



ROOF & FLOOR TRUSSES & BEAMS

Reilly Road Industrial Park
Fayetteville, N.C. 28309
Phone: (910) 864-8787
Fax: (910) 864-4444

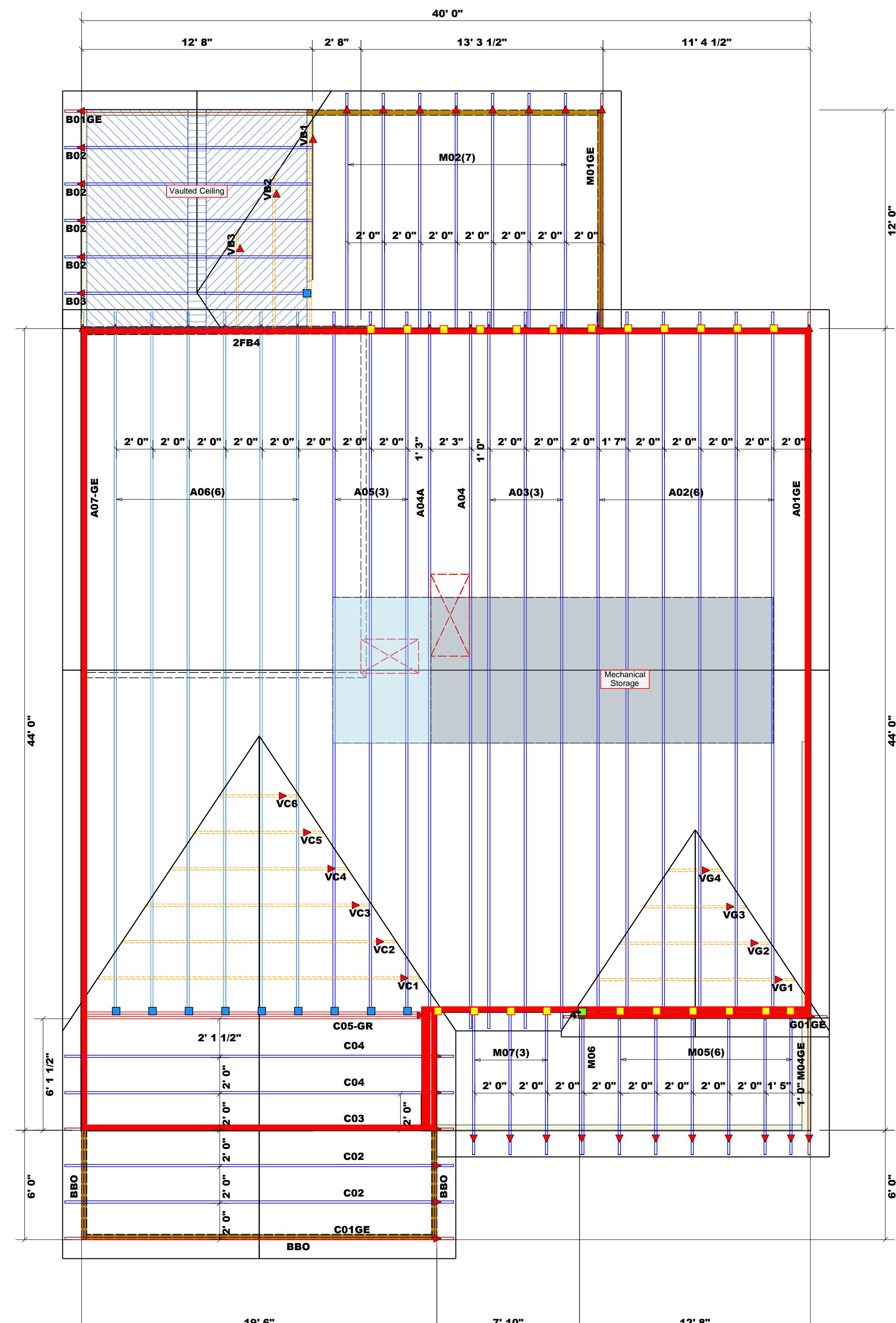
Bearing reactions less than or equal to 3000# are deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables (derived from the prescriptive Code requirements) to determine the minimum foundation size and the number of studs required to support reactions greater than 3000# but not greater than 15000#. A registered design professional shall be retained to design the support system for any reaction that exceeds those specified in the attached Table. The registered design professional shall be retained to design the support system for all reactions that exceed 15000#.

Signature Sales Area
Sales Area

LOAD CHART FOR JACK STUDS

(BASED ON TABLES R502.5(I) & (B))
NUMBER OF JACK STUDS REQUIRED @ EA END OF

HEADER/GAIA	END REACTION (UP TO)	REQ'D STUDS FOR (2 PT HEADER)	END REACTION (UP TO)	REQ'D STUDS FOR (3 PT HEADER)	END REACTION (UP TO)	REQ'D STUDS FOR (4 PT HEADER)
1700	1	2550	3400	2	5100	6800
3400	2	7650	5100	3	10200	10200
5100	3	8500	6800	4	12750	13600
6800	4	10200	8500	5	15300	15300
8500	5	11900	10200	6	17000	17000
10200	6	13600	11900	7		
11900	7	15300	13600	8		
13600	8					
15300	9					



Truss Placement Plan
SCALE: NTS

▲ = Indicates Left End of Truss
(Reference Engineered Truss Drawing)
Do NOT Erect Truss Backwards

THIS IS A TRUSS PLACEMENT DIAGRAM ONLY.
These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design and the building placement drawing. The building designer is responsible for proper permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For guidance regarding design, consult BCSI-B1 and BCSI-B3 provided with the truss delivery package or online @ sibindustry.com

BUILDER	Site Name	CITY / CO.	Lillington / Hamlett
JOB NAME	ADDRESS	778 Beacon Hill Road	
PLAN	The Apex - Georgian - Face	MODEL	Roof
SEAL DATE	Seal Date	DATE REV.	8/20/25
QUOTE #	Quote #	DRAWN BY	Johnnie Baggett
JOB #	250231-A	SALES REP.	House Account

Reilly Road Industrial Park
Fayetteville, N.C. 28309
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uring reactions less than or equal to 3000# are imed to comply with the prescriptive Code equirements. The contractor shall refer to the ched Tables (derived from the prescriptive Code equirements) to determine the minimum foundation e and number of wood studs required to support ctions greater than 3000# but not greater than 00#. A registered design professional shall be ined to design the support system for any ction that exceeds those specified in the attached es. A registered design professional shall be ined to design the support system for all ctions that exceed 15000#.

nature **Sales Area**

AD CHART FOR JACK STUDS

ADDRESS	778 Beacon Hill Road
MODEL	2nd Floor
DATE REV.	10/20/25
DRAWN BY	Johnnie Baggett
MALES REP	House Account

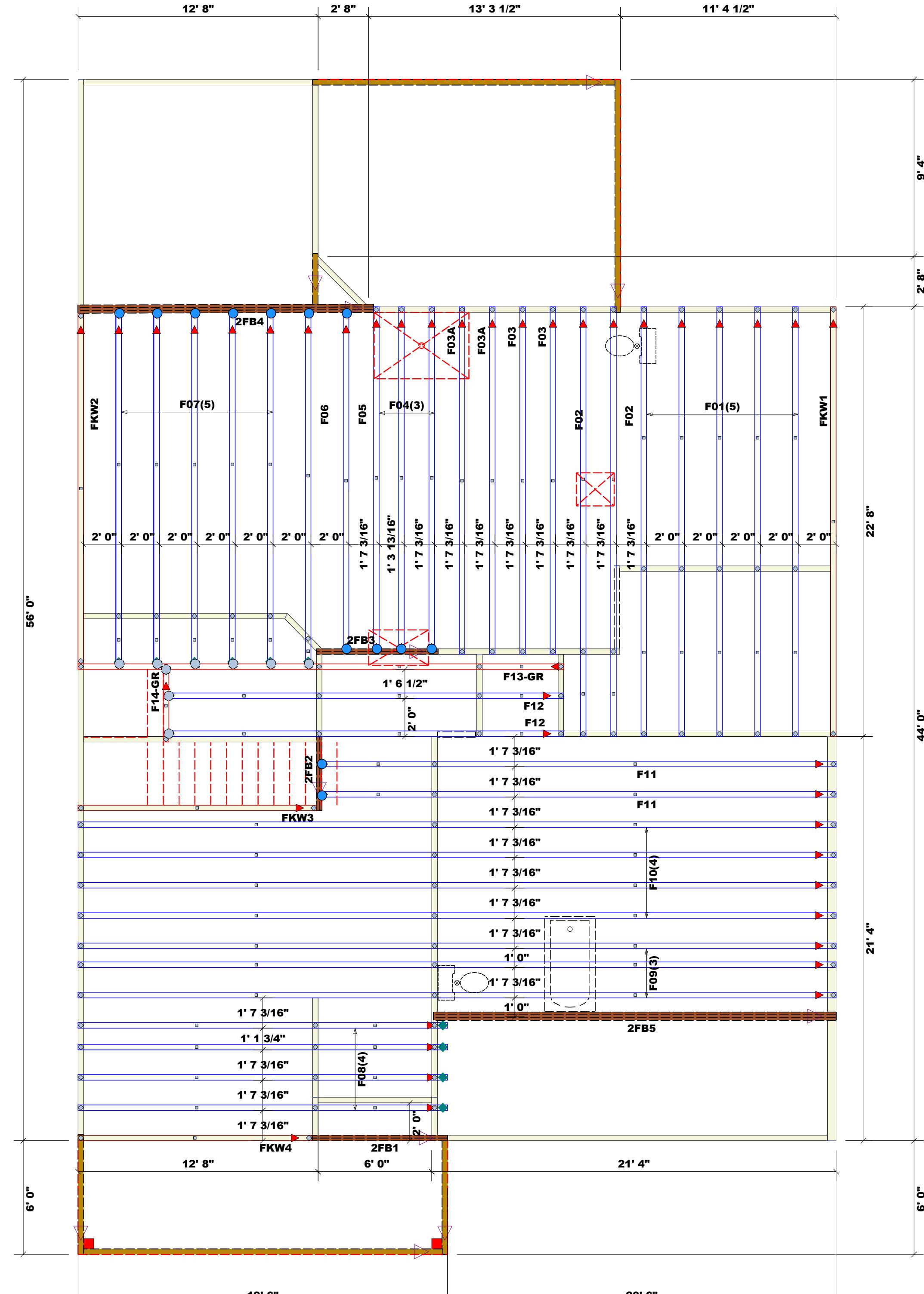
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’s Creek
nogian - Fac

Lot 48 Dunc
The Apex -
Seal Date
Quote #
250231 - B

OB NAME
LAN
SEAL DATE
QUOTE #
OB #

S A TRUSS PLACEMENT DIAGRAM ONLY.
trusses are designed as individual building
ments to be incorporated into the building
at the specification of the building designer.
Individual design sheets for each truss design
ed on the placement drawing. The building
owner is responsible for temporary and
permanent bracing of the roof and floor system and
overall structure. The design of the truss
structure including headers, beams, walls and
columns is the responsibility of the building
owner. For general guidance regarding bracing
BCS1-B1 and BCS1-B3 provided with the
delivery package or online @ sbcindustry.co



Truss Placement Plan

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 250231-A
Lot 48 Duncans Creek

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: I77172196 thru I77172231

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

North Carolina COA: C-0844



October 21, 2025

Galinski, John

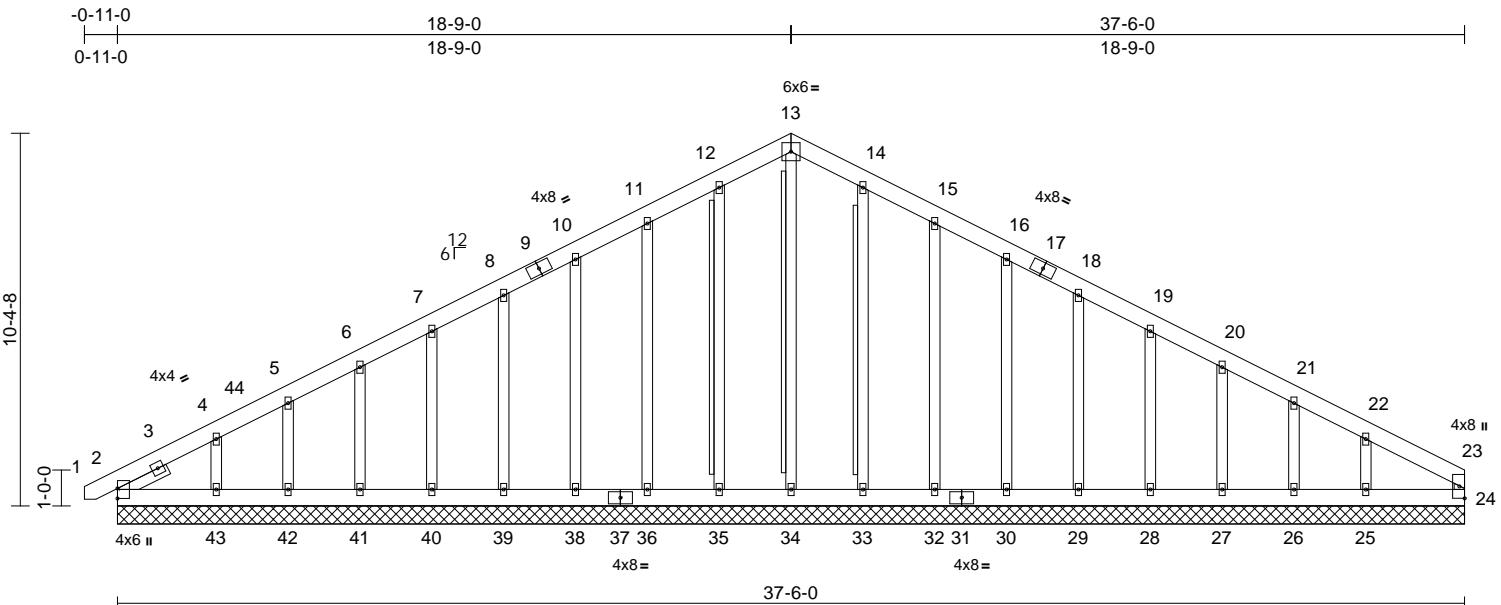
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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 250231-A	Truss A01GE	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77172196
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.30 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 09:38:50
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Page: 1



Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.00	24	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S						Weight: 324 lb	FT = 20%

LUMBER

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

SLIDER Left 2x4 SP No.2 -- 1-6-4

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS T-Brace: 2x4 SPF No.2 - 13-34, 12-35, 14-33

Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.
Brace must cover 90% of web length.

REACTIONS (size) 2=37-6-0, 24=37-6-0, 25=37-6-0, 26=37-6-0, 27=37-6-0, 28=37-6-0, 29=37-6-0, 30=37-6-0, 32=37-6-0, 33=37-6-0, 34=37-6-0, 35=37-6-0, 36=37-6-0, 38=37-6-0, 39=37-6-0, 40=37-6-0, 41=37-6-0, 42=37-6-0, 43=37-6-0

Max Horiz 2=210 (LC 12)

Max Uplift 2=48 (LC 13), 25=148 (LC 13), 26=46 (LC 13), 27=73 (LC 13), 28=68 (LC 13), 29=69 (LC 13), 30=70 (LC 13), 32=82 (LC 13), 33=31 (LC 13), 35=43 (LC 12), 36=78 (LC 12), 38=69 (LC 12), 39=69 (LC 12), 40=69 (LC 12), 41=72 (LC 12), 42=47 (LC 12), 43=160 (LC 12)

Max Grav 2=183 (LC 21), 24=119 (LC 22), 25=210 (LC 26), 26=147 (LC 1), 27=162 (LC 26), 28=160 (LC 1), 29=160 (LC 1), 30=160 (LC 1), 32=162 (LC 26), 33=161 (LC 26), 34=200 (LC 22), 35=161 (LC 25), 36=162 (LC 25), 38=160 (LC 1), 39=160 (LC 1), 40=159 (LC 1), 41=163 (LC 25), 42=147 (LC 1), 43=209 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-8/0, 2-4=-257/111, 4-5=-161/114, 5-6=-130/140, 6-7=-100/170, 7-8=-83/199, 8-10=-89/230, 10-11=-109/288, 11-12=-131/352, 12-13=-145/389, 13-14=-145/389, 14-15=-131/352, 15-16=-109/288, 16-18=-89/230, 18-19=-69/172, 19-20=-53/115, 20-21=-56/57, 21-22=-82/21, 22-23=-143/42, 23-24=-83/0

BOT CHORD 2-43=-33/151, 42-43=-33/151, 41-42=-33/151, 40-41=-33/151, 39-40=-33/151, 38-39=-33/151, 36-38=-33/151, 35-36=-33/151, 34-35=-33/151, 33-34=-33/151, 32-33=-33/151, 30-32=-33/151, 29-30=-33/151, 28-29=-33/151, 27-28=-33/151, 26-27=-33/151, 25-26=-33/151, 24-25=-33/151, 13-34=-210/36, 12-35=-121/67, 11-36=-122/121, 10-38=-120/106, 8-39=-120/105, 7-40=-120/105, 6-41=-121/107, 5-42=-113/93, 4-43=-149/237, 14-33=-121/60, 15-32=-122/121, 16-30=-120/106, 18-29=-120/105, 19-28=-120/105, 20-27=-121/107, 21-26=-111/112, 22-25=-156/242

WEBS

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-9-2 to 3-7-11, Exterior(2N) 3-7-11 to 18-9-0, Corner(3R) 18-9-0 to 23-1-13, Exterior(2N) 23-1-13 to 37-4-4 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 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.



October 21, 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 the Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcaccomponents.com)

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job 250231-A	Truss A01GE	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77172196
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Page: 2

- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 48 lb uplift at joint 2, 43 lb uplift at joint 35, 78 lb uplift at joint 36, 69 lb uplift at joint 38, 69 lb uplift at joint 39, 69 lb uplift at joint 40, 72 lb uplift at joint 41, 47 lb uplift at joint 42, 160 lb uplift at joint 43, 31 lb uplift at joint 33, 82 lb uplift at joint 32, 70 lb uplift at joint 30, 69 lb uplift at joint 29, 68 lb uplift at joint 28, 73 lb uplift at joint 27, 46 lb uplift at joint 26 and 148 lb uplift at joint 25.
- 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

LOAD CASE(S) Standard



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

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

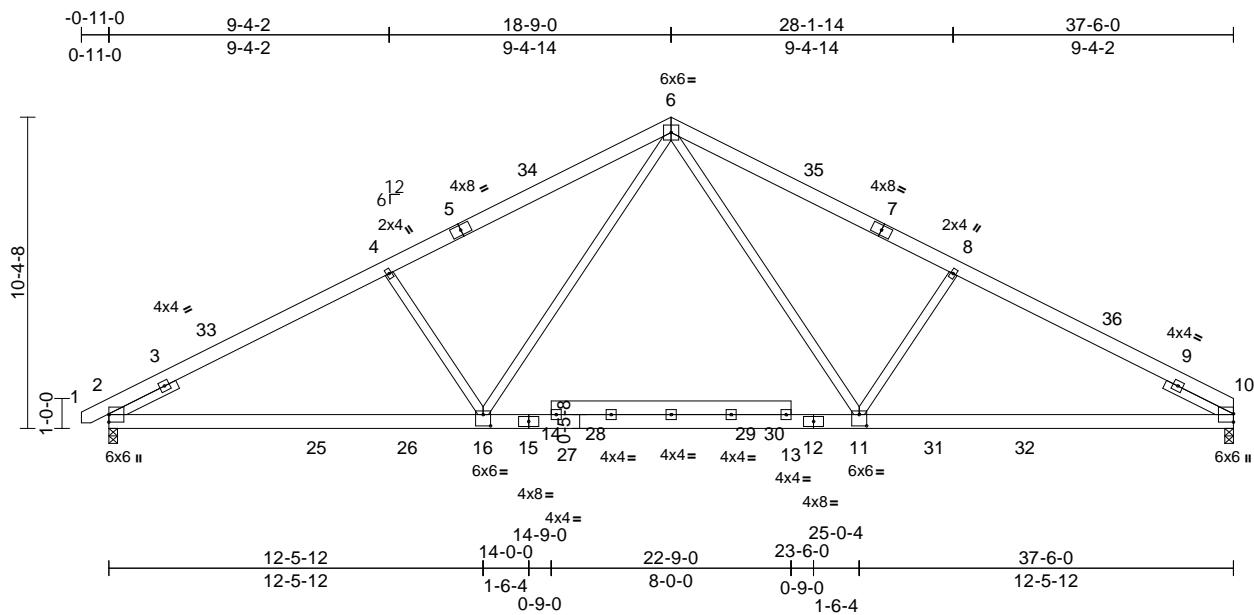
Job 250231-A	Truss A02	Truss Type FINK	Qty 6	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77172197
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.3.0 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 09:38:51
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Page: 1

Page: 1



Scale = 1:76.8

Plate Offsets (X, Y): [11:0-3-0,0-4-8], [16:0-3-0,0-4-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	-0.18	11-16	>999	360	MT20	
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.37	11-16	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.07	10	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS		Wind(LL)	0.06	11-16	>999	240	Weight: 265 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 2-6-0, Right 2x4 SP No.2
-- 2-6-0

- 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 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.

BRACING

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

the bottom chord.

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

Max Horiz 2=128 (LC 9)
Max Gray 2=1927 (LC 2) 10=1888 (LC 2)

FORCES

FORCES (lb) - Maximum Compression/Maximum Tension

1000

BOT CHORD 2-16=-194/2740, 11-16=-19/1875,
10-11=-180/2695

WEBS

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-2 to 3-7-11, Interior (1) 3-7-11 to 18-9-0, Exterior(2R) 18-9-0 to 23-1-13, Interior (1) 23-1-13 to 37-6-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 200.0lb AC unit load placed on the bottom chord, 18-9-0 from left end, supported at two points, 5-0-0 apart.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads



October 21,2025



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

WARNING: Verify design parameters and **READ NOTES ON THIS AND INCLUDED WITH KEY ENCLURE PAGE MP-147.3 REV. 1/2020** BEFORE USE.

Design valid for use only with MitTek® 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 **ANS/TP11 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.sbcaccomponents.com)

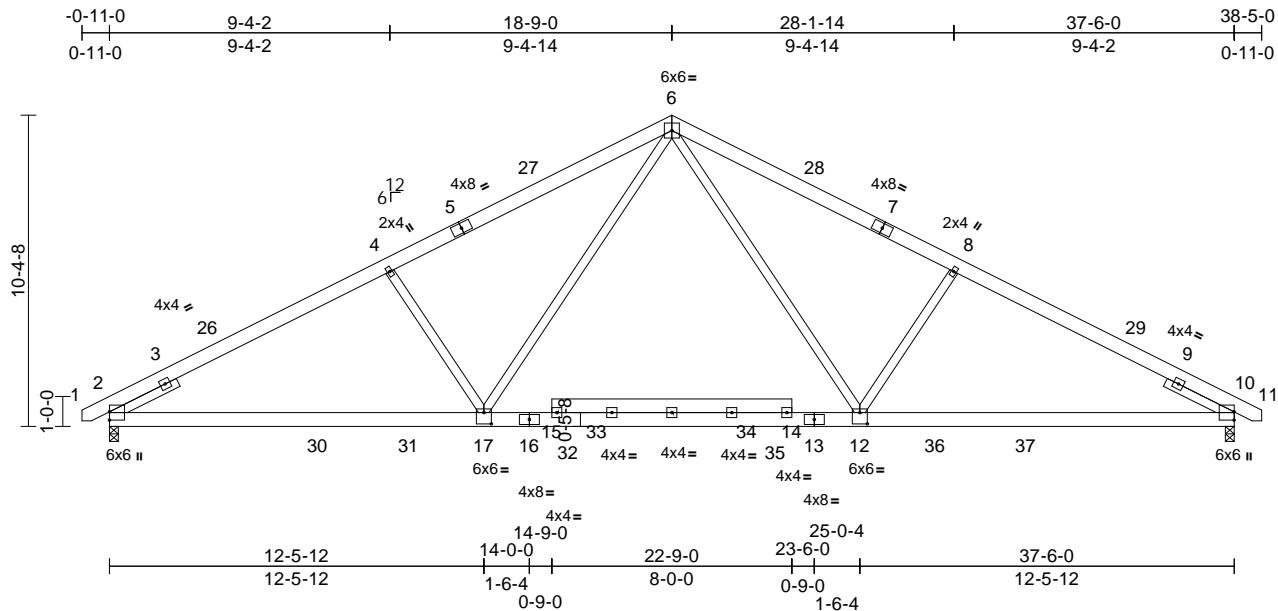
The logo for TRENCO Engineering. It features the word "TRENCO" in a large, bold, black sans-serif font. The letter "T" has a vertical blue bar on its left side. Above "TRENCO", the words "ENGINEERING BY" are written in a smaller, black, all-caps font. Below "TRENCO", the words "A MiTek Affiliate" are written in a smaller, black, all-caps font.

Job 250231-A	Truss A03	Truss Type COMMON	Qty 3	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77172198
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Comtech, Inc, Fayetteville, NC - 28314,

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Page: 1



Scale = 1:76.8

Plate Offsets (X, Y): [12:0-3-0,0-4-8], [17:0-3-0,0-4-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	-0.18	12-17	>999	360	MT20	
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.37	12-17	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.07	10	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS		Wind(LL)	0.06	12-17	>999	240	Weight: 268 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 2-6-0, Right 2x4 SP No.2 -- 2-6-0

5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
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 Structural wood sheathing directly applied.

BOT CHORD Rigid ceiling directly applied.

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

Max Horiz 2=-127 (LC 10)
Max Grav 2=1926 (LC 2), 10=1926 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/20, 2-4=-3095/329, 4-6=-2895/350, 6-8=-2895/350, 8-10=-3095/329, 10-11=0/20

BOT CHORD 2-17=-167/2744, 12-17=0/1879, 10-12=-165/2692

WEBS 4-17=-485/315, 6-17=-12/1219, 6-12=-12/1219, 8-12=-485/315

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-2 to 3-7-11, Interior (1) 3-7-11 to 18-9-0, Exterior(2R) 18-9-0 to 23-1-13, Interior (1) 23-1-13 to 38-3-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 200.0lb AC unit load placed on the bottom chord, 18-9-0 from left end, supported at two points, 5-0-0 apart.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.



October 21, 2025

 **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-743 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 the Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcaccomponents.com)

ENGINEERING BY
TRENCO
A MiTek Affiliate

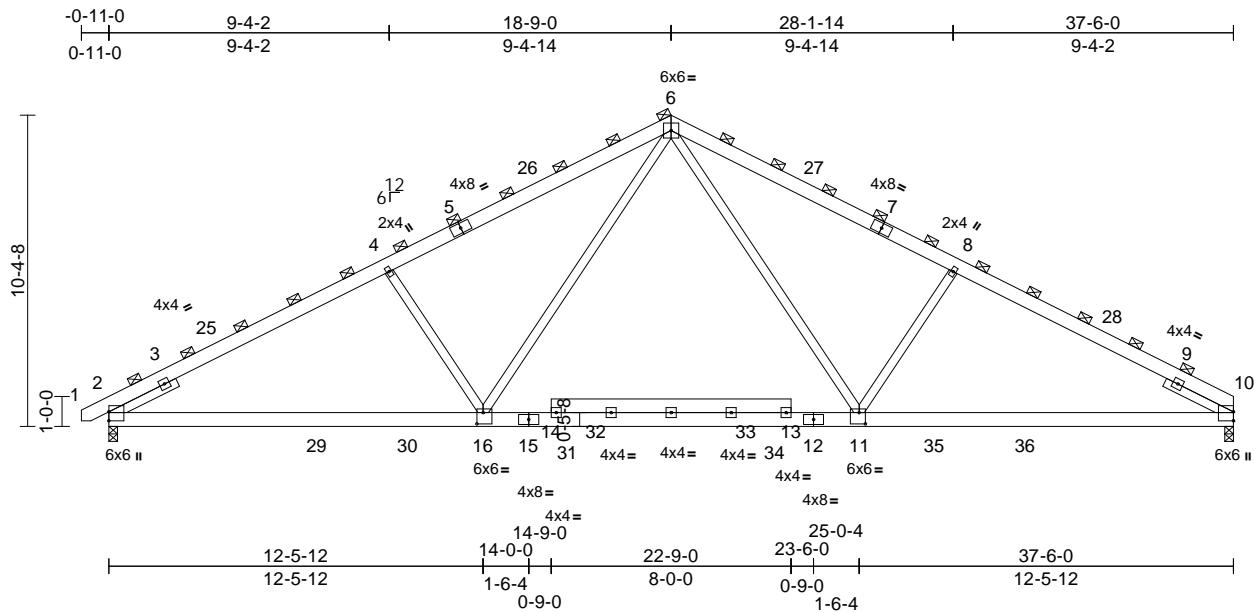
818 Soundside Road
Edenton, NC 27932

Job 250231-A	Truss A04A	Truss Type COMMON	Qty 1	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77172200
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.3.0 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 09:38:51
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Page: 1



Scale = 1:76.8

Plate Offsets (X, Y): [11:0-2-8,0-4-8], [16:0-2-8,0-4-8]

Loading	(psf)	Spacing	2-1-8	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	-0.20	11-16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(CT)	-0.39	11-16	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	Horz(CT)	0.08	10	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS	Wind(LL)	0.06	11-16	>999	240	Weight: 265 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 WEBS 2x4 SP No.2
 SLIDER Left 2x4 SP No.2 -- 2-6-0, Right 2x4 SP No.2 -- 2-6-0

5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 6 lb uplift at joint 2.

BRACING

TOP CHORD 2-0-0 oc purlins (3-10-3 max.)
 (Switched from sheeted: Spacing > 2-0-0).
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

7) 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

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

Max Horiz 2=136 (LC 9)

Max Uplift 2=6 (LC 12)

Max Grav 2=2041 (LC 2), 10=2000 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/22, 2-4=-3283/366, 4-6=-3068/387, 6-8=-3069/393, 8-10=-3284/372

BOT CHORD 2-16=-221/2908, 11-16=-24/1975, 10-11=-206/2860

WEBS 4-16=-530/342, 6-16=-26/1303, 6-11=-26/1305, 8-11=-532/342

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
 $V_{asd}=103\text{mph}$; TCDL=6.0psf; BCDL=6.0psf; $h=15\text{ft}$; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-9-2 to 3-7-11, Interior (1) 3-7-11 to 18-9-0, Exterior(2R) 18-9-0 to 23-1-13, Interior (1) 23-1-13 to 37-6-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 200.0lb AC unit load placed on the bottom chord, 18-9-0 from left end, supported at two points, 5-0-0 apart.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.



October 21, 2025

 **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-743 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 the Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcaccomponents.com)

TRENCO
 ENGINEERING BY
 A MiTek Affiliate

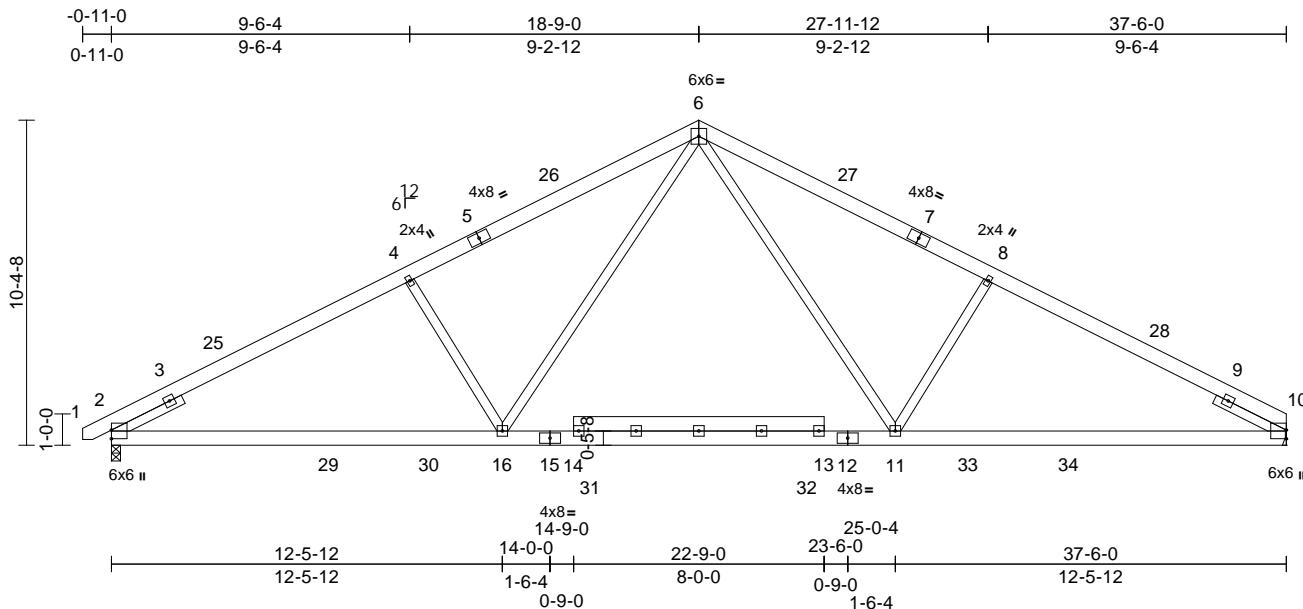
818 Soundside Road
 Edenton, NC 27932

Job 250231-A	Truss A05	Truss Type Common	Qty 3	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77172201
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.3.0 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 09:38:51
ID:6XJu5EDhI0ALdYBK4rF8nKyOFED-RFC?PsB70Hq3NSgPqnL8w3u1TxGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:73.5

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	-0.18	11-16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(CT)	-0.28	11-16	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.06	10	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS	Wind(LL)	0.06	11-16	>999	240	Weight: 265 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 WEBS 2x4 SP No.2
 SLIDER Left 2x4 SP No.2 -- 2-6-0, Right 2x4 SP No.2 -- 2-6-0

6) Refer to girder(s) for truss to truss connections.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint 2 and 89 lb uplift at joint 10.

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

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

REACTIONS (size) 2=0-3-8, 10= Mechanical
 Max Horiz 2=128 (LC 9)
 Max Uplift 2=100 (LC 12), 10=89 (LC 13)
 Max Grav 2=1832 (LC 2), 10=1793 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/20, 2-4=-2888/538, 4-6=-2695/568, 6-8=-2696/574, 8-10=-2890/544
 BOT CHORD 2-16=-373/2557, 11-16=-153/1745, 10-11=-359/2513
 WEBS 4-16=-502/299, 6-16=-127/1125, 6-11=-128/1128, 8-11=-504/299

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
 $V_{asd}=103\text{ mph}$; $TCDL=6.0\text{ psf}$; $BCDL=6.0\text{ psf}$; $h=15\text{ ft}$; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-2 to 3-7-11, Interior (1) 3-7-11 to 18-9-0, Exterior(2R) 18-9-0 to 23-1-13, Interior (1) 23-1-13 to 37-6-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are 4x4 (=) MT20 unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with $BCDL = 10.0\text{ psf}$.



October 21, 2025

 **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-743 rev. 1/2/2023 BEFORE USE.**

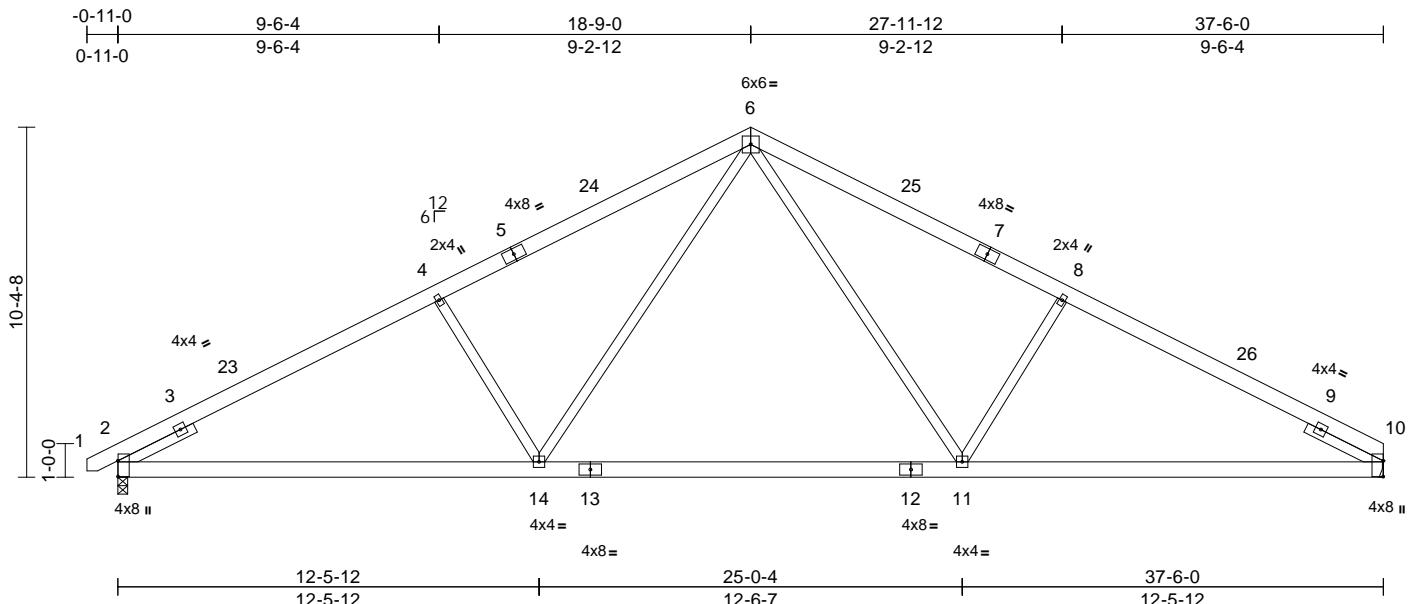
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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 the Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcaccomponents.com)

Job 250231-A	Truss A06	Truss Type Common	Qty 6	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77172202
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.3.0 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 09:38:52
ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RFc?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:68.3

Plate Offsets (X, Y): [2:0-5-10,0,0-1], [10:0-5-10,0,0-1]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	-0.11	11-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.27	11-14	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.06	10	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS		Wind(LL)	0.06	11-14	>999	240	Weight: 247 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 WEBS 2x4 SP No.2
 SLIDER Left 2x4 SP No.2 -- 2-6-0, Right 2x4 SP No.2
 -- 2-6-0

5) Refer to girder(s) for truss to truss connections.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint 2 and 89 lb uplift at joint 10.

7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

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

REACTIONS (size) 2=0-3-8, 10= Mechanical
 Max Horiz 2=128 (LC 9)
 Max Uplift 2=100 (LC 12), 10=89 (LC 13)
 Max Grav 2=1546 (LC 1), 10=1500 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/20, 2-4=-2421/535, 4-6=-2187/565, 6-8=-2189/571, 8-10=-2422/540
 BOT CHORD 2-14=-371/2081, 11-14=-151/1439, 10-11=-356/2083
 WEBS 6-14=-126/799, 6-11=-126/802, 4-14=-499/300, 8-11=-500/300

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
 $V_{asd}=103\text{mph}$; $TCDL=6.0\text{psf}$; $BCDL=6.0\text{psf}$; $h=15\text{ft}$; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-2 to 3-7-11, Interior (1) 3-7-11 to 18-9-0, Exterior(2R) 18-9-0 to 23-1-13, Interior (1) 23-1-13 to 37-6-0 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 0.0psf on the bottom chord in all areas where a rectangle 0-0 tall by 0-0 wide will fit between the bottom chord and any other members.



October 21, 2025

 **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-743 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 the Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

Job 250231-A	Truss A07-GE	Truss Type Common Supported Gable	Qty 1	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77172203
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.3.0 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 09:38:52
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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.

LOAD CASE(S) Standard



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

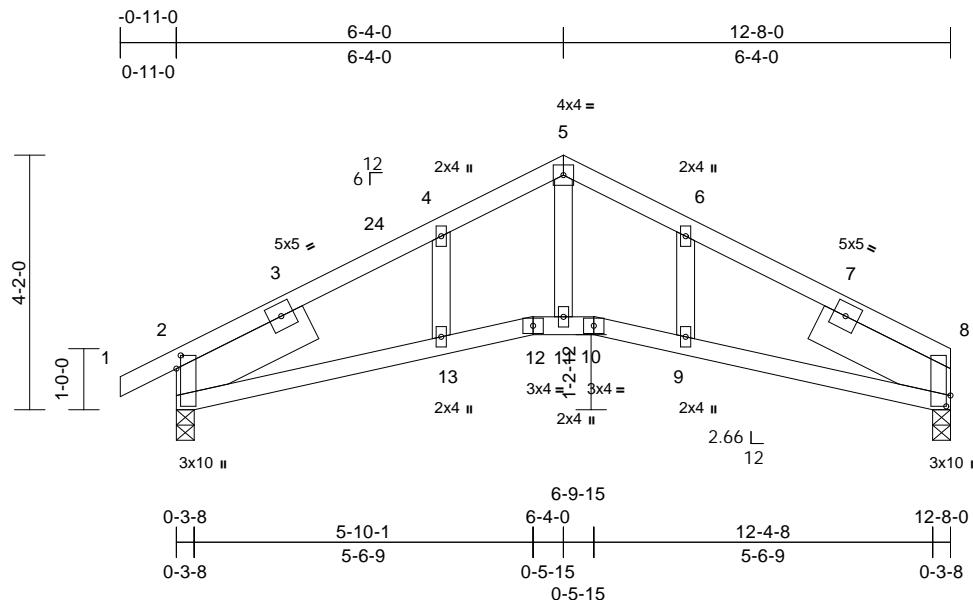
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANS/TP1 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)

Job 250231-A	Truss B01GE	Truss Type Roof Special	Qty 1	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77172204
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.3.0 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 09:38:52
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Page: 1



Scale = 1:37.7

Plate Offsets (X, Y): [2:0-2-10,0-0-13], [8:0-2-2,0-0-13]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	-0.05	9-16	>999	360	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.09	9-16	>999	240	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.03	8	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS	Wind(LL)	0.04	9-16	>999	240	Weight: 66 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.1
 BOT CHORD 2x4 SP No.1
 WEBS 2x4 SP No.2
 OTHERS 2x4 SP No.2
 SLIDER Left 2x8 SP No.1 -- 2-6-0, Right 2x8 SP No.1
 2x8 0

BRACINC

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

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

REACTIONS (SIZZ) 2=3 3, 3=3 3
 Max Horiz 2=50 (LC 12)
 Max Uplift 2=42 (LC 12), 8=29 (LC 13)
 Max Grav 2=577 (LC 1), 8=491 (LC 1)

FORCES

	Tension
TOP CHORD	5-6--709/443, 6-8--711/386, 1-2=0/25, 2-4--777/372, 4-5--711/431
BOT CHORD	9-10--271/663, 8-9--259/652, 11-12--250/636, 10-11--250/636, 2-13--257/681, 12-13--273/659
WERS	5 11 216/204 4 12 221/17 6 0 20/127

WEBS
NOTES

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-11-0 to 3-5-13, Interior (1) 3-5-13 to 6-4-0, Exterior(2R) 6-4-0 to 10-8-13, Interior (1) 10-8-13 to 12-8-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Gable studs spaced at 2-0-0 oc.

- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 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.
- 7) Bearing at joint(s) 8, 2 considers parallel to grain value using ANSI/TP1 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 8 and 42 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



October 21,2025



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

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MILEN KEY ENCLURE PAGE MP-473 REV. 1/2/2023 DLT ONE USE.
Design valid for use only with MitTek® connectors. This design is based only upon parameters shown, and is for 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 **ANSITPI Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **RCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbccomponents.com).

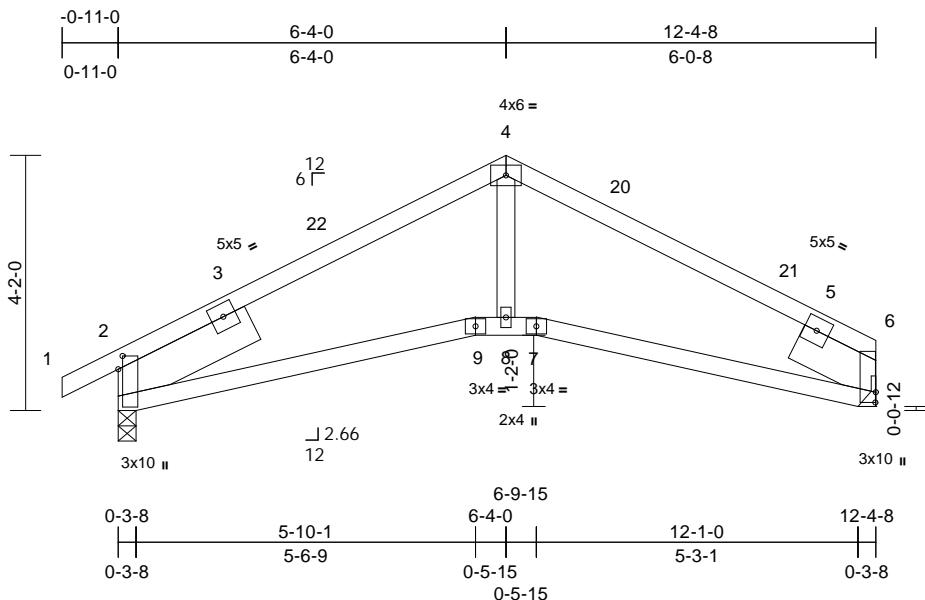
The logo for TRENCO Engineering. It features the word "TRENCO" in a large, bold, black sans-serif font. The letter "T" has a blue horizontal bar extending from its top. Below "TRENCO" is the text "ENGINEERING BY" in a smaller, black, all-caps font. Underneath that is "A MITEk Affiliate" in a smaller, black, all-caps font.

Job 250231-A	Truss B03	Truss Type Roof Special	Qty 1	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77172206
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 E Sep 7 2025 Print: 25.30 E Sep 7 2025 MiTek Industries, Inc. Tue Oct 21 11:09:50
ID:n7pimBzYKH3y6ObRrNivENyRZy7-6MvsRel2louw39VinJCvJxb4WZgxdECbNFY453yRNHn

Page: 1



Scale = 1:37.6

Plate Offsets (X, Y): [2:0-2-10,0,0-13], [6:0-2-0,0,0-1]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	-0.03	7-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(CT)	-0.06	9-18	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.04	6	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS	Wind(LL)	0.02	9-18	>999	240	Weight: 57 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.2
SLIDER Left 2x8 SP No.1 -- 2-6-0, Right 2x8 SP No.1
-- 1-6-6

- 6) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 6 and 42 lb uplift at joint 2.
- 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

BRACING

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

REACTIONS (lb/size) 2=565/0-3-8, 6=480/ Mechanical
Max Horiz 2=53 (LC 12)
Max Uplift 2=42 (LC 12), 6=27 (LC 13)

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

TOP CHORD 4-20=-650/399, 20-21=-664/385,
5-21=-743/373, 3-22=-731/366,
4-22=-664/381

BOT CHORD 6-7=-256/613, 8-9=-241/594, 7-8=-241/594,
2-9=-257/631

WEBS 4-8=-65/390

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C
Exterior(2E) -0-11-0 to 3-5-13, Interior (1) 3-5-13 to
6-4-0, Exterior(2R) 6-4-0 to 10-8-13, Interior (1) 10-8-13
to 12-4-8 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.
- 5) Refer to girder(s) for truss to truss connections.



October 21, 2025



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

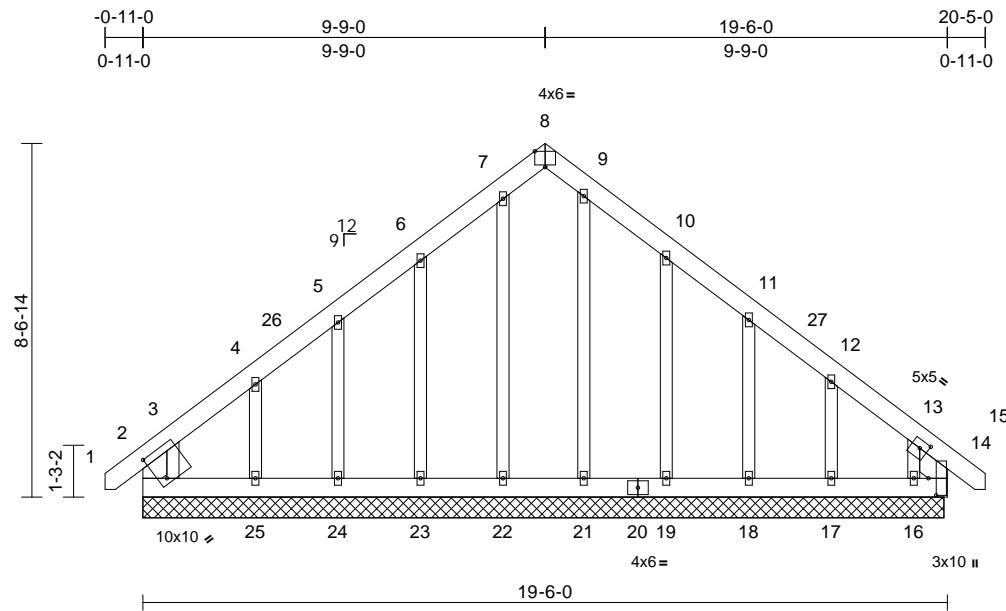
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

Job 250231-A	Truss C01GE	Truss Type GABLE	Qty 1	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77172207
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.30 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 09:38:52
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Page: 1



Scale = 1:55.9

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S						Weight: 171 lb	FT = 20%

LUMBER **LOAD CASE(S)** Standard

TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 OTHERS 2x4 SP No.2
 SLIDER Left 2x6 SP No.1 -- 0-10-6, Right 2x6 SP No.1 -- 0-11-10

BOT CHORD 2-25=-104/231, 24-25=-94/221,

23-24=-94/221, 22-23=-94/221,

21-22=-94/221, 19-21=-94/221,

18-19=-94/221, 17-18=-94/221,

16-17=-94/221, 14-16=-94/221

WEBS 7-22=-116/32, 6-23=-145/153,

5-24=-132/126, 4-25=-176/201, 9-21=-91/0,

10-19=-147/151, 11-18=-140/134,

12-17=-144/167, 13-16=-143/240

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.

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

REACTIONS (size) 2=19-5-0, 14=19-5-0, 16=19-5-0, 17=19-5-0, 18=19-5-0, 19=19-5-0, 21=19-5-0, 22=19-5-0, 23=19-5-0, 24=19-5-0, 25=19-5-0

NOTES

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

2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-9-8 to 3-7-5, Exterior(2N) 3-7-5 to 9-9-0, Corner(3R) 9-9-0 to 14-1-13, Exterior(2N) 14-1-13 to 20-3-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

4) All plates are 2x4 (||) MT20 unless otherwise indicated.

5) Gable studs spaced at 2-0-0 oc.

6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 16 lb uplift at joint 2, 8 lb uplift at joint 22, 115 lb uplift at joint 23, 84 lb uplift at joint 24, 179 lb uplift at joint 25, 115 lb uplift at joint 19, 99 lb uplift at joint 18, 95 lb uplift at joint 14, 107 lb uplift at joint 17 and 242 lb uplift at joint 16.

9) N/A

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/22, 2-3=-223/131, 3-4=-227/162, 4-5=-148/109, 5-6=-130/102, 6-7=-114/172, 7-8=-104/161, 8-9=-102/156, 9-10=-115/176, 10-11=-85/72, 11-12=-102/53, 12-13=-166/88, 13-14=-335/149, 14-15=-9/0



October 21, 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 the Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcaccomponents.com)

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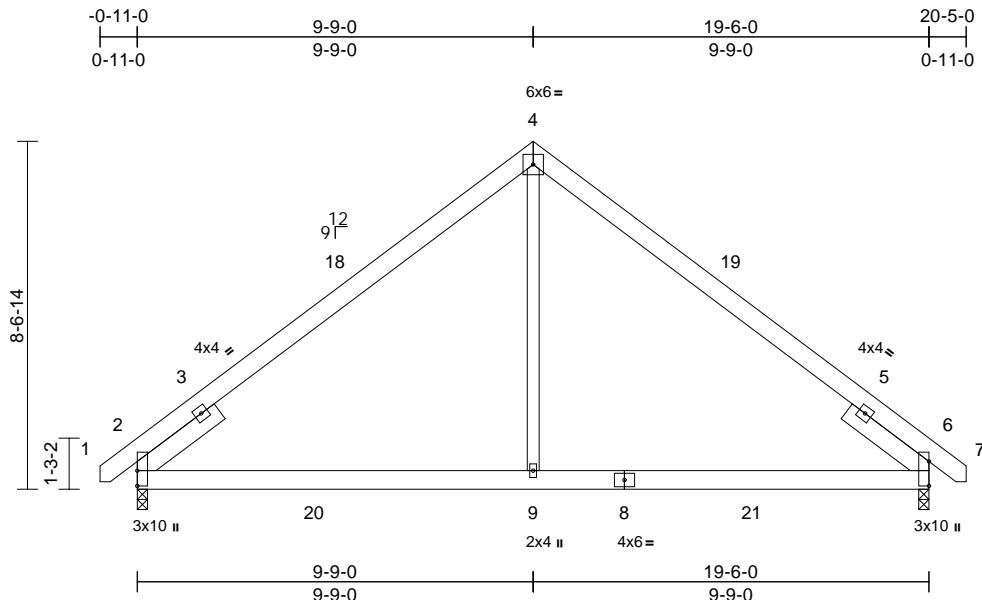
818 Soundside Road
Edenton, NC 27932

Job 250231-A	Truss C02	Truss Type COMMON	Qty 2	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77172208
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.3.0 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 09:38:52
ID:6XJu5EDhI0ALdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f

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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	-0.08	9-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(CT)	-0.12	9-12	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	Horz(CT)	0.03	2	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS	Wind(LL)	0.09	9-12	>999	240	Weight: 132 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.1

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.

BOT CHORD 2x6 SP No.1

WEBS 2x4 SP No.2

SLIDER Left 2x6 SP No.1 -- 2-6-0, Right 2x6 SP No.1

LOAD CASE(S) Standard

-- 2-6-0

BRACING

TOP CHORD Structural wood sheathing directly applied.

BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=0-3-0, 6=0-3-0

Max Horiz 2=-190 (LC 10)

Max Uplift 2=-111 (LC 9), 6=-111 (LC 8)

Max Grav 2=1030 (LC 2), 6=1030 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/29, 2-4=-931/487, 4-6=-931/487, 6-7=0/28

BOT CHORD 2-9=-196/747, 6-9=-196/747

WEBS 4-9=-253/747

NOTES

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

2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-9-8 to 3-7-5, Interior (1) 3-7-5 to 9-9-0, Exterior(2R) 9-9-0 to 14-1-13, Interior (1) 14-1-13 to 20-3-8 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 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 111 lb uplift at joint 2 and 111 lb uplift at joint 6.



October 21, 2025



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-743 rev. 1/2/2023 BEFORE USE.

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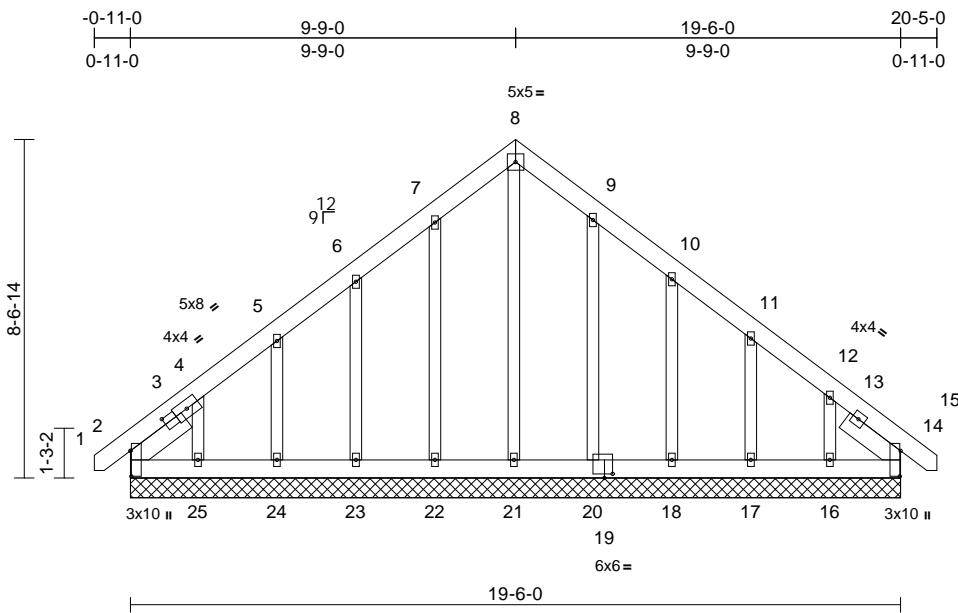
818 Soundside Road
Edenton, NC 27932

Job 250231-A	Truss C03	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77172209
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.3.0 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 09:38:52
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Page: 1



Scale = 1:58.3

Plate Offsets (X, Y): [2:0-7-12,0-0-4], [2:1-1-6,0-2-0], [14:0-7-12,0-0-4], [19:0-2-8,0-1-4]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	n/a	-	n/a	999	
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.00	14	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 175 lb FT = 20%

LUMBER

TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.2
SLIDER Left 2x6 SP No.1 -- 1-8-15, Right 2x6 SP No.1 -- 1-8-14

BOT CHORD 2-25=-102/177, 24-25=-87/197, 23-24=-87/197, 22-23=-87/197, 21-22=-87/197, 20-21=-87/198, 18-20=-87/198, 17-18=-87/198, 16-17=-87/198, 14-16=-87/198 WEBS 8-21=-159/48, 7-22=-146/105, 6-23=-137/141, 5-24=-160/169, 3-25=-142/199, 9-20=-134/96, 10-18=-144/145, 11-17=-141/143, 12-16=-148/223

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 90 lb uplift at joint 2, 81 lb uplift at joint 22, 103 lb uplift at joint 23, 122 lb uplift at joint 24, 153 lb uplift at joint 25, 69 lb uplift at joint 20, 111 lb uplift at joint 18, 92 lb uplift at joint 17, 184 lb uplift at joint 16 and 29 lb uplift at joint 14.

LOAD CASE(S)

Standard

BRACING

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

REACTIONS (size)

2=19-6-0, 14=19-6-0, 16=19-6-0, 17=19-6-0, 18=19-6-0, 20=19-6-0, 21=19-6-0, 22=19-6-0, 23=19-6-0, 24=19-6-0, 25=19-6-0

Max Horiz 2=240 (LC 9)

Max Uplift 2=90 (LC 8), 14=29 (LC 9), 16=184 (LC 13), 17=92 (LC 13), 18=111 (LC 13), 20=69 (LC 13), 22=81 (LC 12), 23=103 (LC 12), 24=122 (LC 12), 25=153 (LC 12)

Max Grav 2=220 (LC 20), 14=187 (LC 22), 16=194 (LC 20), 17=179 (LC 20), 18=184 (LC 20), 20=174 (LC 20), 21=164 (LC 22), 22=186 (LC 19), 23=177 (LC 19), 24=200 (LC 19), 25=177 (LC 19)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=9/0, 2-3=260/173, 3-4=-179/106, 4-5=169/144, 5-6=143/114, 6-7=-125/155, 7-8=-139/226, 8-9=-138/226, 9-10=-102/153, 10-11=-90/56, 11-12=-107/63, 12-14=-235/113, 14-15=-9/0

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-9-8 to 3-8-8, Exterior(2N) 3-8-8 to 9-9-0, Corner(3R) 9-9-0 to 14-1-13, Exterior(2N) 14-1-13 to 20-3-8 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 (||) MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.



October 21, 2025

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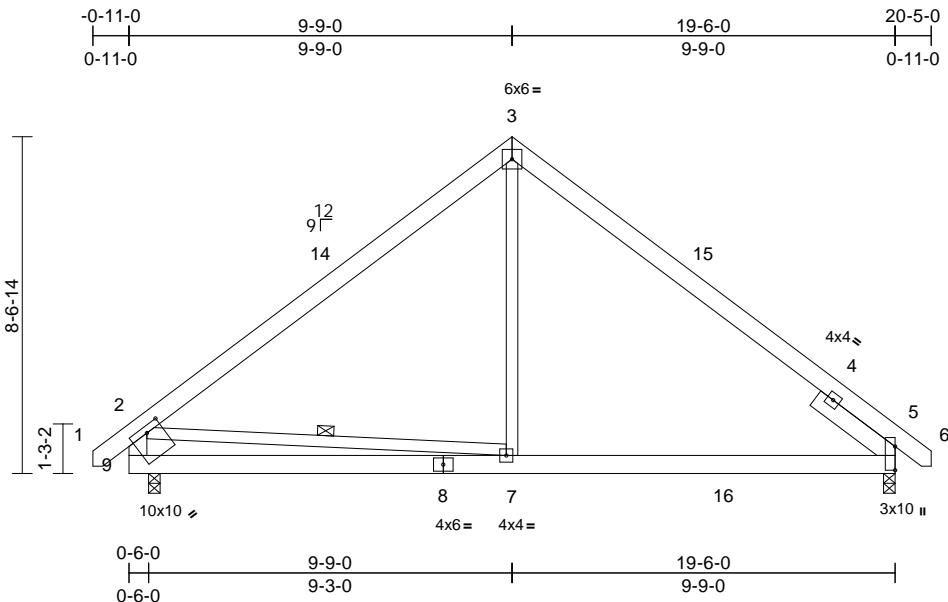
818 Soundside Road
Edenton, NC 27932

Job 250231-A	Truss C04	Truss Type COMMON	Qty 2	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77172210
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.3.0 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 09:38:53
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Page: 1



Scale = 1:58.6

Plate Offsets (X, Y): [9:0-4-12,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	-0.10	7-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(CT)	-0.14	7-12	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	-0.02	5	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS	Wind(LL)	0.05	7-12	>999	240	Weight: 141 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except* 9-2:2x6 SP No.1
SLIDER Right 2x6 SP No.1 -- 2-6-0

BRACING

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 48 lb uplift at joint 9 and 46 lb uplift at joint 5.
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

BOT CHORD Rigid ceiling directly applied.

WEBS 1 Row at midpt 2-7

REACTIONS (size) 5=0-3-8, 9=0-3-8

Max Horiz 9=-214 (LC 10)

Max Uplift 5=-46 (LC 13), 9=-48 (LC 12)

Max Grav 5=998 (LC 20), 9=967 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/37, 2-3=-1014/217, 3-5=-864/214, 5-6=0/28, 2-9=-831/258

BOT CHORD 7-9=-287/775, 5-7=-93/723

WEBS 3-7=0/569, 2-7=-241/335

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C
Exterior(2E) -0-9-8 to 3-7-5, Interior (1) 3-7-5 to 9-9-0,
Exterior(2R) 9-9-0 to 14-1-13, Interior (1) 14-1-13 to 20-3-8 zone; cantilever left exposed ; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.



October 21, 2025

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-743 rev. 1/2/2023 BEFORE USE.**

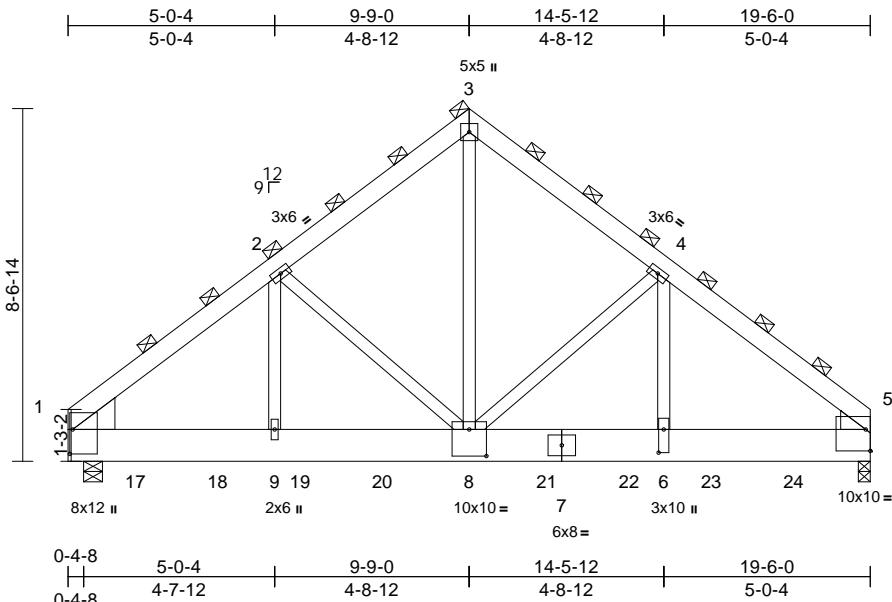
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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 the Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

Job 250231-A	Truss C05-GR	Truss Type Common Girder	Qty 1	Ply 3	Lot 48 Duncans Creek Job Reference (optional)	I77172211
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.30 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 09:38:53
ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RFc?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f

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Scale = 1:56

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

Loading	(psf)	Spacing	2-1-8	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	-0.06	8-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(CT)	-0.12	8-9	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS	Wind(LL)	0.04	8-9	>999	240	Weight: 540 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.1
BOT CHORD 2x10 SP No.1
WEBS 2x4 SP No.2
WEDGE Left: 2x10 SP No.1
Right: 2x6 SP No.1

BRACING

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

REACTIONS (size) 1=0-5-8, 5=0-3-8
Max Horiz 1=186 (LC 4)
Max Uplift 1=505 (LC 8), 5=477 (LC 9)
Max Grav 1=7978 (LC 2), 5=7177 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=7367/519, 2-3=6163/505,
3-4=6190/506, 4-5=8251/579

BOT CHORD 1-9=-411/5653, 8-9=-411/5653,
6-8=-396/6447, 5-6=-396/6447

WEBS 2-9=-100/2062, 2-8=-1359/188,
3-8=-493/6801, 4-8=-2062/266,
4-6=-150/2549

NOTES

- 3-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 - 4 rows staggered at 0-5-0 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.

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 3-12=64, 3-5=64, 1-14=21
Concentrated Loads (lb)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Solid blocking is required on both sides of the truss at joint(s), 1.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 505 lb uplift at joint 1 and 477 lb uplift at joint 5.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1772 lb down and 102 lb up at 1-7-12, 1772 lb down and 102 lb up at 3-7-12, 1772 lb down and 102 lb up at 5-7-12, 1478 lb down and 102 lb up at 7-7-12, 1478 lb down and 102 lb up at 9-7-12, 1478 lb down and 102 lb up at 11-7-12, 1478 lb down and 102 lb up at 13-7-12, and 1478 lb down and 102 lb up at 15-7-12, and 1478 lb down and 102 lb up at 17-7-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

Vert: 8=-1478 (B), 17=-1478 (B), 18=-1478 (B), 19=-1478 (B), 20=-1478 (B), 21=-1478 (B), 22=-1478 (B), 23=-1478 (B), 24=-1478 (B)



October 21, 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 the Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcaccomponents.com)

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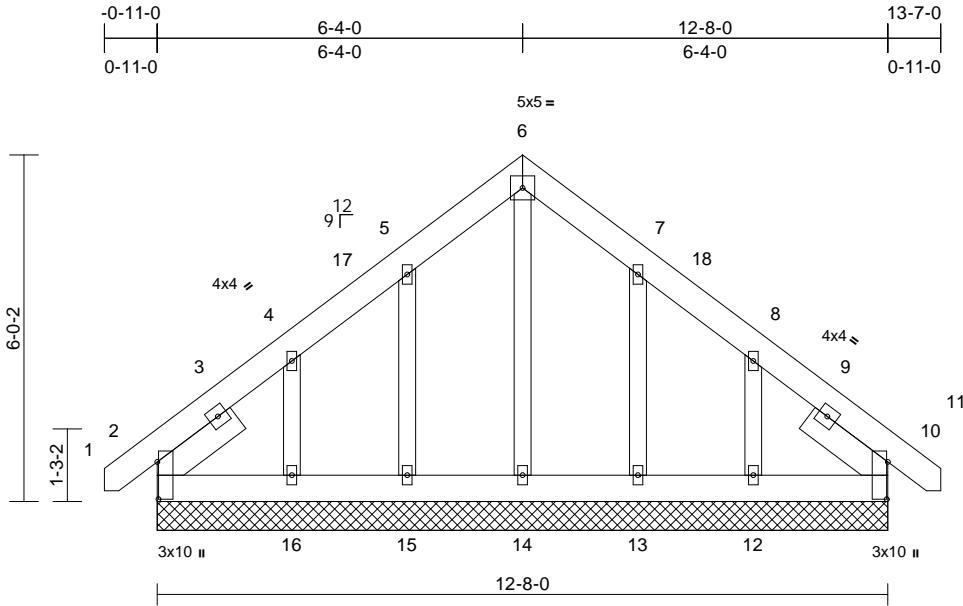
818 Soundside Road
Edenton, NC 27932

Job 250231-A	Truss G01GE	Truss Type GABLE	Qty 1	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77172212
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.30 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 09:38:53
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Page: 1



Scale = 1:39.9

Plate Offsets (X, Y): [2:0-7-12,0-0-4], [10:0-7-12,0-0-4]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	10	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 105 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 OTHERS 2x4 SP No.2
 SLIDER Left 2x6 SP No.1 -- 1-8-9, Right 2x6 SP No.1
 -- 1-8-9

2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
 Vasd=103mph; TCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-9-8 to 3-7-5, Exterior(2N) 3-7-5 to 6-4-0, Corner(3R) 6-4-0 to 10-8-13, Exterior(2N) 10-8-13 to 13-5-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

BRACING
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.

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.

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

4) All plates are 2x4 (||) MT20 unless otherwise indicated.

REACTIONS (size) 2=12-8-0, 10=12-8-0, 12=12-8-0,
 13=12-8-0, 14=12-8-0, 15=12-8-0,
 16=12-8-0

5) Gable requires continuous bottom chord bearing.

Max Horiz 2=164 (LC 9)

6) Gable studs spaced at 2-0-0 oc.

Max Uplift 2=46 (LC 8), 10=11 (LC 9),
 12=166 (LC 13), 13=75 (LC 13),
 15=76 (LC 12), 16=174 (LC 12)

7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

Max Grav 2=194 (LC 20), 10=176 (LC 1),
 12=218 (LC 20), 13=172 (LC 20),
 14=133 (LC 22), 15=174 (LC 19),
 16=227 (LC 19)

8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=-9/0, 2-4=-167/106, 4-5=-117/129,
 5-6=-136/224, 6-7=-136/224, 7-8=-90/126,
 8-10=-142/62, 10-11=-9/0

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 46 lb uplift at joint 2, 11 lb uplift at joint 10, 76 lb uplift at joint 15, 174 lb uplift at joint 16, 75 lb uplift at joint 13 and 166 lb uplift at joint 12.

BOT CHORD 2-16=-55/134, 15-16=-55/134,
 14-15=-55/134, 13-14=-55/134,
 12-13=-55/134, 10-12=-55/134
 WEBS 6-14=-145/42, 5-15=-139/141,
 4-16=-171/275, 7-13=-137/140,
 8-12=-171/273

LOAD CASE(S) Standard

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



October 21, 2025

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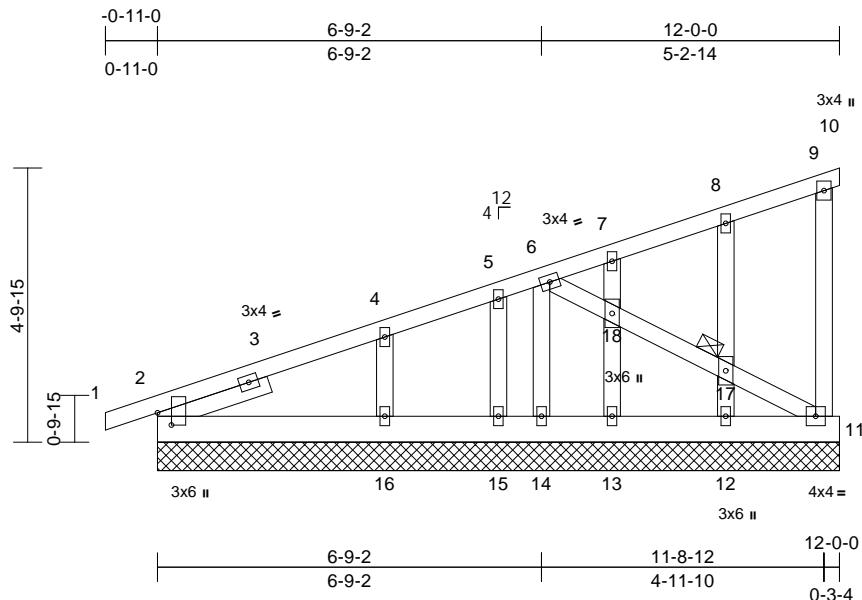
818 Soundside Road
 Edenton, NC 27932

Job 250231-A	Truss M01GE	Truss Type Monopitch	Qty 1	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77172213
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.30 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 09:38:53
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Page: 1



Scale = 1:40.5

Plate Offsets (X, Y): [2:0-2-9,0-2-15]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.00	10	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S						Weight: 83 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 2-0-10

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-11-0 to 3-5-13, Exterior(2N) 3-5-13 to 12-0-0 zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 (||) MT20 unless otherwise indicated. Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.

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

- JOINTS 1 Brace at Jt(s): 17
- Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

REACTIONS (size) 2=12-0-0, 10=12-0-0, 11=12-0-0, 12=12-0-0, 13=12-0-0, 14=12-0-0, 15=12-0-0, 16=12-0-0

- Max Horiz 2=203 (LC 12)
- Max Uplift 2=56 (LC 8), 10=6 (LC 12), 11=84 (LC 12), 12=50 (LC 8), 13=42 (LC 8), 16=130 (LC 12)
- Max Grav 2=227 (LC 1), 10=7 (LC 1), 11=105 (LC 1), 12=162 (LC 1), 13=131 (LC 1), 14=48 (LC 3), 15=34 (LC 1), 16=303 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 6 lb uplift at joint 10, 84 lb uplift at joint 11, 56 lb uplift at joint 2, 50 lb uplift at joint 12, 42 lb uplift at joint 13 and 130 lb uplift at joint 16.

TOP CHORD 1-2=8/0, 2-4=137/7, 4-5=101/13, 5-6=77/27, 6-7=135/40, 7-8=91/30, 8-9=30/12, 9-10=5/2, 9-11=51/65

LOAD CASE(S) Standard

BOT CHORD 2-16=188/86, 15-16=188/86, 14-15=188/86, 13-14=188/86, 12-13=188/86, 11-12=188/86

- WEBS 6-14=50/15, 6-18=96/210, 17-18=-96/209, 11-17=-99/216, 8-17=-125/168, 12-17=-120/153, 7-18=-98/124, 13-18=-98/126, 5-15=-44/34, 4-16=-201/301

NOTES

- Unbalanced roof live loads have been considered for this design.



October 21, 2025



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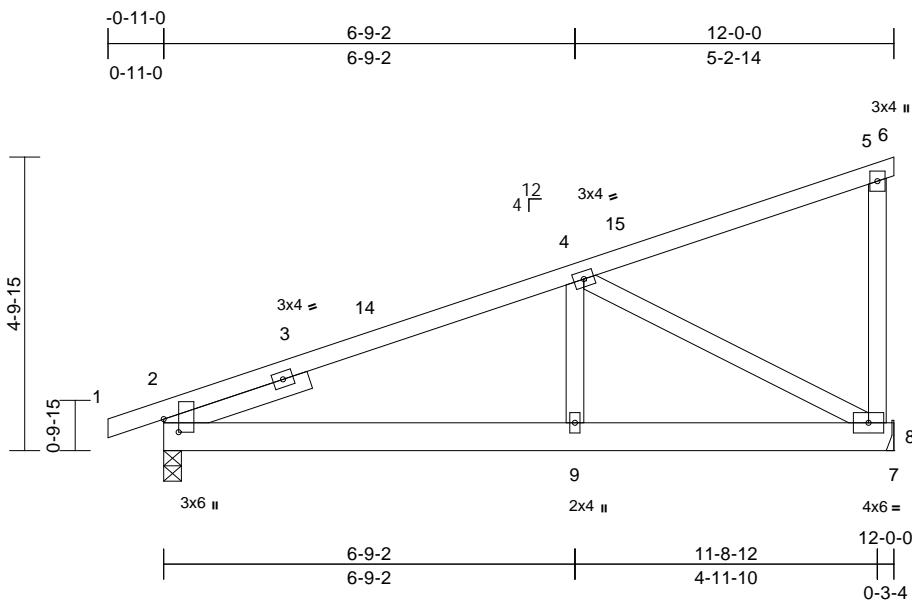
818 Soundside Road
Edenton, NC 27932

Job 250231-A	Truss M02	Truss Type Monopitch	Qty 7	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77172214
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Comtech, Inc, Fayetteville, NC - 28314,

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Page: 1



Scale = 1:37.9

Plate Offsets (X, Y): [2:0-2-9,0-2-15]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	0.03	9-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(CT)	-0.03	9-12	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	-0.01	2	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS						Weight: 69 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.1

BOT CHORD 2x6 SP No.1

WEBS 2x4 SP No.2

SLIDER Left 2x4 SP No.2 -- 2-6-0

BRACING

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

BOT CHORD Rigid ceiling directly applied.

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

Max Horiz 2=144 (LC 8)

Max Uplift 2=188 (LC 8), 8=-208 (LC 8)

Max Grav 2=526 (LC 1), 8=478 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/17, 2-4=-623/416, 4-5=-72/23, 5-6=-2/0, 5-8=-125/124

BOT CHORD 2-9=-531/586, 8-9=-531/586, 7-8=0/0

WEBS 4-9=-171/261, 4-8=-649/588

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-11-0 to 3-5-13, Interior (1) 3-5-13 to 12-0-0 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
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.

- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 188 lb uplift at joint 2 and 208 lb uplift at joint 8.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



October 21, 2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-743 rev. 1/2/2023 BEFORE USE.

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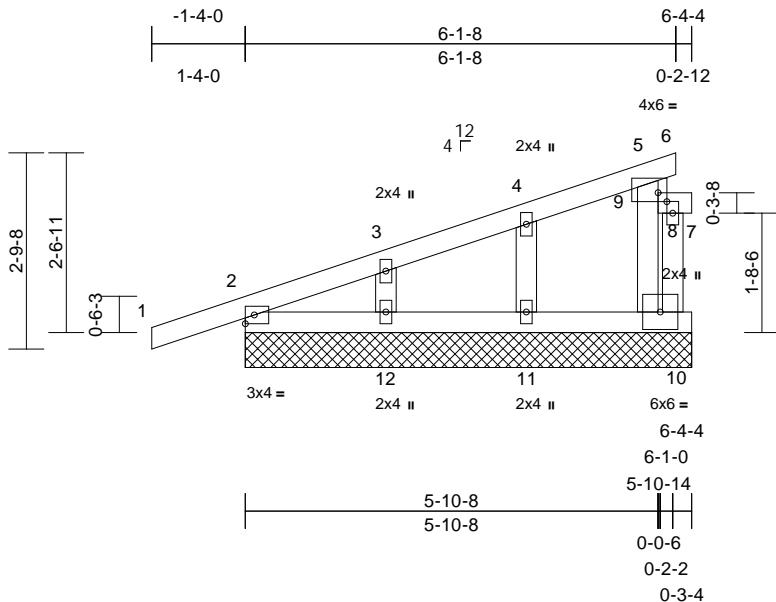
818 Soundside Road
Edenton, NC 27932

Job 250231-A	Truss M04GE	Truss Type GABLE	Qty 1	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77172215
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.30 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 09:38:53
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Page: 1



Scale = 1:32.8

Plate Offsets (X, Y): [5:0-1-8,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.16	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	
BCLL	0.0*	Rep Stress Incr	NO	WB	0.04	Horz(CT)	0.00	7	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 30 lb FT = 20%

LUMBER

TOP CHORD 2x4 SP No.1

BOT CHORD 2x4 SP No.1

WEBS 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.

Except:

6-0-0 oc bracing: 5-9

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

REACTIONS (size) 2=6-4-4, 7=6-4-4, 10=6-4-4, 11=6-4-4, 12=6-4-4

Max Horiz 2=119 (LC 8)

Max Uplift 2=81 (LC 8), 7=86 (LC 1), 10=217 (LC 12), 11=61 (LC 8), 12=53 (LC 12)

Max Grav 2=193 (LC 1), 7=26 (LC 8), 10=767 (LC 1), 11=174 (LC 1), 12=132 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/14, 2-3=-168/35, 3-4=-87/8, 4-5=-58/8, 5-6=-8/0, 9-10=-391/491, 5-9=-53/115

BOT CHORD 2-12=-46/35, 11-12=-46/35, 10-11=-46/35,

8-9=-11/11, 7-8=0/0

WEBS 3-12=-130/212, 4-11=-130/247,

8-10=-163/169

NOTES

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E)-1-4-0 to 3-0-13, Exterior(2N) 3-0-13 to 6-1-8 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. Gable requires continuous bottom chord bearing.
- 4) Gable studs spaced at 2-0-0 oc.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-0-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 81 lb uplift at joint 2, 86 lb uplift at joint 7, 53 lb uplift at joint 12, 61 lb uplift at joint 11 and 217 lb uplift at joint 10.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 200 lb down and 225 lb up at 5-8-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-5=60, 5-6=60, 2-10=-20, 7-9=-20
Concentrated Loads (lb)

Vert: 9=-400, 10=-200 (F)



October 21, 2025

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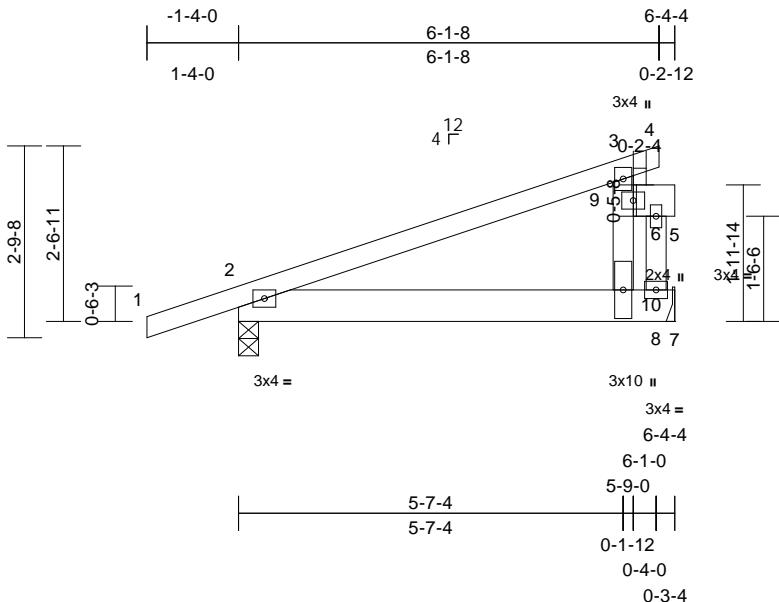
818 Soundside Road
Edenton, NC 27932

Job 250231-A	Truss M05	Truss Type MONOPITCH	Qty 6	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77172216
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.3.0 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 09:38:53
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Page: 1



Scale = 1:33.6

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	-0.03	10-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(CT)	-0.07	10-13	>981	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MP	Wind(LL)	0.06	10-13	>999	240	Weight: 32 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

Except:

6-0-0 oc bracing: 3-9

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

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

Max Horiz 2=87 (LC 8)

Max Uplift 2=72 (LC 8), 8=-115 (LC 12)

Max Grav 2=374 (LC 1), 8=1129 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/25, 2-3=-172/41, 3-4=-10/0,
9-10=-696/592, 3-9=-166/215

BOT CHORD 2-10=0/101, 8-10=0/0, 7-8=0/0, 6-9=0/0,
5-6=0/0

WEBS 6-8=-50/12

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16: Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C
Exterior(2E)-1-4-0 to 3-0-13, Interior (1) 3-0-13 to 6-1-8
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 30.0psf 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.

- Refer to girder(s) for truss to truss connections.



October 21, 2025



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

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

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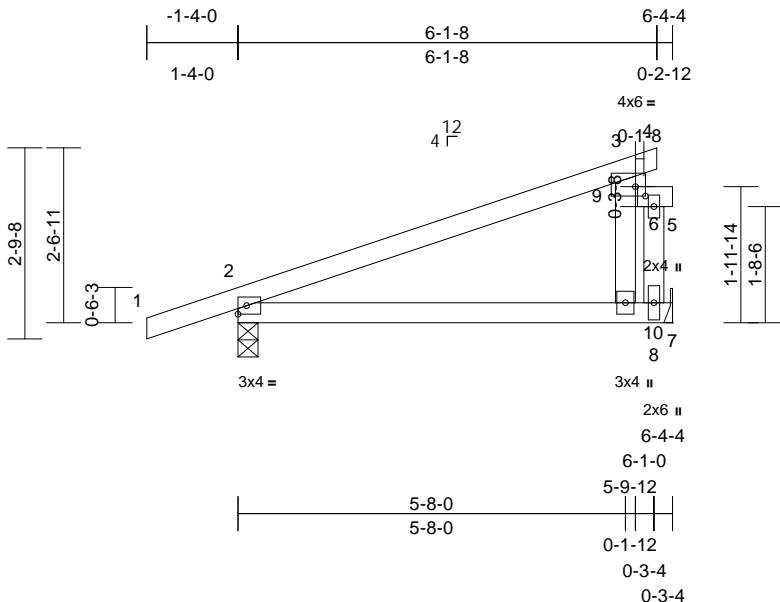
818 Soundside Road
Edenton, NC 27932

Job 250231-A	Truss M06	Truss Type MONOPITCH	Qty 1	Ply 2	Lot 48 Duncans Creek	I77172217
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.30 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 09:38:53
ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RFc?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:33.7

Plate Offsets (X, Y): [3:0-1-12,0-1-10]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	-0.04	10-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(CT)	-0.09	10-13	>844	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MP	Wind(LL)	0.07	10-13	>999	240	Weight: 54 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
Except:

- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; h=15ft; Cat.

II; Exp C; Enclosed; MWFRS (envelope) and C-C
Exterior(2E) -1-4-0 to 3-0-13, Interior (1) 3-0-13 to 6-1-8
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.

6) * This truss has been designed for a live load of 30.0psf
on the bottom chord in all areas where a rectangle
3-06-00 tall by 2-00-00 wide will fit between the bottom
chord and any other members.

- Refer to girder(s) for truss to truss connections.

8) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 69 lb uplift at joint
2 and 92 lb uplift at joint 8.

9) Hanger(s) or other connection device(s) shall be
provided sufficient to support concentrated load(s) 360
lb down and 259 lb up at 6-4-4 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, 3-4=-60, 7-11=-20, 5-9=-20
Concentrated Loads (lb)
Vert: 9=-300, 8=-360 (F)

NOTES

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



October 21, 2025



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-743 rev. 1/2/2023 BEFORE USE.

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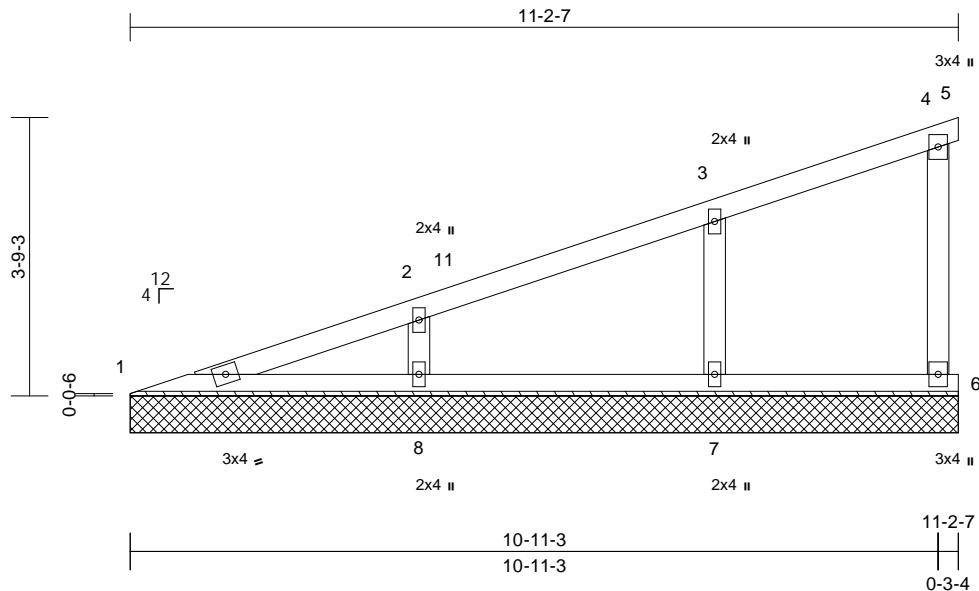
818 Soundside Road
Edenton, NC 27932

Job 250231-A	Truss VB1	Truss Type Valley	Qty 1	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77172219
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.30 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 09:38:53
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Page: 1



Scale = 1:31.2

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horiz(TL)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS						Weight: 42 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.1

BOT CHORD 2x4 SP No.1

WEBS 2x4 SP No.2

OTHERS 2x4 SP No.2

BRACING

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

BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 1=11-2-7, 5=11-2-7, 6=11-2-7, 7=11-2-7, 8=11-2-7

Max Horiz 1=118 (LC 8)

Max Uplift 5=38 (LC 1), 6=35 (LC 8), 7=44 (LC 8), 8=49 (LC 8)

Max Grav 1=124 (LC 1), 5=12 (LC 8), 6=153 (LC 1), 7=291 (LC 1), 8=360 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=218/87, 2-3=-99/52, 3-4=-38/20, 4-5=-17/8, 4-6=-127/90

BOT CHORD 1-8=-143/200, 7-8=-2/4, 6-7=-2/4

WEBS 2-8=-250/193, 3-7=-222/167

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C
Exterior(2E) 0-1 to 4-5-15, Interior (1) 4-5-15 to 11-3-9
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.
- Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 38 lb uplift at joint 5, 35 lb uplift at joint 6, 49 lb uplift at joint 8 and 44 lb uplift at joint 7.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



October 21, 2025

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

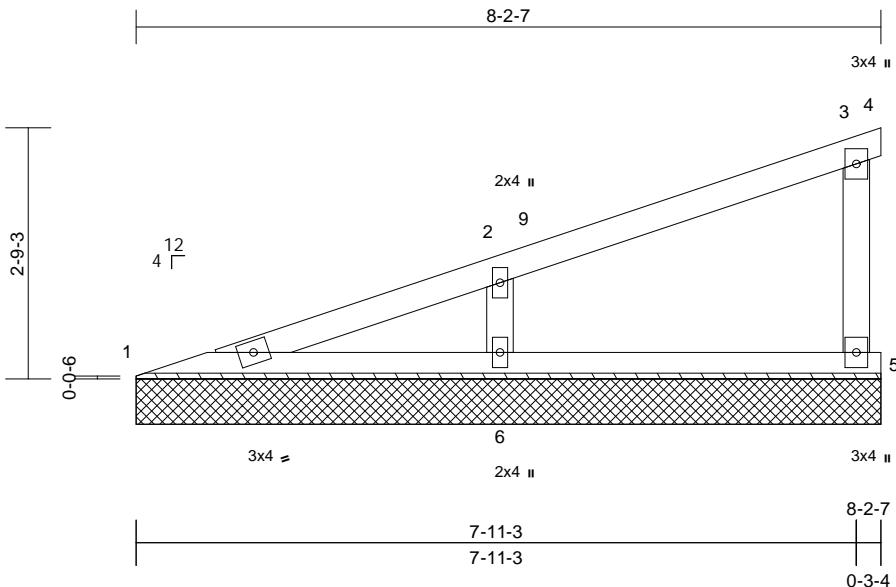
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

Job 250231-A	Truss VB2	Truss Type Valley	Qty 1	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77172220
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Comtech, Inc, Fayetteville, NC - 28314,

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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS						Weight: 28 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.1

7) * 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.

BOT CHORD 2x4 SP No.1

8) 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.

WEBS 2x4 SP No.2

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 172 lb uplift at joint 4, 110 lb uplift at joint 5 and 48 lb uplift at joint 6.

OTHERS 2x4 SP No.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.

BRACING

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

LOAD CASE(S)

Standard

BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 1=8-2-7, 4=8-2-7, 5=8-2-7, 6=8-2-7

Max Horiz 1=85 (LC 8)

7) 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.

Max Uplift 4=172 (LC 1), 5=110 (LC 8),

6=48 (LC 8)

Max Grav 1=125 (LC 1), 4=78 (LC 8), 5=322 (LC 1), 6=375 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-221/75, 2-3=-49/34, 3-4=-60/48,

3-5=-295/256

BOT CHORD 1-6=-158/203, 5-6=0/0

WEBS 2-6=-256/222

NOTES

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

2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C
Exterior(2E) 0-1-2 to 4-5-15, Interior (1) 4-5-15 to 8-3-9
zone; C-C for members and forces and 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) Gable requires continuous bottom chord bearing.

5) Gable studs spaced at 4-0-0 oc.

6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.



October 21, 2025

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ENGINEERING BY
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818 Soundside Road
Edenton, NC 27932

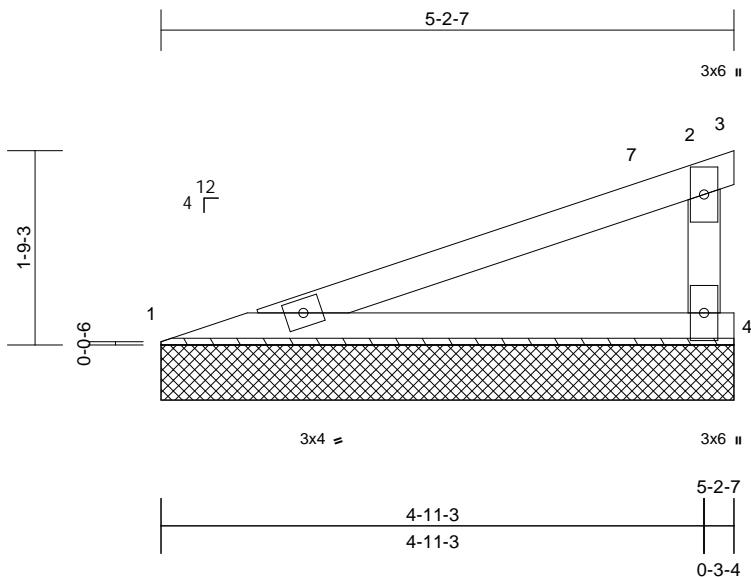
Job 250231-A	Truss VB3	Truss Type Valley	Qty 1	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77172221
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Comtech, Inc, Fayetteville, NC - 28314,

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Page: 1

Page: 1



Scale = 1:20.9

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(TL)	n/a	-	n/a	999	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	4	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS						Weight: 16 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.1

BOT CHORD 2x4 SP No.1

WEBS 2x4 SP No.2

BRACING

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

BOT CHORD Rigid ceiling directly applied.

REACTIONS	(size)	1=5-2-7, 3=5-2-7, 4=5-2-7
	Max Horiz	1=53 (LC 8)
	Max Uplift	1=7 (LC 8), 3=-478 (LC 1), 4=-130 (LC 8)
	Max Grav	1=170 (LC 1), 3=90 (LC 8), 4=718 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

Tension
TOP CHORD 1-2=-350/147, 2-3=-156/117, 2-4=-661/529
BOT CHORD 1-4=-237/324

NOTES

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-1-2 to 4-5-15, Interior (1) 4-5-15 to 5-3-9 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) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 4-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 7) * This truss has been designed for a live load of 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.
- 8) Bearing at joint(s) 3 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 7 lb uplift at joint 1, 478 lb uplift at joint 3 and 130 lb uplift at joint 4.
- 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



October 21,2025



 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-Z473 rev. 1/2/2023 BEFORE USE

WARNING - Verify design parameters and **READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MIL-4743 REV. 1/2/2023 BEFORE USE.**

Design valid for use only with MitTek® 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 **ANS/TP1 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.sbcaccomponents.com).

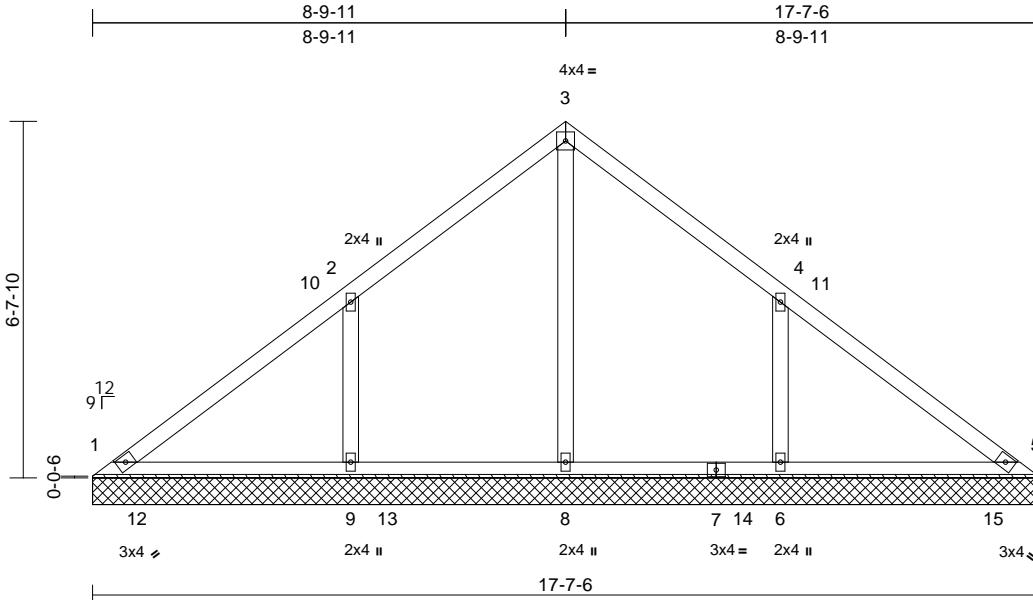
The logo for TRENCO Engineering. It features the word "TRENCO" in a large, bold, black sans-serif font. The letter "T" has a blue vertical bar on its left side. Above "TRENCO", the words "ENGINEERING BY" are written in a smaller, black, all-caps font. Below "TRENCO", the text "A MITek Affiliate" is displayed in a smaller, black, all-caps font.

Job 250231-A	Truss VC1	Truss Type Valley	Qty 1	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77172222
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.3.0 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 09:38:54
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Page: 1



Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S						Weight: 76 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.

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

REACTIONS (size) 1=17-7-6, 5=17-7-6, 6=17-7-6, 8=17-7-6, 9=17-7-6

Max Horiz 1=151 (LC 8)
Max Uplift 1=4 (LC 8), 6=-140 (LC 13), 9=-140 (LC 12)
Max Grav 1=191 (LC 20), 5=169 (LC 19), 6=549 (LC 20), 8=398 (LC 22), 9=549 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-147/120, 2-3=-142/149, 3-4=-131/141, 4-5=-110/83

BOT CHORD 1-9=-51/99, 8-9=-51/99, 6-8=-51/99,

WEBS 5-6=-51/99

WEBS 3-8=-148/0, 2-9=-335/250, 4-6=-335/250

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C
Exterior(2E) 0-5-5 to 4-10-3, Interior (1) 4-10-3 to 8-10-3,
Exterior(2R) 8-10-3 to 13-3-0, Interior (1) 13-3-0 to 17-3-1 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.
- Gable requires continuous bottom chord bearing.

- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 4 lb uplift at joint 1, 140 lb uplift at joint 9 and 140 lb uplift at joint 6.

LOAD CASE(S)

Standard



October 21, 2025

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

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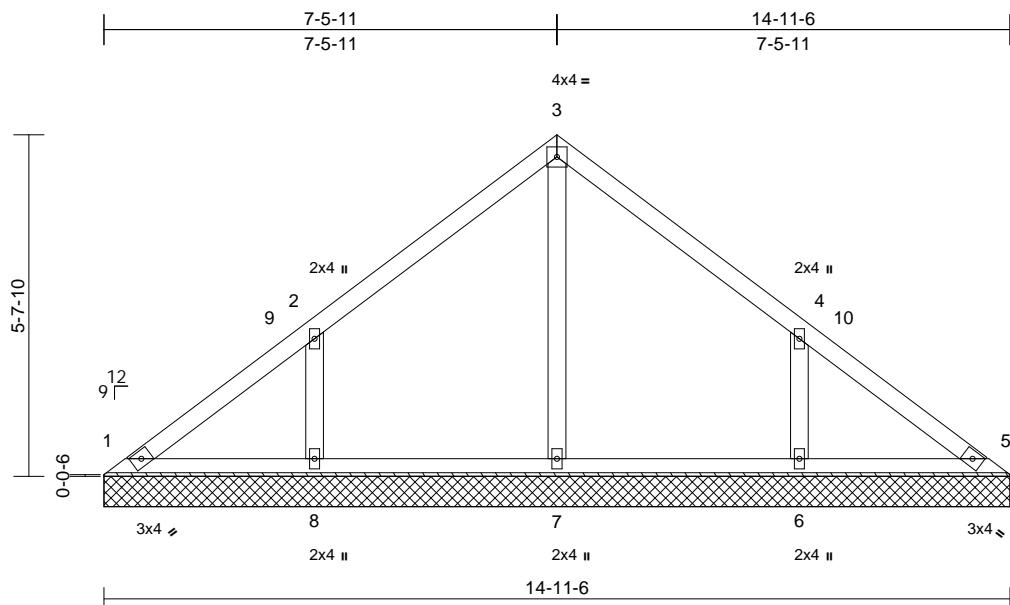
818 Soundside Road
Edenton, NC 27932

Job 250231-A	Truss VC2	Truss Type Valley	Qty 1	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77172223
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.3.0 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 09:38:54
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Page: 1



Scale = 1:38

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S						Weight: 62 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.

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

REACTIONS (size) 1=14-11-6, 5=14-11-6, 6=14-11-6, 7=14-11-6, 8=14-11-6

Max Horiz 1=127 (LC 8)
Max Uplift 1=14 (LC 8), 6=118 (LC 13), 8=118 (LC 12)
Max Grav 1=131 (LC 20), 5=115 (LC 1), 6=363 (LC 20), 7=244 (LC 1), 8=363 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-127/99, 2-3=-138/137, 3-4=-125/130, 4-5=-97/58

BOT CHORD 1-8=-39/85, 7-8=-39/85, 6-7=-39/85,

WEBS 5-6=-39/85

WEBS 3-7=-164/0, 2-8=-281/245, 4-6=-281/245

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C
Exterior(2E) 0-5 to 4-10-1, Interior (1) 4-10-1 to 7-6-3,
Exterior(2R) 7-6-3 to 11-11-0, Interior (1) 11-11-0 to 14-7-1 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.
- Gable requires continuous bottom chord bearing.

- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 1, 118 lb uplift at joint 8 and 118 lb uplift at joint 6.

LOAD CASE(S)

Standard



October 21, 2025

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

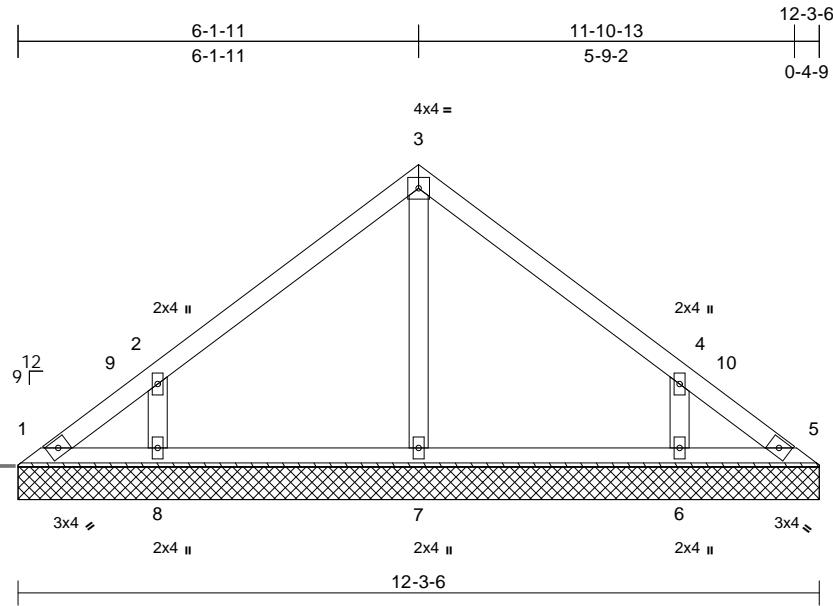
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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 the Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcaccomponents.com)

Job 250231-A	Truss VC3	Truss Type Valley	Qty 1	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77172224
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.3.0 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 09:38:54
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Page: 1



Scale = 1:35.3

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S						Weight: 49 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.

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

REACTIONS (size) 1=12-3-6, 5=12-3-6, 6=12-3-6,
7=12-3-6, 8=12-3-6
Max Horiz 1=103 (LC 9)
Max Uplift 1=31 (LC 8), 5=11 (LC 9), 6=107 (LC 13), 8=107 (LC 12)
Max Grav 1=74 (LC 20), 5=59 (LC 19), 6=319 (LC 20), 7=253 (LC 1), 8=319 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-106/88, 2-3=-135/122, 3-4=-125/117,
4-5=-84/55

BOT CHORD 1-8=-28/68, 7-8=-28/68, 6-7=-28/68,
5-6=-28/68

WEBS 3-7=-167/27, 2-8=-256/262, 4-6=-256/262

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C
Exterior(2E) 0-5-5 to 4-10-1, Interior (1) 4-10-1 to 6-2-3,
Exterior(2R) 6-2-3 to 10-7-0, Interior (1) 10-7-0 to
11-11-1 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.
- Gable requires continuous bottom chord bearing.

- 5) Gable studs spaced at 4-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 1, 11 lb uplift at joint 5, 107 lb uplift at joint 8 and 107 lb uplift at joint 6.

LOAD CASE(S)

Standard



October 21, 2025

 **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-743 rev. 1/2/2023 BEFORE USE.**

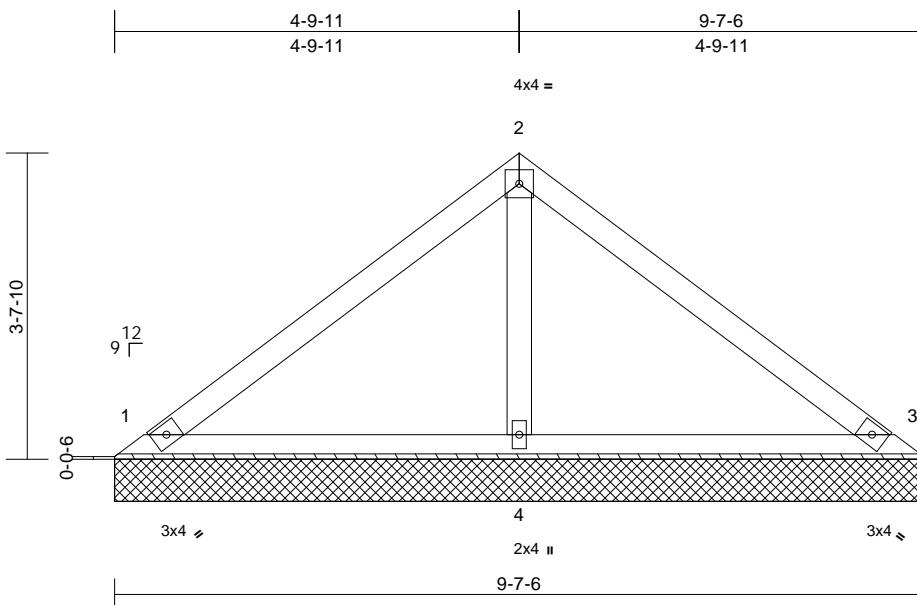
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

Job 250231-A	Truss VC4	Truss Type Valley	Qty 1	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77172225
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Page: 1



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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S						Weight: 35 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size) 1=9-7-6, 3=9-7-6, 4=9-7-6

Max Horiz 1=79 (LC 9)
Max Uplift 1=-21 (LC 12), 3=-29 (LC 13)
Max Grav 1=182 (LC 1), 3=182 (LC 1), 4=342 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-142/86, 2-3=-135/90

BOT CHORD 1-4=-15/62, 3-4=-15/62

WEBS 2-4=-211/128

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 21 lb uplift at joint 1 and 29 lb uplift at joint 3.

LOAD CASE(S) Standard



October 21, 2025

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

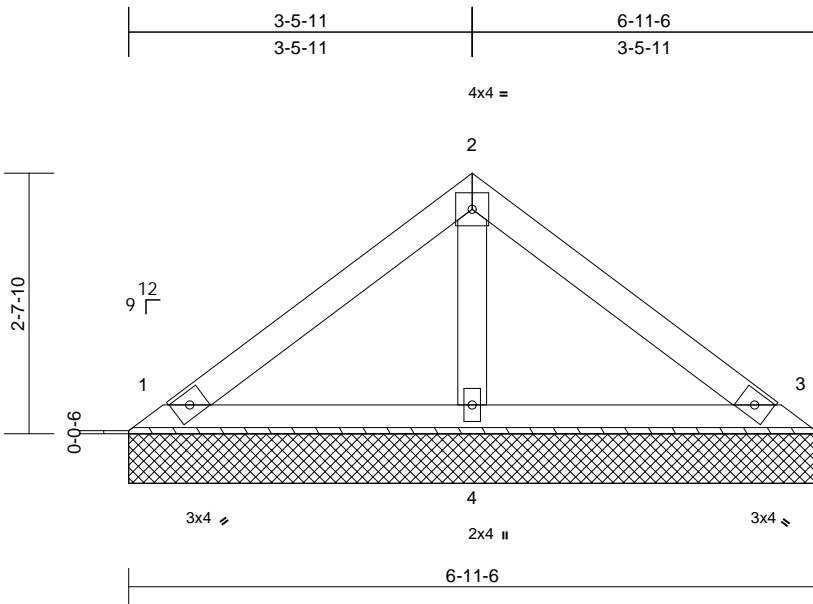
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Job 250231-A	Truss VC5	Truss Type Valley	Qty 1	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77172226
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Page: 1



Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-P						Weight: 25 lb	FT = 20%

LUMBER		
TOP CHORD	2x4 SP No.1	7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
BOT CHORD	2x4 SP No.1	
OTHERS	2x4 SP No.2	
BRACING		8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 21 lb uplift at joint 1 and 27 lb uplift at joint 3.
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.	LOAD CASE(S) Standard
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.	
REACTIONS (size)	1=6-11-6, 3=6-11-6, 4=6-11-6	
Max Horiz	1=-55 (LC 10)	
Max Uplift	1=-21 (LC 12), 3=-27 (LC 13)	
Max Grav	1=138 (LC 1), 3=138 (LC 1), 4=216 (LC 1)	
FORCES	(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-90/68, 2-3=-82/69	
BOT CHORD	1-4=-11/40, 3-4=-11/40	
WEBS	2-4=-139/98	

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 4-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.



October 21, 2025

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Job 250231-A	Truss VC6	Truss Type Valley	Qty 1	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77172227
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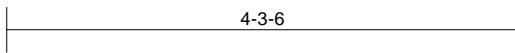
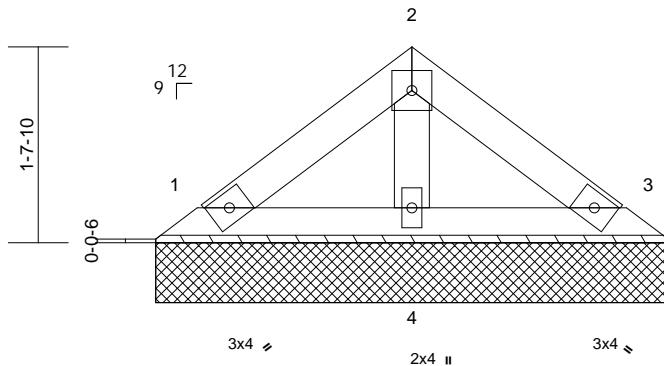
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Page: 1



4x4 =



Scale = 1:19.2

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-P						Weight: 14 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 4-4-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=4-3-6, 3=4-3-6, 4=4-3-6

Max Horiz 1=31 (LC 10)

Max Uplift 1=12 (LC 12), 3=15 (LC 13)

Max Grav 1=78 (LC 1), 3=78 (LC 1), 4=122 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=51/43, 2-3=47/43

BOT CHORD 1-4=-6/23, 3-4=-6/23

WEBS 2-4=-79/64

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 4-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-0-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 12 lb uplift at joint 1 and 15 lb uplift at joint 3.

LOAD CASE(S) Standard



October 21,2025

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

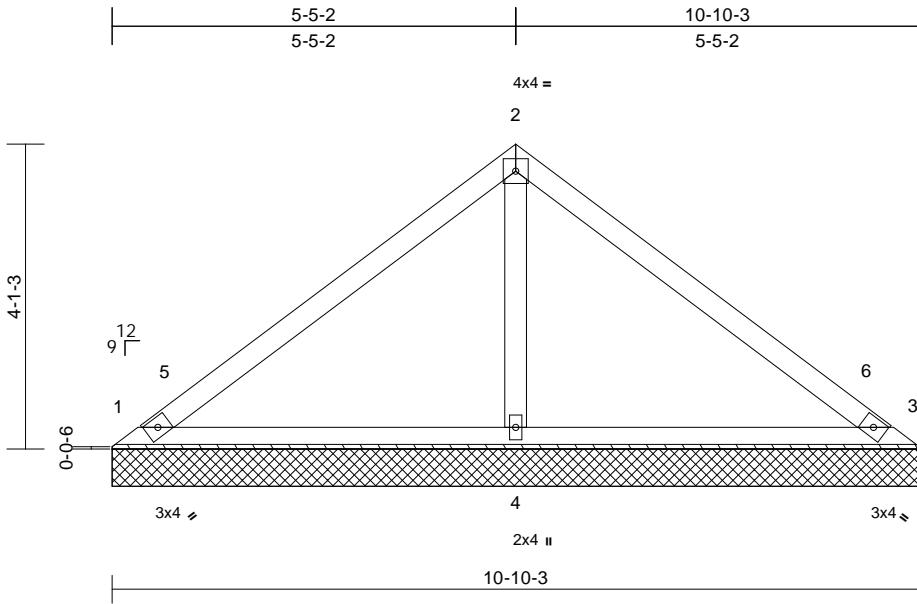
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

Job 250231-A	Truss VG1	Truss Type Valley	Qty 1	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77172228
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Comtech, Inc, Fayetteville, NC - 28314,

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Page: 1



Scale = 1:31

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S						Weight: 40 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size) 1=10-10-3, 3=10-10-3, 4=10-10-3

Max Horiz 1=90 (LC 9)
Max Uplift 1=24 (LC 12), 3=33 (LC 13)
Max Grav 1=207 (LC 1), 3=207 (LC 1), 4=389 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-162/102, 2-3=-154/97
BOT CHORD 1-4=-17/71, 3-4=-17/71
WEBS 2-4=-240/135

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-5-5 to 4-10-1, Interior (1) 4-10-1 to 5-5-10, Exterior(2R) 5-5-10 to 9-10-6, Interior (1) 9-10-6 to 10-5-14 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) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 4-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-0 tall by 2-00-00 wide will fit between the bottom chord and any other members.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 1 and 33 lb uplift at joint 3.

LOAD CASE(S) Standard



October 21, 2025

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

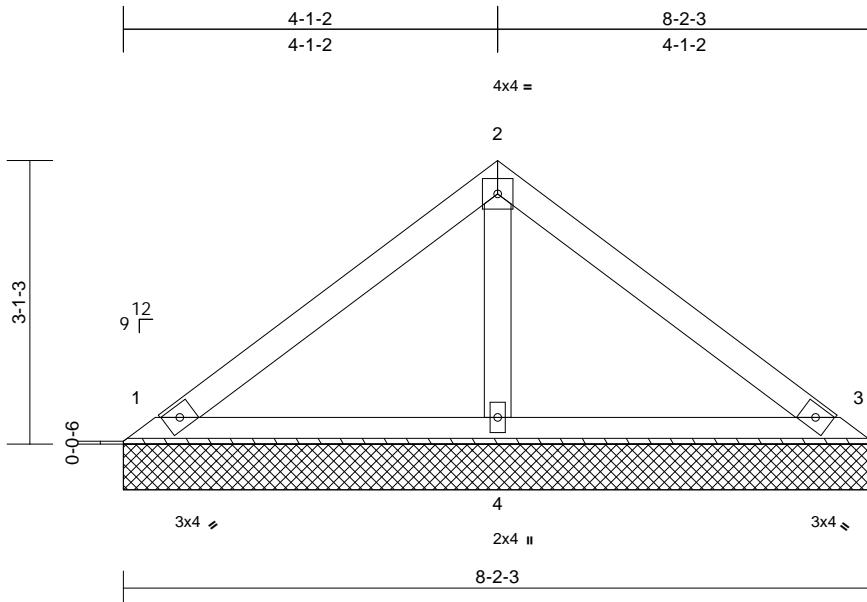
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

Job 250231-A	Truss VG2	Truss Type Valley	Qty 1	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77172229
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.3.0 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 09:38:54
ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:25.2

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-P						Weight: 30 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.

7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-0 tall by 2-00-00 wide will fit between the bottom chord and any other members.

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

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint 1 and 32 lb uplift at joint 3.

LOAD CASE(S) Standard

REACTIONS (size) 1=8-2-3, 3=8-2-3, 4=8-2-3

Max Horiz 1=66 (LC 9)

Max Uplift 1=-26 (LC 12), 3=-32 (LC 13)

Max Grav 1=166 (LC 1), 3=166 (LC 1), 4=259 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-108/75, 2-3=-99/77

BOT CHORD 1-4=-14/48, 3-4=-14/48

WEBS 2-4=-167/108

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 4-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.



October 21, 2025



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-743 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)

TRENCO
A MiTek Affiliate

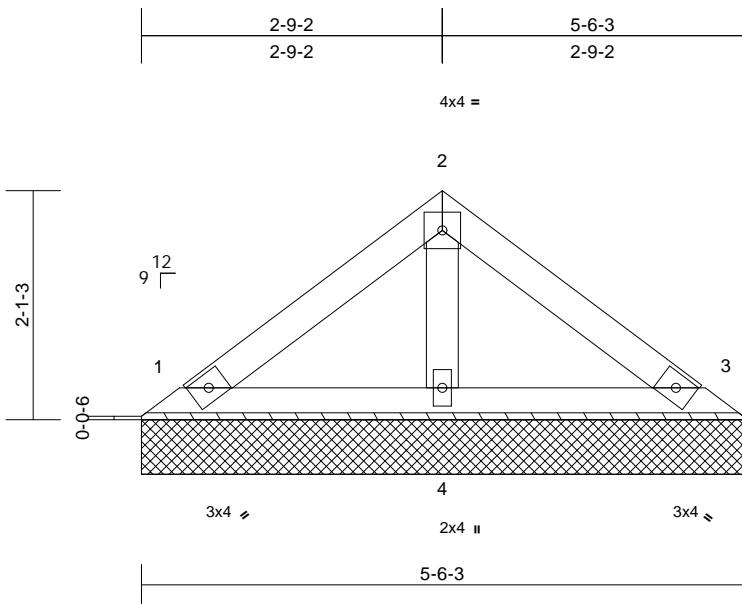
818 Soundside Road
Edenton, NC 27932

Job 250231-A	Truss VG3	Truss Type Valley	Qty 1	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77172230
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.3.0 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 09:38:54
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Page: 1



Scale = 1:21.1

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-P						Weight: 19 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 5-7-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=5-6-3, 3=5-6-3, 4=5-6-3

Max Horiz 1=42 (LC 8)

Max Uplift 1=16 (LC 12), 3=20 (LC 13)

Max Grav 1=106 (LC 1), 3=106 (LC 1), 4=166 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=69/57, 2-3=63/57

BOT CHORD 1-4=-9/31, 3-4=-9/31

WEBS 2-4=-107/83

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 4-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 16 lb uplift at joint 1 and 20 lb uplift at joint 3.

LOAD CASE(S) Standard



October 21, 2025

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

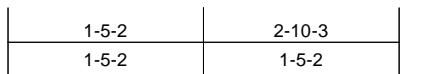
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

Job 250231-A	Truss VG4	Truss Type Valley	Qty 1	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77172231
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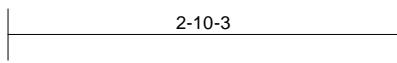
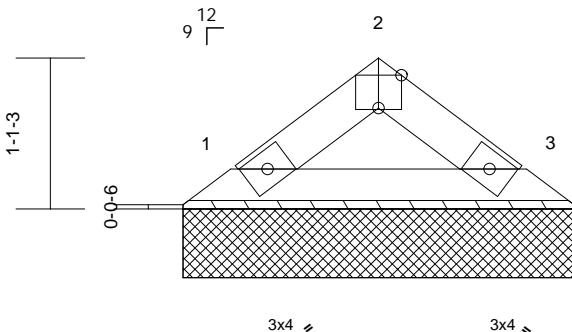
Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.3.0 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 09:38:54
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Page: 1



3x4 =



Scale = 1:16.8

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(TL)	n/a	-	n/a	999	
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-P							Weight: 8 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 2-11-3 oc purlins.

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

REACTIONS (size) 1=2-10-3, 3=2-10-3

Max Horiz 1=-19 (LC 10)

Max Uplift 1=-4 (LC 12), 3=-4 (LC 13)

Max Grav 1=82 (LC 1), 3=82 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-66/59, 2-3=-66/61

BOT CHORD 1-3=-17/42

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 4 lb uplift at joint 1 and 4 lb uplift at joint 3.

LOAD CASE(S) Standard



October 21, 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)

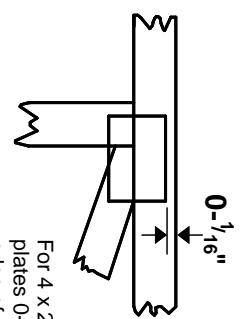
Symbols

PLATE LOCATION AND ORIENTATION

Center plate on joint unless X, Y offsets are indicated.

Dimensions are in ft-in-sixteenths.

Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0-1/16" from outside edge of truss.



This symbol indicates the required direction of slots in connector plates.

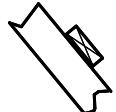
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

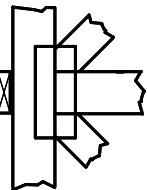
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



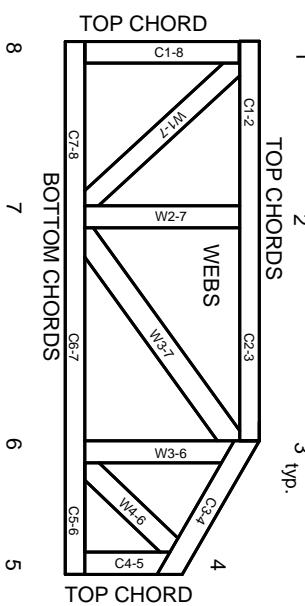
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System

6-4-8 dimensions shown in ft-in-sixteenths
(Drawings not to scale)



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

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

Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TP1 section 6.3. These truss designs rely on lumber values established by others.

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General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.

2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor! 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.

7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1.

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 Quality Criteria.

21. The design does not take into account any dynamic or other loads other than those expressly stated.

MiTek®
ENGINEERING BY
TRENGO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 250231-B
Lot 48 Duncans Creek

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: I77197317 thru I77197335

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

North Carolina COA: C-0844



October 21, 2025

Garcia, Juan

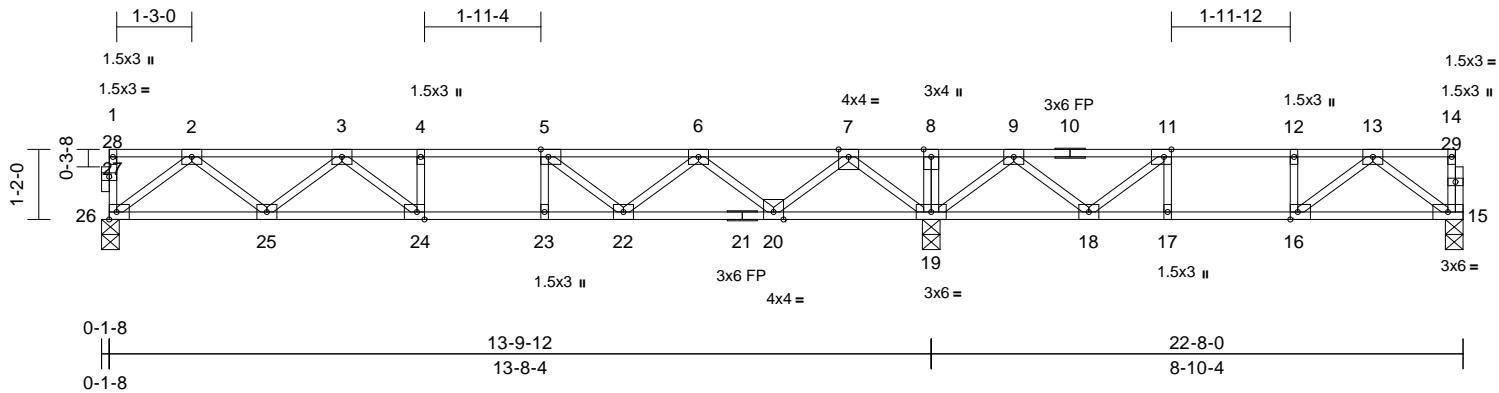
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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 250231-B	Truss F01	Truss Type FLOOR	Qty 5	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77197317
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Comtech, Inc, Fayetteville, NC - 28314,

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Page: 1



Scale = 1:38.4

Plate Offsets (X, Y): [5:0-1-8,Edge], [11:0-1-8,Edge], [16:0-1-8,Edge], [24:0-1-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.37	Vert(LL)	-0.09	24-25	>999	480	MT20
TCDL	10.0	Lumber DOL	1.00	BC	0.52	Vert(CT)	-0.12	24-25	>999	360	
BCLL	0.0	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.02	15	n/a	n/a	
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S						Weight: 112 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.1(flat)

BOT CHORD 2x4 SP No.1(flat)

WEBS 2x4 SP No.3(flat)

OTHERS 2x4 SP No.3(flat)

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 15=0-3-8, 19=0-3-8, 26=0-3-8
Max Grav 15=395 (LC 4), 19=1482 (LC 1).

26=676 (LC 10)

FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-26=-36/0, 14-15=-55/0, 1-2=0/0, 2-3=-1280/0, 3-4=-1962/0, 4-5=-1962/0, 5-6=-1669/0, 6-7=-719/118, 7-8=0/1338, 8-9=0/1338, 9-11=-352/444, 11-12=-680/149,

BOT CHORD	12-13=-680/149, 13-14=-3/0 25-26=0/795, 24-25=0/1735, 23-24=0/1962, 22-23=0/1962, 20-22=0/1355, 19-20=-343/60, 18-19=-682/17, 17-18=-149/680, 16-17=-149/680, 15-16=-16/437
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WEBS 8-19=-119/0, 2-26=-1014/0, 2-25=0/632,
3-25=-593/0, 3-24=-16/392, 4-24=-174/2,
7-19=-1294/0, 7-20=0/905, 6-20=871/0,
6-22=0/466, 5-22=-545/0, 5-23=-52/124,
13-15=-544/20, 13-16=-170/310,
9-19=-914/0, 9-18=0/578, 11-18=-635/0,
11-17=0/133, 12-16=-163/73

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 (=) MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center

A circular seal for a professional engineer. The outer ring contains the text "NORTH CAROLINA" at the top and "PROFESSIONAL" at the bottom, separated by a horizontal line. The inner circle contains the word "SEAL" at the top and the number "27687" in the center. At the bottom, the name "JUAN GARCIA" is written in a stylized font, with "ENGINEER" written above it. A red signature line is drawn across the center of the seal.

October 21, 2025



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MIL-Z473 rev. 1/2/2023 BEFORE USE

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MIL-PRF-31055 REFERENCE PAGE MIL-PRF-31055 REV. B 11/2023 BEFORE USE.
Design valid for use only with M1Tek® connectors. This design is based only upon parameters shown, and is for the 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 **ANS/TP11 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)

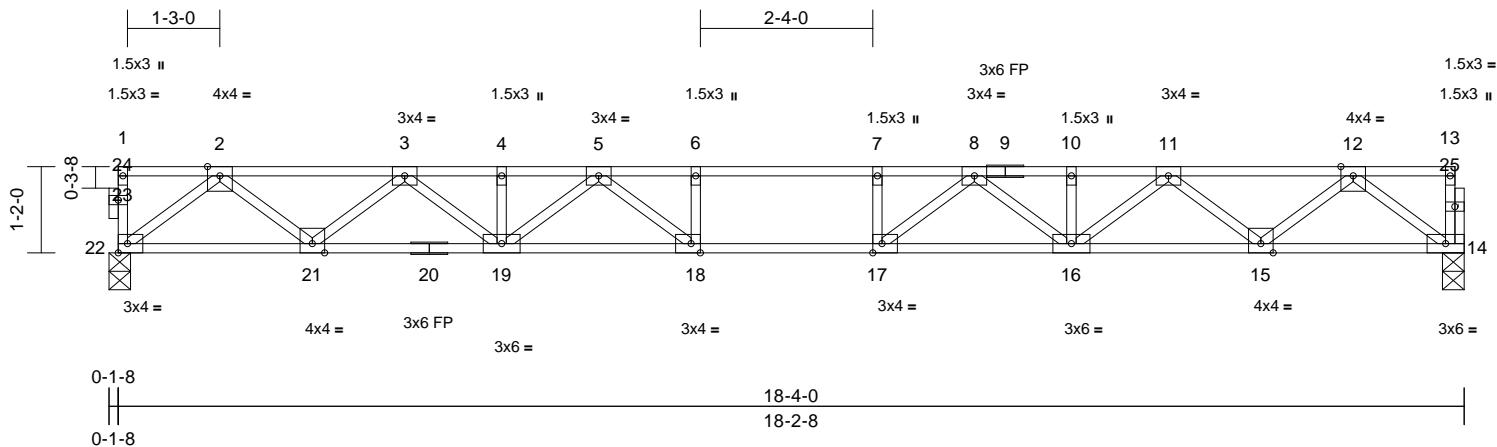
The logo for TRENCO Engineering. It features the word "TRENCO" in a large, bold, black, sans-serif font. The letter "T" has three horizontal blue bars of decreasing length from left to right. Above "TRENCO", the words "ENGINEERING BY" are written in a smaller, black, sans-serif font. Below "TRENCO", the text "A Mitek Affiliate" is written in a smaller, black, sans-serif font.

Job 250231-B	Truss F03	Truss Type FLOOR	Qty 2	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77197319
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Comtech, Inc, Fayetteville, NC - 28314,

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Page: 1



Scale = 1:31.2

Plate Offsets (X, Y): [17:0-1-8,Edge], [18:0-1-8,Edge]

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	Vert(LL)	-0.25	17-18	>875	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	Vert(CT)	-0.34	17-18	>635	360		
BCLL	0.0	Rep Stress Incr	YES	WB	Horz(CT)	0.06	14	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S						Weight: 92 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING

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

REACTIONS (size) 14=0-3-8, 22=0-3-8

Max Grav 14=787 (LC 1), 22=792 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-22=-28/0, 13-14=-28/0, 1-2=0/0,
2-3=-1642/0, 3-4=-2786/0, 4-5=-2786/0,
5-6=-3382/0, 6-7=-3382/0, 7-8=-3382/0,
8-10=-2806/0, 10-11=-2806/0, 11-12=-1675/0,
12-13=-2/0

BOT CHORD 21-22=0/951, 19-21=0/2306, 18-19=0/3137,
17-18=0/3382, 16-17=0/3150, 15-16=0/2333,
14-15=0/990

WEBS 2-22=-1214/0, 2-21=0/899, 3-21=-864/0,
3-19=0/612, 12-14=-1240/0, 12-15=0/892,
11-15=-857/0, 11-16=0/604, 10-16=-82/0,
4-19=-83/0, 5-19=-448/0, 5-18=-24/589,
8-16=-439/0, 8-17=-36/578, 7-17=-270/0,
6-18=-275/0

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



October 21, 2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-743 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.sbcaccomponents.com)

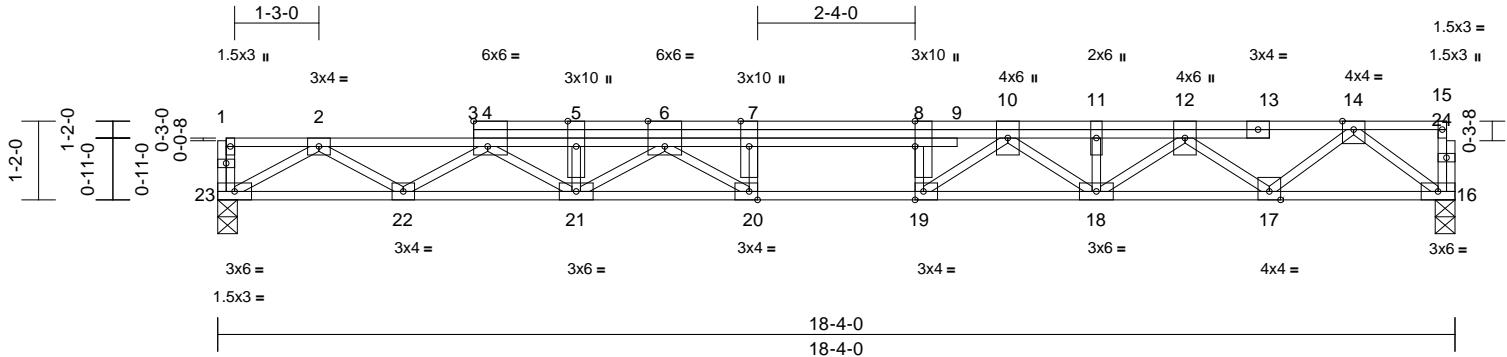
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job 250231-B	Truss F03A	Truss Type FLOOR	Qty 2	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77197320
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.3.0 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 16:29:13
ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3uITxGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:34.1

Plate Offsets (X, Y): [4:Edge,0-4-8], [6:0-3-0,Edge], [8:0-4-8,Edge], [19:0-1-8,Edge], [20:0-1-8,Edge]

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	Vert(LL)	-0.22	19-20	>983	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	Vert(CT)	-0.30	19-20	>714	360		
BCLL	0.0	Rep Stress Incr	YES	WB	Horz(CT)	0.07	16	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S						Weight: 117 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING

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

REACTIONS (size) 16=0-3-8, 23=0-3-8
Max Grav 16=790 (LC 1), 23=800 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-23=-40/0, 15-16=-40/0, 1-2=0/3,
2-4=-2046/0, 4-5=-3161/0, 5-6=-3161/0,
6-7=-3779/0, 7-8=-3779/0, 8-10=-3779/0,
10-11=-2990/0, 11-12=-2990/0,
12-14=-1709/0, 14-15=-2/0

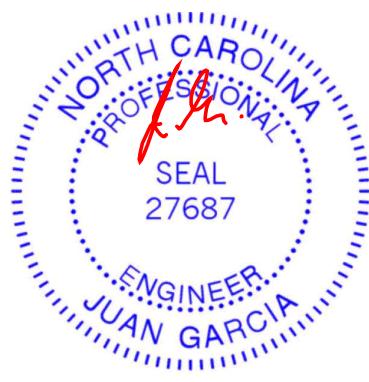
BOT CHORD 22-23=0/1297, 21-22=0/2652, 20-21=0/3411,
19-20=0/3779, 18-19=0/3369, 17-18=0/2450,
16-17=0/979

WEBS 2-23=-1501/0, 2-22=0/877, 4-22=-761/0,
4-21=0/621, 14-16=-1226/0, 14-17=0/945,
12-17=-946/0, 12-18=0/673, 11-18=-98/0,
5-21=-159/0, 6-21=-313/0, 6-20=0/710,
10-18=-474/0, 10-19=0/750, 8-19=-421/0,
7-20=-378/0

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



October 21, 2025



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

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

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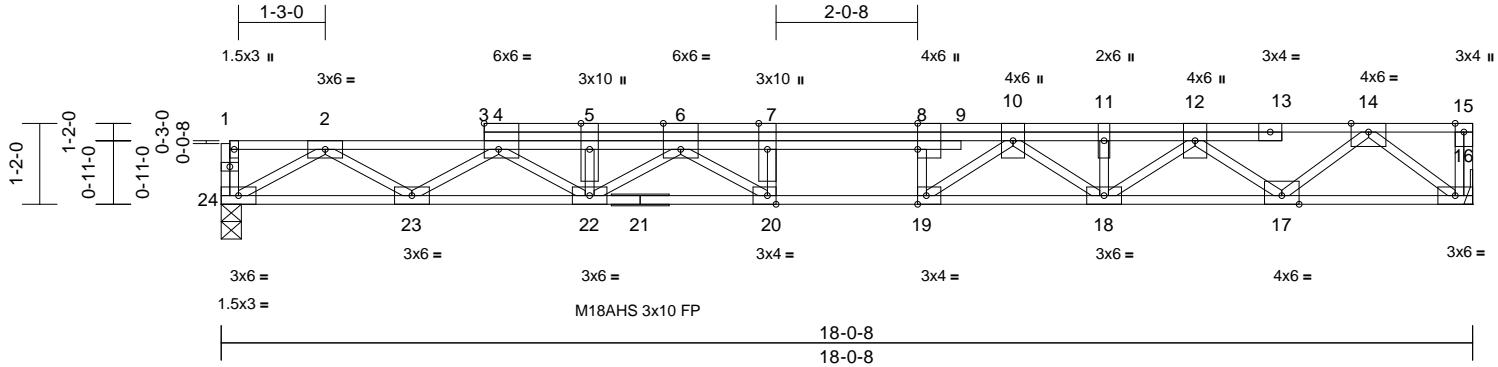
818 Soundside Road
Edenton, NC 27932

Job 250231-B	Truss F04	Truss Type Floor	Qty 3	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77197321
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.3.0 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 16:29:13
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Page: 1



Scale = 1:33.2

Plate Offsets (X, Y): [4:Edge,0-4-8], [6:0-3-0,Edge], [8:0-4-8,Edge], [19:0-1-8,Edge], [20:0-1-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	Vert(LL)	-0.24	19-20	>875	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	Vert(CT)	-0.34	19-20	>637	360	M18AHS	186/179
BCLL	0.0	Rep Stress Incr	YES	WB	Horz(CT)	0.08	16	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S						Weight: 116 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)

- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

BOT CHORD 2x4 SP No.1(flat)

WEBS 2x4 SP No.3(flat)

OTHERS 2x4 SP No.3(flat)

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

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

REACTIONS (size) 16= Mechanical, 24=0-3-8

Max Grav 16=979 (LC 1), 24=985 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-24=-50/0, 15-16=-52/0, 1-2=0/4,

2-4=-2509/0, 4-5=-3862/0, 5-6=-3862/0,

6-7=-4569/0, 7-8=-4569/0, 8-10=-4569/0,

10-11=-3659/0, 11-12=-3659/0,

12-14=-2094/0, 14-15=0/0

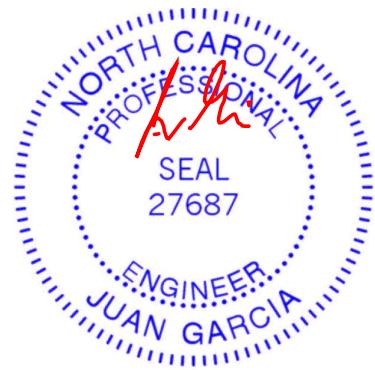
BOT CHORD 23-24=0/1595, 22-23=0/3247, 20-22=0/4108,

19-20=0/4569, 18-19=0/4093, 17-18=0/2994,

16-17=0/1206

WEBS 2-24=-1845/0, 2-23=0/1070, 4-23=-927/0,
4-22=0/751, 5-22=-231/0, 6-22=-344/0,
6-20=0/844, 7-20=-450/0, 14-16=-1513/0,
14-17=0/1150, 12-17=-1149/0, 12-18=0/830,
11-18=-146/0, 10-18=-542/0, 10-19=0/867,
8-19=-487/0**NOTES**

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Refer to girder(s) for truss to truss connections.



October 21, 2025

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

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A MiTek Affiliate

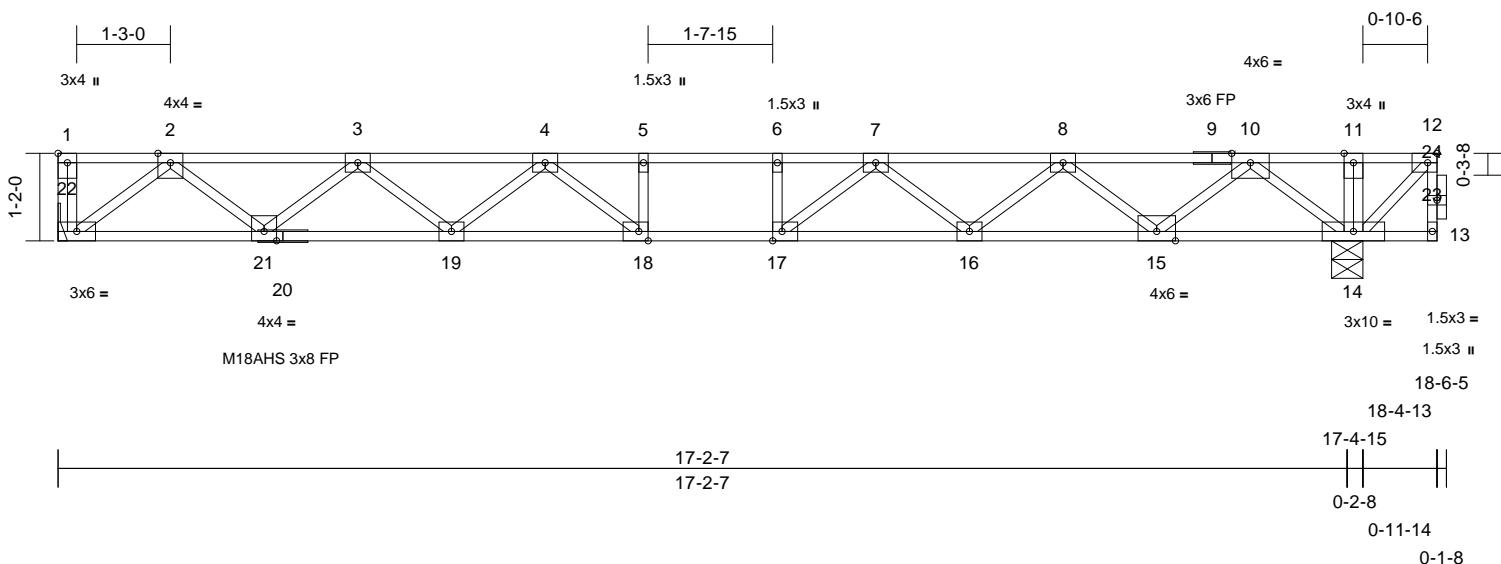
818 Soundside Road
Edenton, NC 27932

Job 250231-B	Truss F06	Truss Type Floor	Qty 1	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77197323
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.30 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 16:29:13
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Page: 1



Scale = 1:30.7

Plate Offsets (X, Y): [1:Edge,0-1-8], [12:0-1-8,Edge], [17:0-1-8,Edge], [18:0-1-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.64	Vert(LL)	-0.26	17-18	>807	480	M18AHS	186/179
TCDL	10.0	Lumber DOL	1.00	BC	0.86	Vert(CT)	-0.34	17-18	>603	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.54	Horz(CT)	0.06	14	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 95 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.1(flat)

BOT CHORD 2x4 SP No.1(flat)

WEBS 2x4 SP No.3(flat)

OTHERS 2x4 SP No.3(flat)

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 6-0-0 oc bracing: 14-15.

REACTIONS (size) 14=0-5-0, 22= Mechanical Max Grav 14=1807 (LC 1), 22=931 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-22=-43/0, 12-13=-8/0, 1-2=0/0, 2-3=-1949/0, 3-4=-3153/0, 4-5=-3738/0, 5-6=-3738/0, 6-7=-3738/0, 7-8=-3062/0, 8-10=-1794/109, 10-11=0/748, 11-12=0/748

BOT CHORD 21-22=0/1155, 19-21=0/2710, 18-19=0/3562, 17-18=0/3738, 16-17=0/3506, 15-16=0/2589, 14-15=-397/972, 13-14=0/0

WEBS 11-14=-136/0, 12-14=-1047/0, 10-14=-1503/0, 2-22=-1449/0, 10-15=0/1124, 2-21=0/1033, 8-15=-1088/0, 3-21=-991/0, 8-16=0/663, 3-19=0/576, 7-16=-638/0, 4-19=-533/0, 7-17=-70/705, 4-18=-230/544, 5-18=-245/56, 6-17=-310/0

NOTES

- Unbalanced floor live loads have been considered for this design.
- All plates are MT20 plates unless otherwise indicated.
- All plates are 3x4 (=) MT20 unless otherwise indicated.
- Plates checked for a plus or minus 1 degree rotation about its center.
- Refer to girder(s) for truss to truss connections.

- Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 700 lb down at 18-4-1 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 13-22=-10, 1-12=-100
Concentrated Loads (lb)
Vert: 12=-700 (F)



October 21, 2025

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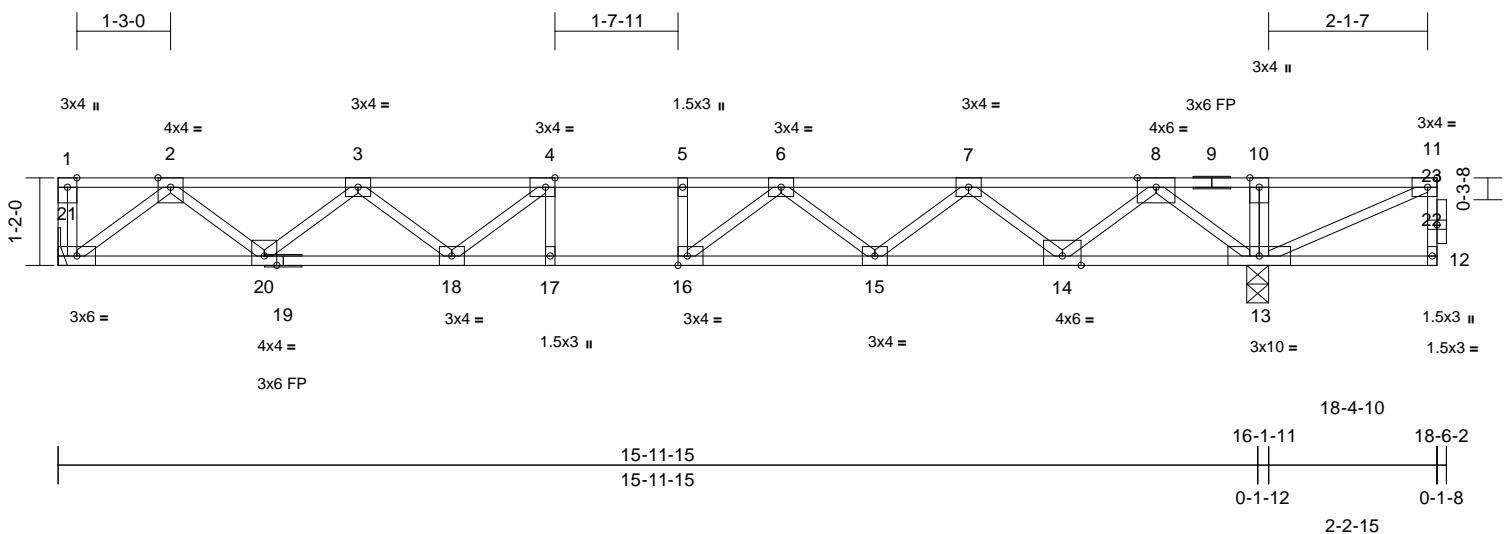
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job 250231-B	Truss F07	Truss Type Floor	Qty 5	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77197324
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.30 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 16:29:13
ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RFc?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:30.7

Plate Offsets (X, Y): [4:0-1-8,Edge], [11:0-1-8,Edge], [16:0-1-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	Vert(LL)	-0.21	15-16	>930	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	Vert(CT)	-0.25	15-16	>767	360		
BCLL	0.0	Rep Stress Incr	NO	WB	Horz(CT)	0.05	13	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S						Weight: 94 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.1(flat)

BOT CHORD 2x4 SP No.1(flat)

WEBS 2x4 SP No.3(flat)

OTHERS 2x4 SP No.3(flat)

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 13=0-3-8, 21= Mechanical

Max Grav 13=1945 (LC 1), 21=843 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-21=47/0, 11-12=0/6, 1-2=0/0, 2-3=-1730/0, 3-4=-2723/0, 4-5=-3068/0, 5-6=-3068/0, 6-7=-2561/435, 7-8=-1411/999, 8-10=0/1734, 10-11=0/1739

BOT CHORD 20-21=0/1041, 18-20=0/2383, 17-18=0/3068, 16-17=0/3068, 15-16=-195/2938, 14-15=-677/2146, 13-14=-1352/653, 12-13=0/0

WEBS 10-13=-236/0, 11-13=-1912/0, 8-13=-1472/0, 2-21=-1306/0, 8-14=0/1127, 2-20=0/896, 7-14=-1092/0, 3-20=-850/0, 7-15=0/660, 3-18=-61/488, 6-15=-643/0, 4-18=-583/177, 6-16=-115/737, 4-17=-191/145, 5-16=-287/0

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.

6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 700 lb down at 18-3-14 on top chord. The design/selection of such connection device(s) is the responsibility of others.

7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
 - Uniform Loads (lb/ft)
 - Vert: 12-21=-10, 1-11=-100
 - Concentrated Loads (lb)
 - Vert: 11=-700 (F)



October 21, 2025

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-743 rev. 1/2/2023 BEFORE USE.**

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ENGINEERING BY
TRENCO
A MiTek Affiliate

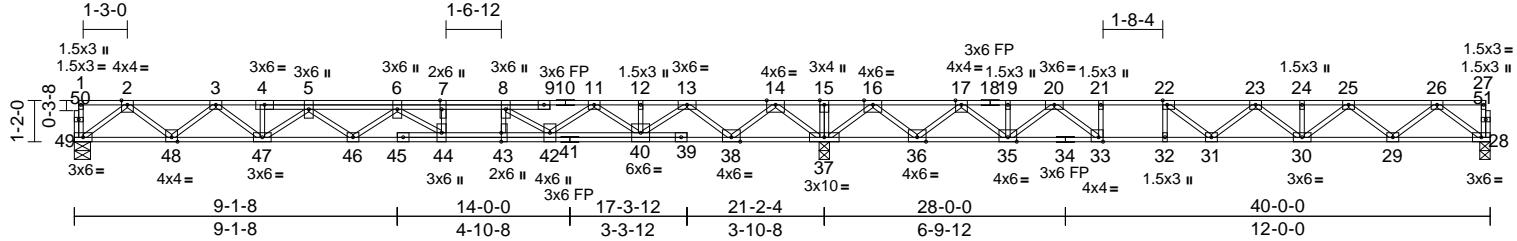
818 Soundside Road
Edenton, NC 27932

Job 250231-B	Truss F09	Truss Type FLOOR	Qty 3	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77197326
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.30 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 16:29:13
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Page: 1



Scale = 1:65.1

Plate Offsets (X, Y): [7:0-3-0,Edge], [22:0-1-8,Edge], [33:0-1-8,Edge], [43:0-3-0,Edge]

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	Vert(LL)	-0.28	44-46	>898	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	Vert(CT)	-0.36	44-46	>697	360		
BCLL	0.0	Rep Stress Incr	YES	WB	Horz(CT)	0.05	28	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S						Weight: 224 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.1(flat)

BOT CHORD 2x4 SP No.1(flat)

WEBS 2x4 SP No.3(flat)

OTHERS 2x4 SP No.3(flat)

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS (size) 28=0-3-8, 37=0-3-8, 49=0-5-8

Max Grav 28=697 (LC 4), 37=2123 (LC 1),

49=802 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-49=-28/0, 27-28=-29/0, 1-2=-2/0, 2-3=-1712/0, 3-4=-2879/0, 4-5=-2884/0, 5-6=-3609/0, 6-7=-3733/0, 7-8=-3733/0, 8-11=-3019/180, 11-12=-1746/671, 12-13=-1746/671, 13-14=0/1410, 14-15=0/3526, 15-16=0/3526, 16-17=0/1573, 17-19=-1399/931, 19-20=-1399/931, 20-21=-2506/283, 21-22=-2506/283, 22-23=-2646/29, 23-24=-2343/0, 24-25=-2343/0, 25-26=-1451/0, 26-27=-2/0

BOT CHORD 48-49=0/1009, 47-48=0/2390, 46-47=0/3429, 44-46=0/3824, 43-44=0/3733, 42-43=0/3733, 40-42=412/2441, 38-40=-985/888, 37-38=-2153/0, 36-37=-2257/0, 35-36=-1240/746, 33-35=-651/1950, 32-33=-283/2506, 31-32=-283/2506, 30-31=0/2649, 29-30=0/2001, 28-29=0/872

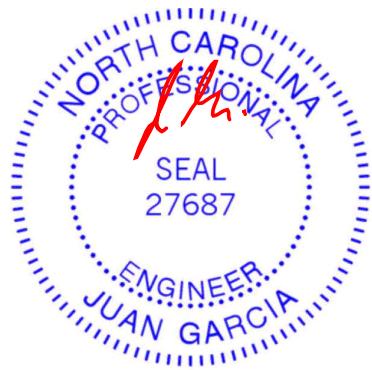
WEBS

15-37=-92/0, 2-49=-1264/0, 2-48=0/915, 3-48=-883/0, 3-47=0/624, 4-47=0/50, 14-37=-1723/0, 14-38=0/1369, 13-38=-1339/0, 13-40=0/1142, 12-40=-87/0, 11-40=-943/0, 11-42=0/794, 8-42=-1103/0, 5-47=-686/0, 5-46=-33/229, 6-46=-273/86, 6-44=-581/128, 7-44=-58/160, 8-43=0/336, 26-28=-1092/0, 26-29=0/754, 25-29=-715/0, 25-30=-42/436, 24-30=-19/15, 16-37=-1592/0, 16-36=0/1244, 17-36=-1193/0, 17-35=0/959, 19-35=-117/0, 20-35=-839/0, 20-33=0/1051, 23-30=-391/37, 23-31=-273/23, 22-31=0/574, 22-32=-307/0, 21-33=-406/0

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 (=) MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Required 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



October 21, 2025

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

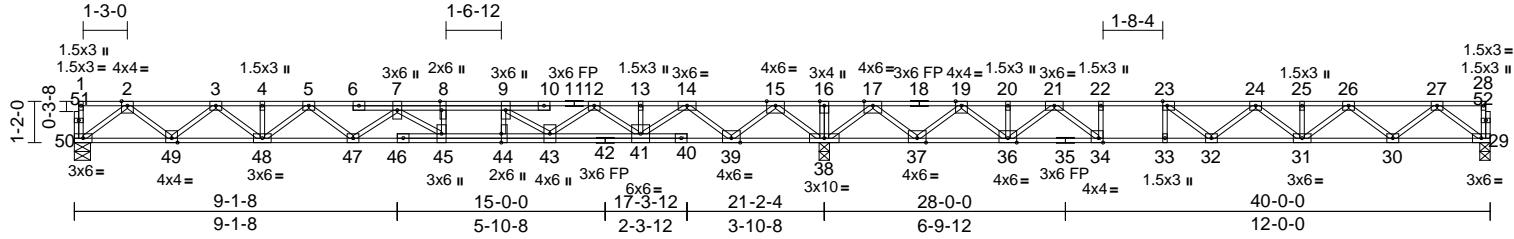
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

Job 250231-B	Truss F10	Truss Type Floor	Qty 4	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77197327
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.30 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 16:29:14
ID:6XJu5EDhI0ALdYBK4rF8nKyOFED-RFc?PsB70Hq3NSgPqnL8w3u1TxGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:65.1

Plate Offsets (X, Y): [8:0-3-0,Edge], [23:0-1-8,Edge], [34:0-1-8,Edge], [44:0-3-0,Edge]

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	Vert(LL)	-0.29	45-47	>874	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	Vert(CT)	-0.37	45-47	>677	360		
BCLL	0.0	Rep Stress Incr	YES	WB	Horz(CT)	0.05	29	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S						Weight: 220 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.1(flat)
 BOT CHORD 2x4 SP No.1(flat)
 WEBS 2x4 SP No.3(flat)
 OTHERS 2x4 SP No.3(flat)

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS (size) 29=0-3-8, 38=0-3-8, 50=0-5-8
 Max Grav 29=697 (LC 4), 38=2126 (LC 1), 50=801 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-50=-28/0, 28-29=-29/0, 1-2=-2/0, 2-3=-1709/0, 3-4=-2876/0, 4-5=-2876/0, 5-7=-3468/0, 7-8=-3724/0, 8-9=-3724/0, 9-12=-3001/183, 12-13=-1726/673, 13-14=-1726/673, 14-15=0/1426, 15-16=0/3549, 16-17=0/3549, 17-19=0/1596, 19-20=-1397/950, 20-21=-1397/950, 21-22=-2504/297, 22-23=-2504/297, 23-24=-2645/40, 24-25=-2342/0, 25-26=-2342/0, 26-27=-1451/0, 27-28=-2/0
 BOT CHORD 49-50=0/1008, 48-49=0/2384, 47-48=0/3227, 45-47=0/3745, 44-45=0/3724, 43-44=0/3724, 41-43=-414/2421, 39-41=-988/866, 38-39=-2174/0, 37-38=-2278/0, 36-37=-1261/743, 34-36=-668/1948, 33-34=-297/2504, 32-33=-297/2504, 31-32=0/2648, 30-31=0/2000, 29-30=0/872

WEBS

16-38=-92/0, 2-50=-1262/0, 2-49=0/912, 3-49=-879/0, 3-48=0/628, 4-48=-86/0, 5-48=-448/0, 5-47=-22/308, 7-47=-357/77, 7-45=-525/166, 8-45=-82/123, 15-38=-1725/0, 15-39=0/1370, 14-39=-1341/0, 14-41=0/1144, 13-41=-88/0, 12-41=-944/0, 12-43=0/796, 9-43=-1110/0, 9-44=0/342, 27-29=-1092/0, 27-30=0/754, 26-30=-715/0, 26-31=-44/436, 25-31=-19/15, 17-38=-1595/0, 17-37=0/1246, 19-37=-1195/0, 19-36=0/961, 20-36=-1170/0, 21-36=-841/0, 21-34=0/1054, 22-34=-407/0, 24-31=-391/39, 24-32=-275/20, 23-32=0/577, 23-33=-309/0

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 (=) MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Required 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

October 21, 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

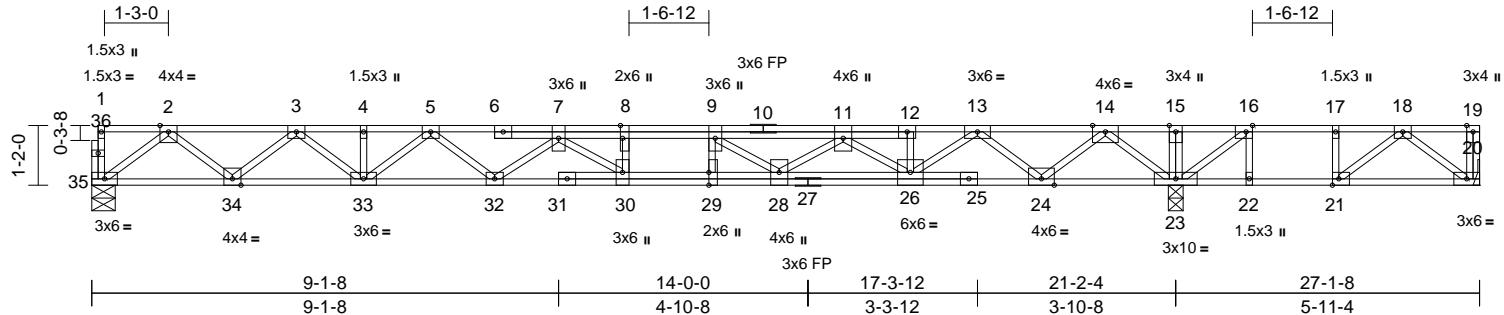
818 Soundside Road
Edenton, NC 27932

Job 250231-B	Truss F11	Truss Type FLOOR	Qty 2	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77197328
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.30 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 16:29:14
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Page: 1



Scale = 1:45

Plate Offsets (X, Y): [8:0-3-0,Edge], [16:0-1-8,Edge], [21:0-1-8,Edge], [29:0-3-0,Edge]

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	Vert(LL)	-0.29	30-32	>872	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	Vert(CT)	-0.40	30-32	>634	360		
BCLL	0.0	Rep Stress Incr	YES	WB	Horz(CT)	0.06	23	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S						Weight: 160 lb	FT = 20%F, 11%E

LUMBERTOP CHORD 2x4 SP No.1(flat) *Except* 10-19:2x4 SP
2400F 2.0E(flat)

BOT CHORD 2x4 SP No.1(flat)

WEBS 2x4 SP No.3(flat)

OTHERS 2x4 SP No.3(flat)

BRACINGTOP CHORD Structural wood sheathing directly applied or
6-0-0 oc purlins, except end verticals.BOT CHORD Rigid ceiling directly applied or 6-0-0 oc
bracing.REACTIONS (size) 20= Mechanical, 23=0-3-8,
35=0-5-8

Max Uplift 20=238 (LC 3)

Max Grav 20=187 (LC 4), 23=1561 (LC 1),
35=841 (LC 10)FORCES (lb) - Maximum Compression/Maximum
TensionTOP CHORD 1-35=28/0, 19-20=34/21, 1-2=-2/0,
2-3=-1810/0, 3-4=-3079/0, 4-5=-3079/0,
5-7=-3763/0, 7-8=-4225/0, 8-9=-4225/0,
9-11=-3712/0, 11-12=-2360/0, 12-13=-2355/0,
13-14=-610/0, 14-15=0/1770, 15-16=0/1770,
16-17=-98/938, 17-18=-98/938, 18-19=0/0BOT CHORD 34-35=0/1061, 33-34=0/2535, 32-33=0/3476,
30-32=0/4119, 29-30=0/4225, 28-29=0/4225,
26-28=0/3228, 24-26=0/1541, 23-24=-461/0,
22-23=-938/98, 21-22=-938/98,
20-21=-340/173

WEBS

15-23=0/148, 2-35=-1329/0, 14-23=-1649/0,
2-34=0/975, 14-24=0/1233, 3-34=-943/0,
13-24=-1228/0, 3-33=0/695, 4-33=-87/0,
13-26=0/1023, 12-26=0/35, 5-33=-507/0,
11-26=-1065/0, 5-32=0/370, 11-28=0/651,
7-32=-456/0, 9-28=-788/0, 7-30=-203/481,
8-30=-194/22, 9-29=-42/227,
18-20=-217/427, 16-23=-1260/0,
18-21=-763/0, 16-22=0/242, 17-21=0/343**NOTES**

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 (=) MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 238 lb uplift at joint 20.
- 6) Required 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 7) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

October 21, 2025

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

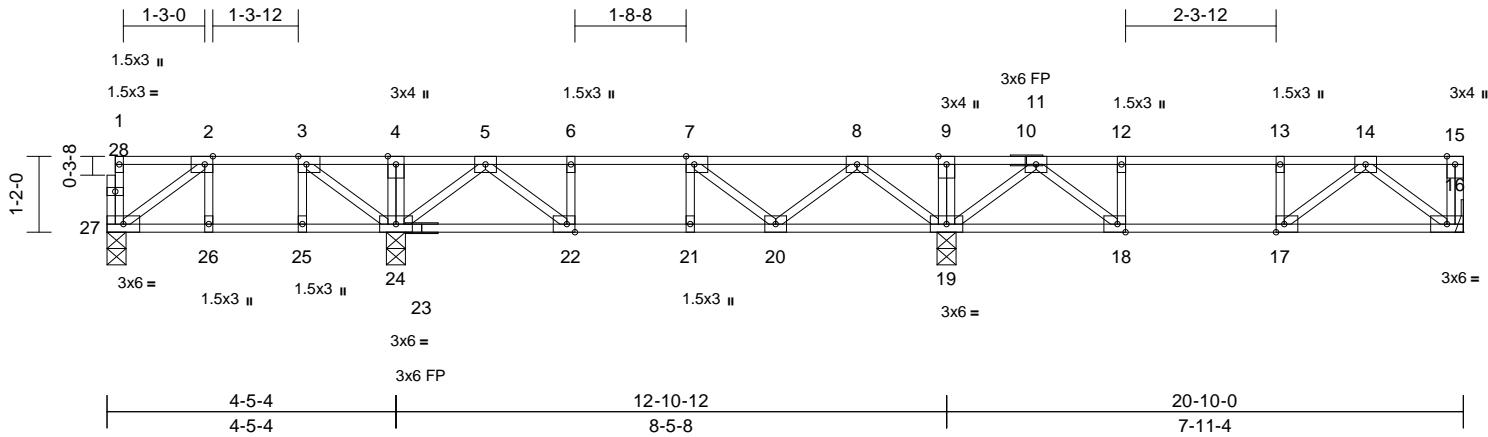
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

Job 250231-B	Truss F12	Truss Type Floor	Qty 2	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77197329
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.30 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 16:29:14
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Page: 1



Scale = 1:35.4

Plate Offsets (X, Y): [2:0-1-8,Edge], [3:0-1-8,Edge], [7:0-1-8,Edge], [17:0-1-8,Edge], [18:0-1-8,Edge], [22:0-1-8,Edge]

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.29	Vert(LL)	-0.03	16-17	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.24	Vert(CT)	-0.04	16-17	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.01	16	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 106 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.1(flat)

- 3) Plates checked for a plus or minus 1 degree rotation about its center.

BOT CHORD 2x4 SP No.1(flat)

- 4) Refer to girder(s) for truss to truss connections.

WEBS 2x4 SP No.3(flat)

- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

OTHERS 2x4 SP No.3(flat)

- 6) CAUTION, Do not erect truss backwards.

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

LOAD CASE(S) Standard

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

6-0-0 oc bracing: 19-20,18-19.

REACTIONS (size) 16= Mechanical, 19=0-3-8,
24=0-3-8, 27=0-3-8

- 3) Plates checked for a plus or minus 1 degree rotation about its center.

Max Grav 16=324 (LC 5), 19=792 (LC 11),
24=551 (LC 16), 27=190 (LC 14)

- 4) Refer to girder(s) for truss to truss connections.

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-27=-53/0, 15-16=-46/0, 1-2=-3/0,
2-3=-199/0, 3-4=-33/116, 4-5=-33/116,

- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

5-6=-636/0, 6-7=-636/0, 7-8=-491/0,
8-9=0/394, 9-11=0/394, 11-12=-542/0,

- 6) CAUTION, Do not erect truss backwards.

BOT CHORD 26-27=0/199, 25-26=0/199, 24-25=0/199,
22-24=0/365, 21-22=0/636, 20-21=0/636,

LOAD CASE(S) Standard

19-20=-11/298, 18-19=-102/259,
17-18=0/542, 16-17=0/351

WEBS 4-24=-125/0, 9-19=-106/0, 2-27=-242/0,
3-24=-292/0, 2-26=-13/14, 3-25=0/33,

- 7) CAUTION, Do not erect truss backwards.

8-19=-603/0, 5-24=-475/0, 8-20=0/293,
5-22=0/346, 7-20=-253/0, 6-22=-162/0,

- 8) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

7-21=-44/17, 11-19=-528/0, 11-18=0/440,
14-16=-440/0, 14-17=10/244,

- 9) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

13-17=-140/11, 12-18=-228/0

- 10) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

NOTES

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

2) All plates are 3x4 (=) MT20 unless otherwise indicated.



October 21, 2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-743 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 the Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcaccomponents.com)

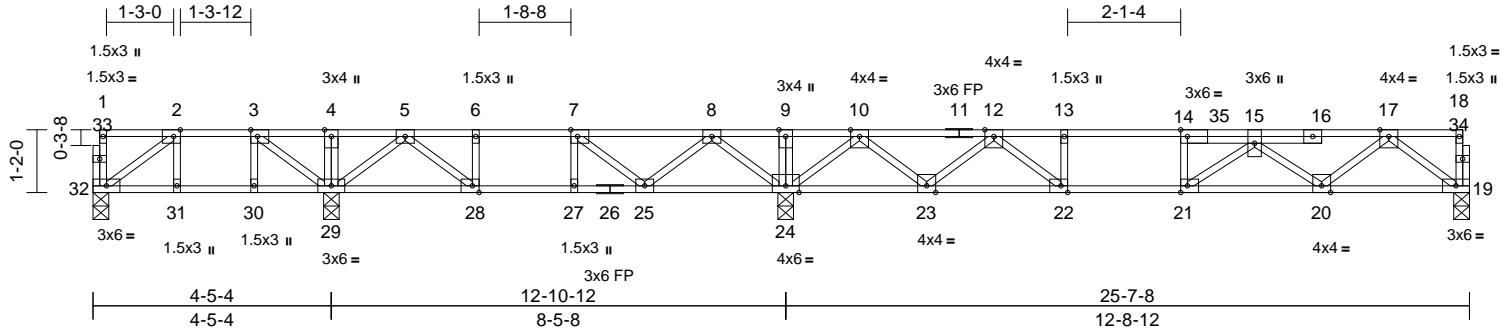
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job 250231-B	Truss F13-GR	Truss Type Floor Girder	Qty 1	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77197330
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.3.0 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 16:29:14
ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RFc?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:42.9

Plate Offsets (X, Y): [2:0-1-8,Edge], [3:0-1-8,Edge], [7:0-1-8,Edge], [14:0-1-8,Edge], [21:0-1-8,Edge], [22:0-1-8,Edge], [28:0-1-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.69	Vert(LL)	-0.15	20-21	>996	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.90	Vert(CT)	-0.20	20-21	>754	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.46	Horz(CT)	0.03	19	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 132 lb	FT = 20%F, 11%E

LUMBERTOP CHORD 2x4 SP No.1(flat) *Except* 11-18:2x4 SP
2400F 2.0E(flat)

BOT CHORD 2x4 SP No.1(flat)

WEBS 2x4 SP No.3(flat)

OTHERS 2x4 SP No.3(flat)

BRACINGTOP CHORD Structural wood sheathing directly applied or
6-0-0 oc purlins, except end verticals.BOT CHORD Rigid ceiling directly applied or 6-0-0 oc
bracing.REACTIONS (size) 19=0-3-8, 24=0-3-8, 29=0-3-8,
32=0-3-8
Max Grav 19=835 (LC 13), 24=1448 (LC 11),
29=668 (LC 3), 32=214 (LC 14)FORCES (lb) - Maximum Compression/Maximum
TensionTOP CHORD 1-32=-72/0, 18-19=-54/0, 1-2=-4/0,
2-3=-200/11, 3-4=0/222, 4-5=0/222,
5-6=-622/95, 6-7=-622/95, 7-8=-360/261,
8-9=0/1004, 9-10=0/1004, 10-12=-1096/15,
12-13=-2403/0, 13-14=-2403/0,
14-15=-2421/0, 15-17=-1776/0, 17-18=-3/0BOT CHORD 31-32=-11/200, 30-31=-11/200,
29-30=-11/200, 28-29=-73/362,
27-28=-95/622, 25-27=-95/622,
24-25=-413/74, 23-24=-239/425,
22-23=0/1787, 21-22=0/2403, 20-21=0/2478,
19-20=0/1027WEBS 4-29=-145/0, 9-24=-95/0, 2-32=-243/15,
3-29=-412/0, 2-31=-29/2, 3-30=0/50,
8-24=-833/0, 5-29=-543/0, 8-25=0/456,
5-28=-28/337, 7-25=-458/0, 6-28=-167/13,
7-27=-14/67, 10-24=-1357/0, 10-23=0/912,
12-23=-945/0, 17-19=-1284/0, 17-20=0/967,
15-20=-901/0, 15-21=-315/191, 12-22=0/974,
13-22=-460/0, 14-21=-109/89**NOTES**

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 (=) MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.
- 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 315 lb down at 20-11-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 19-32=-10, 1-18=-100
Concentrated Loads (lb)
Vert: 35=-251 (F)



October 21, 2025

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

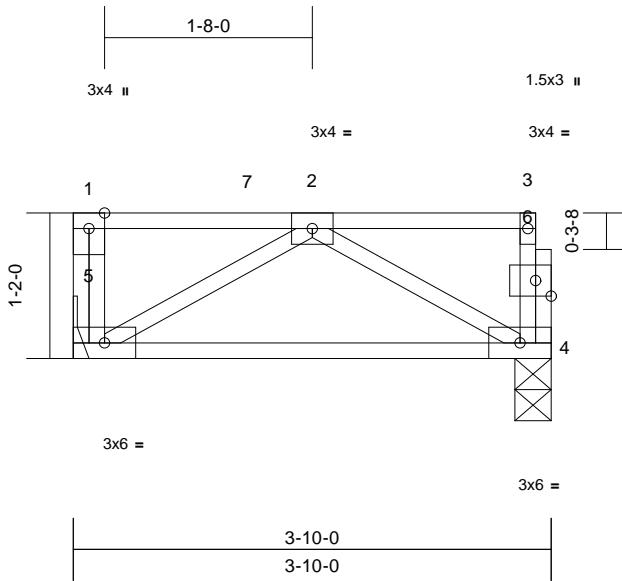
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

Job 250231-B	Truss F14-GR	Truss Type Floor Girder	Qty 1	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77197331
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.3.0 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 16:29:14
ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RFc?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:18.5

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

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	Vert(CT)	-0.02	4-5	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	Horz(CT)	0.00	4	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-P						Weight: 22 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

Concentrated Loads (lb)

Vert: 3=-283 (F), 7=-261 (F)

BRACING

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

REACTIONS (size) 4=0-3-8, 5= Mechanical
Max Grav 4=523 (LC 1), 5=331 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-5=-109/0, 3-4=-312/0, 1-2=0/0, 2-3=-19/0
BOT CHORD 4-5=0/357
WEBS 2-4=-391/0, 2-5=-413/0

NOTES

- Plates checked for a plus or minus 1 degree rotation about its center.
- Refer to girder(s) for truss to truss connections.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 261 lb down at 1-4-12, and 283 lb down at 3-7-12 on top chord. The design/selection of such connection device (s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S)

Standard

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 4-5=-8, 1-3=-8-0



October 21, 2025



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

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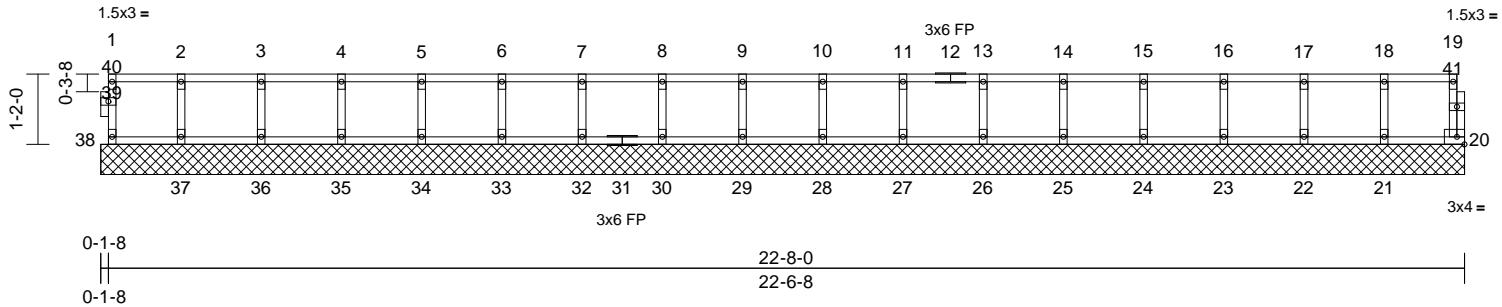
818 Soundside Road
Edenton, NC 27932

Job 250231-B	Truss FKW1	Truss Type Floor Supported Gable	Qty 1	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77197332
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.3.0 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 16:29:14
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Page: 1



Scale = 1:38.3

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	Horiz(TL)	0.00	20	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R						Weight: 93 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING

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

REACTIONS (size) 20=22-8-0, 21=22-8-0, 22=22-8-0, 23=22-8-0, 24=22-8-0, 25=22-8-0,

NOTES

- 1) All plates are 1.5x3 (||) MT20 unless otherwise indicated.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 3) Gable requires continuous bottom chord bearing.
- 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 5) Gable studs spaced at 1-4-0 oc.
- 6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S)

Standard

26=22-8-0, 27=22-8-0, 28=22-8-0, 29=22-8-0, 30=22-8-0, 32=22-8-0, 33=22-8-0, 34=22-8-0, 35=22-8-0, 36=22-8-0, 37=22-8-0, 38=22-8-0

Max Grav 20=54 (LC 1), 21=146 (LC 1), 22=147 (LC 1), 23=147 (LC 1), 24=147 (LC 1), 25=147 (LC 1), 26=147 (LC 1), 27=147 (LC 1), 28=147 (LC 1), 29=147 (LC 1), 30=147 (LC 1), 32=147 (LC 1), 33=147 (LC 1), 34=147 (LC 1), 35=146 (LC 1), 36=148 (LC 1), 37=141 (LC 1), 38=57 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-38=-51/0, 19-20=-50/0, 1-2=-8/0, 2-3=-8/0, 3-4=-8/0, 4-5=-8/0, 5-6=-8/0, 6-7=-8/0, 7-8=-8/0, 8-9=-8/0, 9-10=-8/0, 10-11=-8/0, 11-13=-8/0, 13-14=-8/0, 14-15=-8/0, 15-16=-8/0, 16-17=-8/0, 17-18=-8/0, 18-19=-8/0

BOT CHORD 37-38=0/8, 36-37=0/8, 35-36=0/8, 34-35=0/8, 33-34=0/8, 32-33=0/8, 30-32=0/8, 29-30=0/8, 28-29=0/8, 27-28=0/8, 26-27=0/8, 25-26=0/8, 24-25=0/8, 23-24=0/8, 22-23=0/8, 21-22=0/8, 20-21=0/8



October 21, 2025

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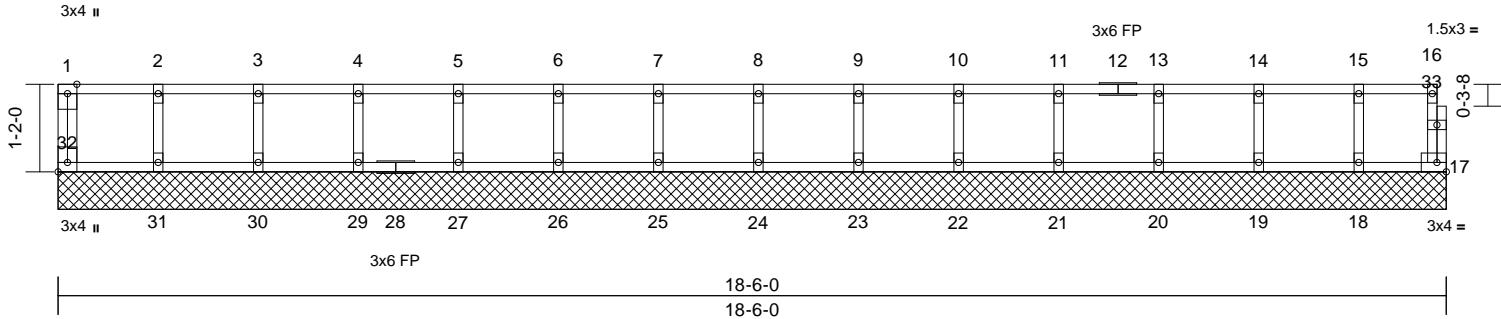
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job 250231-B	Truss FKW2	Truss Type Floor Supported Gable	Qty 1	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77197333
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.3.0 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 16:29:14
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Page: 1



Scale = 1:30.7

Plate Offsets (X, Y): [32:Edge,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	17	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 78 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING

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

REACTIONS (size) 17=18-6-0, 18=18-6-0, 19=18-6-0, 20=18-6-0, 21=18-6-0, 22=18-6-0, 23=18-6-0, 24=18-6-0, 25=18-6-0, 26=18-6-0, 27=18-6-0, 29=18-6-0, 30=18-6-0, 31=18-6-0, 32=18-6-0

Max Grav 17=47 (LC 1), 18=132 (LC 1), 19=150 (LC 1), 20=146 (LC 1), 21=147 (LC 1), 22=147 (LC 1), 23=147 (LC 1), 24=147 (LC 1), 25=147 (LC 1), 26=147 (LC 1), 27=147 (LC 1), 29=147 (LC 1), 30=147 (LC 1), 31=145 (LC 1), 32=60 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-32=-55/0, 16-17=-41/0, 1-2=-8/0, 2-3=-8/0, 3-4=-8/0, 4-5=-8/0, 5-6=-8/0, 6-7=-8/0, 7-8=-8/0, 8-9=-8/0, 9-10=-8/0, 10-11=-8/0, 11-12=-8/0, 13-14=-8/0, 14-15=-8/0, 15-16=-8/0

BOT CHORD 31-32=0/8, 30-31=0/8, 29-30=0/8, 27-29=0/8, 26-27=0/8, 25-26=0/8, 24-25=0/8, 23-24=0/8, 22-23=0/8, 21-22=0/8, 20-21=0/8, 19-20=0/8, 18-19=0/8, 17-18=0/8

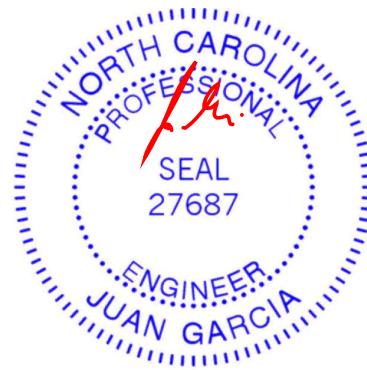
WEBS 2-31=-132/0, 3-30=-134/0, 4-29=-133/0, 5-27=-133/0, 6-26=-133/0, 7-25=-133/0, 8-24=-133/0, 9-23=-133/0, 10-22=-133/0, 11-21=-134/0, 13-20=-133/0, 14-19=-136/0, 15-18=-121/0

NOTES

- 1) All plates are 1.5x3 (||) MT20 unless otherwise indicated.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 3) Gable requires continuous bottom chord bearing.
- 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 5) Gable studs spaced at 1-4-0 oc.
- 6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 7) CAUTION, Do not erect truss backwards.

LOAD CASE(S)

Standard



October 21, 2025

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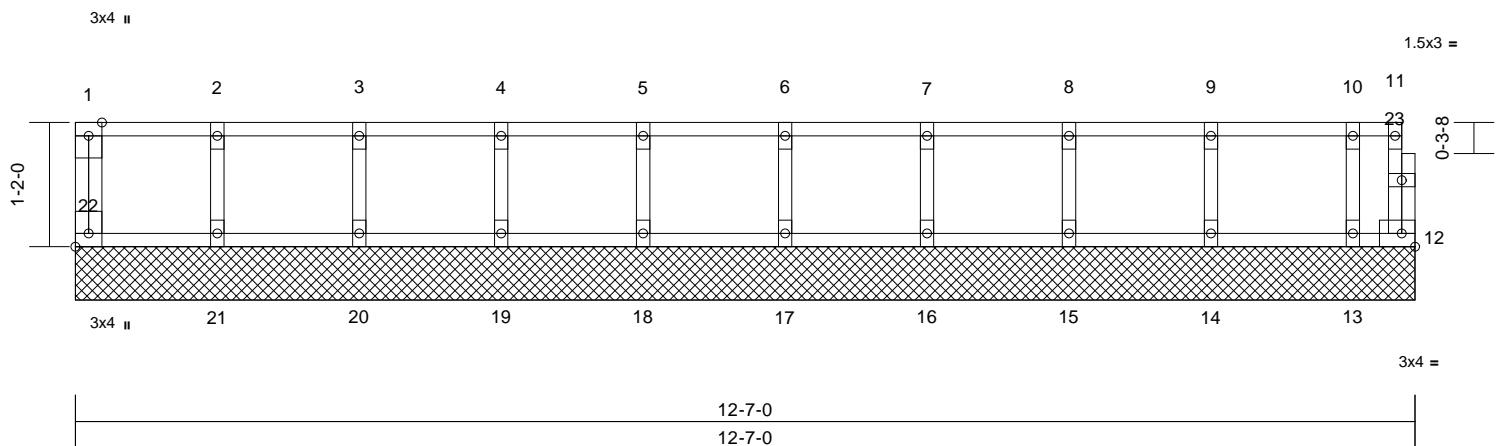
818 Soundside Road
Edenton, NC 27932

Job 250231-B	Truss FKW3	Truss Type Floor Supported Gable	Qty 1	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77197334
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.3.0 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 16:29:15
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Page: 1



Scale = 1:21.6

Plate Offsets (X, Y): [22:Edge,0-1-8]

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	Horiz(TL)	0.00	12	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R						Weight: 55 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.1(flat)

5) Gable studs spaced at 1-4-0 oc.

BOT CHORD 2x4 SP No.1(flat)

6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

WEBS 2x4 SP No.3(flat)

7) CAUTION, Do not erect truss backwards.

OTHERS 2x4 SP No.3(flat)

LOAD CASE(S) Standard

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

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

REACTIONS (size) 12=12-7-0, 13=12-7-0, 14=12-7-0, 15=12-7-0, 16=12-7-0, 17=12-7-0, 18=12-7-0, 19=12-7-0, 20=12-7-0, 21=12-7-0, 22=12-7-0

LOAD CASE(S) Standard

Max Grav 12=8 (LC 1), 13=81 (LC 1), 14=122 (LC 1), 15=116 (LC 1), 16=118 (LC 1), 17=117 (LC 1), 18=117 (LC 1), 19=117 (LC 1), 20=117 (LC 1), 21=118 (LC 1), 22=47 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-22=-44/0, 11-12=-1/0, 1-2=-5/0, 2-3=-5/0, 3-4=-5/0, 4-5=-5/0, 5-6=-5/0, 6-7=-5/0,

7-8=-5/0, 8-9=-5/0, 9-10=-5/0, 10-11=-5/0

BOT CHORD 21-22=0/5, 20-21=0/5, 19-20=0/5, 18-19=0/5, 17-18=0/5, 16-17=0/5, 15-16=0/5, 14-15=0/5, 13-14=0/5, 12-13=0/5

WEBS 2-21=-106/0, 3-20=-107/0, 4-19=-107/0, 5-18=-107/0, 6-17=-107/0, 7-16=-107/0, 8-15=-106/0, 9-14=-111/0, 10-13=-81/0

NOTES

- All plates are 1.5x3 (||) MT20 unless otherwise indicated.
- Plates checked for a plus or minus 1 degree rotation about its center.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).



October 21, 2025

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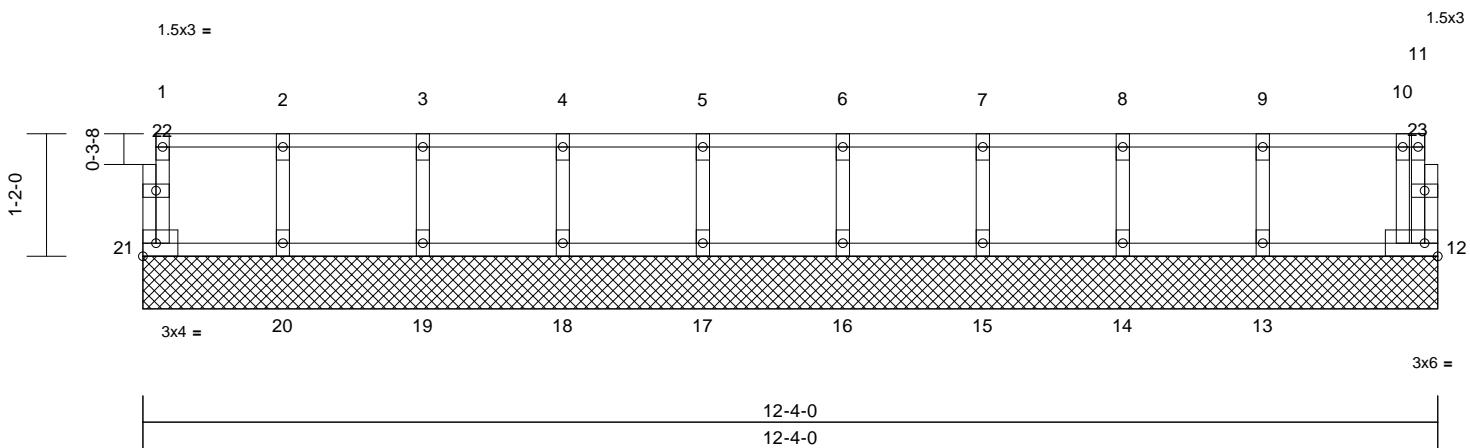
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job 250231-B	Truss FKW4	Truss Type Floor Supported Gable	Qty 1	Ply 1	Lot 48 Duncans Creek Job Reference (optional)	I77197335
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Oct 2 2025 Print: 25.3.0 S Oct 2 2025 MiTek Industries, Inc. Mon Oct 20 16:29:15
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Page: 1



Scale = 1:21.9

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999	
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	12	n/a	n/a	
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 54 lb FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard

BRACING

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

REACTIONS (size) 12=12-4-0, 13=12-4-0, 14=12-4-0,
15=12-4-0, 16=12-4-0, 17=12-4-0,
18=12-4-0, 19=12-4-0, 20=12-4-0,
21=12-4-0

Max Grav 12=79 (LC 1), 13=160 (LC 1),
14=143 (LC 1), 15=148 (LC 1),
16=146 (LC 1), 17=147 (LC 1),
18=146 (LC 1), 19=149 (LC 1),
20=136 (LC 1), 21=61 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-21=-54/0, 11-12=0/19, 1-2=-15/0,
2-3=-15/0, 3-4=-15/0, 4-5=-15/0, 5-6=-15/0,
6-7=-15/0, 7-8=-15/0, 8-9=-15/0, 9-10=-15/0,
10-11=-3/0

BOT CHORD 20-21=0/15, 19-20=0/15, 18-19=0/15,
17-18=0/15, 16-17=0/15, 15-16=0/15,
14-15=0/15, 13-14=0/15, 12-13=0/15

WEBS 2-20=-127/0, 3-19=-135/0, 4-18=-133/0,
5-17=-133/0, 6-16=-133/0, 7-15=-134/0,
8-14=-131/0, 9-13=-143/0, 10-12=-93/0

NOTES

- All plates are 1.5x3 (||) MT20 unless otherwise indicated.
- Plates checked for a plus or minus 1 degree rotation about its center.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.



October 21, 2025

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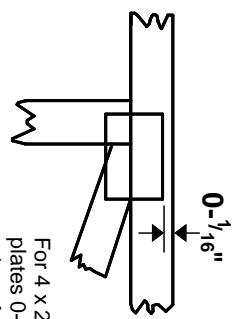
Symbols

PLATE LOCATION AND ORIENTATION

Center plate on joint unless X, Y offsets are indicated.

Dimensions are in ft-in-sixteenths.

Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0-1/16" from outside edge of truss.



This symbol indicates the required direction of slots in connector plates.

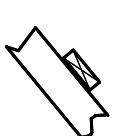
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

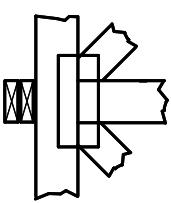
LATERAL BRACING LOCATION

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



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.

BEARING



Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.

DSB-22: Design Standard for Bracing.

BCSI: Building Component Safety Information,

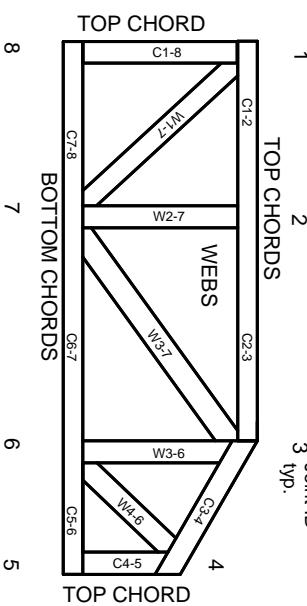
Guide to Good Practice for Handling,

Installing, Restraining & Bracing of Metal

Plate Connected Wood Trusses.

Numbering System

dimensions shown in ft-in-sixteenths
(Drawings not to scale)



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

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

Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TP1 section 6.3. These truss designs rely on lumber values established by others.

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General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.

2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor! 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.

7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1.

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 Quality Criteria.

21. The design does not take into account any dynamic or other loads other than those expressly stated.

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TRENGO
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