

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: 250380-A  
Lexington Plan

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: I75712807 thru I75712829

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

North Carolina COA: C-0844



August 19, 2025

Gilbert, Eric

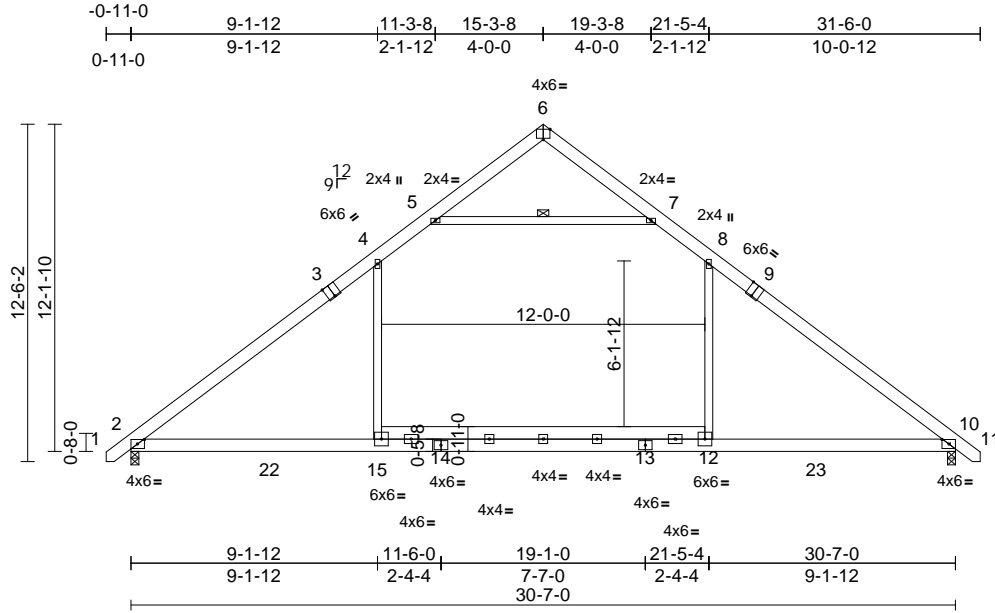
**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), 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	Lexington Plan
250380-A	A1	COMMON	5	1	Job Reference (optional)
					I75712807

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Mon Aug 18 13:03:48  
ID:cOQ8L2C?CnzLwQ?En3p?sKzuAkG-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:85.5

Plate Offsets (X, Y): [2:0-3-1,0-2-0], [3:0-3-0,Edge], [6:0-3-0,Edge], [9:0-3-0,Edge], [10:0-3-1,0-2-0]

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	0.66	Vert(LL)	-0.36	15-18	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.46	15-18	>803	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.03	10	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS		Wind(LL)	0.46	15-18	>799	240	Weight: 227 lb	FT = 20%

#### 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.  
WEBS 1 Row at midpt 5-7

REACTIONS (size) 2=0-3-8, 10=0-3-8

Max Horiz 2=-385 (LC 10)  
Max Uplift 2=-218 (LC 12), 10=-218 (LC 13)  
Max Grav 2=1483 (LC 19), 10=1483 (LC 20)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/28, 2-4=-1906/548, 4-5=-1287/614,  
5-6=-77/197, 6-7=-77/197, 7-8=-1288/614,  
8-10=-1909/548, 10-11=0/28

BOT CHORD 2-15=-196/1437, 12-15=-190/1437,  
10-12=-183/1437

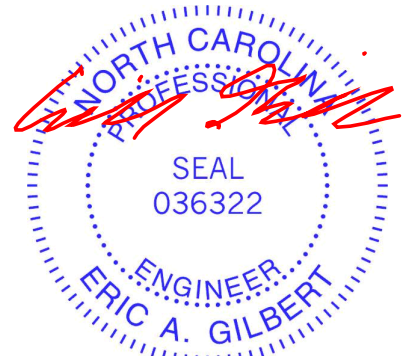
WEBS 4-15=-8/599, 8-12=-11/601, 5-7=-1507/729

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=150mph (3-second gust)  
Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-4 to 3-7-9, Interior (1) 3-7-9 to 15-3-8, Exterior(2R) 15-3-8 to 19-7-8, Interior (1) 19-7-8 to 31-4-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf 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 218 lb uplift at joint 2 and 218 lb uplift at joint 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.

LOAD CASE(S) Standard



August 19,2025

**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.sbcacompoments.com)

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

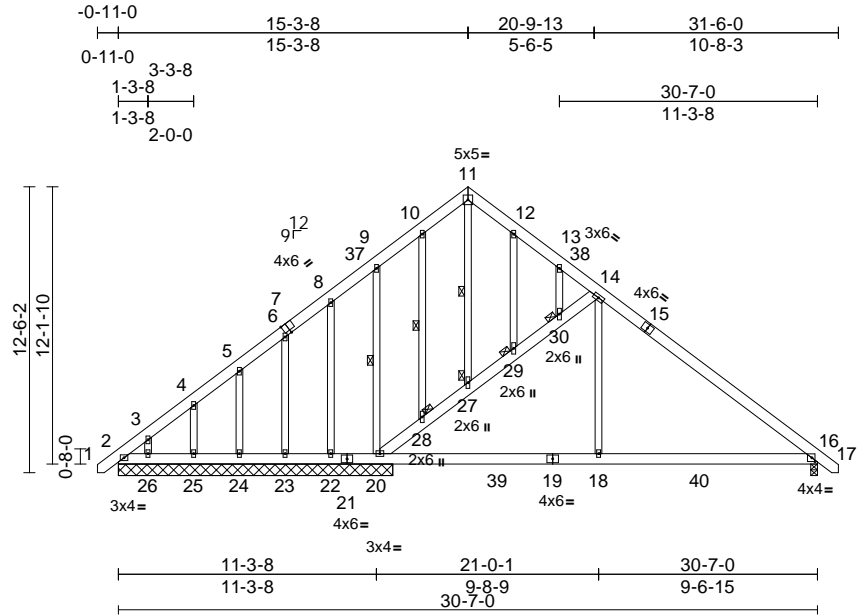
Job	Truss	Truss Type	Qty	Ply	Lexington Plan
250380-A	A1SG	GABLE	1	1	Job Reference (optional)
					I75712808

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Mon Aug 18 13:03:49

Page: 1

ID:cOQ8L2C?CnzLwQ?En3p?sKzuAkG-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:100.8

Plate Offsets (X, Y): [7'-0"-2'-13", Edge], [16'-0"-1'-11", 0'-2'-0"]

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	0.29	Vert(LL)	-0.07	18-36	>999	360	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.12	18-36	>999	240	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.01	16	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS		Wind(LL)	0.07	18-36	>999	240	Weight: 280 lb FT = 20%

**LUMBER**  
TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x6 SP No.1 \*Except\* 18-14:2x4 SP No.2  
OTHERS 2x4 SP No.2

**BRACING**  
TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied.  
WEBS 1 Row at midpt 11-27, 10-28, 9-20  
JOINTS 1 Brace at Jt(s): 27, 28, 29, 30

**REACTIONS** (size) 2=12'-0'-0, 16=0'-3'-8, 20=12'-0'-0, 22=12'-0'-0, 23=12'-0'-0, 24=12'-0'-0, 25=12'-0'-0, 26=12'-0'-0  
Max Horiz 2=385 (LC 10)  
Max Uplift 2=83 (LC 10), 16=113 (LC 13), 20=132 (LC 13), 22=160 (LC 12), 23=67 (LC 12), 24=94 (LC 12), 25=83 (LC 12), 26=125 (LC 12)  
Max Grav 2=283 (LC 12), 16=1042 (LC 20), 20=1094 (LC 20), 22=42 (LC 1), 23=267 (LC 19), 24=202 (LC 19), 25=224 (LC 19), 26=187 (LC 19)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/28, 2-3=-467/257, 3-4=-391/204, 4-5=-298/140, 5-6=-245/103, 6-8=-225/67, 8-9=-193/61, 9-10=-230/147, 10-11=-179/201, 11-12=-185/195, 12-13=-211/129, 13-14=-340/176, 14-16=-1074/202, 16-17=0/28  
BOT CHORD 2-26=-224/403, 25-26=-224/403, 24-25=-224/403, 23-24=-224/403, 22-23=-224/403, 20-22=-224/403, 18-20=0/785, 16-18=-63/785

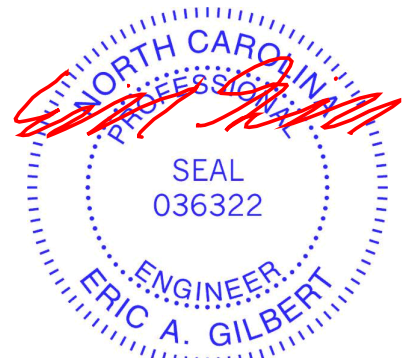
**WEBS**  
20-28=-1018/438, 27-28=-1003/400, 27-29=-1016/451, 29-30=-953/390, 14-30=-1042/448, 14-18=0/570, 11-27=-84/56, 10-28=-66/78, 9-20=-242/183, 8-22=-131/132, 6-23=-145/128, 5-24=-146/129, 4-25=-150/132, 3-26=-131/118, 12-29=-104/101, 13-30=-102/147

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-4 to 3-7-9, Interior (1) 3-7-9 to 15-3-8, Exterior(2R) 15-3-8 to 19-8-5, Interior (1) 19-8-5 to 31-4-4 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 20.0psf on the bottom chord in all areas where a rectangle 3'-0'-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 83 lb uplift at joint 2, 113 lb uplift at joint 16, 132 lb uplift at joint 20, 160 lb uplift at joint 22, 67 lb uplift at joint 23, 94 lb uplift at joint 24, 83 lb uplift at joint 25, 125 lb uplift at joint 26 and 83 lb uplift at joint 2.

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.

**LOAD CASE(S)** Standard



August 19, 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

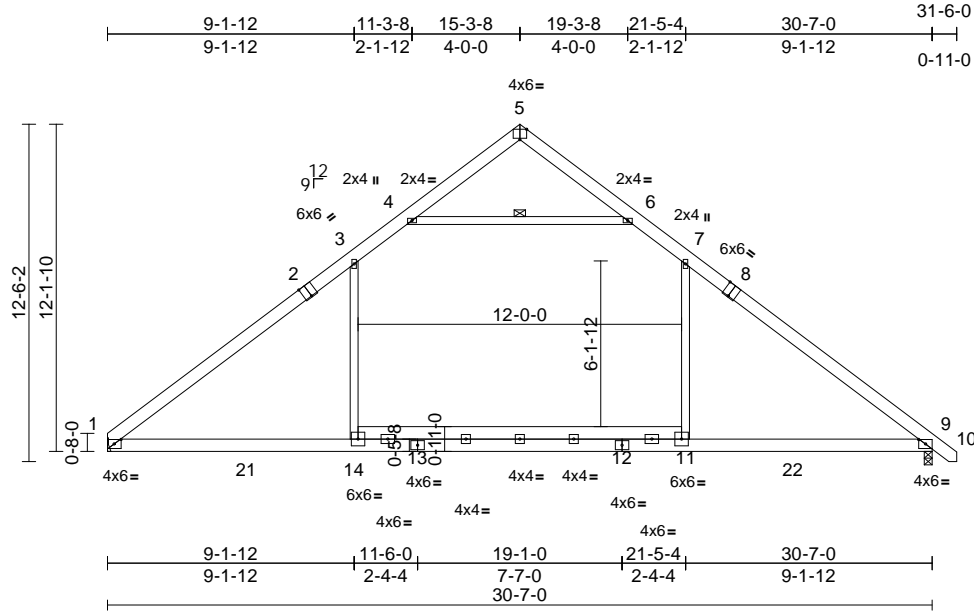
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lexington Plan	
250380-A	A2	COMMON	5	1	Job Reference (optional)	I75712809

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Mon Aug 18 13:03:49  
ID:cOQ8L2C?CnzLwQ?En3p?sKzuAkG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:85.5

Plate Offsets (X, Y): [1:0-3-1,0-2-0], [2:0-3-0,Edge], [5:0-3-0,Edge], [8:0-3-0,Edge], [9:0-3-1,0-2-0]

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	0.66	Vert(LL)	-0.37	14-17	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.46	14-17	>796	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.03	9	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS		Wind(LL)	0.46	14-17	>796	240	Weight: 225 lb	FT = 20%

#### 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.  
WEBS 1 Row at midpt 4-6

#### REACTIONS

(size) 1= Mechanical, 9=0-3-8  
Max Horiz 1=-378 (LC 10)  
Max Uplift 1=-200 (LC 12), 9=-218 (LC 13)  
Max Grav 1=1438 (LC 19), 9=1484 (LC 20)

#### FORCES

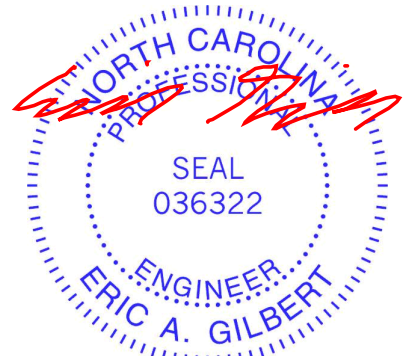
(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-3=-1907/550, 3-4=-1287/616, 4-5=-76/197,  
5-6=-76/197, 6-7=-1289/615, 7-9=-1911/549,  
9-10=0/28  
BOT CHORD 1-14=-210/1438, 11-14=-191/1438,  
9-11=-184/1438  
WEBS 3-14=-8/599, 7-11=-11/602, 4-6=-1509/732

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=150mph (3-second gust)  
Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-0-0 to 4-4-13, Interior (1) 4-4-13 to 15-3-8, Exterior(2R) 15-3-8 to 19-7-8, Interior (1) 19-7-8 to 31-4-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf 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.

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 200 lb uplift at joint 1 and 218 lb uplift at joint 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.

LOAD CASE(S) Standard



August 19,2025

**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)

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

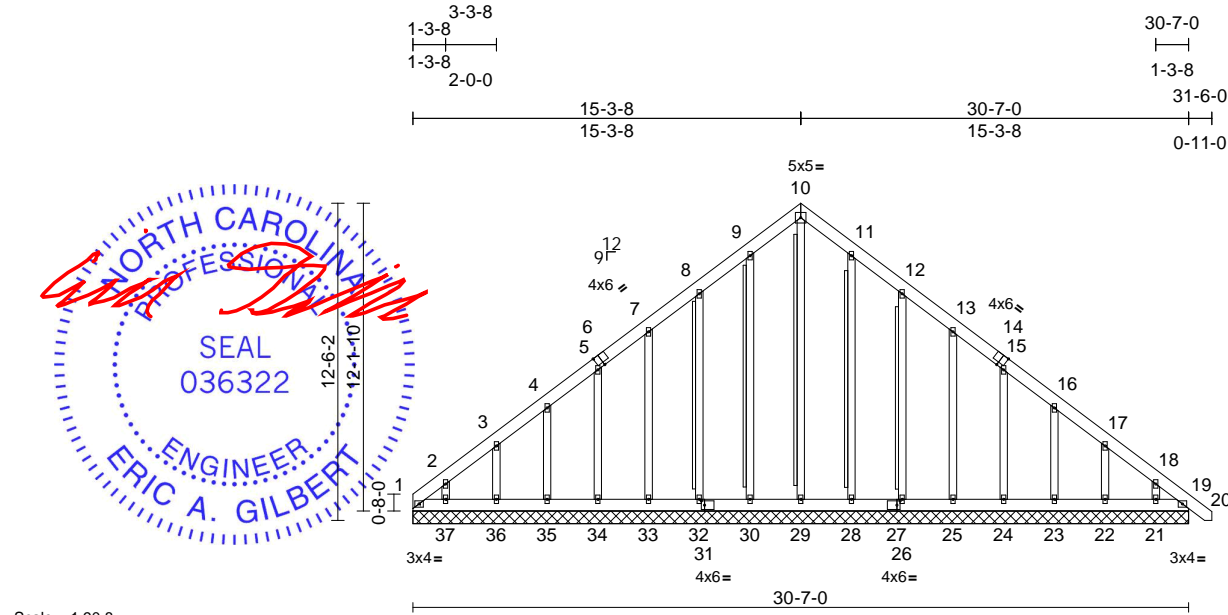
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lexington Plan	I75712810
250380-A	A2GE	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. Mon Aug 18 13:03:50  
ID: cOQ8L2C?CnzLwQ?En3p?sKzuAkG-RfC?PsB70Hq3NSgPqnL8w3uITxBGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:90.8

Plate Offsets (X, Y): [6:0-2-13,Edge], [14:0-2-13,Edge], [27:0-1-8,0-2-0], [31:0-1-8,0-2-0]

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	0.08	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.01	19	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS							Weight: 290 lb FT = 20%

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

**BRACING**  
TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied.  
WEBS T-Brace: 2x4 SPF No.2 - 10-29, 9-30, 8-32, 11-28, 12-26  
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)  
Max Horiz 1=473 (LC 10)  
Max Uplift 1=225 (LC 10), 19=87 (LC 11), 21=172 (LC 13), 22=145 (LC 13), 23=148 (LC 13), 24=145 (LC 13), 25=149 (LC 13), 26=170 (LC 13), 28=68 (LC 13), 29=9 (LC 11), 30=87 (LC 12), 32=165 (LC 12), 33=148 (LC 12), 34=145 (LC 12), 35=149 (LC 12), 36=142 (LC 12), 37=200 (LC 12)  
Max Grav 1=366 (LC 12), 19=250 (LC 13), 21=175 (LC 20), 22=196 (LC 20), 23=192 (LC 20), 24=192 (LC 20), 25=193 (LC 20), 26=200 (LC 20), 28=177 (LC 20), 29=295 (LC 13), 30=198 (LC 19), 32=194 (LC 19), 33=192 (LC 19), 34=192 (LC 19), 35=193 (LC 19), 36=192 (LC 19), 37=207 (LC 19)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=-539/368, 2-3=-437/328, 3-4=-325/285, 4-5=-261/243, 5-7=-229/223, 7-8=-196/270, 8-9=-205/347, 9-10=-236/381, 10-11=-236/381, 11-12=-205/321, 12-13=-133/198, 13-15=-105/106, 15-16=-130/99, 16-17=-221/141, 17-18=-341/185, 18-19=-436/217, 19-20=0/28  
BOT CHORD 1-37=-217/403, 36-37=-183/403, 35-36=-183/403, 34-35=-183/403, 33-34=-183/403, 32-33=-183/403, 30-32=-183/403, 29-30=-183/403, 28-29=-183/403, 26-28=-183/403, 25-26=-183/403, 24-25=-183/403, 23-24=-183/403, 22-23=-183/403, 21-22=-183/403, 19-21=-183/403  
WEBS 10-29=-276/119, 9-30=-158/111, 8-32=-160/189, 7-33=-152/172, 5-34=-153/170, 4-35=-152/170, 3-36=-156/174, 2-37=-137/161, 11-28=-137/92, 12-26=-160/194, 13-25=-153/173, 15-24=-152/170, 16-23=-152/170, 17-22=-157/175, 18-21=-130/149

**NOTES**  
1) Unbalanced roof live loads have been considered for this design.  
2) Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-0-0 to 4-4-13, Exterior(2N) 4-4-13 to 15-3-8, Corner(3R) 15-3-8 to 19-8-5, Exterior(2N) 19-8-5 to 31-4-4 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 20.0psf 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.  
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 225 lb uplift at joint 1, 87 lb uplift at joint 19, 9 lb uplift at joint 29, 87 lb uplift at joint 30, 165 lb uplift at joint 32, 148 lb uplift at joint 33, 145 lb uplift at joint 34, 149 lb uplift at joint 35, 142 lb uplift at joint 36, 200 lb uplift at joint 37, 68 lb uplift at joint 28, 170 lb uplift at joint 26, 149 lb uplift at joint 25, 145 lb uplift at joint 24, 148 lb uplift at joint 23, 145 lb uplift at joint 22, 172 lb uplift at joint 21, 225 lb uplift at joint 1 and 87 lb uplift at joint 19.

August 19,2025

Continued on page 2

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

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

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lexington Plan
250380-A	A2GE	GABLE	1	1	I75712810
					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. Mon Aug 18 13:03:50  
ID:cOQ8L2C?CnzLwQ?En3p?sKzuAkG-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 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.
- 11) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

**LOAD CASE(S)** Standard

*win gain*



August 19, 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

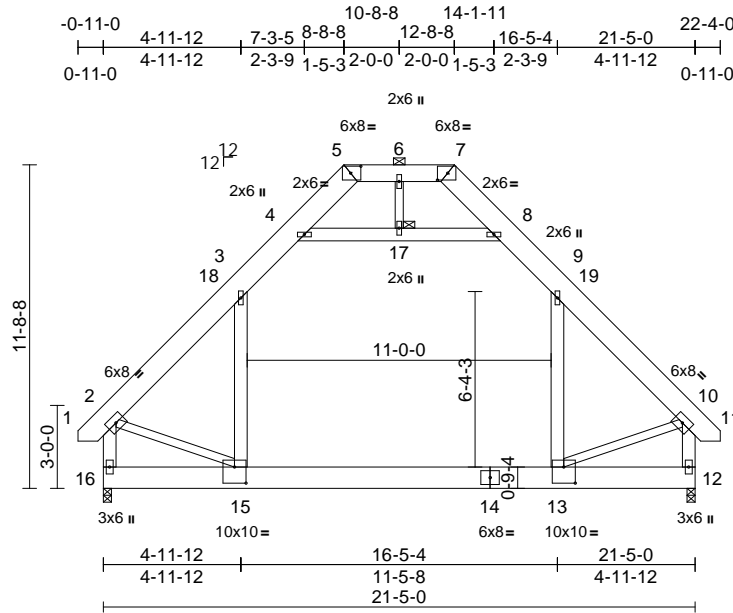


Job	Truss	Truss Type	Qty	Ply	Lexington Plan
250380-A	B1	Attic	6	1	Job Reference (optional)
					I75712811

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Mon Aug 18 13:03:50  
ID:cOQ8L2C?CnzLwQ?En3p?sKzuAkG-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:83.4

Plate Offsets (X, Y): [5:0-4-7,0-3-0], [7:0-4-7,0-3-0], [13:0-5-0,0-7-0], [15:0-5-0,0-7-0]

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	0.21	Vert(LL)	-0.10	13-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.16	13-15	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.01	12	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS		Wind(LL)	0.05	13-15	>999	240	Weight: 276 lb	FT = 20%

#### LUMBER

TOP CHORD 2x10 SP No.1 \*Except\* 5-7:2x8 SP No.1  
BOT CHORD 2x10 SP No.1  
WEBS 2x6 SP No.1 \*Except\* 6-17,15-2,13-10:2x4 SP No.2

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-7.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

JOINTS 1 Brace at Jt(s): 17

REACTIONS (size) 12=0-3-8, 16=0-3-8  
Max Horiz 16=410 (LC 10)  
Max Grav 12=1417 (LC 2), 16=1417 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/33, 2-3=-1459/101, 3-4=-921/271, 4-5=-287/129, 5-6=-118/135, 6-7=-118/135, 7-8=-287/129, 8-9=-921/292, 9-10=-1458/117, 10-11=0/33, 2-16=-1593/151, 10-12=-1593/168

BOT CHORD 15-16=-395/432, 13-15=0/983, 12-13=-66/116

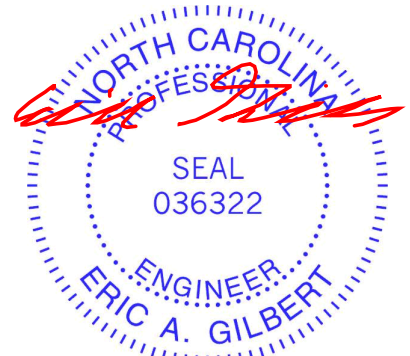
WEBS 3-15=0/639, 9-13=0/639, 4-17=-940/289, 8-17=-940/289, 6-17=0/120, 2-15=0/1042, 10-13=-1/1046

#### NOTES

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-6-11 to 3-10-1, Interior (1) 3-10-1 to 8-11-7, Exterior(2E) 8-11-7 to 12-5-9, Exterior(2R) 12-5-9 to 16-10-6, Interior (1) 16-10-6 to 21-11-11 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 0.0psf on the bottom chord in all areas where a rectangle 0-00 tall by 0-00 wide will fit between the bottom chord and any other members.
- 6) Ceiling dead load (10.0 psf) on member(s). 3-4, 8-9, 4-17, 8-17; Wall dead load (5.0psf) on member(s).3-15, 9-13
- 7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-15
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard



August 19,2025

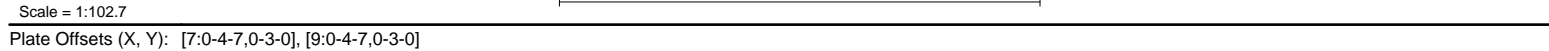
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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)

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Comtech, Inc, Fayetteville, NC - 28314, Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Mon Aug 18 13:03:50 Page: 1  
ID:cOQ8L2C?CnzLwQ?En3p?sKzuAkG-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWRcDOI?J4zJC?f



LUMBER		WEBS	2-27=-183/361, 26-27=-175/349, 20-26=-184/356, 4-20=-492/236, 12-18=-472/229, 18-28=-173/351, 28-29=-163/340, 14-29=-174/355, 5-25=-108/283, 24-25=-104/283, 23-24=-104/283, 11-23=-108/283, 10-23=-19/68, 8-24=0/52, 6-25=-22/69, 3-26=-171/292, 21-26=-173/267, 22-27=-36/69, 13-28=-172/294, 17-28=-173/269, 16-29=-43/70
TOP CHORD	2x10 SP No.1 *Except* 7-9:2x8 SP No.1		
BOT CHORD	2x10 SP No.1		
WEBS	2x6 SP No.1 *Except* 20-2,18-14:2x4 SP No.2		
OTHERS	2x4 SP No.2		
BRACING			
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-9.		
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.		
JOINTS	1 Brace at Jt(s): 24, 26, 28		
REACTIONS	(size)      16=21-5-0, 17=21-5-0, 18=21-5-0, 20=21-5-0, 21=21-5-0, 22=21-5-0 Max Horiz    22=514 (LC 11) Max Uplift    16=-161 (LC 9), 17=-277 (LC 27), 18=-150 (LC 13), 20=-158 (LC 12), 21=-279 (LC 26), 22=-197 (LC 8) Max Grav     16=589 (LC 24), 17=34 (LC 11), 18=1066 (LC 25), 20=1088 (LC 24), 21=42 (LC 10), 22=618 (LC 25)		
FORCES	(lb) - Maximum Compression/Maximum Tension		
TOP CHORD	2-22=-571/233, 1-2=0/33, 2-3=-469/220, 3-4=-410/225, 4-5=-495/349, 5-6=-426/180, 6-7=-317/186, 7-8=-308/177, 8-9=-308/177, 9-10=-317/186, 10-11=-428/179, 11-12=-495/349, 12-13=-385/198, 13-14=-444/189, 14-15=0/33, 14-16=-552/208		
BOT CHORD	21-22=-479/459, 20-21=-479/459, 18-20=-201/337, 17-18=-54/81, 16-17=-54/81		

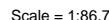


**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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/TPH 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.sbccomponents.com](http://www.sbccomponents.com))







818 Soundside Road  
Edenton, NC 27932

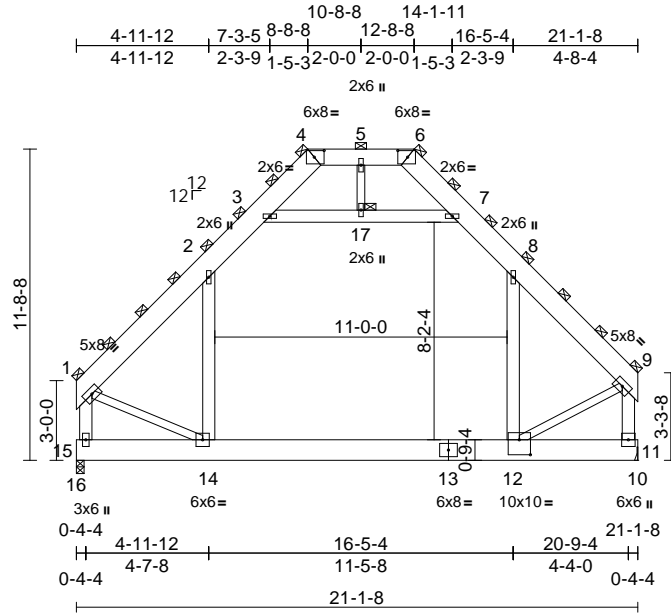
Job	Truss	Truss Type	Qty	Ply	Lexington Plan
250380-A	B2-GR	Attic Girder	1	2	Job Reference (optional)
					I75712814

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Mon Aug 18 13:03:50

Page: 1

ID:cOQ8L2C?CnzLwQ?En3p?sKzuAkG-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f



Scale = 1:86.7

Plate Offsets (X, Y): [4:0-4-7,0-3-0], [6:0-4-7,0-3-0], [12:0-5-0,0-6-12]

Loading	(psf)	Spacing	3-6-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TOP CHORD	20.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	-0.08	12-14	>999	360	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.13	12-14	>999	240	244/190
BCLL	0.0*	Rep Stress Incr	NO	WB	0.21	Horz(CT)	0.00	11	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS		Wind(LL)	0.04	12-14	>999	240	Weight: 535 lb FT = 20%

#### LUMBER

TOP CHORD 2x10 SP No.1 \*Except\* 4-6:2x8 SP No.1  
BOT CHORD 2x10 SP No.1  
WEBS 2x6 SP No.1 \*Except\* 14-1,12-9,5-17:2x4 SP No.2

#### BRACING

TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals  
(Switched from sheeted: Spacing > 2-0-0).  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
JOINTS 1 Brace at Jt(s): 4, 6, 1, 9, 17

REACTIONS (size) 11= Mechanical, 15=0-3-8  
Max Horiz 15=646 (LC 7)  
Max Grav 11=2406 (LC 2), 15=2374 (LC 21)

#### FORCES

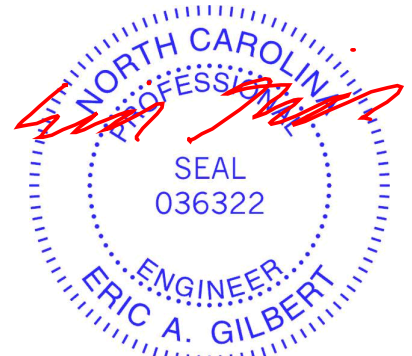
(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=-2445/0, 2-3=-1552/164, 3-4=-517/224, 4-5=-237/202, 5-6=-237/202, 6-7=-531/221, 7-8=-1557/173, 8-9=-2396/0, 1-15=-2679/0, 9-11=-2801/0  
BOT CHORD 15-16=0/0, 14-15=-646/649, 12-14=-4/1613, 11-12=-80/65, 10-11=0/0  
WEBS 2-14=-9/1059, 8-12=-39/1030, 3-17=-1532/202, 7-17=-1532/202, 1-14=0/1749, 9-12=-4/1858, 5-17=0/206

#### NOTES

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc.  
Web connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.

- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); end vertical right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf 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.
- Ceiling dead load (10.0 psf) on member(s). 2-3, 7-8, 3-17, 7-17; Wall dead load (5.0psf) on member(s).2-14, 8-12
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-14
- Refer to girder(s) for truss to truss connections.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Attic room checked for L/360 deflection.

LOAD CASE(S) Standard



August 19,2025

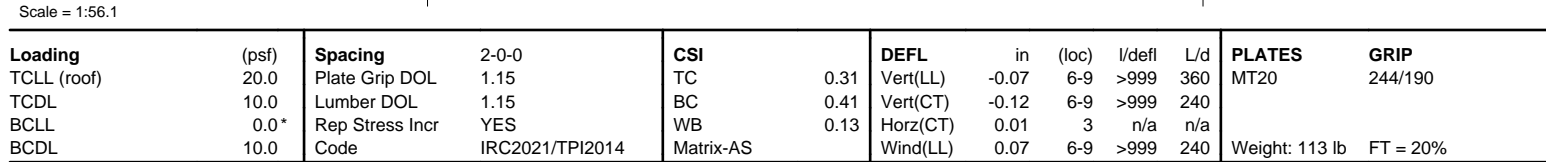
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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

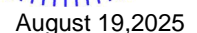
Comtech, Inc, Fayetteville, NC - 28314, Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Mon Aug 18 13:03:50 Page: 1  
ID:cOQ8L2C?CnzLwQ?En3p?sKzuAkG-RfC?PsB70Hg3NSgPqnL8w3ulTXbGKWrcDci7J4zJC?i



LOAD CASE(S) Standard

## NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=150mph (3-second gust)  
 Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-0-0 to 4-4-13, Interior (1) 4-4-13 to 9-5-4, Exterior(2R) 9-5-4 to 13-10-1, Interior (1) 13-10-1 to 19-7-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf 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.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 123 lb uplift at joint 1 and 141 lb uplift at joint 3.



**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/TPI 1 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.sbccomponents.com](http://www.sbccomponents.com))

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

818 Soundside Road  
Edenton, NC 27932

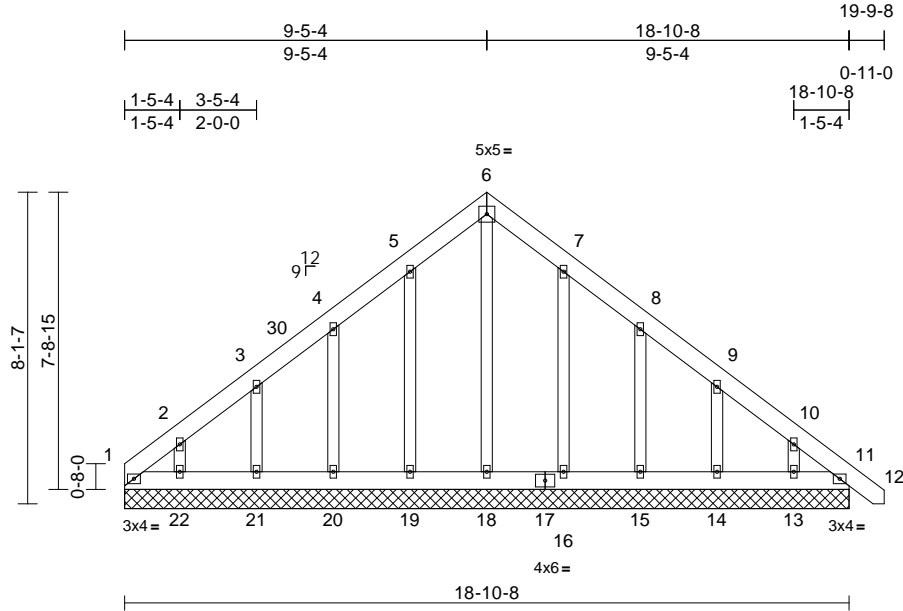
Job	Truss	Truss Type	Qty	Ply	Lexington Plan
250380-A	C1GE	GABLE	1	1	Job Reference (optional)
					I75712816

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Mon Aug 18 13:03:50

Page: 1

ID:cOQ8L2C?CnzLwQ?En3p?sKzuAkG-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f



Scale = 1:60

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	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00	11	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS							
										Weight: 150 lb	FT = 20%

#### LUMBER

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

#### BRACING

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

REACTIONS	(size)	1=18-10-8, 11=18-10-8, 13=18-10-8, 14=18-10-8, 15=18-10-8, 16=18-10-8, 18=18-10-8, 19=18-10-8, 20=18-10-8, 21=18-10-8, 22=18-10-8
Max Horiz	1=298 (LC 8)	
Max Uplift	1=115 (LC 10), 11=40 (LC 9), 13=155 (LC 13), 14=145 (LC 13), 15=162 (LC 13), 16=110 (LC 13), 19=119 (LC 12), 20=160 (LC 12), 21=142 (LC 12), 22=177 (LC 12)	
Max Grav	1=196 (LC 12), 11=142 (LC 22), 13=175 (LC 20), 14=195 (LC 20), 15=197 (LC 20), 16=187 (LC 20), 18=179 (LC 22), 19=197 (LC 19), 20=194 (LC 19), 21=192 (LC 19), 22=200 (LC 19)	

FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-302/219, 2-3=-208/181, 3-4=-163/144, 4-5=-139/189, 5-6=-158/285, 6-7=-158/285, 7-8=-109/187, 8-9=-96/61, 9-10=-142/93, 10-11=-237/126, 11-12=0/28
BOT CHORD	1-22=-135/282, 21-22=-113/282, 20-21=-113/282, 19-20=-113/282, 18-19=-113/282, 16-18=-113/282, 15-16=-113/282, 14-15=-113/282, 13-14=-113/282, 11-13=-113/282

#### WEBS

6-18=-180/47, 5-19=-157/143, 4-20=-155/207, 3-21=-155/221, 2-22=-137/202, 7-16=-147/140, 8-15=-157/203, 9-14=-156/209, 10-13=-131/187

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-0-0 to 4-4-13, Exterior(2N) 4-4-13 to 9-5-4, Corner(3R) 9-5-4 to 13-10-1, Exterior(2N) 13-10-1 to 19-7-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 (||) MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 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 20.0psf 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 40 lb uplift at joint 11, 115 lb uplift at joint 1, 119 lb uplift at joint 19, 160 lb uplift at joint 20, 142 lb uplift at joint 21, 177 lb uplift at joint 22, 110 lb uplift at joint 16, 162 lb uplift at joint 15, 145 lb uplift at joint 14, 155 lb uplift at joint 13, 40 lb uplift at joint 11 and 115 lb uplift at joint 1.
- 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 19,2025

**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)

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

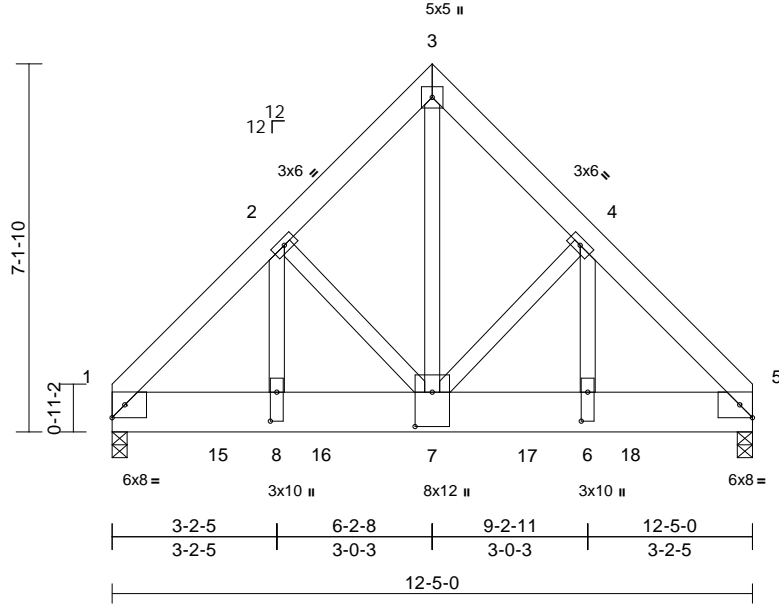
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lexington Plan
250380-A	D1-GR	Common Girder	1	2	Job Reference (optional)
					I75712817

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Mon Aug 18 13:03:51  
ID:cOQ8L2C?CnzLwQ?En3p?sKzuAkG-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:44.7

Plate Offsets (X, Y): [6:0-6-12,0-1-8], [7:0-8-0,0-4-0], [8:0-6-12,0-1-8]

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	0.11	Vert(LL)	-0.03	6-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.05	6-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.52	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS		Wind(LL)	0.02	6-7	>999	240	Weight: 241 lb	FT = 20%

#### LUMBER

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x10 SP No.1  
WEBS 2x4 SP No.2

#### BRACING

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

**REACTIONS** (size) 1=0-3-8, 5=0-3-8  
Max Horiz 1=-198 (LC 4)  
Max Uplift 1=-622 (LC 9), 5=-810 (LC 8)  
Max Grav 1=4124 (LC 16), 5=5344 (LC 15)

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

TOP CHORD 1-2=-4577/725, 2-3=-3456/623,  
3-4=-3458/623, 4-5=-4724/748

BOT CHORD 1-8=-521/3252, 7-8=-521/3252,  
6-7=-469/3291, 5-6=-469/3291

WEBS 2-8=-209/1544, 2-7=-1112/293,  
3-7=-761/4505, 4-7=-1301/324,  
4-6=-250/1786

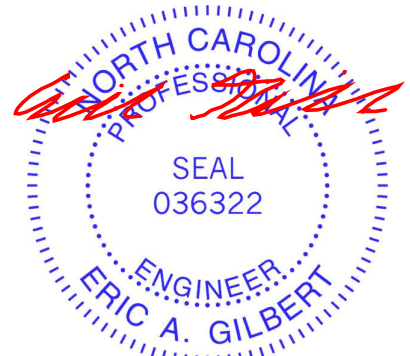
#### NOTES

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-7-0 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=150mph (3-second gust)  
Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); 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 20.0psf 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 622 lb uplift at joint 1 and 810 lb uplift at joint 5.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1418 lb down and 212 lb up at 2-0-12, 1418 lb down and 212 lb up at 4-0-12, 1418 lb down and 212 lb up at 6-0-12, 1418 lb down and 212 lb up at 8-0-12, and 1418 lb down and 212 lb up at 10-0-12, and 1470 lb down and 226 lb up at 12-0-12 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: 1-3=-60, 3-5=-60, 9-12=-20  
Concentrated Loads (lb)  
Vert: 7=-1203 (B), 14=-1256 (B), 15=-1203 (B), 16=-1203 (B), 17=-1203 (B), 18=-1203 (B)



August 19,2025

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

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

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

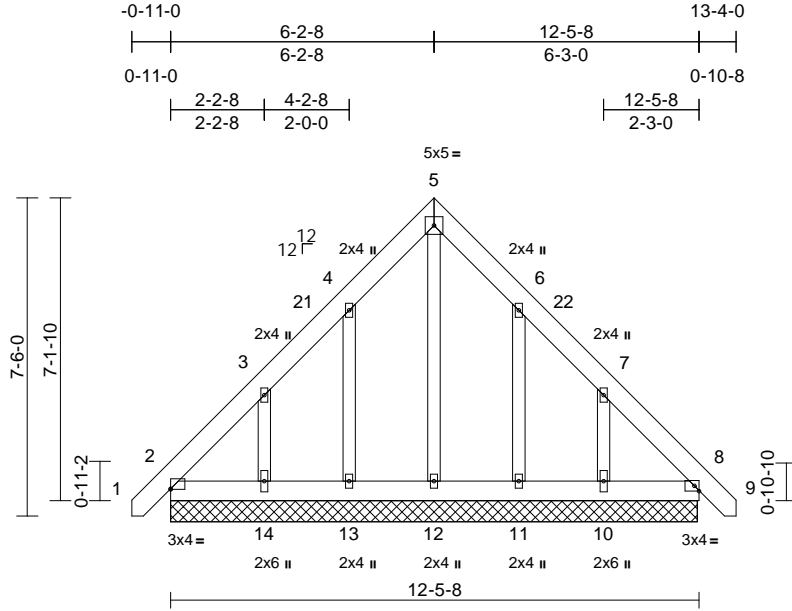


Job	Truss	Truss Type	Qty	Ply	Lexington Plan
250380-A	D1GE	Common Supported Gable	1	1	Job Reference (optional)
					I75712818

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 E Jun 11 2025 Print: 25.2.0 E Jun 11 2025 MiTek Industries, Inc. Tue Aug 19 11:52:07  
ID:cOQ8L2C?CnzLwQ?En3p?sKzuAkG-AV4e4AkmiS72UIMg9nHdbbAHwtq1EXCEUBiQUYmI76

Page: 1



Scale = 1:54.3

Plate Offsets (X, Y): [2:Edge,0-0-3]

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	0.06	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.23	Horz(CT)	0.00	8	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS							Weight: 105 lb FT = 20%

#### LUMBER

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

#### BRACING

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

#### REACTIONS

All bearings 12-5-0.  
(lb) - Max Horiz 2=279 (LC 11)  
Max Uplift All uplift 100 (lb) or less at joint(s)  
12 except 2=188 (LC 8), 10=216 (LC 13), 11=195 (LC 13), 13=159 (LC 12), 14=299 (LC 12)  
Max Grav All reactions 250 (lb) or less at joint (s) 2, 11, 13 except 10=306 (LC 20), 12=384 (LC 22), 14=283 (LC 19)

#### FORCES

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

TOP CHORD 2-3=-270/316, 4-21=-136/253, 4-5=-175/351, 5-6=-175/351  
BOT CHORD 2-14=-233/325, 13-14=-145/327, 12-13=-146/328, 11-12=-146/328, 10-11=-145/327, 8-10=-144/324  
WEBS 5-12=-329/95, 4-13=-191/259, 3-14=-238/422, 6-11=-175/268, 7-10=-238/411

#### NOTES

1) Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-16; Vult=150mph (3-second gust)  
Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed: MWFRS (envelope) exterior zone and C-C Corner(3E) -0-9-6 to 3-7-7, Exterior(2N) 3-7-7 to 6-2-8, Corner(3R) 6-2-8 to 10-7-5, Exterior(2N) 10-7-5 to 13-2-6 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 20.0psf 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 100 lb uplift at joint (s) 12 except (jt=lb) 2=188, 13=158, 14=299, 11=194, 10=215, 2=188.
- Non Standard bearing condition. Review required.

LOAD CASE(S) Standard



August 19,2025

**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)

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

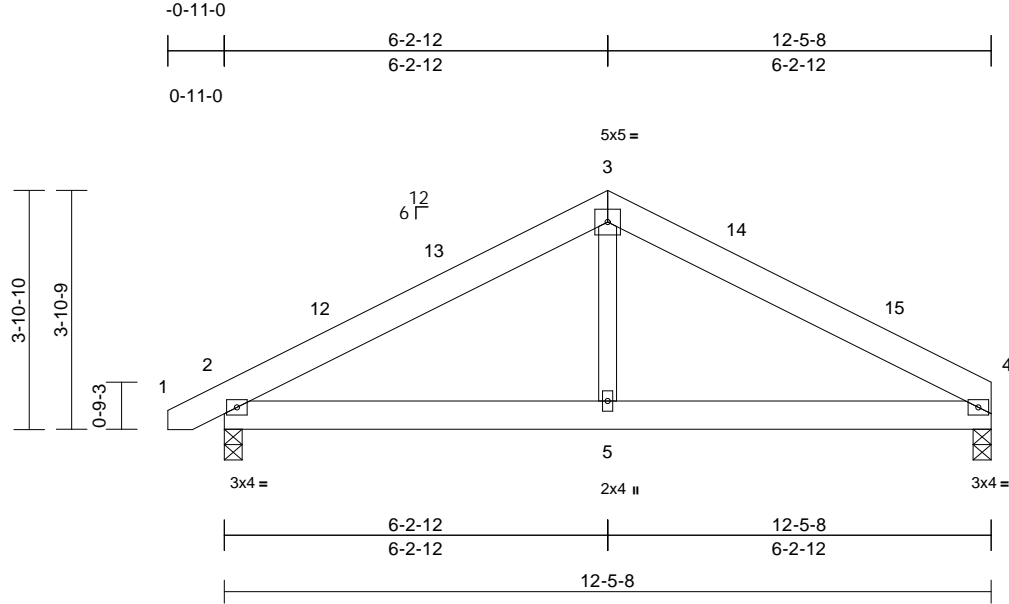
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lexington Plan	I75712819
250380-A	G1	Common	2	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. Mon Aug 18 13:03:51  
ID:cOQ8L2C?CnzLwQ?En3p?sKzuAkG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



<b>Loading</b>	(psf)	<b>Spacing</b>	2-0-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	-0.01	5-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.02	5-8	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS		Wind(LL)	0.01	5-8	>999	240	Weight: 69 lb	FT = 20%

#### 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=62 (LC 16)  
Max Uplift 2=-105 (LC 12), 4=-89 (LC 13)  
Max Grav 2=543 (LC 1), 4=497 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/19, 2-3=-661/508, 3-4=-660/514  
BOT CHORD 2-5=-318/524, 4-5=-318/524  
WEBS 3-5=0/263

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=150mph (3-second gust)  
Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-8-10 to 3-8-3, Interior (1) 3-8-3 to 6-2-12, Exterior(2R) 6-2-12 to 10-7-9, Interior (1) 10-7-9 to 12-5-8 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 20.0psf 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 89 lb uplift at joint 4 and 105 lb uplift at joint 2.



August 19, 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)

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

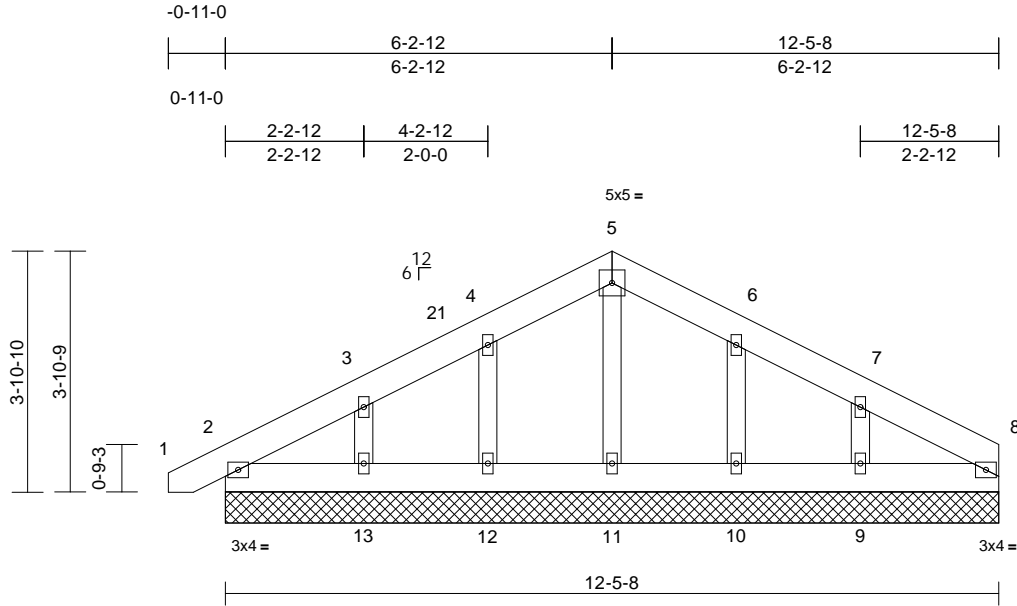
Job	Truss	Truss Type	Qty	Ply	Lexington Plan	175712820
250380-A	G1GE	Common Supported Gable	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Mon Aug 18 13:03:51

Page: 1

ID: cOQ8L2C?CnzLwQ?En3p?sKzuAkG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:37.1

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	0.03	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	8	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS						Weight: 78 lb	FT = 20%

#### LUMBER

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

#### BRACING

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

#### REACTIONS

(size) 2=12-5-8, 8=12-5-8, 9=12-5-8,  
10=12-5-8, 11=12-5-8, 12=12-5-8,  
13=12-5-8  
Max Horiz 2=103 (LC 12)  
Max Uplift 2=-41 (LC 13), 8=-11 (LC 12),  
9=-147 (LC 13), 10=-94 (LC 13),  
12=-96 (LC 12), 13=-146 (LC 12)  
Max Grav 2=141 (LC 1), 8=89 (LC 1), 9=190  
(LC 26), 10=156 (LC 26), 11=132  
(LC 1), 12=159 (LC 25), 13=180  
(LC 25)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/19, 2-3=-86/51, 3-4=-60/107,  
4-5=-86/205, 5-6=-86/205, 6-7=-57/105,  
7-8=-62/18

BOT CHORD 2-13=-55/74, 12-13=-9/74, 11-12=-9/74,  
10-11=-9/74, 9-10=-9/74, 8-9=-9/74

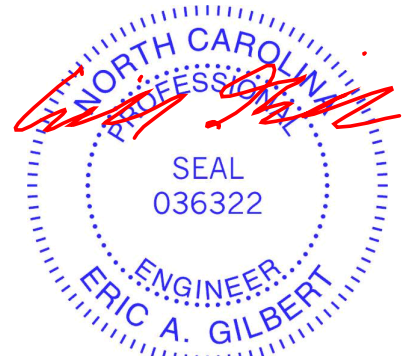
WEBS 5-11=-89/5, 4-12=-123/200, 3-13=-129/242,  
6-10=-122/200, 7-9=-131/250

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=150mph (3-second gust)  
Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-8-10 to 3-8-3, Exterior(2N) 3-8-3 to 6-2-12, Corner(3R) 6-2-12 to 10-7-9, Exterior(2N) 10-7-9 to 12-5-8 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.
- All plates are 2x4 (II) 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 20.0psf 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 41 lb uplift at joint 2, 11 lb uplift at joint 8, 96 lb uplift at joint 12, 146 lb uplift at joint 13, 94 lb uplift at joint 10, 147 lb uplift at joint 9, 41 lb uplift at joint 2 and 11 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.

LOAD CASE(S) Standard



August 19, 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

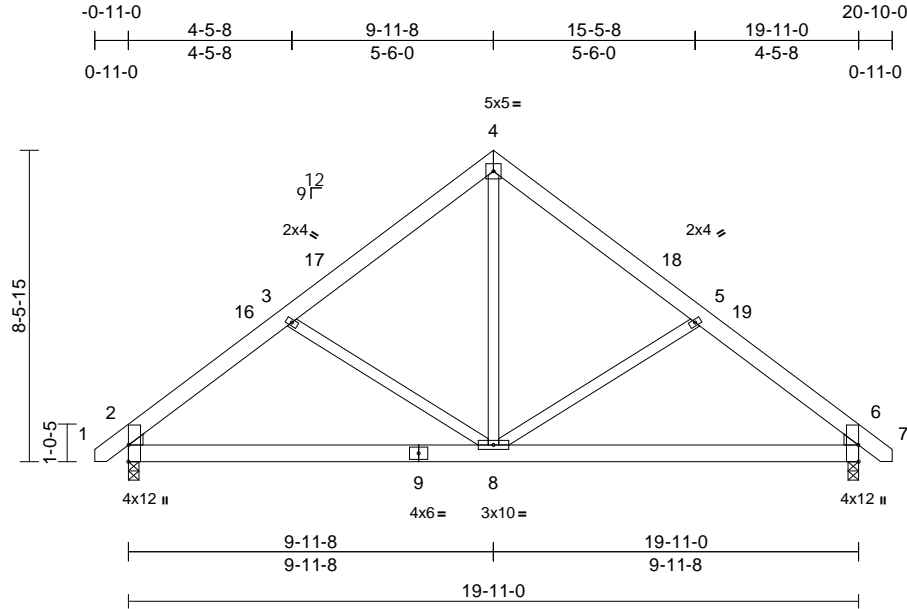
Job	Truss	Truss Type	Qty	Ply	Lexington Plan	
250380-A	H1	Common	7	1	Job Reference (optional)	I75712821

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Mon Aug 18 13:03:51

Page: 1

ID:RBjw0bSu?OqAlzdVzmH449yobLJ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:62.8

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

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	0.11	Vert(LL)	-0.03	8-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.07	8-15	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS		Wind(LL)	0.02	8	>999	240	Weight: 142 lb	FT = 20%

#### LUMBER

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.2  
WEDGE Left: 2x4 SP No.2  
Right: 2x4 SP No.2

#### BRACING

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

#### REACTIONS

(size) 2=0-3-8, 6=0-3-8  
Max Horiz 2=257 (LC 11)  
Max Uplift 2=145 (LC 12), 6=145 (LC 13)  
Max Grav 2=842 (LC 1), 6=842 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

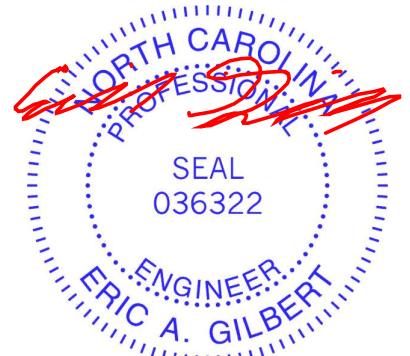
TOP CHORD 1-2=0/27, 2-3=-1070/430, 3-4=-887/379,  
4-5=-887/379, 5-6=-1070/430, 6-7=0/27  
BOT CHORD 2-8=-216/830, 6-8=-210/781  
WEBS 4-8=-168/616, 5-8=-396/280, 3-8=-396/280

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust)  
Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior (2) -0-9-1 to 3-7-11, Interior (1) 3-7-11 to 9-11-8, Exterior (2) 9-11-8 to 14-4-5, Interior (1) 14-4-5 to 20-8-1 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 20.0psf 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 145 lb uplift at joint 2 and 145 lb uplift at joint 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



August 19,2025

**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)

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

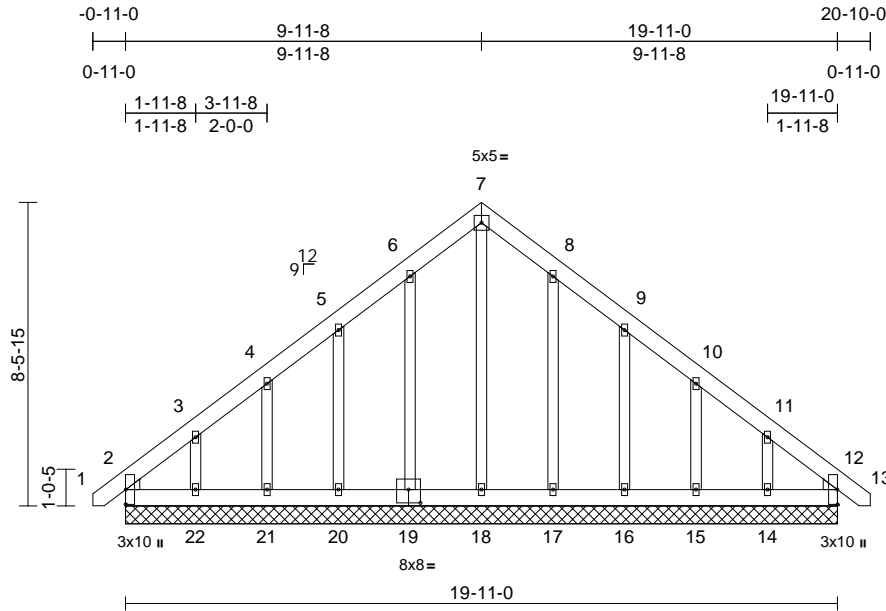
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lexington Plan
250380-A	H1GE	Common Supported Gable	1	1	Job Reference (optional)
					I75712822

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Mon Aug 18 13:03:51  
ID:wTO?VBHAlbXO4aPIWm0FNiyobKE-RfC?PsB70Hq3NSgPqnL8w3uLTxbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:64.5												
Plate Offsets (X, Y): [19:0-4-0,0-4-8]												
<b>Loading</b>	(psf)	<b>Spacing</b>	2-0-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS							Weight: 169 lb	FT = 20%

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

**WEBS**  
7-18=-181/110, 6-19=-152/110,  
5-20=-208/178, 4-21=-190/156,  
3-22=-213/180, 8-17=-152/110,  
9-16=-208/177, 10-15=-190/157,  
11-14=-215/180

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.

**LOAD CASE(S)** Standard

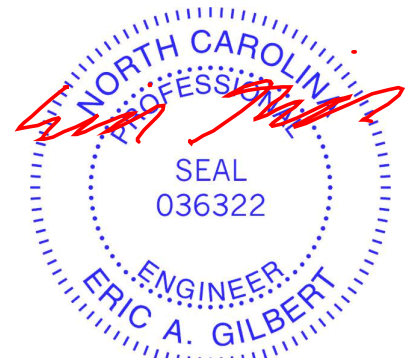
**BRACING**  
TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied.

**REACTIONS** (size) 2=19-11-0, 12=19-11-0,  
14=19-11-0, 15=19-11-0,  
16=19-11-0, 17=19-11-0,  
18=19-11-0, 19=19-11-0,  
20=19-11-0, 21=19-11-0,  
22=19-11-0  
Max Horiz 2=257 (LC 11)  
Max Uplift 2=-90 (LC 8), 12=-37 (LC 9),  
14=-154 (LC 13), 15=-72 (LC 13),  
16=-103 (LC 13), 17=-55 (LC 13),  
19=-61 (LC 12), 20=-102 (LC 12),  
21=-70 (LC 12), 22=-165 (LC 12)  
Max Grav 2=209 (LC 20), 12=167 (LC 19),  
14=215 (LC 20), 15=178 (LC 20),  
16=192 (LC 20), 17=178 (LC 20),  
18=155 (LC 22), 19=187 (LC 19),  
20=190 (LC 19), 21=175 (LC 19),  
22=231 (LC 19)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/27, 2-3=-229/189, 3-4=-158/140,  
4-5=-143/124, 5-6=-182/191, 6-7=-247/273,  
7-8=-249/273, 8-9=-183/192, 9-10=-94/73,  
10-11=-109/73, 11-12=-174/147, 12-13=0/27  
2-22=-191/217, 21-22=-148/217,  
20-21=-148/217, 18-20=-148/217,  
17-18=-147/217, 16-17=-147/217,  
15-16=-147/217, 14-15=-147/217,  
12-14=-147/217

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Corner (3) -0-9-1 to 3-7-11, Exterior (2) 3-7-11 to 9-11-8, Corner (3) 9-11-8 to 14-4-5, Exterior (2) 14-4-5 to 20-8-1 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 (||) MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 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 20.0psf 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 90 lb uplift at joint 2, 37 lb uplift at joint 12, 61 lb uplift at joint 19, 102 lb uplift at joint 20, 70 lb uplift at joint 21, 165 lb uplift at joint 22, 55 lb uplift at joint 17, 103 lb uplift at joint 16, 72 lb uplift at joint 15, 154 lb uplift at joint 14, 90 lb uplift at joint 2 and 37 lb uplift at joint 12.



August 19,2025

**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

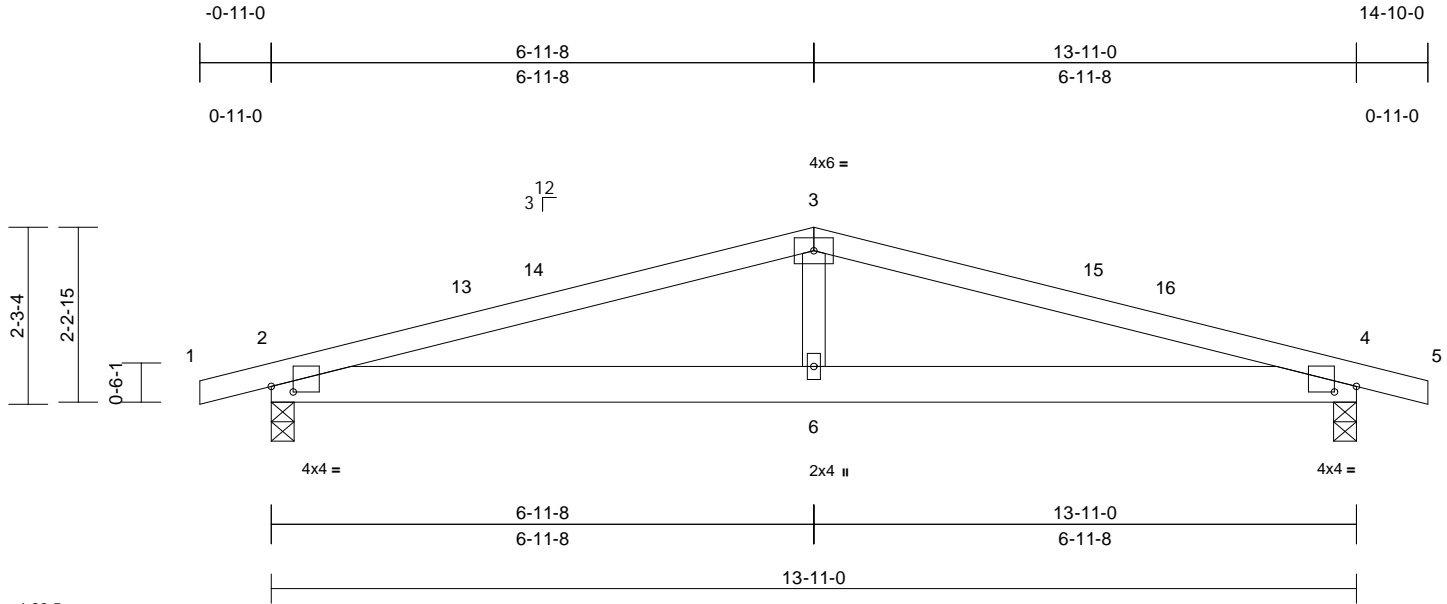


Job	Truss	Truss Type	Qty	Ply	Lexington Plan	
250380-A	K1	Common	6	1	Job Reference (optional)	I75712823

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Mon Aug 18 13:03:51  
ID:S4Pv\_HuX\_yqI4GEMRGw\_PFYobJS-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:29.5

Plate Offsets (X, Y): [2:0-3-6,0-0-14], [4:0-3-6,0-0-14]

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	0.38	Vert(LL)	0.09	6-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.07	6-12	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horz(CT)	-0.01	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS							Weight: 59 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 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=-32 (LC 9)  
Max Uplift 2=-367 (LC 8), 4=-367 (LC 9)  
Max Grav 2=612 (LC 1), 4=612 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/13, 2-3=-1247/1866, 3-4=-1247/1866, 4-5=0/13  
BOT CHORD 2-6=-1723/1169, 4-6=-1723/1169  
WEBS 3-6=-575/315

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust)  
Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior (2) 0-11-0 to 3-5-13, Interior (1) 3-5-13 to 6-11-8, Exterior (2) 6-11-8 to 11-4-5, Interior (1) 11-4-5 to 14-10-0 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 20.0psf 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 367 lb uplift at joint 2 and 367 lb uplift at joint 4.



August 19, 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

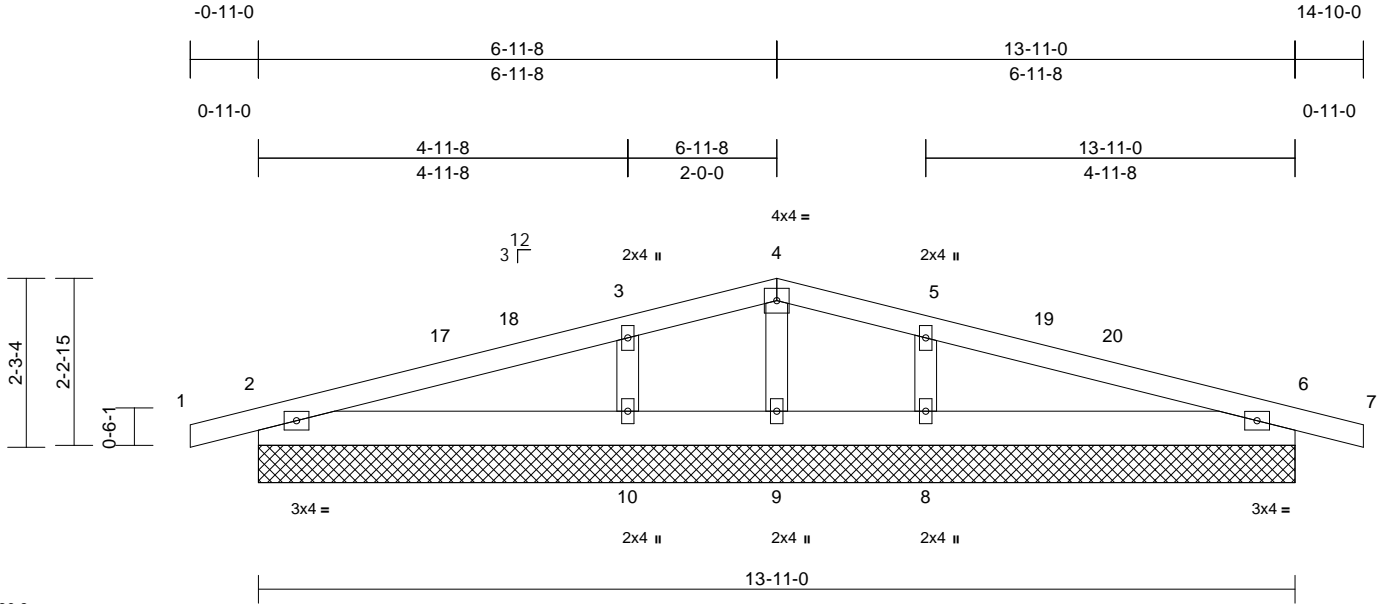
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lexington Plan	I75712824
250380-A	K1GE	Common Supported 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. Mon Aug 18 13:03:51  
ID:6CjjDpf28JmL7xYTe?YISXyobIT-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:30.9

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	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS							Weight: 62 lb	FT = 20%

#### LUMBER

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

#### BRACING

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

#### REACTIONS

(size) 2=13-11-0, 6=13-11-0, 8=13-11-0,  
9=13-11-0, 10=13-11-0  
Max Horiz 2=-32 (LC 9)  
Max Uplift 2=-91 (LC 8), 6=-94 (LC 9), 8=-113 (LC 13), 9=-93 (LC 1), 10=-114 (LC 12)  
Max Grav 2=237 (LC 1), 6=237 (LC 1), 8=421 (LC 1), 9=39 (LC 13), 10=421 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

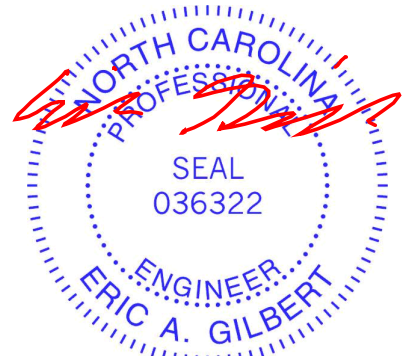
TOP CHORD 1-2=0/13, 2-3=-83/100, 3-4=-88/176,  
4-5=-87/179, 5-6=-83/102, 6-7=0/13  
BOT CHORD 2-10=-1/66, 9-10=0/57, 8-9=0/57, 6-8=0/70  
WEBS 4-9=-33/21, 3-10=-233/387, 5-8=-233/387

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Corner (3) -0-11-0 to 3-5-13, Exterior (2) 3-5-13 to 6-11-8, Corner (3) 6-11-8 to 11-4-5, Exterior (2) 11-4-5 to 14-10-0 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 20.0psf 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 91 lb uplift at joint 2, 94 lb uplift at joint 6, 93 lb uplift at joint 9, 114 lb uplift at joint 10, 113 lb uplift at joint 8, 91 lb uplift at joint 2 and 94 lb uplift at joint 6.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 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.

LOAD CASE(S) Standard



August 19, 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.sbcacompnents.com](http://www.sbcacompnents.com))

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

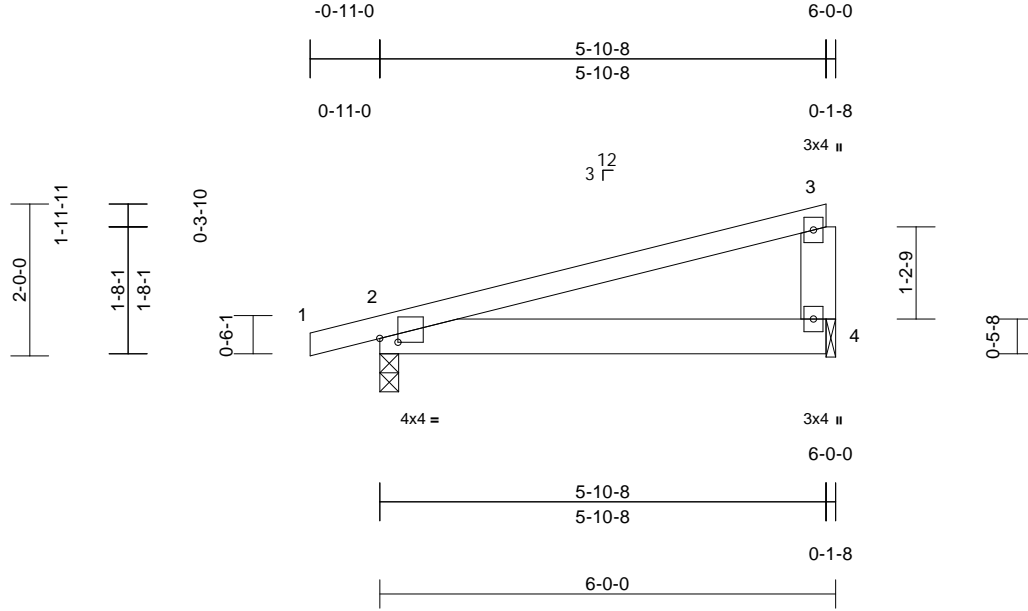
Job	Truss	Truss Type	Qty	Ply	Lexington Plan	
250380-A	M1	MONOPITCH	5	1	Job Reference (optional)	I75712825

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Mon Aug 18 13:03:51

Page: 1

ID:cOQ8L2C?CnzLwQ?En3p?sKzuAkG-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:30.3

Plate Offsets (X, Y): [2:0-2-14,0-0-10]

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	0.29	Vert(LL)	0.06	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.04	4-7	>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-AS							Weight: 27 lb	FT = 20%

#### LUMBER

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

#### BRACING

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

#### REACTIONS

(size) 2=0-3-0, 4=0-1-8  
Max Horiz 2=77 (LC 8)  
Max Uplift 2=-184 (LC 8), 4=-147 (LC 8)  
Max Grav 2=290 (LC 1), 4=226 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

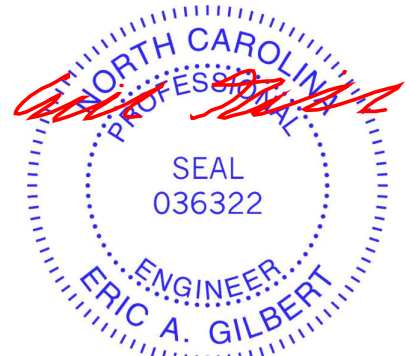
TOP CHORD 1-2=0/13, 2-3=-71/48, 3-4=-131/222  
BOT CHORD 2-4=-143/80

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; 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 5-9-4 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 20.0psf 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 184 lb uplift at joint 2 and 147 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 19,2025

**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)

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

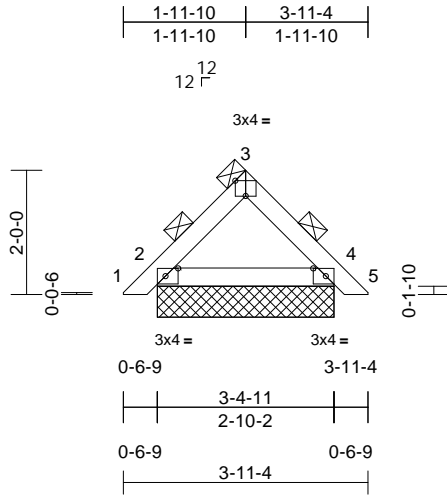
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lexington Plan
250380-A	PB	Piggyback	11	1	Job Reference (optional)
					I75712826

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Mon Aug 18 13:03:51  
ID:lzFNbYgM28IbxYTCcdo5hkymd5H-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:37.1

Plate Offsets (X, Y): [2:0-2-7,0-1-8], [3:0-2-0,Edge], [4:0-2-7,0-1-8]

Loading	(psf)	Spacing	3-6-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	2	n/a	n/a	
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 13 lb FT = 20%

#### LUMBER

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

#### BRACING

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

**REACTIONS** (size) 2=2-10-2, 4=2-10-2  
Max Horiz 2=-99 (LC 10)  
Max Uplift 2=-42 (LC 12), 4=-42 (LC 13)  
Max Grav 2=236 (LC 1), 4=236 (LC 1)

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

TOP CHORD 1-2=0/27, 2-3=-137/88, 3-4=-137/89,  
4-5=0/27

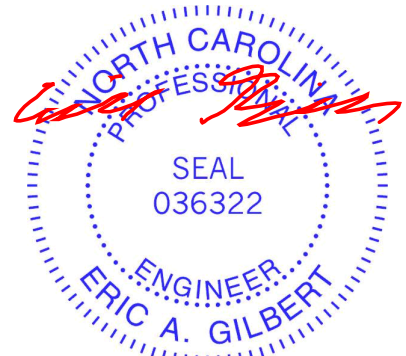
BOT CHORD 2-4=-31/104

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph (3-second gust)  
Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat.  
II; Exp C; Enclosed; MWFRS (envelope) and C-C  
Exterior (2) zone;C-C for members and forces &  
MWFRS for reactions shown; Lumber DOL=1.60 plate  
grip DOL=1.60
- 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 20.0psf  
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 42 lb uplift at joint  
2, 42 lb uplift at joint 4, 42 lb uplift at joint 2 and 42 lb  
uplift at joint 4.
- See Standard Industry Piggyback Truss Connection  
Detail for Connection to base truss as applicable, or  
consult qualified building designer.
- 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 19,2025

**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

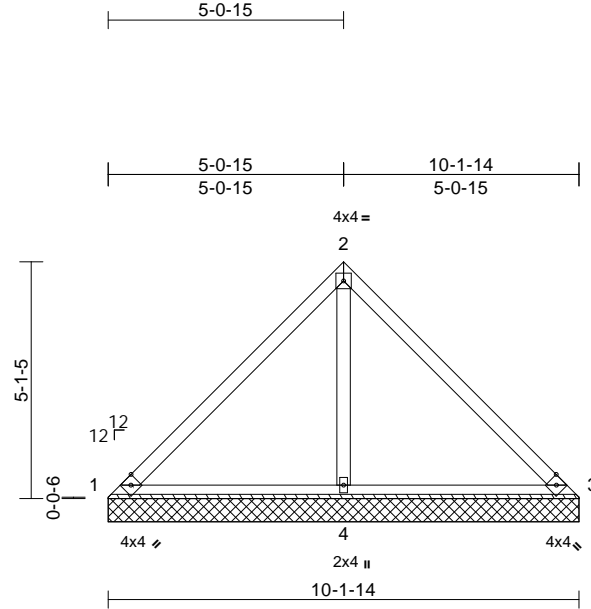
Job	Truss	Truss Type	Qty	Ply	Lexington Plan
250380-A	V1	Valley	1	1	Job Reference (optional)
					I75712827

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Mon Aug 18 13:03:52

Page: 1

ID:cOQ8L2C?CnzLwQ?En3p?sKzuAkG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?fi



Scale = 1:49.7

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	0.34	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.26	Horiz(TL)	0.01	3	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS							Weight: 42 lb FT = 20%

#### LUMBER

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

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 9-3-4 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

#### REACTIONS

(size) 1=10-1-15, 3=10-1-15, 4=10-1-15  
Max Horiz 1=-157 (LC 10)  
Max Uplift 1=-25 (LC 26), 3=-25 (LC 25), 4=-239 (LC 12)  
Max Grav 1=76 (LC 25), 3=76 (LC 26), 4=740 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-333/321, 2-3=-311/320  
BOT CHORD 1-4=-317/439, 3-4=-317/439  
WEBS 2-4=-695/712

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-0-6 to 4-5-3, Interior (1) 4-5-3 to 5-1-5, Exterior(2R) 5-1-5 to 9-6-3, Interior (1) 9-6-3 to 10-2-5 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 20.0psf 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, 25 lb uplift at joint 3 and 239 lb uplift at joint 4.

LOAD CASE(S) Standard



August 19,2025

**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.sbcacompoments.com)

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

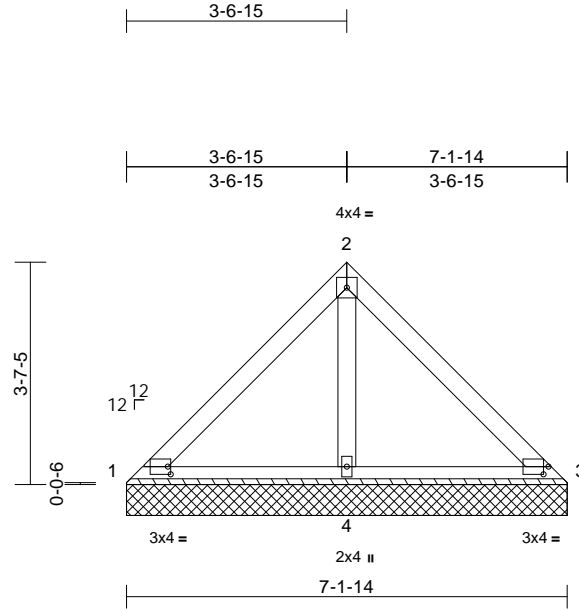


Job	Truss	Truss Type	Qty	Ply	Lexington Plan
250380-A	V2	Valley	1	1	Job Reference (optional)
					I75712828

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Mon Aug 18 13:03:52  
ID:cOQ8L2C?CnzLwQ?En3p?sKzuAkG-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:37.4

Plate Offsets (X, Y): [1:0-0-9,0-1-8], [3:0-1-0,0-1-8]

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	0.22	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.00	3	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MP							Weight: 29 lb FT = 20%

#### LUMBER

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

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 7-1-14 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

#### REACTIONS

(size) 1=7-1-14, 3=7-1-14, 4=7-1-14  
Max Horiz 1=109 (LC 9)  
Max Uplift 1=-1 (LC 26), 3=-1 (LC 25), 4=-147 (LC 12)  
Max Grav 1=71 (LC 25), 3=71 (LC 26), 4=477 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

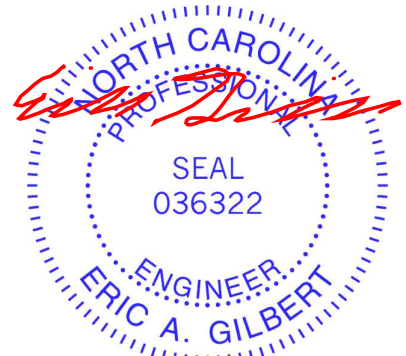
TOP CHORD 1-2=-235/188, 2-3=-193/188  
BOT CHORD 1-4=-227/314, 3-4=-227/314  
WEBS 2-4=-426/500

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; 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 20.0psf 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 1 lb uplift at joint 1, 1 lb uplift at joint 3 and 147 lb uplift at joint 4.

LOAD CASE(S) Standard



August 19,2025

**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)

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

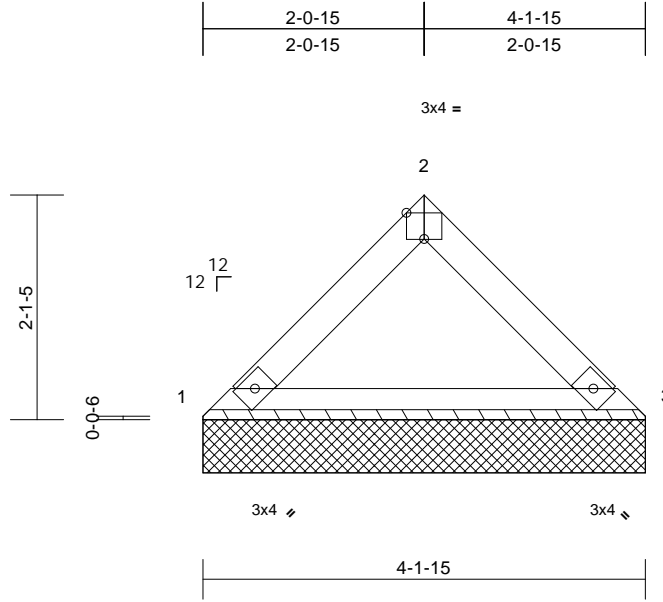
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lexington Plan
250380-A	V3	Valley	1	1	Job Reference (optional)
					I75712829

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Mon Aug 18 13:03:52  
ID:cOQ8L2C?CnzLwQ?En3p?sKzuAkG-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:21.7

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MP							Weight: 14 lb FT = 20%

#### LUMBER

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

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 4-1-15 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 1=4-1-15, 3=4-1-15  
Max Horiz 1=-61 (LC 8)  
Max Uplift 1=-25 (LC 12), 3=-25 (LC 13)  
Max Grav 1=166 (LC 1), 3=166 (LC 1)

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

TOP CHORD 1-2=-227/215, 2-3=-227/221  
BOT CHORD 1-3=-162/164

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph; 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 20.0psf 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 25 lb uplift at joint 3.

**LOAD CASE(S)** Standard



August 19,2025

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

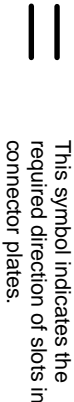
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

# Symbols

## PLATE LOCATION AND ORIENTATION



\* Plate location details available in MITek software or upon request.

## PLATE SIZE

**4 X 4**

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

## LATERAL BRACING LOCATION



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

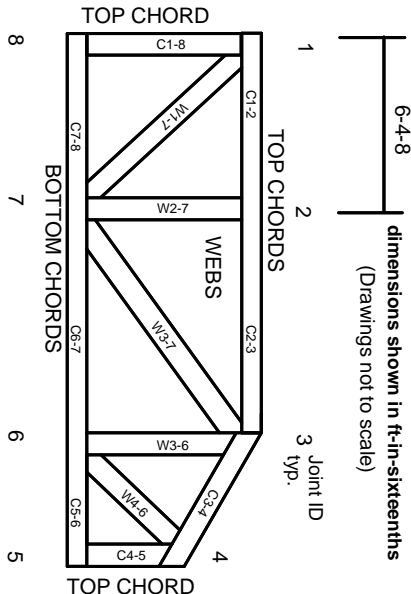
## BEARING



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

**Industry Standards:**  
ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-22: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System



**JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.**

**CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.**

# Product Code Approvals

ICC-ES Reports:  
ESR-1988, ESR-2362, ESR-2685, ESR-3282  
ESR-4722, ESL-1388

# Design General Notes

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.  
Lumber design values are in accordance with ANSI/TP1 1 section 6.3. These truss designs rely on lumber values established by others.

© 2023 MITek® All Rights Reserved

# 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.

**MITek®**

ENGINEERING BY  
**TRENCO**  
A MITek Affiliate

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