140
WEBS	4-9=-110/17, 3-10=-205/286, 5-8=-205/284

#### 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) exterior zone and C-C Corner(3E) -0-11-0 to 3-5-13, Exterior(2N) 3-5-13 to 4-11-8, Corner(3R) 4-11-8 to 9-4-5, Exterior (2N) 9-4-5 to 10-10-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 2, 37 lb uplift at joint 6, 140 lb uplift at joint 10 and 137 lb uplift at joint 8.

LOAD CASE(S) Standard



August 8, 2025

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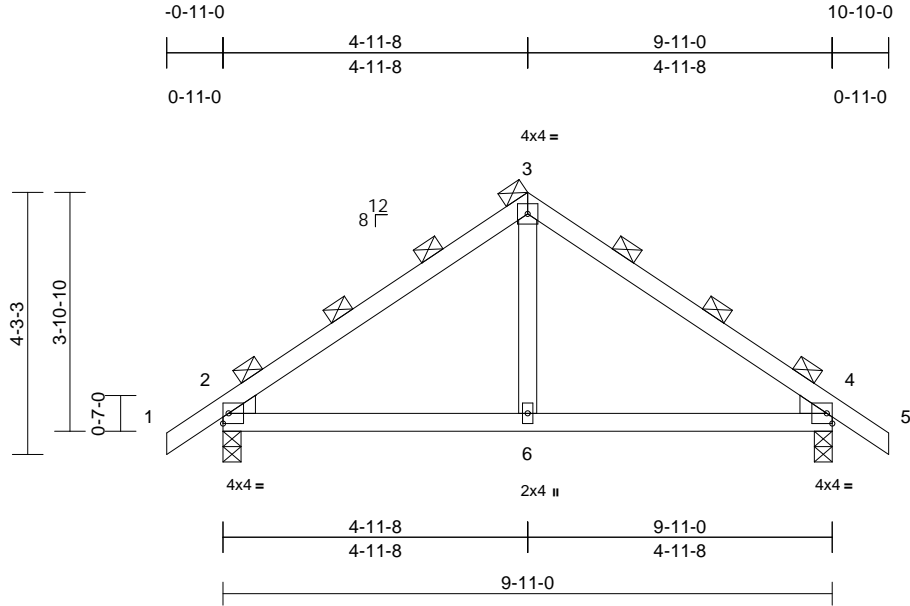
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	101 Ducks Landing	I75473154
250116-A	D02	COMMON	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

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Page: 1



<b>Loading</b>	(psf)	<b>Spacing</b>	2-0-8	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	-0.02	6-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.03	6-9	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.05	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS		Wind(LL)	0.02	6-9	>999	240	Weight: 42 lb	FT = 25%

#### LUMBER

TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
WEBS 2x4 SP No.2  
WEDGE Left: 2x4 SP No.2  
Right: 2x4 SP No.2

#### BRACING

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

**REACTIONS** (size) 2=0-3-8, 4=0-3-8  
Max Horiz 2=-96 (LC 10)  
Max Uplift 2=-34 (LC 12), 4=-34 (LC 13)  
Max Grav 2=461 (LC 1), 4=461 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum  
Tension

TOP CHORD 1-2=0/31, 2-3=-453/193, 3-4=-453/194,  
4-5=0/31

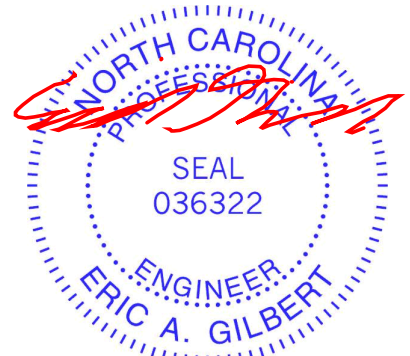
BOT CHORD 2-6=-37/321, 4-6=-37/321  
WEBS 3-6=-2/221

#### 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) -0-11-0 to 3-5-13, Interior (1) 3-5-13 to 4-11-8, Exterior(2R) 4-11-8 to 9-4-11, Interior (1) 9-4-11 to 10-10-0 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 34 lb uplift at joint 2 and 34 lb uplift at joint 4.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard



August 8, 2025

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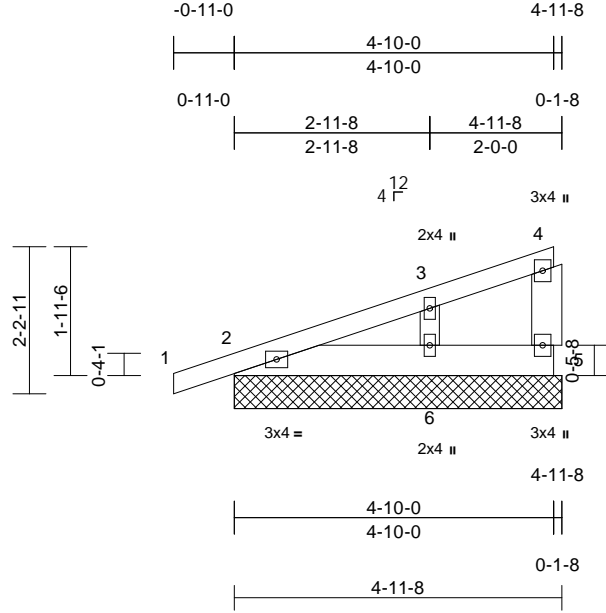
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	101 Ducks Landing	I75473155
250116-A	M01GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Thu Aug 07 09:46:25  
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Page: 1



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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horz(CT)	n/a	-	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 24 lb FT = 25%

#### LUMBER

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

- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 17 lb uplift at joint 5, 68 lb uplift at joint 2 and 77 lb uplift at joint 6.

**LOAD CASE(S)** Standard

#### BRACING

TOP CHORD	Structural wood sheathing directly applied or 4-11-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS

(size)	2=4-11-8, 5=4-11-8, 6=4-11-8
Max Horiz	2=94 (LC 8)
Max Uplift	2=-68 (LC 8), 5=-17 (LC 8), 6=-77 (LC 12)
Max Grav	2=162 (LC 1), 5=38 (LC 1), 6=233 (LC 1)

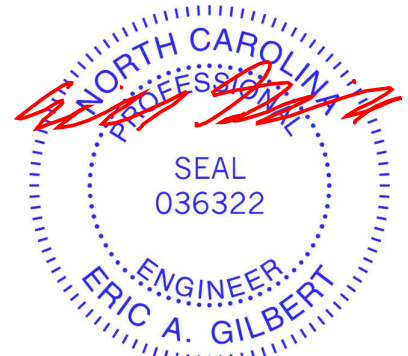
#### FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/20, 2-3=-141/51, 3-4=-27/8, 4-5=-30/63
BOT CHORD	2-6=0/0, 5-6=0/0
WEBS	3-6=-177/340

#### 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) exterior zone and C-C Corner(3E) -0-11-0 to 3-5-13, Exterior(2N) 3-5-13 to 4-8-12 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.



August 8, 2025

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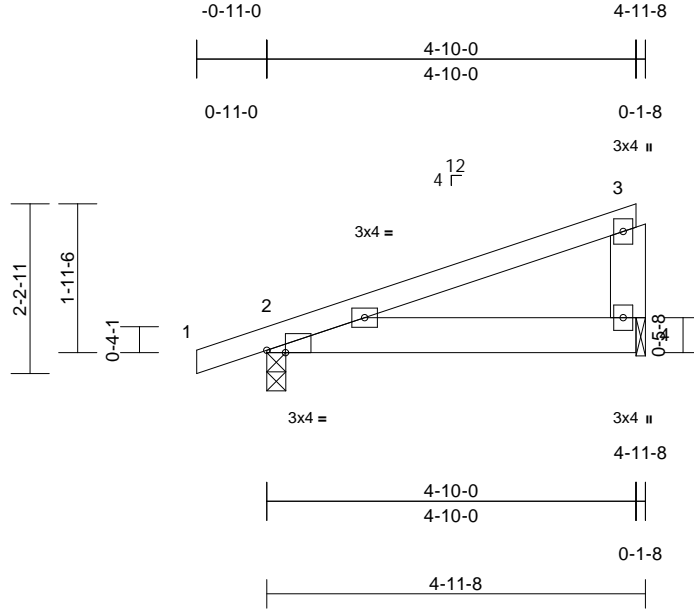


Job	Truss	Truss Type	Qty	Ply	101 Ducks Landing	
250116-A	M02	Monopitch	3	1	Job Reference (optional)	I75473156

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Thu Aug 07 09:46:25  
ID:wthNvmIRXnTjBRs?cpWA9zC275-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWRCDoi7J4zJC?i

Page: 1



Scale = 1:30.2

Plate Offsets (X, Y): [2:0-2-15,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	-0.01	4-6	>999	360	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.02	4-6	>999	240	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS		Wind(LL)	0.02	4-6	>999	240	Weight: 23 lb FT = 25%

#### LUMBER

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

#### BRACING

TOP CHORD Structural wood sheathing directly applied, except end verticals.  
BOT CHORD Rigid ceiling directly applied.

**REACTIONS** (size) 2=0-3-0, 4=0-1-8  
Max Horiz 2=67 (LC 8)  
Max Uplift 2=-105 (LC 8), 4=-75 (LC 8)  
Max Grav 2=254 (LC 1), 4=177 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension

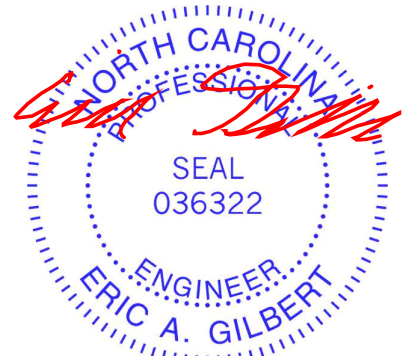
TOP CHORD 1-2=0/20, 2-3=-107/29, 3-4=-96/126  
BOT CHORD 2-4=-127/93

#### 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) -0-11-0 to 3-5-13, Interior (1) 3-5-13 to 4-8-12 zone; porch left 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 105 lb uplift at joint 2 and 75 lb uplift at joint 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.

**LOAD CASE(S)** Standard



August 8,2025

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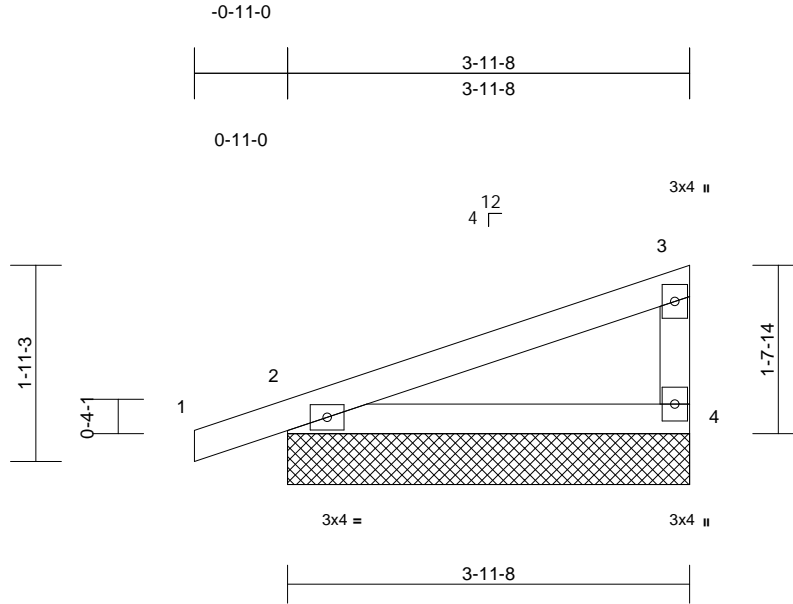


Job	Truss	Truss Type	Qty	Ply	101 Ducks Landing	I75473157
250116-A	M03GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Thu Aug 07 09:46:26  
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Page: 1



Scale = 1:22.7

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	n/a	-	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 15 lb	FT = 25%

#### LUMBER

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

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 3-11-8 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS (size) 2=3-11-8, 4=3-11-8

Max Horiz 2=78 (LC 8)  
Max Uplift 2=-85 (LC 8), 4=-51 (LC 12)  
Max Grav 2=214 (LC 1), 4=146 (LC 1)

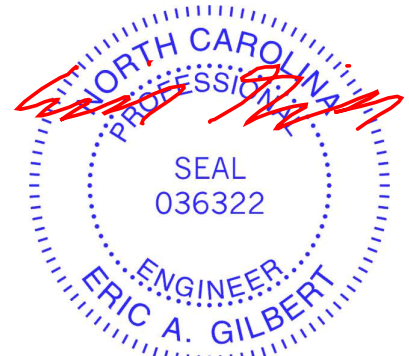
#### FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/15, 2-3=-86/33, 3-4=-109/219  
BOT CHORD 2-4=0/0

#### 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) exterior zone and C-C Corner(3E) -0-11-0 to 3-5-13, Exterior(2N) 3-5-13 to 3-9-12 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 51 lb uplift at joint 4 and 85 lb uplift at joint 2.

LOAD CASE(S) Standard



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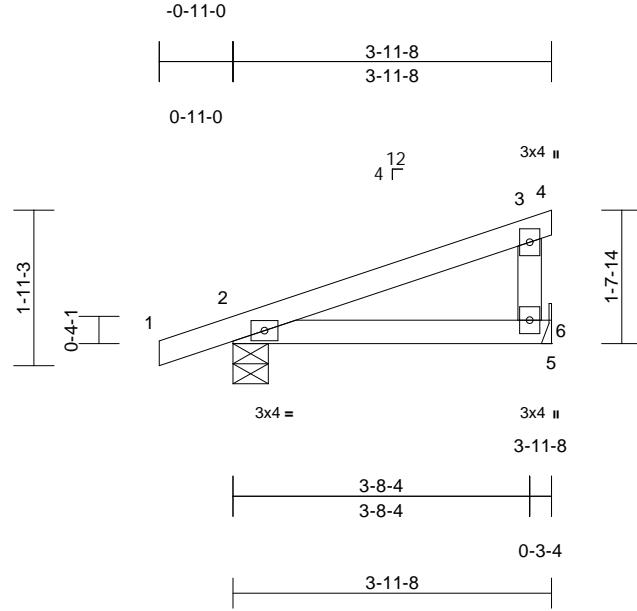
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	101 Ducks Landing	I75473158
250116-A	M04	Monopitch	4	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Thu Aug 07 09:46:26  
ID:wthNvmIRXnTiJBRs?cpWA9zC275-RfC?PsB70Hg3NSgPqnL8w3ulTXbGKWRCDoi7J4zJC?f

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Scale = 1:28.6

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	-0.01	6-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.02	6-9	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MP		Wind(LL)	0.01	6-9	>999	240	Weight: 15 lb	FT = 25%

#### LUMBER

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

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 3-11-8 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 2=0-5-4, 6= Mechanical  
Max Horiz 2=57 (LC 8)  
Max Uplift 2=-46 (LC 8), 6=-22 (LC 12)  
Max Grav 2=209 (LC 1), 6=152 (LC 1)

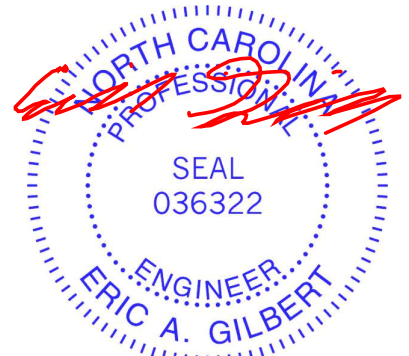
**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/17, 2-3=-72/29, 3-4=-2/0, 3-6=-102/128  
BOT CHORD 2-6=-45/86, 5-6=0/0

#### 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 6 and 46 lb uplift at joint 2.

**LOAD CASE(S)** Standard



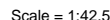
August 8, 2025

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

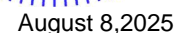
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/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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Page: 1

**LOAD CASE(S)** Standard



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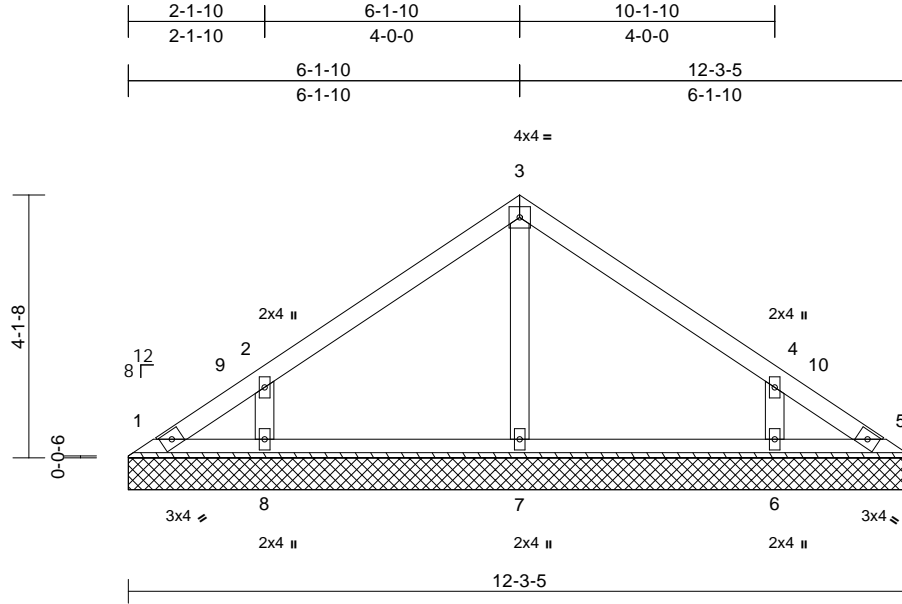
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	101 Ducks Landing	I75473160
250116-A	VB2	Valley	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Thu Aug 07 09:46:26  
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Page: 1



Scale = 1:36.1

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	5	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 47 lb FT = 25%

#### 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.

<b>REACTIONS</b>	(size)	1=12-3-5, 5=12-3-5, 6=12-3-5, 7=12-3-5, 8=12-3-5
	Max Horiz	1=91 (LC 9)
	Max Uplift	1=-27 (LC 8), 5=-9 (LC 9), 6=-93 (LC 13), 8=-93 (LC 12)
	Max Grav	1=61 (LC 20), 5=47 (LC 19), 6=314 (LC 20), 7=264 (LC 1), 8=314 (LC 19)

#### FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-92/78, 2-3=-122/107, 3-4=-114/104, 4-5=-62/46
BOT CHORD	1-8=-23/52, 7-8=-23/52, 6-7=-23/52, 5-6=-23/52
WEBS	3-7=-178/42, 2-8=-251/228, 4-6=-251/228

#### 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) 0-5-15 to 4-10-12, Interior (1) 4-10-12 to 6-2-3, Exterior(2R) 6-2-3 to 10-7-0, Interior (1) 10-7-0 to 11-10-8 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 requires continuous bottom chord bearing.

- Gable studs spaced at 4-0-0 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 1, 9 lb uplift at joint 5, 93 lb uplift at joint 8 and 93 lb uplift at joint 6.

**LOAD CASE(S)** Standard



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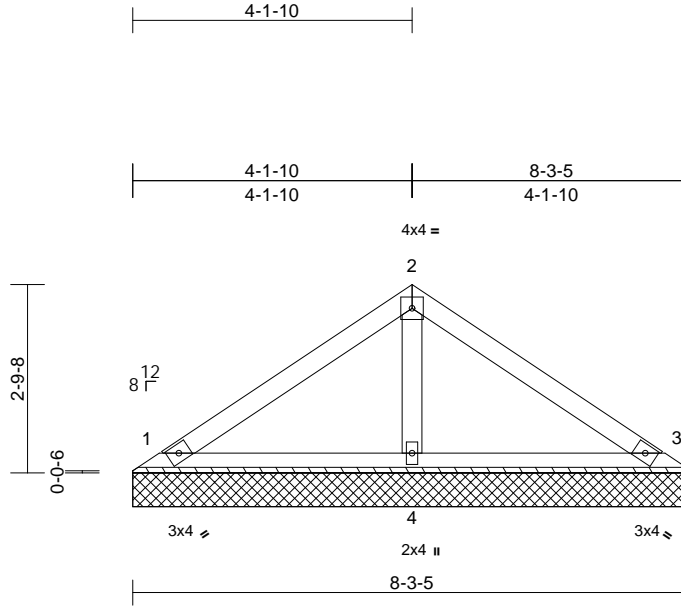
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	101 Ducks Landing	I75473161
250116-A	VB3	Valley	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

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Page: 1



Scale = 1:34.1

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 29 lb	FT = 25%

#### 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=8-3-5, 3=8-3-5, 4=8-3-5
Max Horiz	1=59 (LC 11)
Max Uplift	1=-25 (LC 12), 3=-31 (LC 13)
Max Grav	1=160 (LC 1), 3=160 (LC 1), 4=269 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

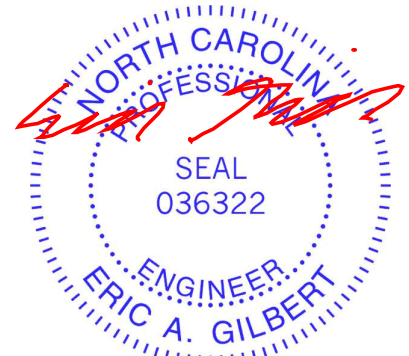
TOP CHORD	1-2=-97/68, 2-3=-89/68
BOT CHORD	1-4=-11/43, 3-4=-11/43
WEBS	2-4=-177/115

#### 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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 1 and 31 lb uplift at joint 3.

LOAD CASE(S) Standard



August 8,2025

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/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)

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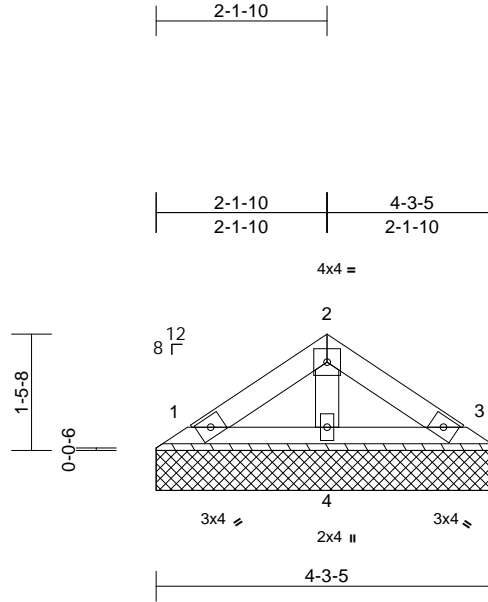
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	101 Ducks Landing	I75473162
250116-A	VB4	Valley	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Thu Aug 07 09:46:26  
ID:wthNvmIRXnTjJBRs?cpWA9zC275-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWRCDoi7J4zJC?i

Page: 1



Scale = 1:28.8

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.01	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 14 lb	FT = 25%

#### 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 4-4-7 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS

(size)	1=4-3-5, 3=4-3-5, 4=4-3-5
Max Horiz	1=27 (LC 11)
Max Uplift	1=-12 (LC 12), 3=-14 (LC 13)
Max Grav	1=74 (LC 1), 3=74 (LC 1), 4=123 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

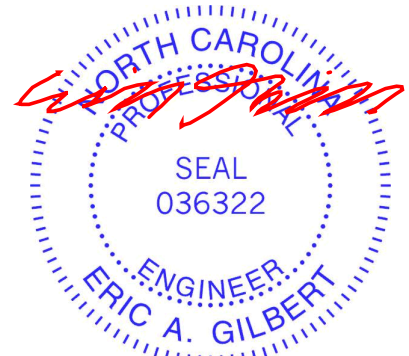
TOP CHORD	1-2=-45/38, 2-3=-41/38
BOT CHORD	1-4=-5/20, 3-4=-5/20
WEBS	2-4=-81/68

#### 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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 12 lb uplift at joint 1 and 14 lb uplift at joint 3.

LOAD CASE(S) Standard



August 8, 2025

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# 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.

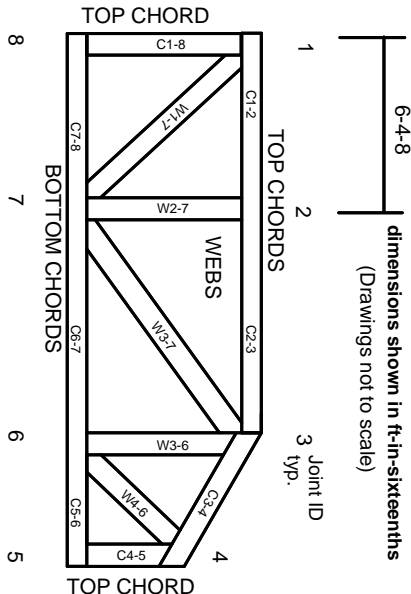
## BEARING



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