



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 number of wood 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 Tables. A registered design professional shall be retained to design the support system for all reactions that exceed 15000#.

Signature Sales Area

Sales Area

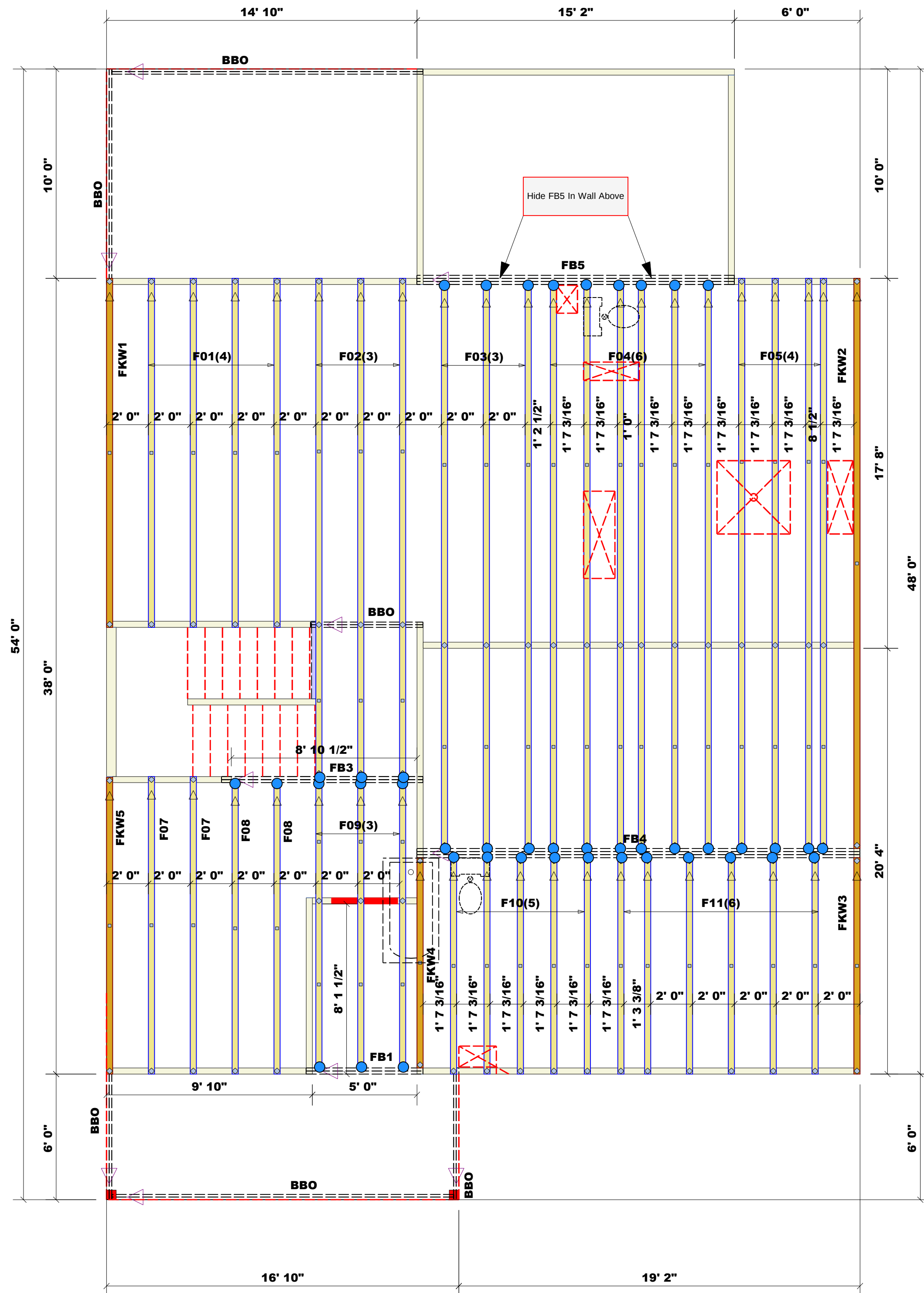
LOAD CHART FOR JACK STUDS

(BASED ON TABLES R502.5(1) & (b))					
NUMBER OF JACK STUDS REQUIRED @ EA END OF HEADER/GIRDER					
END REACTION (UP TO)	REQ. D. STUDS FOR (1) FLY HEADER	END REACTION (UP TO)	REQ. D. STUDS FOR (3) FLY HEADER	END REACTION (UP TO)	REQ. D. STUDS FOR (4) FLY HEADER
1700	1	2550	1	3400	1
3400	2	5100	2	6800	2
5100	3	7650	3	10200	3
6800	4	10200	4	13600	4
8500	5	12750	5	17000	5
10200	6	15300	6		
11900	7				
13600	8				
15300	9				

CITY / CO.	Lillington / Harnett
ADDRESS	644 Beacon Hill Road
MODEL	Floor
DATE REV.	9/15/25
DRAWN BY	Johnnie Baggett
SALES REP.	House Account

BUILDER	New Home Inc.
JOB NAME	Lot 54 Duncans Creek
PLAN	Plan
SEAL DATE	7/1/21
QUOTE #	Quote #
JOB #	251278 - B

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 identified on the placement drawing. The building designer is responsible for temporary and 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 general guidance regarding bracing, consult BCSI-B1 and BCSI-B3 provided with the truss delivery package or online @ sbcindustry.com



Plumbing Drop Notes
1. Plumbing drop locations shown are NOT exact.
2. Contractor to verify ALL plumbing drop locations prior to setting Floor Trusses.
3. Adjust spacing as needed not to exceed 24"oc.

Dimension Notes
1. All exterior wall to wall dimensions are to face of sheathing unless noted otherwise
2. All interior wall dimensions are to face of stud unless noted otherwise
3. All exterior wall to truss dimensions are to face of stud unless noted otherwise

Roof Area = 2204.71 sq.ft.
Ridge Line = 62.74 ft.
Hip Line = 0 ft.
Horiz. OH = 148.61 ft.
Raked OH = 152.28 ft.
Decking = 76 sheets

All Walls Shown Are Considered Load Bearing

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

WALL SCHEDULE	
	1st Floor Walls
	2nd Floor Walls
	Non-Bearing Walls
	Garage Walls Dropped

Connector Information					Nail Information	
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
	HUS410	USP	44	NA	16d/3-1/2"	16d/3-1/2"

Products				
PlotID	Length	Product	Plies	Net Qty
FB3	10' 0"	1-3/4"x 14" LVL Kerto-S	2	2
FB1	6' 0"	1-3/4"x 14" LVL Kerto-S	2	2
FB4	22' 0"	1-3/4"x 18" LVL Kerto-S	3	3
FB5	16' 0"	1-3/4"x 18" LVL Kerto-S	3	3
BBO	16' 0"	2x10 SPF No.2	2	2
BBO	12' 0"	2x10 SPF No.2	2	2

Truss Placement Plan
SCALE: NTS

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

Trenco

818 Soundside Rd
Edenton, NC 27932

Re: 251278-A
Lot 54 Duncan's 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: I76364784 thru I76364806

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

North Carolina COA: C-0844

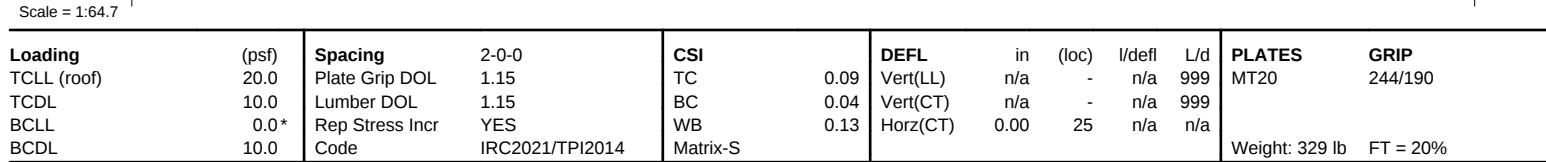


September 16, 2025

Gilbert, Eric

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

Comtech, Inc, Fayetteville, NC - 28314, Run: 25.30 S Sep 7 2025 Print: 25.3.0 S Sep 7 2025 MiTek Industries, Inc. Mon Sep 15 13:02:46 Page: 1
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Continued on page 2

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

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



ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 54 Duncan's Creek
251278-A	A01GE	COMMON SUPPORTED GAB	1	1	I76364784
			Job Reference (optional)		

- 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 (I) 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.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 37 lb uplift at joint 25, 53 lb uplift at joint 2, 14 lb uplift at joint 37, 40 lb uplift at joint 38, 34 lb uplift at joint 40, 33 lb uplift at joint 41, 34 lb uplift at joint 42, 34 lb uplift at joint 43, 33 lb uplift at joint 44, 38 lb uplift at joint 45, 104 lb uplift at joint 46, 7 lb uplift at joint 35, 42 lb uplift at joint 34, 34 lb uplift at joint 32, 33 lb uplift at joint 31, 34 lb uplift at joint 30, 33 lb uplift at joint 29, 33 lb uplift at joint 28, 36 lb uplift at joint 27 and 150 lb uplift at joint 26.
- 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

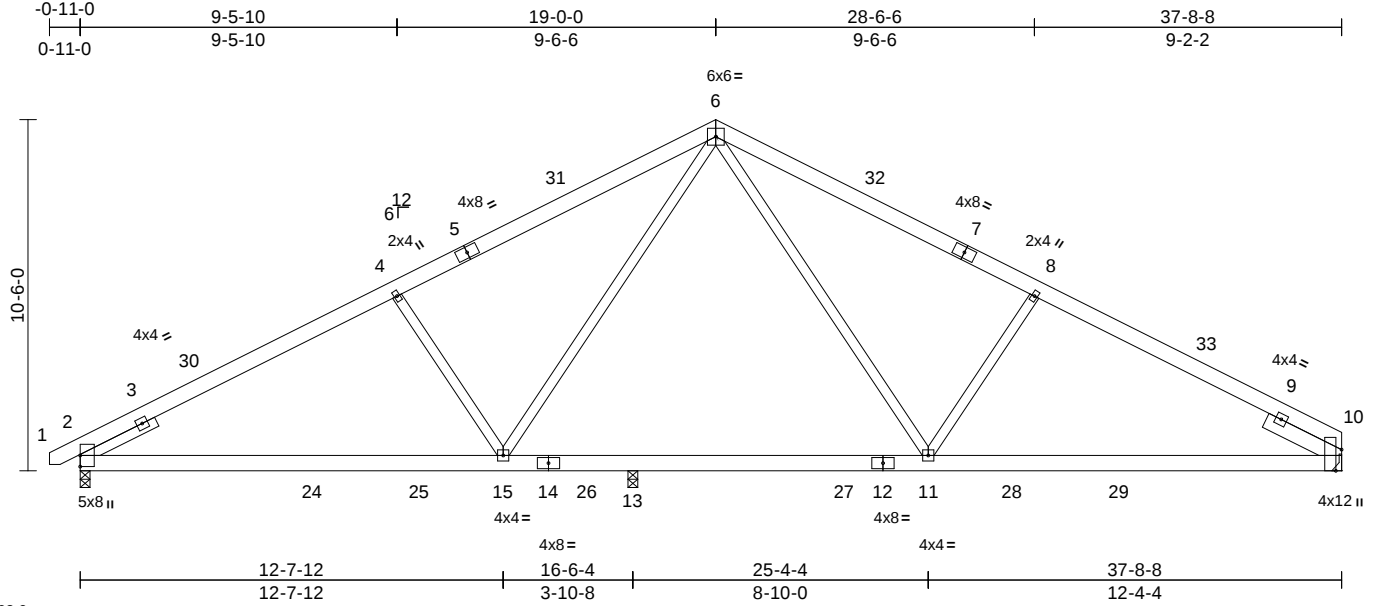
LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Lot 54 Duncan's Creek	176364785
251278-A	A02	FINK	6	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

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Page: 1



Scale = 1:68.9

Plate Offsets (X, Y): [10:0-7-10,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	-0.22	15-18	>901	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.38	15-18	>524	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.06	10	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS		Wind(LL)	0.07	15-18	>999	240	Weight: 251 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 2x6 SP No.2 -- 2-6-0

BRACING

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

REACTIONS (size) 2=0-3-8, 10= Mechanical, 13=0-3-8
Max Horiz 2=132 (LC 9)
Max Uplift 2=-115 (LC 12), 10=-102 (LC 13)
Max Grav 2=1580 (LC 2), 10=1604 (LC 2), 13=481 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

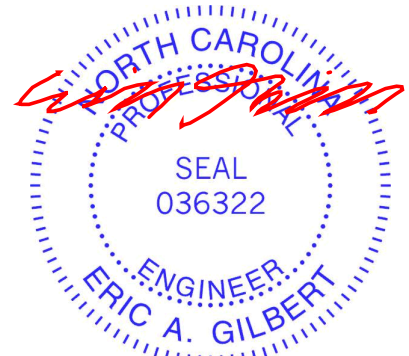
TOP CHORD 1-2=0/20, 2-4=-2299/535, 4-6=-2127/557, 6-8=-2237/556, 8-10=-2437/533
BOT CHORD 2-15=-376/2090, 13-15=-150/1431, 11-13=-150/1431, 10-11=-352/2110
WEBS 4-15=-536/304, 6-15=-115/782, 6-11=-108/958, 8-11=-497/294

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) 0-9-2 to 3-7-11, Interior (1) 3-7-11 to 19-0-0, Exterior(2R) 19-0-0 to 23-4-13, Interior (1) 23-4-13 to 37-8-8 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 115 lb uplift at joint 2 and 102 lb uplift at joint 10.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



September 16, 2025

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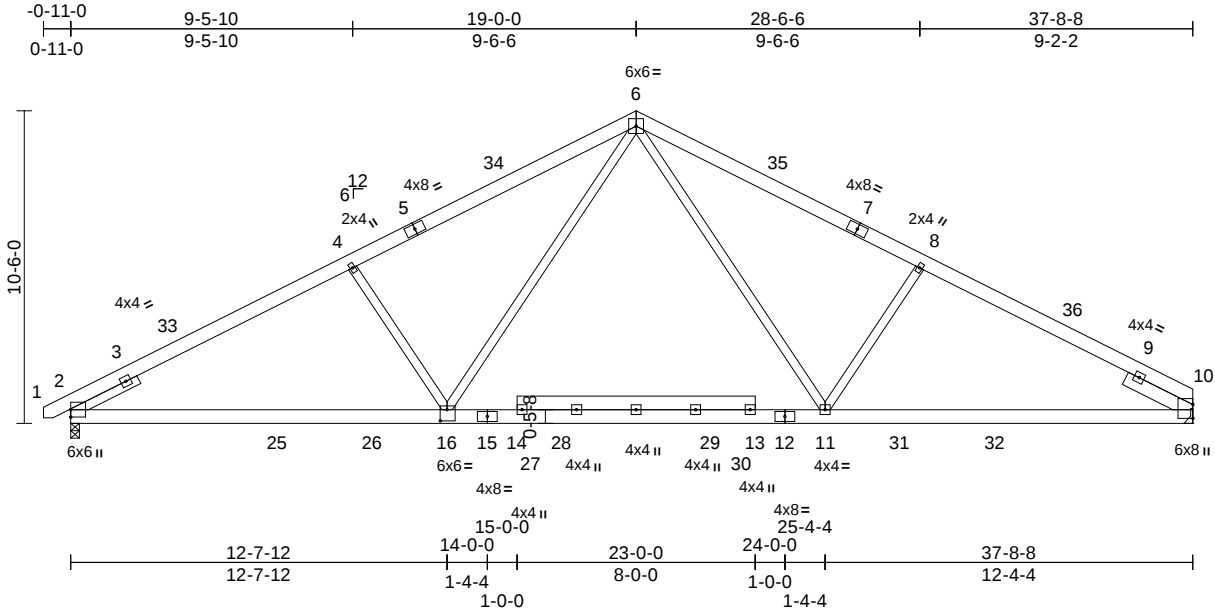
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 54 Duncan's Creek	176364786
251278-A	A03	FINK	2	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

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Page: 1



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.43	Vert(LL)	-0.19	11-16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.39	11-16	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.08	10	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS		Wind(LL)	0.06	11-16	>999	240	Weight: 269 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 2x6 SP No.2 -- 2-6-0

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=132 (LC 9)

Max Uplift 2=-2 (LC 12)

Max Grav 2=1941 (LC 2), 10=1907 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/20, 2-4=-3118/333, 4-6=-2914/354, 6-8=-2863/355, 8-10=-3057/333

BOT CHORD 2-16=-201/2760, 11-16=-23/1876, 10-11=-180/2644

WEBS 4-16=-493/319, 6-16=-12/1247, 6-11=-6/1168, 8-11=-456/312

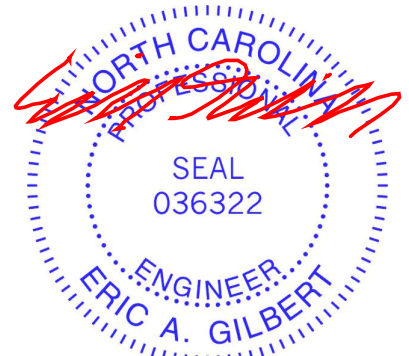
NOTES

- 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) -0-9-2 to 3-7-11, Interior (1) 3-7-11 to 19-0-0, Exterior(2R) 19-0-0 to 23-4-13, Interior (1) 23-4-13 to 37-8-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 200.0lb AC unit load placed on the bottom chord, 19-0-0 from left end, supported at two points, 5-0-0 apart.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

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

- 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



September 16, 2025

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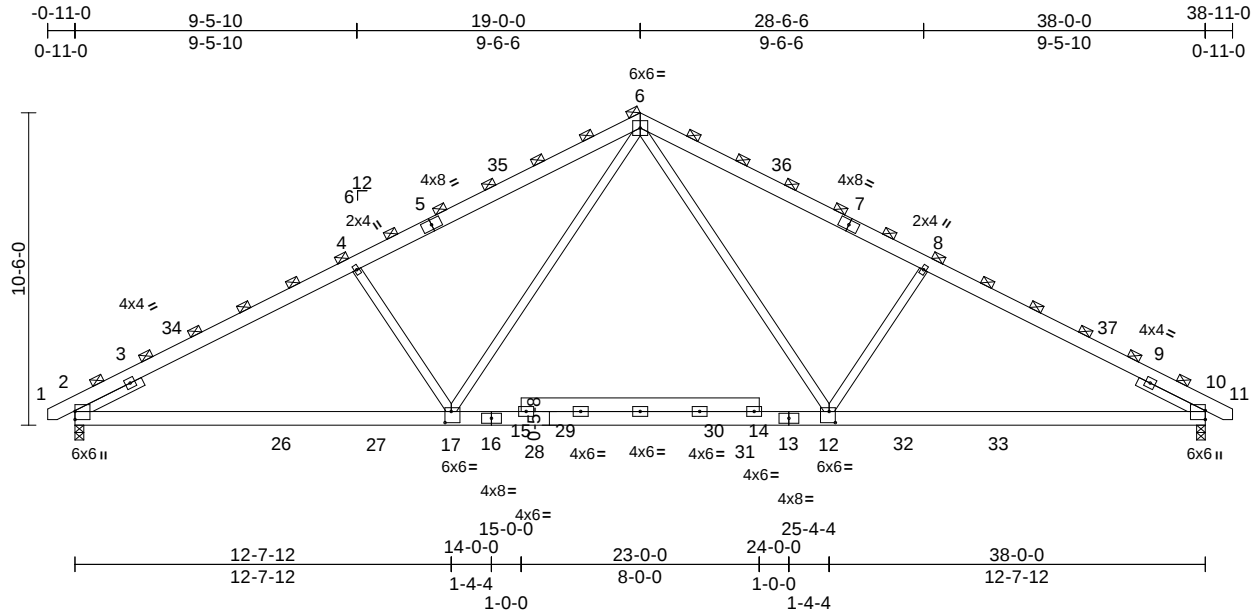
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 54 Duncan's Creek
251278-A	A04	FINK	2	1	176364787
Job Reference (optional)					

Comtech, Inc, Fayetteville, NC - 28314,

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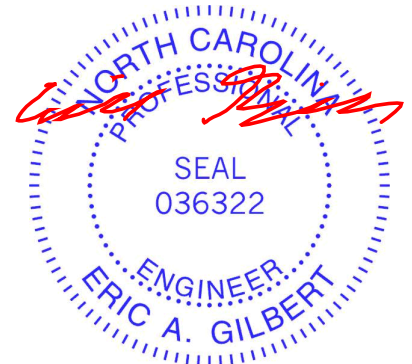
Scale = 1:77.5									
Plate Offsets (X, Y): [12:0-2-8,0-4-8], [17:0-2-8,0-4-8]									
Loading	(psf)	Spacing	2-1-8	CSI		DEFL	in (loc)	l/defl	L/d
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.20 12-17	>999	360
TCDL	10.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.40 12-17	>999	240
BCLL	0.0*	Rep Stress Incr	NO	WB	0.34	Horz(CT)	0.08 10	n/a	n/a
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS		Wind(LL)	0.07 12-17	>999	240
					Weight: 271 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	
BRACING		
TOP CHORD	2-0-0 oc purlins (3-9-3 max.) (Switched from sheeted: Spacing > 2-0-0).	
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.	
REACTIONS (size) 2=0-3-8, 10=0-3-8		
Max Horiz 2=-137 (LC 10)		
Max Uplift 2=-7 (LC 12), 10=-7 (LC 13)		
Max Grav 2=2071 (LC 2), 10=2071 (LC 2)		
FORCES (lb) - Maximum Compression/Maximum Tension		
TOP CHORD 1-2=0/22, 2-4=-3337/372, 4-6=-3118/394, 6-8=-3118/394, 8-10=-3337/372, 10-11=0/22		
BOT CHORD 2-17=-196/2961, 12-17=0/2011, 10-12=-194/2906		
WEBS 4-17=-539/346, 6-17=-28/1327, 6-12=-28/1327, 8-12=-539/346		

- 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) -0-9-2 to 3-7-11, Interior (1) 3-7-11 to 19-0-0, Exterior(2R) 19-0-0 to 23-4-13, Interior (1) 23-4-13 to 38-9-2 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 200.0lb AC unit load placed on the bottom chord, 19-0-0 from left end, supported at two points, 5-0-0 apart.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 7 lb uplift at joint 2 and 7 lb uplift at joint 10.
- 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



September 16,2025

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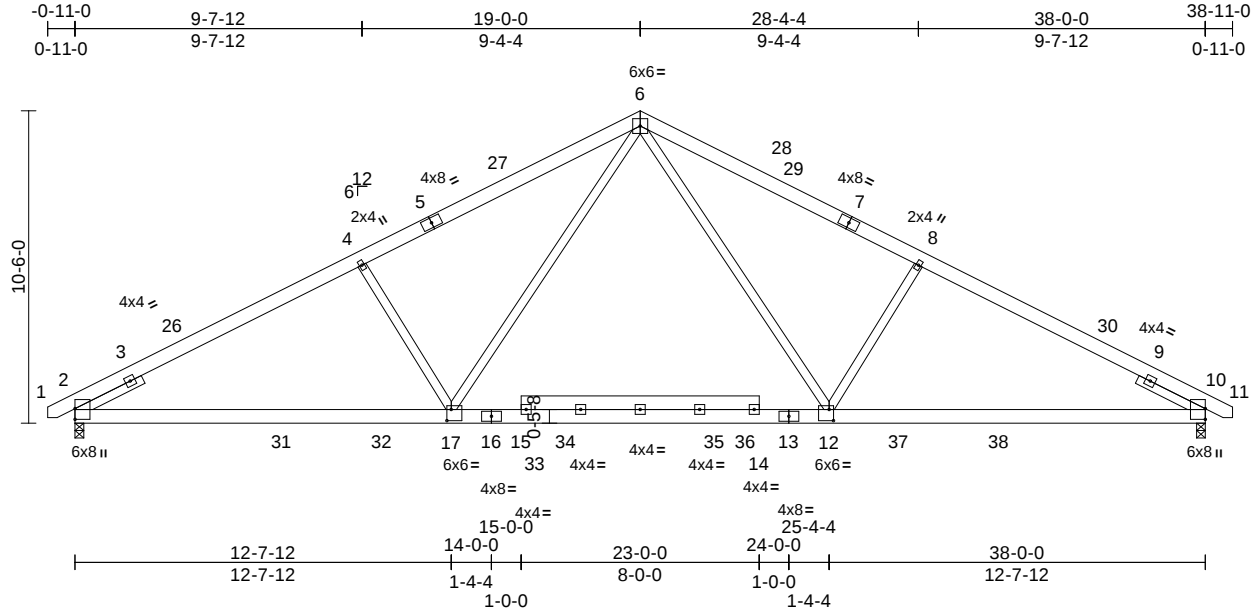
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 54 Duncan's Creek	
251278-A	A05	Common	2	1	Job Reference (optional)	I76364788

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Sep 7 2025 Print: 25.3.0 S Sep 7 2025 MiTek Industries, Inc. Mon Sep 15 13:02:47
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Page: 1



Scale = 1:77.5

Plate Offsets (X, Y): [12:0-1-12,0-4-8], [17:0-1-12,0-4-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	-0.19	12-17	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.39	12-17	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.46	Horz(CT)	0.08	10	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS		Wind(LL)	0.07	12-17	>999	240	Weight: 271 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

BRACING

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

REACTIONS

(size)	2=0-3-8, 10=0-3-8
Max Horiz	2=129 (LC 11)
Max Uplift	2=-10 (LC 12), 10=-38 (LC 13)
Max Grav	2=2031 (LC 2), 10=2268 (LC 20)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/20, 2-4=-3293/388, 4-6=-3097/418, 6-8=-3288/472, 8-10=-3589/470, 10-11=0/20
BOT CHORD	2-17=-215/2925, 12-17=-46/2060, 10-12=-306/3101
WEBS	4-17=-483/316, 6-17=-15/1241, 6-12=-108/1492, 8-12=-732/402

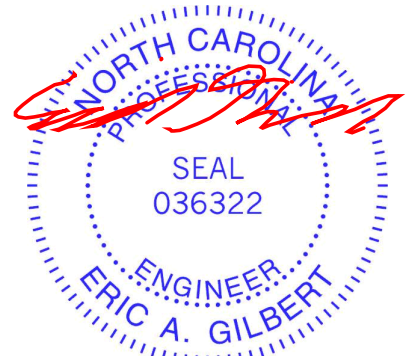
NOTES

- 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) -0-9-2 to 3-7-11, Interior (1) 3-7-11 to 19-0-0, Exterior(2R) 19-0-0 to 23-4-13, Interior (1) 23-4-13 to 38-9-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 200.0lb AC unit load placed on the bottom chord, 19-0-0 from left end, supported at two points, 5-0-0 apart.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 10 lb uplift at joint 2 and 38 lb uplift at joint 10.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 60 lb down and 21 lb up at 35-9-8 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 + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-6=-60, 6-29=-60, 9-29=-90 (F=-30), 9-11=-60, 18-22=-20
Concentrated Loads (lb)
Vert: 9=-60 (F), 34=-100, 35=-100



September 16, 2025

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

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

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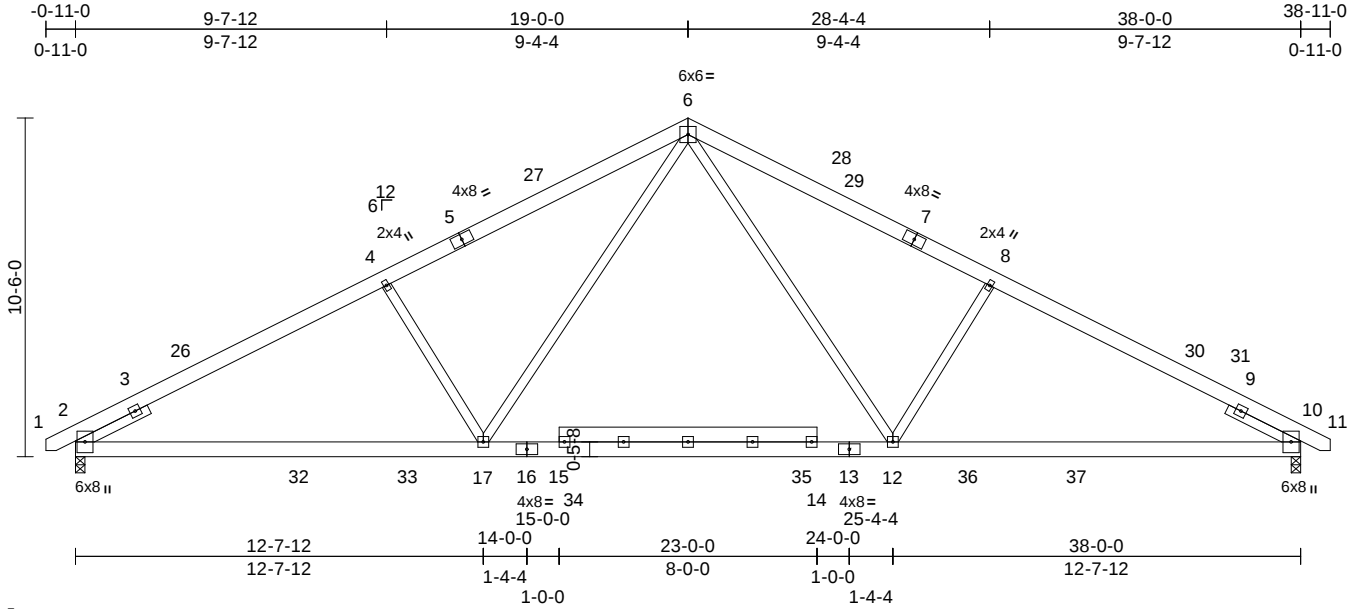
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 54 Duncan's Creek	
251278-A	A06	Common	3	1	Job Reference (optional)	I76364789

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Sep 7 2025 Print: 25.3.0 S Sep 7 2025 MiTek Industries, Inc. Mon Sep 15 13:02:47
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Page: 1



Scale = 1:71.5

Plate Offsets (X, Y): [2:0-4-6,0-0-9], [10:0-4-6,0-0-9]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	-0.19	12-17	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.31	12-24	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.55	Horz(CT)	0.07	10	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS		Wind(LL)	0.07	12-17	>999	240	Weight: 271 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

BRACING

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

REACTIONS

(size)	2=0-3-8, 10=0-3-8
Max Horiz	2=-129 (LC 10)
Max Uplift	2=-110 (LC 12), 10=-143 (LC 13)
Max Grav	2=1934 (LC 2), 10=2212 (LC 20)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/20, 2-4=-3087/603, 4-6=-2890/634, 6-8=-3092/693, 8-10=-3438/701, 10-11=0/20
BOT CHORD	2-17=-401/2746, 12-17=-183/1931, 10-12=-499/2937
WEBS	4-17=-500/299, 6-17=-123/1131, 6-12=-223/1401, 8-12=-762/390

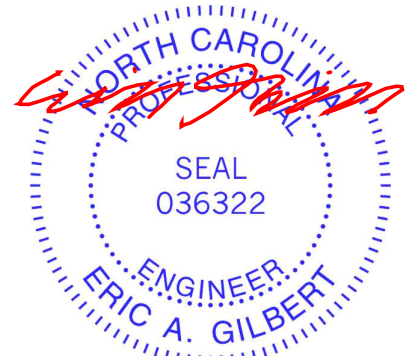
NOTES

- 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) -0-9-2 to 3-7-11, Interior (1) 3-7-11 to 19-0-0, Exterior(2R) 19-0-0 to 23-4-13, Interior (1) 23-4-13 to 38-9-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 4x4 (=) MT20 unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3'-06'-00 tall by 2'-00'-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 110 lb uplift at joint 2 and 143 lb uplift at joint 10.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 120 lb down and 42 lb up at 35-9-5 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 + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-6=-60, 6-29=-60, 29-31=-90 (F=-30), 11-31=-60, 18-22=-20
Concentrated Loads (lb)
Vert: 31=-120 (F)



September 16, 2025

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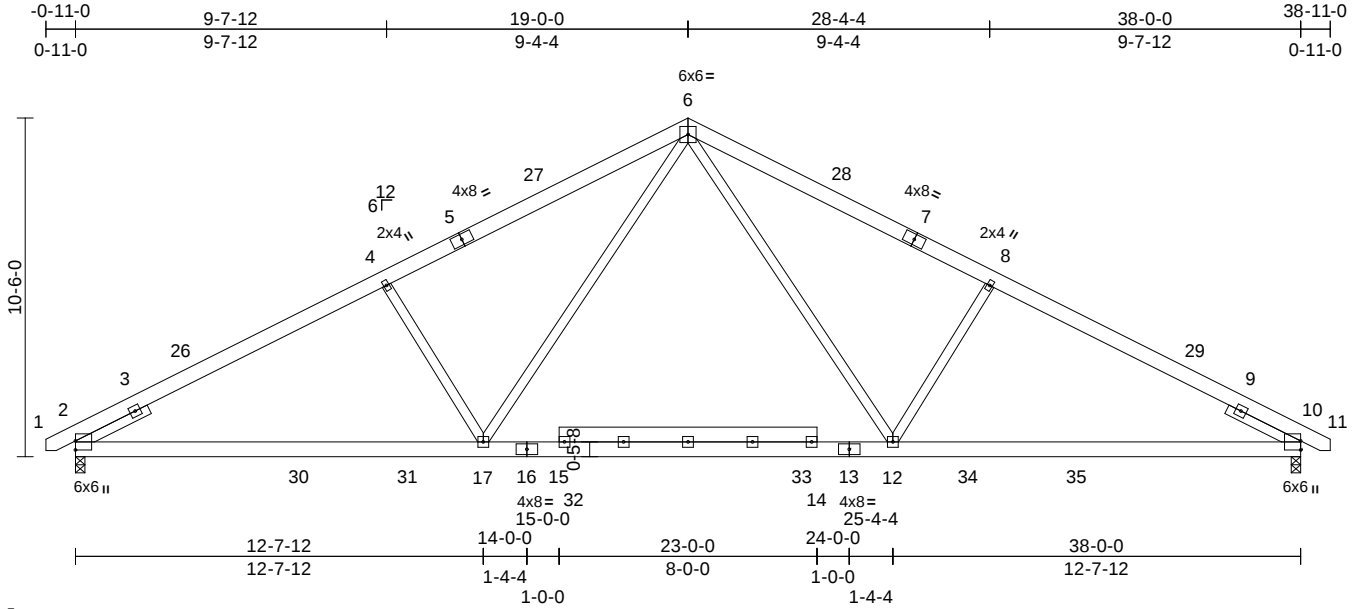
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 54 Duncan's Creek	176364790
251278-A	A07	Common	3	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Sep 7 2025 Print: 25.3.0 S Sep 7 2025 MiTek Industries, Inc. Mon Sep 15 13:02:48
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Page: 1



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.19	12-17	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.29	12-17	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.32	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: 271 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

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

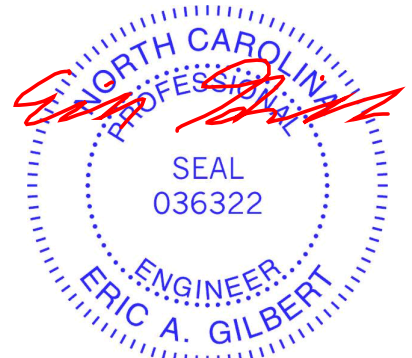
REACTIONS (size) 2=0-3-8, 10=0-3-8
Max Horiz 2=-129 (LC 10)
Max Uplift 2=-101 (LC 12), 10=-101 (LC 13)
Max Grav 2=1860 (LC 2), 10=1860 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-4=-2939/544, 4-6=-2741/575, 6-8=-2741/575, 8-10=-2939/544, 10-11=0/20
BOT CHORD 2-17=-350/2607, 12-17=-127/1778, 10-12=-348/2555
WEBS 4-17=-510/303, 6-17=-129/1148, 6-12=-129/1148, 8-12=-510/303

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 19-0-0, Exterior(2R) 19-0-0 to 23-4-13, Interior (1) 23-4-13 to 38-9-2 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 = 10.0psf.

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 101 lb uplift at joint 2 and 101 lb uplift at joint 10.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



September 16, 2025

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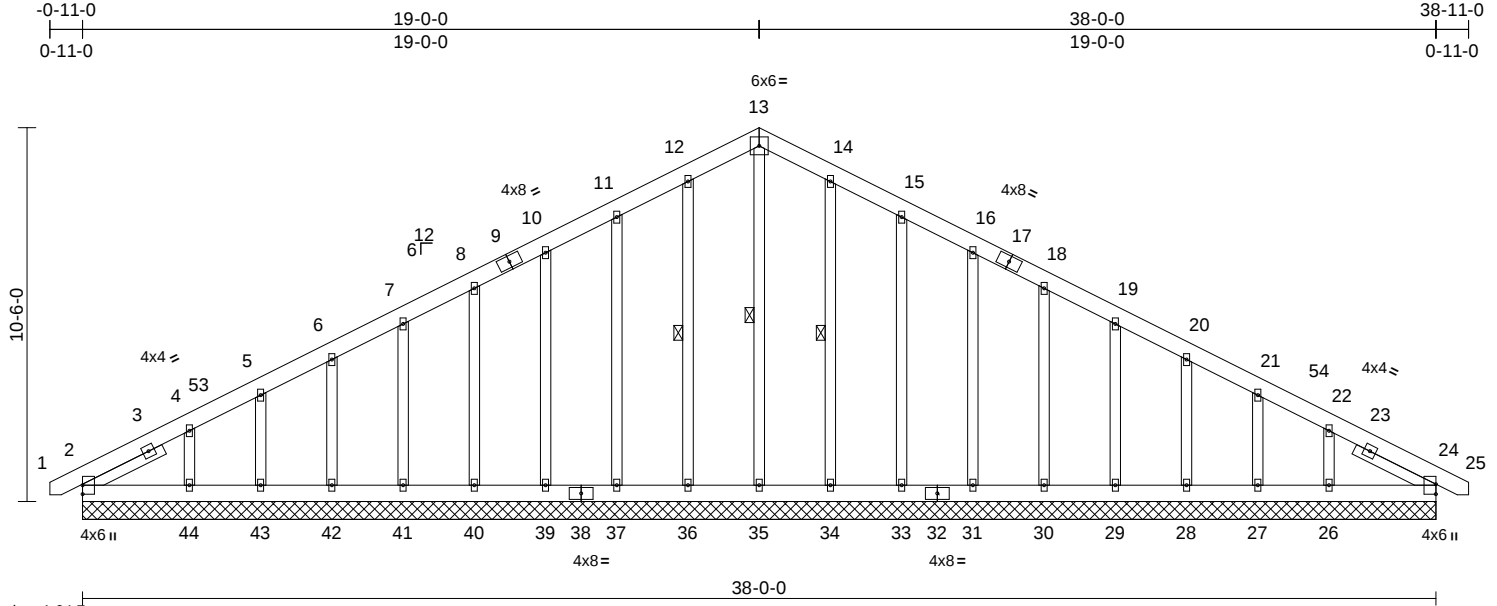
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 54 Duncan's Creek	
251278-A	A08GE	Common Supported Gable	1	1	Job Reference (optional)	I76364791

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Sep 7 2025 Print: 25.3.0 S Sep 7 2025 MiTek Industries, Inc. Mon Sep 15 13:02:48
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Page: 1



Scale = 1:64.7

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.01	24	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS							Weight: 337 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 13-35, 12-36, 14-34

REACTIONS (size)
2=38-0-0, 24=38-0-0, 26=38-0-0,
27=38-0-0, 28=38-0-0, 29=38-0-0,
30=38-0-0, 31=38-0-0, 33=38-0-0,
34=38-0-0, 35=38-0-0, 36=38-0-0,
37=38-0-0, 39=38-0-0, 40=38-0-0,
41=38-0-0, 42=38-0-0, 43=38-0-0,
44=38-0-0
Max Horiz 2=-129 (LC 10)
Max Uplift 2=-19 (LC 8), 26=-82 (LC 13),
27=-19 (LC 13), 28=-36 (LC 13),
29=-33 (LC 13), 30=-33 (LC 13),
31=-34 (LC 13), 33=-42 (LC 13),
34=-5 (LC 13), 36=-11 (LC 12),
37=-40 (LC 12), 39=-34 (LC 12),
40=-33 (LC 12), 41=-33 (LC 12),
42=-37 (LC 12), 43=-16 (LC 12),
44=-93 (LC 12)
Max Grav 2=175 (LC 20), 24=172 (LC 1),
26=227 (LC 26), 27=139 (LC 1),
28=164 (LC 26), 29=159 (LC 1),
30=160 (LC 1), 31=160 (LC 1),
33=163 (LC 26), 34=159 (LC 26),
35=157 (LC 22), 36=159 (LC 25),
37=163 (LC 25), 39=160 (LC 1),
40=160 (LC 1), 41=159 (LC 1),
42=164 (LC 25), 43=139 (LC 1),
44=227 (LC 25)

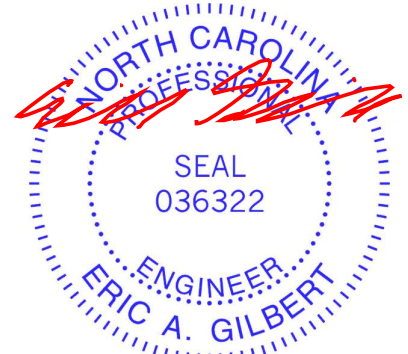
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/20, 2-4=-155/89, 4-5=-112/71,
5-6=-101/74, 6-7=-93/96, 7-8=-84/154,
8-10=-85/211, 10-11=-105/269,
11-12=-128/333, 12-13=-140/367,
13-14=-140/367, 14-15=-128/333,
15-16=-105/269, 16-18=-85/211,
18-19=-65/154, 19-20=-58/96, 20-21=-64/37,
21-22=-78/22, 22-24=-129/50, 24-25=0/20
BOT CHORD 2-44=-45/200, 43-44=-45/200,
42-43=-45/200, 41-42=-45/200,
40-41=-45/200, 39-40=-45/200,
37-39=-45/200, 36-37=-45/200,
35-36=-45/200, 34-35=-45/200,
33-34=-45/200, 31-33=-45/200,
30-31=-45/200, 29-30=-45/200,
28-29=-45/200, 27-28=-45/200,
26-27=-45/200, 24-26=-45/200
WEBS 13-35=-181/28, 12-36=-119/54,
11-37=-123/120, 10-39=-120/107,
8-40=-120/105, 7-41=-120/105,
6-42=-121/107, 5-43=-111/93, 4-44=-156/225,
14-34=-119/54, 15-33=-123/120,
16-31=-120/107, 18-30=-120/105,
19-29=-120/105, 20-28=-121/107,
21-27=-111/92, 22-26=-156/222

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 Corner(3E) -0-9-2 to 3-7-11, Exterior(2N) 3-7-11 to 19-0-0, Corner(3R) 19-0-0 to 23-4-13, Exterior(2N) 23-4-13 to 38-9-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 (||) MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint 2, 11 lb uplift at joint 36, 40 lb uplift at joint 37, 34 lb uplift at joint 39, 33 lb uplift at joint 40, 33 lb uplift at joint 41, 37 lb uplift at joint 42, 16 lb uplift at joint 43, 93 lb uplift at joint 44, 5 lb uplift at joint 34, 42 lb uplift at joint 33, 34 lb uplift at joint 31, 33 lb uplift at joint 30, 33 lb uplift at joint 29, 36 lb uplift at joint 28, 19 lb uplift at joint 27, 82 lb uplift at joint 26 and 19 lb uplift at joint 2.



September 16, 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.

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 54 Duncan's Creek
251278-A	A08GE	Common Supported Gable	1	1	I76364791
Job Reference (optional)					

- 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.

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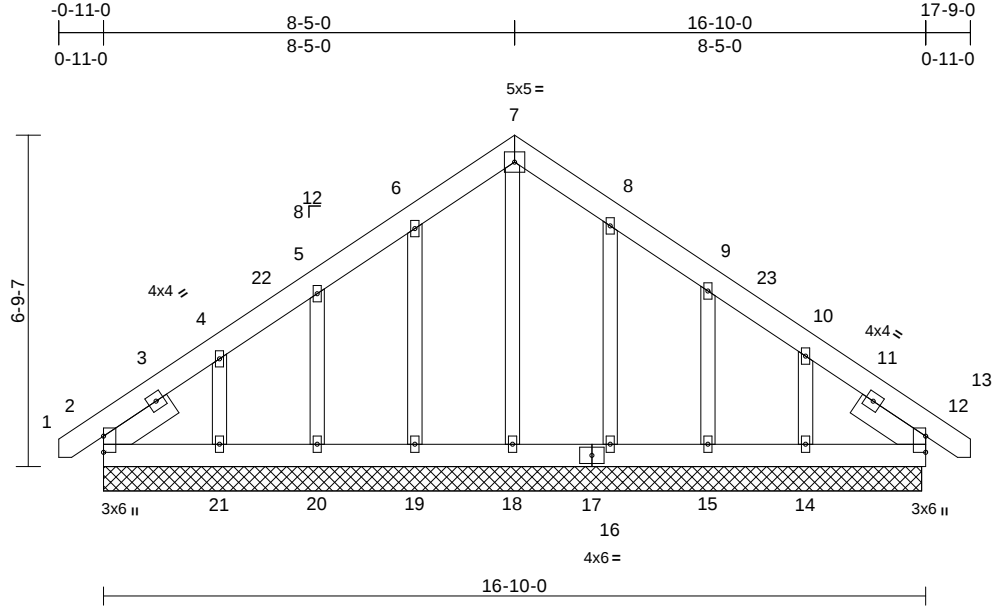
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 54 Duncan's Creek	176364792
251278-A	B01GE	COMMON SUPPORTED GAB	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

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Page: 1



Scale = 1:47.2

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.03	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	12	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S							
Weight: 138 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 -- 1-7-11, Right 2x6 SP No.1 -- 1-7-11

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=16-9-0, 12=16-9-0, 14=16-9-0, 15=16-9-0, 16=16-9-0, 18=16-9-0, 19=16-9-0, 20=16-9-0, 21=16-9-0
Max Horiz		2=-150 (LC 8)
Max Uplift		2=-38 (LC 8), 12=-1 (LC 9), 14=-86 (LC 13), 15=-45 (LC 13), 16=-33 (LC 13), 19=-39 (LC 12), 20=-43 (LC 12), 21=-92 (LC 12)
Max Grav		2=185 (LC 20), 12=173 (LC 1), 14=213 (LC 20), 15=165 (LC 20), 16=171 (LC 20), 18=124 (LC 22), 19=178 (LC 19), 20=163 (LC 19), 21=218 (LC 19)

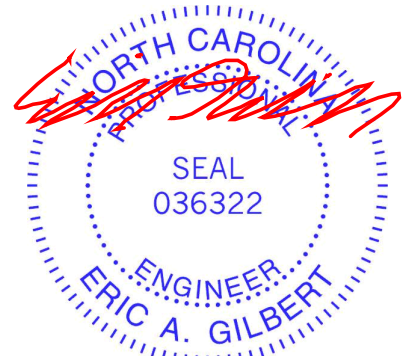
FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-9/0, 2-4=-163/105, 4-5=-116/75, 5-6=-108/146, 6-7=-133/222, 7-8=-132/221, 8-9=-98/149, 9-10=-85/62, 10-12=-127/56, 12-13=-9/0
BOT CHORD	2-21=-49/132, 20-21=-49/132, 19-20=-49/132, 18-19=-49/132, 16-18=-49/133, 15-16=-49/133, 14-15=-49/133, 12-14=-49/133
WEBS	7-18=-134/34, 6-19=-137/109, 5-20=-128/137, 4-21=-161/212, 8-16=-129/105, 9-15=-131/137, 10-14=-156/214

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 Corner(3E) -0-9-7 to 3-7-6, Exterior(2N) 3-7-6 to 8-5-0, Corner(3R) 8-5-0 to 12-9-13, Exterior(2N) 12-9-13 to 17-7-7 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 (II) MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 38 lb uplift at joint 2, 39 lb uplift at joint 19, 43 lb uplift at joint 20, 92 lb uplift at joint 21, 33 lb uplift at joint 16, 45 lb uplift at joint 15, 86 lb uplift at joint 14 and 1 lb uplift at joint 12.

LOAD CASE(S) Standard



September 16,2025

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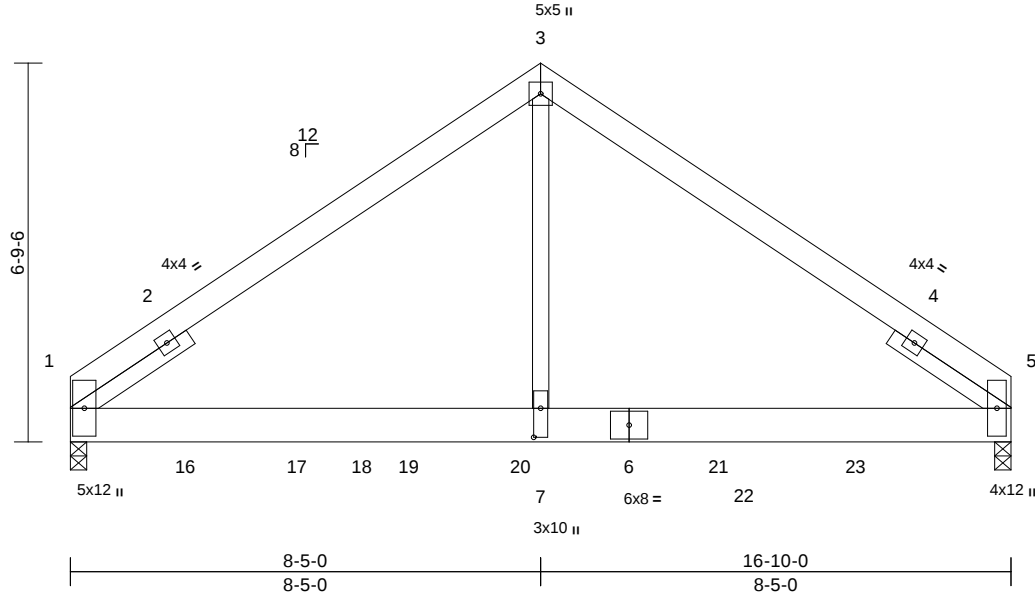
Job	Truss	Truss Type	Qty	Ply	Lot 54 Duncan's Creek
251278-A	B02-GR	COMMON GIRDER	1	3	Job Reference (optional)

I76364793

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Sep 7 2025 Print: 25.3.0 S Sep 7 2025 MiTek Industries, Inc. Mon Sep 15 13:02:48
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Page: 1



Scale = 1:41.2

Plate Offsets (X, Y): [1:0-6-0,0-0-8], [5:0-6-3,0-1-0], [7:0-6-4,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	-0.09	7-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.17	7-14	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.62	Horz(CT)	-0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS		Wind(LL)	0.05	7-10	>999	240	Weight: 349 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.1
 BOT CHORD 2x8 SP 2400F 2.0E *Except* 6-5:2x8 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

BRACING

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

REACTIONS (size) 1=0-3-8, 5=0-3-8
 Max Horiz 1=-135 (LC 4)
 Max Uplift 1=-325 (LC 8)
 Max Grav 1=6601 (LC 2), 5=8094 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-3=-7163/339, 3-5=-7163/274
 BOT CHORD 1-7=-129/5972, 5-7=-129/5972
 WEBS 3-7=-153/7536

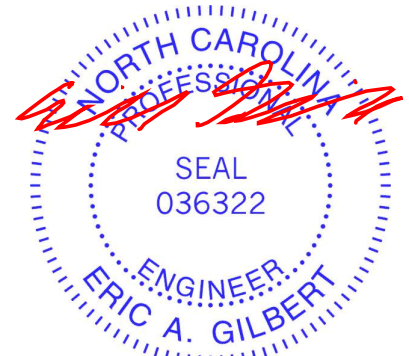
NOTES

- 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: 2x8 - 2 rows staggered at 0-4-0 oc.
 Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-16; Vult=130mph (3-second gust)
 Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- 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 325 lb uplift at joint 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1569 lb down and 114 lb up at 2-0-12, 1569 lb down and 114 lb up at 4-0-12, 1542 lb down and 114 lb up at 6-0-12, 1546 lb down and 114 lb up at 8-0-12, 1539 lb down and 114 lb up at 10-0-12, 1561 lb down and 114 lb up at 12-0-12, and 1872 lb down at 14-0-12, and 1876 lb down at 16-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-3=-60, 3-5=-60, 8-12=-20
 Concentrated Loads (lb)
 Vert: 6=-1371 (B), 14=-1591 (B), 16=-1371 (B), 17=-1371 (B), 19=-1371 (B), 20=-1371 (B), 22=-1371 (B), 23=-1589 (B)



September 16, 2025

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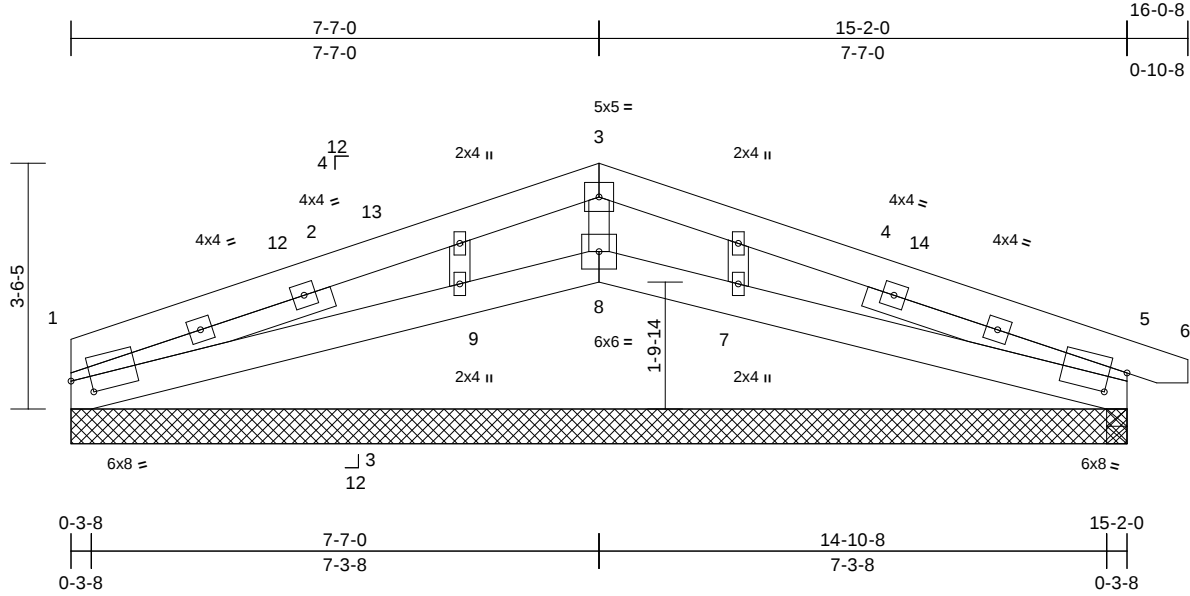
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 54 Duncan's Creek	176364794
251278-A	C01GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Sep 7 2025 Print: 25.3.0 S Sep 7 2025 MiTek Industries, Inc. Mon Sep 15 13:02:48
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Page: 1



Scale = 1:33.1

Plate Offsets (X, Y): [1:0-3-6,0-2-12], [5:0-3-0,0-4-2]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	-0.01	1-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.01	1-9	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S		Wind(LL)	0.01	5-7	>999	240	Weight: 92 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
SLIDER	Left 2x4 SP No.2 -- 3-11-8, Right 2x4 SP No.2 -- 3-11-8

- * 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 69 lb uplift at joint 1, 60 lb uplift at joint 8 and 101 lb uplift at joint 5.

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.

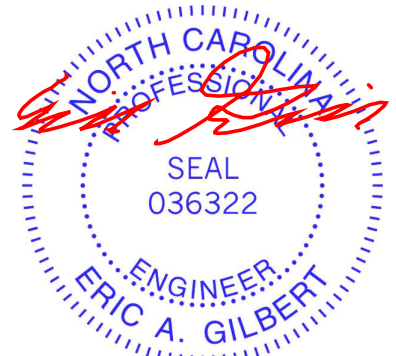
REACTIONS (size)	1=15-2-0, 5=15-2-0, 7=15-2-0, 8=15-2-0, 9=15-2-0
Max Horiz	1=42 (LC 12)
Max Uplift	1=-69 (LC 8), 5=-101 (LC 9), 8=-60 (LC 8)
Max Grav	1=322 (LC 1), 5=370 (LC 1), 7=237 (LC 3), 8=245 (LC 1), 9=239 (LC 3)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-3=-592/511, 3-5=-613/489, 5-6=-19/0
BOT CHORD	1-9=-394/512, 8-9=-385/485, 7-8=-386/485, 5-7=-392/513
WEBS	3-8=-72/8

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) 0-1-5 to 4-6-2, Interior (1) 4-6-2 to 7-7-0, Exterior(2R) 7-7-0 to 11-11-13, Interior (1) 11-11-13 to 15-9-13 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.



September 16,2025

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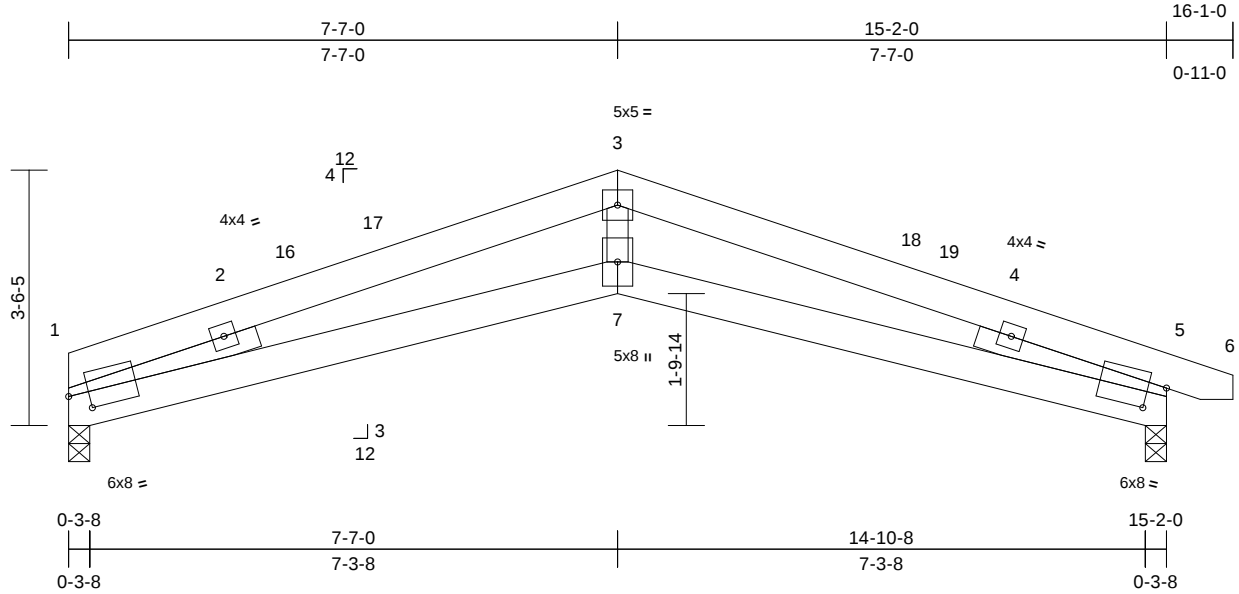
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 54 Duncan's Creek	176364795
251278-A	C02	SCISSORS	4	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Sep 7 2025 Print: 25.3.0 S Sep 7 2025 MiTek Industries, Inc. Mon Sep 15 13:02:48
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Page: 1



Scale = 1:31.8

Plate Offsets (X, Y): [1:0-3-6,0-2-12], [5:0-3-0,0-4-2]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	-0.09	7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.17	7	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.09	5	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS		Wind(LL)	0.08	7	>999	240	Weight: 86 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 -- 2-9-0, Right 2x4 SP No.2 -- 2-9-0

BRACING

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

REACTIONS

(size) 1=0-3-8, 5=0-3-8
Max Horiz 1=-36 (LC 13)
Max Uplift 1=-47 (LC 8), 5=-72 (LC 9)
Max Grav 1=606 (LC 1), 5=649 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

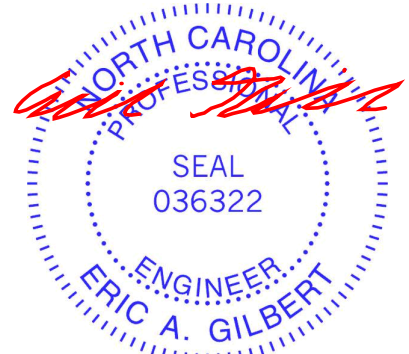
TOP CHORD 1-3=-1854/774, 3-5=-1854/776, 5-6=0/13
BOT CHORD 1-7=-646/1756, 5-7=-642/1756
WEBS 3-7=-228/859

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) 0-0-0 to 4-4-13, Interior (1) 4-4-13 to 7-7-0, Exterior(2R) 7-7-0 to 11-11-13, Interior (1) 11-11-13 to 15-10-5 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 1, 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 47 lb uplift at joint 1 and 72 lb uplift at joint 5.
- 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



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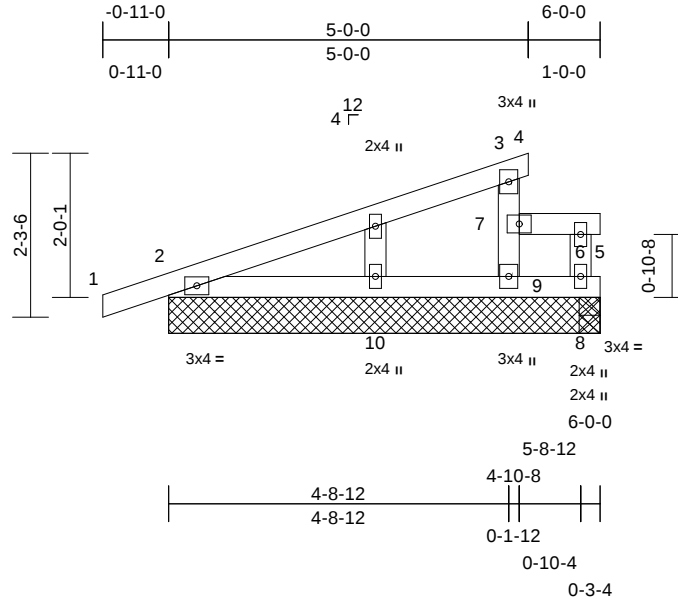
Job	Truss	Truss Type	Qty	Ply	Lot 54 Duncan's Creek
251278-A	M01GE	GABLE	1	1	Job Reference (optional)

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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Sep 7 2025 Print: 25.3.0 S Sep 7 2025 MiTek Industries, Inc. Mon Sep 15 13:02:48
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Page: 1



Scale = 1:32

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	-0.01	10-14	>999	360	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.01	10-14	>999	240	244/190
BCLL	0.0*	Rep Stress Incr	NO	WB	0.01	Horz(CT)	0.00	2	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MP		Wind(LL)	0.01	10-14	>999	240	Weight: 24 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 5-0-0 oc purlins, except end verticals. Except: 6-0-0 oc bracing: 3-7
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size)	2=6-0-0, 7=6-0-0, 8=0-3-8, 9=6-0-0, 10=6-0-0
Max Horiz	2=68 (LC 8)
Max Uplift	2=-46 (LC 8), 7=-68 (LC 12), 8=-21 (LC 12), 9=-24 (LC 1), 10=-13 (LC 12)
Max Grav	2=188 (LC 1), 7=217 (LC 1), 8=139 (LC 1), 9=36 (LC 12), 10=164 (LC 1)

FORCES

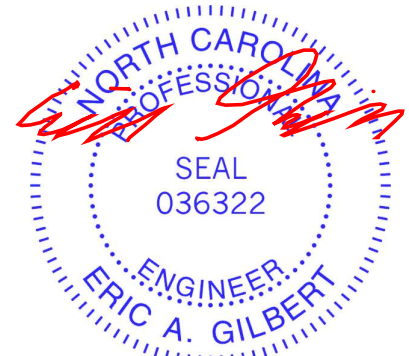
(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/17, 2-3=-64/31, 3-4=-2/0, 7-9=0/0, 3-7=-111/152
BOT CHORD	2-10=-47/74, 9-10=0/0, 8-9=0/0, 6-7=0/0, 5-6=0/0
WEBS	6-8=-116/62

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-11-0 to 3-5-13, Interior (1) 3-5-13 to 5-0-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - Bearing at joint(s) 7 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 24 lb uplift at joint 9, 46 lb uplift at joint 2, 68 lb uplift at joint 7, 13 lb uplift at joint 10, 21 lb uplift at joint 8 and 46 lb uplift at joint 2.
- 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=-20, 8-12=-20, 6-7=-220, 5-6=-20



September 16, 2025

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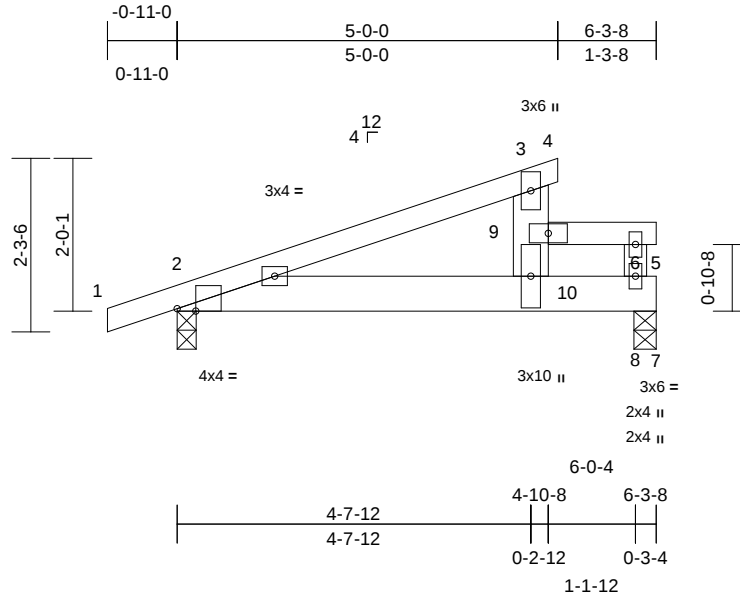
Job	Truss	Truss Type	Qty	Ply	Lot 54 Duncan's Creek
251278-A	M02	Roof Special	5	1	Job Reference (optional)

I76364797

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Sep 7 2025 Print: 25.3.0 S Sep 7 2025 MiTek Industries, Inc. Mon Sep 15 13:02:48
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Page: 1



Scale = 1:30.3

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	-0.06	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.13	10-12	>557	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.04	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MP		Wind(LL)	0.24	10-12	>293	240	Weight: 30 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.1
 BOT CHORD 2x6 SP 2400F 2.0E *Except* 9-5:2x4 SP No.1
 WEBS 2x6 SP No.1 *Except* 6-8:2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins, except end verticals.
 Except:
 6-0-0 oc bracing: 3-9
 BOT CHORD Rigid ceiling directly applied or 7-6-8 oc bracing.

REACTIONS

(size) 2=0-3-0, 8=0-3-8
 Max Horiz 2=69 (LC 8)
 Max Uplift 2=-200 (LC 8), 8=-417 (LC 8)
 Max Grav 2=478 (LC 1), 8=944 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/20, 2-3=-409/594, 3-4=-102/112, 9-10=-1043/1877, 3-9=-494/621
 BOT CHORD 2-10=-644/355, 8-10=0/0, 7-8=0/0, 6-9=0/0, 5-6=0/0
 WEBS 6-8=-109/210

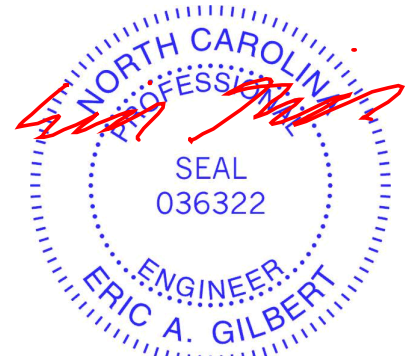
NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-11-0 to 3-5-13, Interior (1) 3-5-13 to 5-0-0 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
- 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 200 lb uplift at joint 2 and 417 lb uplift at joint 8.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 300 lb down and 355 lb up at 5-0-0 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 + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (lb/ft)
 Vert: 1-3=-60, 3-4=-60, 2-7=-20, 6-9=-130, 5-6=-20
 Concentrated Loads (lb)
 Vert: 4=-300 (F), 9=-460



September 16, 2025

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818 Soundside Road
 Edenton, NC 27932

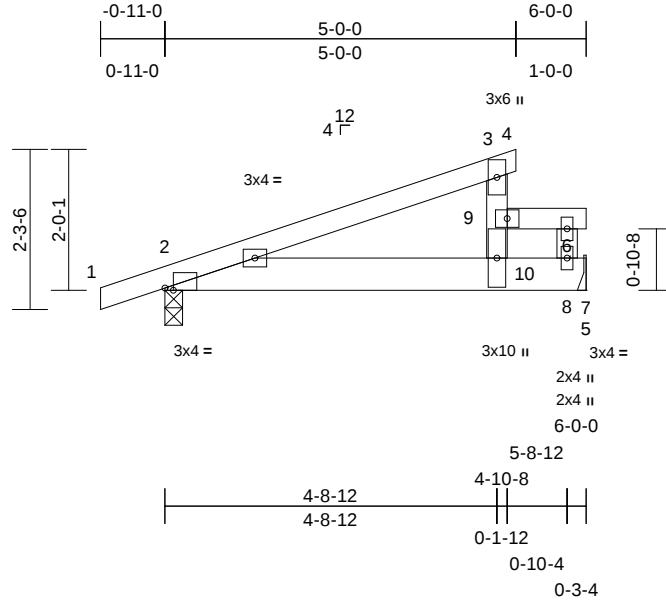
Job	Truss	Truss Type	Qty	Ply	Lot 54 Duncan's Creek
251278-A	M03	Roof Special	3	1	Job Reference (optional)

I76364798

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Sep 7 2025 Print: 25.3.0 S Sep 7 2025 MiTek Industries, Inc. Mon Sep 15 13:02:48
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Page: 1



Scale = 1:32.8

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.05	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.10	10-12	>644	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MP		Wind(LL)	0.19	10-12	>355	240	Weight: 28 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.1
 BOT CHORD 2x6 SP No.1 *Except* 9-5:2x4 SP No.1
 WEBS 2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or
 5-0-0 oc purlins, except end verticals.
 Except:
 6-0-0 oc bracing: 3-9
 BOT CHORD Rigid ceiling directly applied or 5-1-7 oc
 bracing.

REACTIONS (size) 2=0-3-0, 8= Mechanical
 Max Horiz 2=69 (LC 8)
 Max Uplift 2=-176 (LC 8), 8=-353 (LC 8)
 Max Grav 2=426 (LC 1), 8=831 (LC 1)

FORCES (lb) - Maximum Compression/Maximum
 Tension
 TOP CHORD 1-2=0/20, 2-3=-338/456, 3-4=-2/0,
 9-10=-907/1627, 3-9=-432/556
 BOT CHORD 2-10=-521/293, 8-10=0/0, 7-8=0/0, 6-9=0/0,
 5-6=0/0
 WEBS 6-8=-38/24

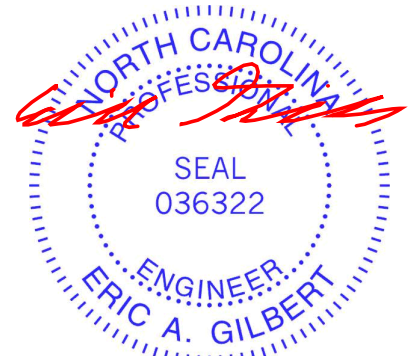
NOTES

- 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 5-0-0 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 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 176 lb uplift at joint 2 and 353 lb uplift at joint 8.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 300 lb down and 355 lb up at 5-0-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) 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: 1-3=-60, 3-4=-20, 2-7=-20, 6-9=-30 (F=-10),
 5-6=-20
 Concentrated Loads (lb)
 Vert: 3=-300 (F), 9=-460



September 16, 2025

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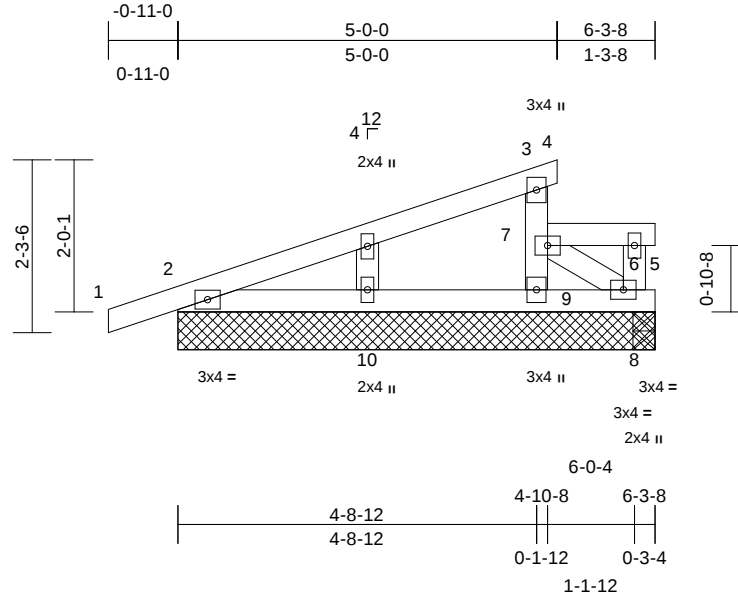
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 54 Duncan's Creek	
251278-A	M04GE	GABLE	1	1	Job Reference (optional)	I76364799

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Sep 7 2025 Print: 25.3.0 S Sep 7 2025 MiTek Industries, Inc. Mon Sep 15 13:02:48
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Page: 1



Scale = 1:30.4

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	0.00	10-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	-0.01	10-14	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MP		Wind(LL)	0.01	10-14	>999	240	Weight: 26 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 5-0-0 oc purlins, except end verticals. Except: 6-0-0 oc bracing: 3-7
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS	(size)	2=6-3-8, 8=6-3-8, 9=6-3-8, 10=6-3-8
	Max Horiz	2=68 (LC 8)
	Max Uplift	2=-45 (LC 8), 8=-30 (LC 12), 9=-31 (LC 8), 10=-16 (LC 12)
	Max Grav	2=176 (LC 1), 8=177 (LC 1), 9=236 (LC 1), 10=165 (LC 1)

FORCES

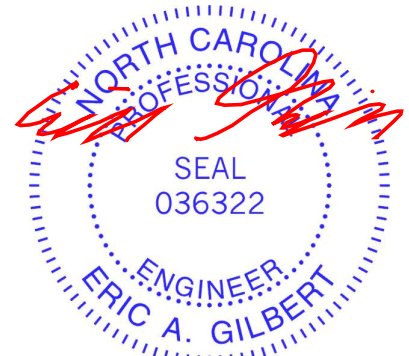
(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/17, 2-3=-54/20, 3-4=-2/0, 7-9=-234/238, 3-7=-105/145
BOT CHORD	2-10=-44/67, 9-10=-14/10, 8-9=-25/18, 6-7=0/0, 5-6=0/0
WEBS	6-8=-148/106, 7-8=-21/30

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-11-0 to 3-5-13, Interior (1) 3-5-13 to 5-0-0 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 9, 45 lb uplift at joint 2, 30 lb uplift at joint 8, 16 lb uplift at joint 10 and 45 lb uplift at joint 2.
- 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=-20, 8-12=-20, 6-7=-220, 5-6=-20



September 16, 2025

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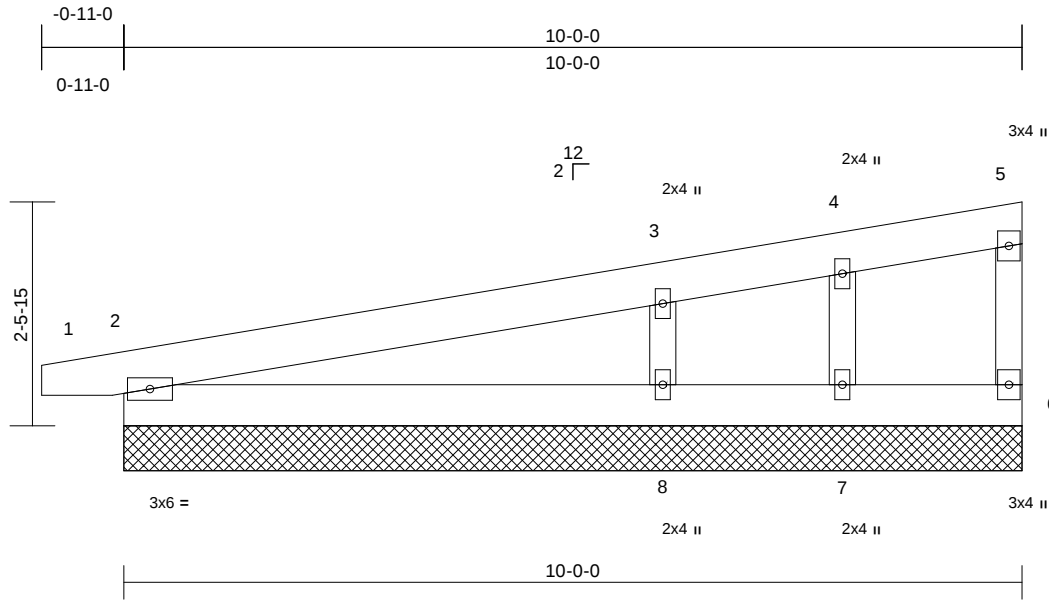
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 54 Duncan's Creek	176364800
251278-A	M05GE	Monopitch Supported Gable	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

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Page: 1



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS							Weight: 55 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

BRACING

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

REACTIONS	(size)	2=10-0-0, 6=10-0-0, 7=10-0-0, 8=10-0-0
	Max Horiz	2=58 (LC 8)
	Max Uplift	2=-28 (LC 8), 6=-43 (LC 12), 8=-103 (LC 12)
	Max Grav	2=248 (LC 25), 6=49 (LC 25), 7=557 (LC 3), 8=393 (LC 25)

FORCES

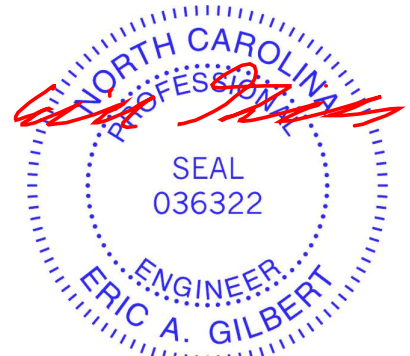
	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/5, 2-3=-151/30, 3-4=-49/0, 4-5=-22/2, 5-6=-78/89
BOT CHORD	2-8=-152/54, 7-8=-17/18, 6-7=-17/18
WEBS	4-7=0/91, 3-8=-414/441

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 Corner(3E) -0-6-4 to 3-10-8, Exterior(2N) 3-10-8 to 9-10-4 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) Gable requires continuous bottom chord bearing.
- 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 28 lb uplift at joint 2, 43 lb uplift at joint 6, 103 lb uplift at joint 8 and 28 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



September 16,2025

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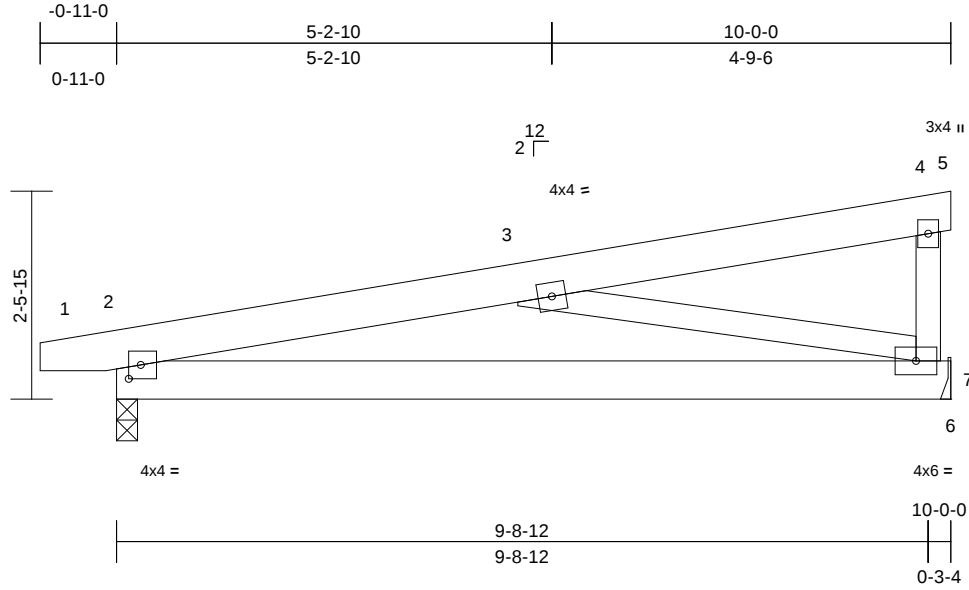
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 54 Duncan's Creek	I76364801
251278-A	M06	Monopitch	7	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Sep 7 2025 Print: 25.3.0 S Sep 7 2025 MiTek Industries, Inc. Mon Sep 15 13:02:49
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Page: 1



Scale = 1:27.6

Plate Offsets (X, Y): [2:0-1-12,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.04	7-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.09	7-10	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS		Wind(LL)	0.06	7-10	>999	240	Weight: 59 lb	FT = 20%

LUMBER

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

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

LOAD CASE(S) Standard

BRACING

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

REACTIONS (size) 2=0-3-0, 7= Mechanical
Max Horiz 2=58 (LC 8)
Max Uplift 2=-163 (LC 8), 7=-157 (LC 8)
Max Grav 2=421 (LC 1), 7=399 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

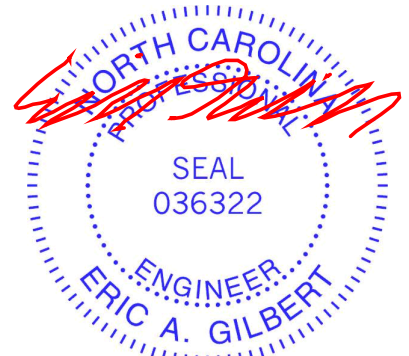
TOP CHORD 1-2=0/5, 2-3=-785/659, 3-4=-109/60,
4-5=-1/0, 4-7=-146/135

BOT CHORD 2-7=-724/754, 6-7=0/0

WEBS 3-7=-695/661

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-6-4 to 3-10-8, Interior (1) 3-10-8 to 10-0-0 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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 157 lb uplift at joint 7 and 163 lb uplift at joint 2.



September 16, 2025

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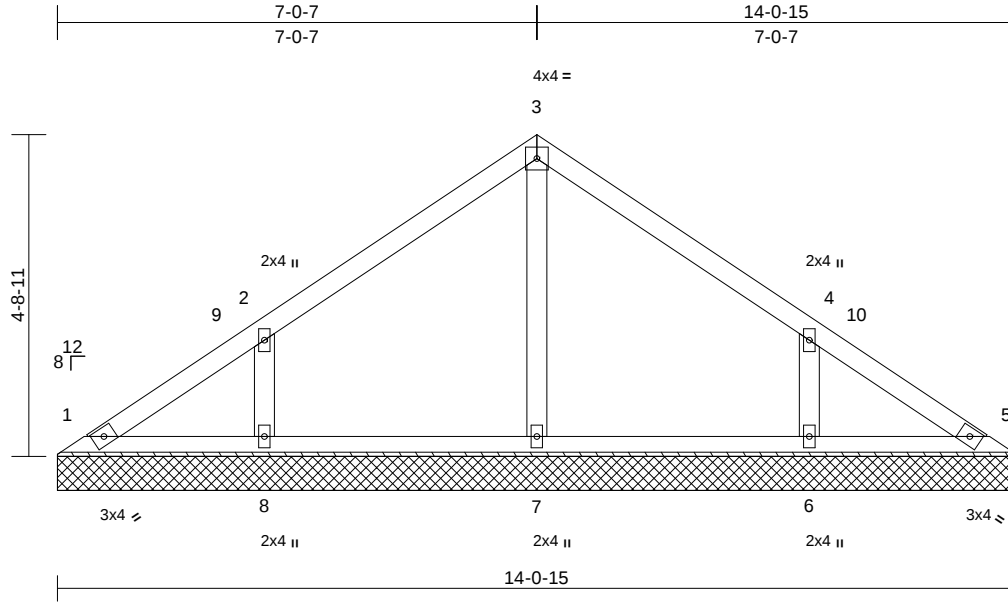
818 Soundside Road
Edenton, NC 27932

Job 251278-A	Truss VB1	Truss Type Valley	Qty 1	Ply 1	Lot 54 Duncan's Creek Job Reference (optional)	I76364802
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Sep 7 2025 Print: 25.3.0 S Sep 7 2025 MiTek Industries, Inc. Mon Sep 15 13:02:49
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Page: 1



Scale = 1:33.8

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 55 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'-0-15, 5=14'-0-15, 6=14'-0-15, 7=14'-0-15, 8=14'-0-15
Max Horiz 1=106 (LC 11)
Max Uplift 1=-13 (LC 8), 6=-97 (LC 13), 8=-97 (LC 12)
Max Grav 1=102 (LC 20), 5=88 (LC 1), 6=336 (LC 20), 7=260 (LC 1), 8=336 (LC 19)

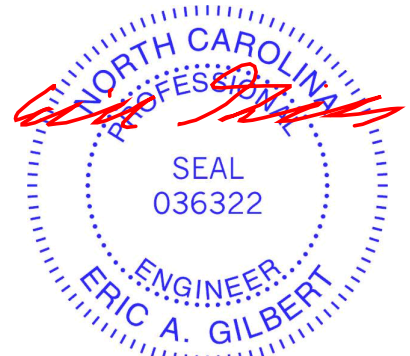
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-105/83, 2-3=-125/119, 3-4=-113/114, 4-5=-77/46
BOT CHORD 1-8=-29/62, 7-8=-29/62, 6-7=-29/62, 5-6=-29/62
WEBS 3-7=-177/19, 2-8=-262/218, 4-6=-262/218

NOTES

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

- Gable studs spaced at 4'-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 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 13 lb uplift at joint 1, 97 lb uplift at joint 8 and 97 lb uplift at joint 6.
- LOAD CASE(S)** Standard



September 16, 2025

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

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

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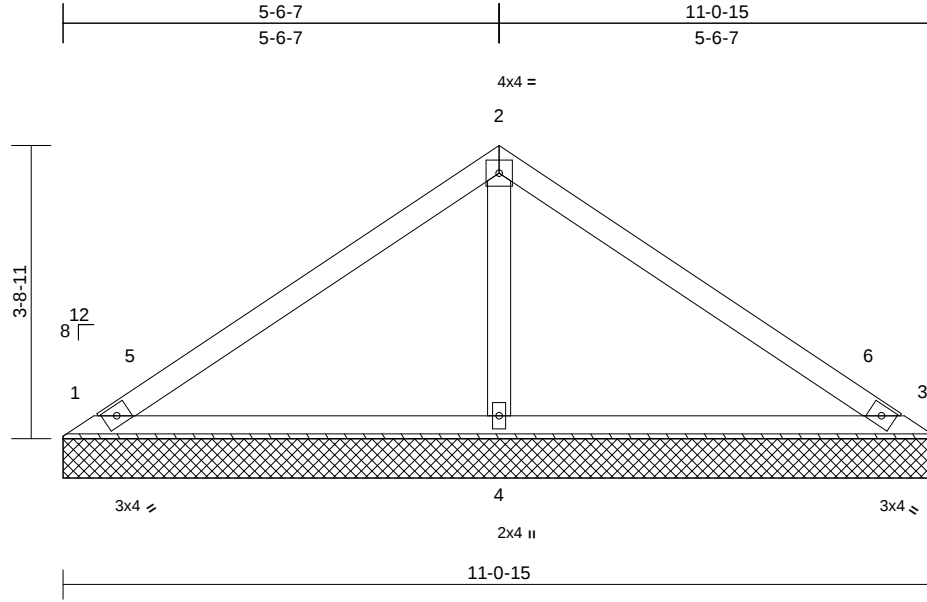
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 54 Duncan's Creek	
251278-A	VB2	Valley	1	1	Job Reference (optional)	I76364803

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Sep 7 2025 Print: 25.3.0 S Sep 7 2025 MiTek Industries, Inc. Mon Sep 15 13:02:49
ID:JQb1igK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcD0i7J4zJC?f

Page: 1



Scale = 1:29.3

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 39 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=11-0-15, 3=11-0-15, 4=11-0-15
Max Horiz 1=82 (LC 11)
Max Uplift 1=25 (LC 12), 3=33 (LC 13)
Max Grav 1=202 (LC 1), 3=202 (LC 1), 4=410 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

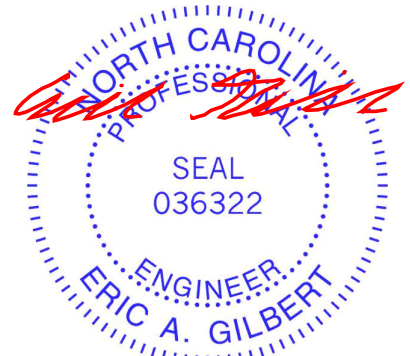
TOP CHORD 1-2=-148/88, 2-3=-141/86
BOT CHORD 1-4=-14/64, 3-4=-14/64
WEBS 2-4=-260/141

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-5-15 to 4-10-12, Interior (1) 4-10-12 to 5-7-0, Exterior(2R) 5-7-0 to 9-11-13, Interior (1) 9-11-13 to 10-8-2 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 1 and 33 lb uplift at joint 3.

LOAD CASE(S) Standard



September 16, 2025

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

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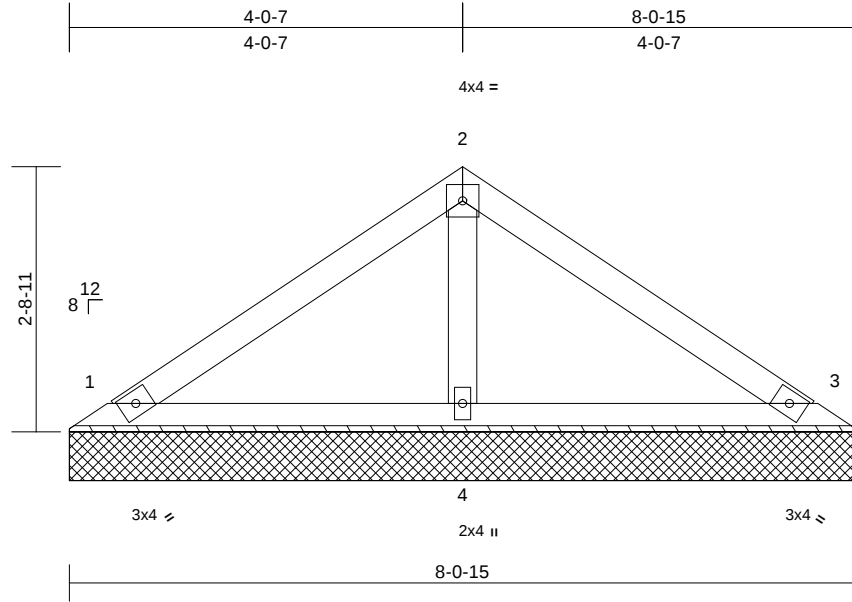
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 54 Duncan's Creek
251278-A	VB3	Valley	1	1	I76364804
Job Reference (optional)					

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Sep 7 2025 Print: 25.3.0 S Sep 7 2025 MiTek Industries, Inc. Mon Sep 15 13:02:49
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Page: 1



Scale = 1:23.7

Loading	(psf)	Spacing	2'-0"-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	3	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 28 lb FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size)	1=8'-0"-15, 3=8'-0"-15, 4=8'-0"-15
Max Horiz	1=-58 (LC 10)
Max Uplift	1=-25 (LC 12), 3=-30 (LC 13)
Max Grav	1=156 (LC 1), 3=156 (LC 1), 4=262 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

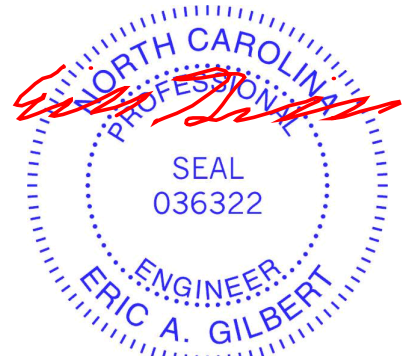
TOP CHORD	1-2=-95/67, 2-3=-87/67
BOT CHORD	1-4=-11/41, 3-4=-11/41
WEBS	2-4=-172/113

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 25 lb uplift at joint 1 and 30 lb uplift at joint 3.

LOAD CASE(S) Standard



September 16,2025

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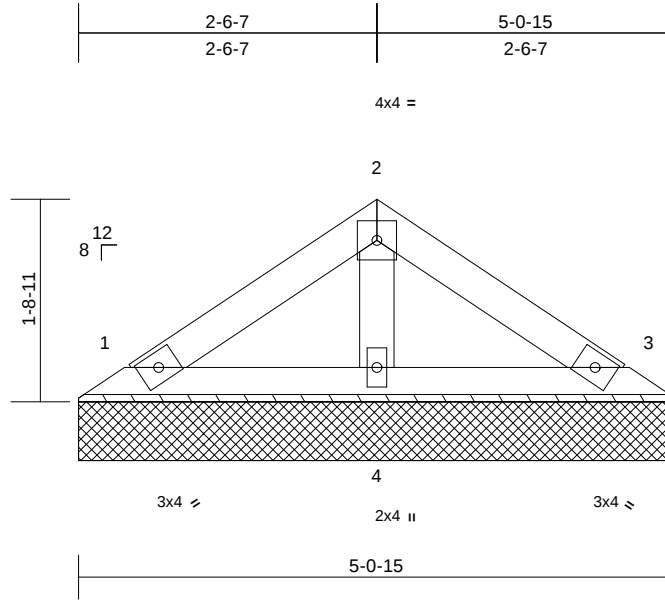
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 54 Duncan's Creek
251278-A	VB4	Valley	1	1	Job Reference (optional)
					I76364805

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Sep 7 2025 Print: 25.3.0 S Sep 7 2025 MiTek Industries, Inc. Mon Sep 15 13:02:49
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Page: 1



Scale = 1:19.6

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.01	Horiz(TL)	0.00	3	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 17 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 5-2-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 1=5-0-15, 3=5-0-15, 4=5-0-15
Max Horiz 1=-34 (LC 8)
Max Uplift 1=-14 (LC 12), 3=-18 (LC 13)
Max Grav 1=91 (LC 1), 3=91 (LC 1), 4=153 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

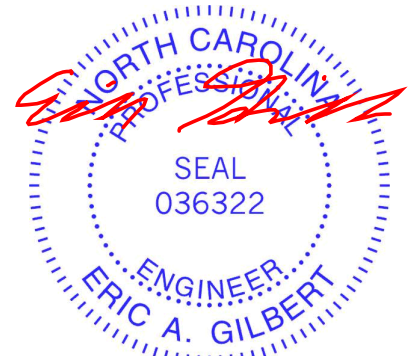
TOP CHORD 1-2=-55/47, 2-3=-51/47
BOT CHORD 1-4=-6/24, 3-4=-6/24
WEBS 2-4=-100/83

NOTES

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

- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 1 and 18 lb uplift at joint 3.

LOAD CASE(S) Standard



September 16,2025

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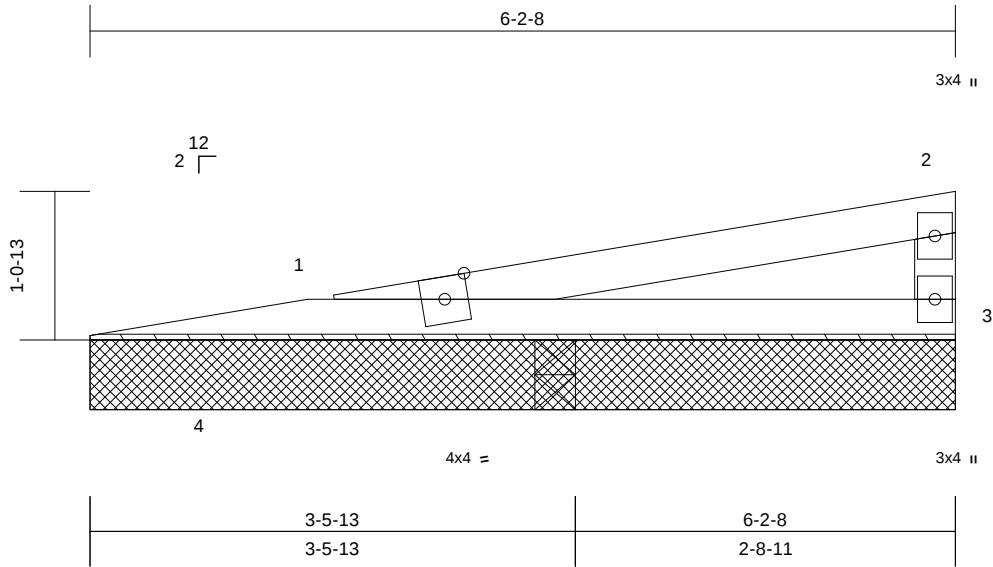
Job	Truss	Truss Type	Qty	Ply	Lot 54 Duncan's Creek	
251278-A	VC1	Valley	1	1	Job Reference (optional)	I76364806

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 E Sep 7 2025 Print: 25.3.0 E Sep 7 2025 MiTek Industries, Inc. Tue Sep 16 17:35:07

Page: 1

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Scale = 1:16.5

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	0.00	3-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00	3-6	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MP		Wind(LL)	0.00	3-6	>999	240	Weight: 17 lb	FT = 20%

LUMBER

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

LOAD CASE(S) Standard

BRACING

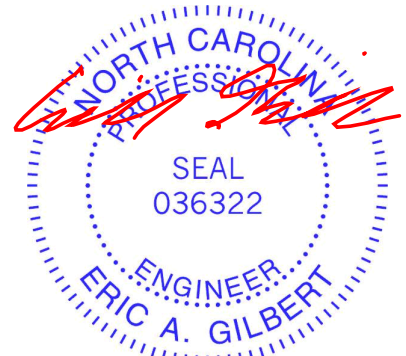
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 1=160/6-2-8, 3=97/6-2-8, 4=12/6-2-8
Max Horiz 4=15 (LC 8)
Max Uplift 3=-15 (LC 8)
Max Grav 1=163 (LC 3), 3=97 (LC 1), 4=36 (LC 3)

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

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable studs spaced at 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 100 lb uplift at joint (s) 3.



September 16, 2025

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

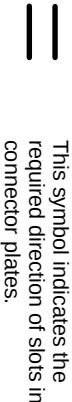
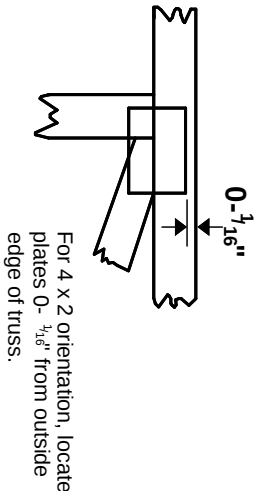
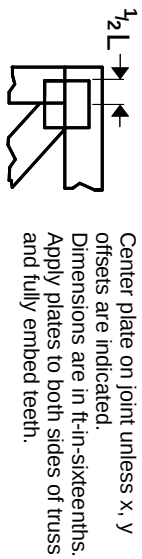
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

Symbols

PLATE LOCATION AND ORIENTATION



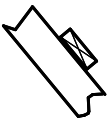
* Plate location details available in MITek software or upon request.

PLATE SIZE

4 X 4

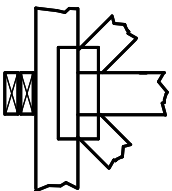
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

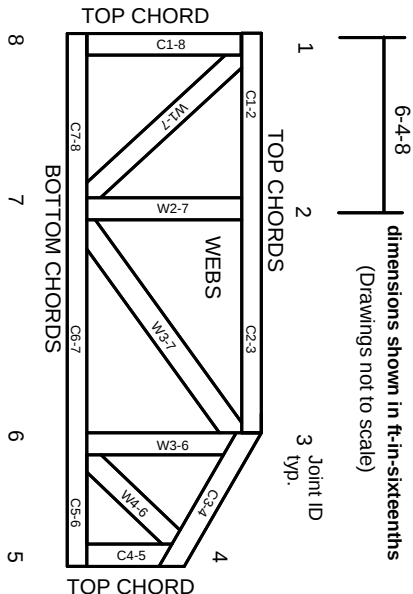


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP1.1: 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



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

Lumber design values are in accordance with ANSI/TP1 1 section 6.3. These truss designs rely on lumber values established by others.

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General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.

MITek

ENGINEERING BY
TRENCO
A MITek Affiliate

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

Trenco

818 Soundside Rd
Edenton, NC 27932

Re: 251278-B
Lot 54 Duncan's 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: I76366206 thru I76366220

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

North Carolina COA: C-0844



September 16, 2025

Gilbert, Eric

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

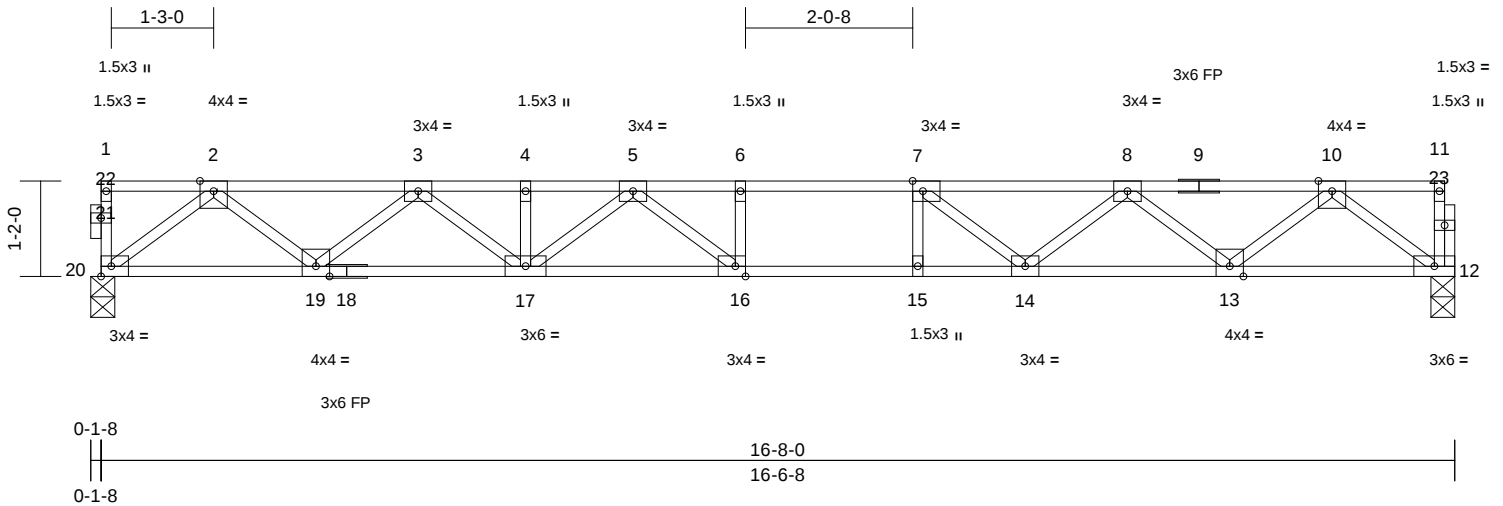
Job	Truss	Truss Type	Qty	Ply	Lot 54 Duncan's Creek
251278-B	F01	FLOOR	4	1	Job Reference (optional)

I76366206

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Sep 7 2025 Print: 25.3.0 S Sep 7 2025 MiTek Industries, Inc. Mon Sep 15 13:24:52
ID:JQb1gK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:28.2

Plate Offsets (X, Y): [7:0-1-8,Edge], [16:0-1-8,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	0.59	Vert(LL)	-0.25	16-17	>788	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.94	Vert(CT)	-0.34	16-17	>576	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.06	12	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 83 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:
2-2-0 oc bracing: 15-16.

REACTIONS (size) 12=0-3-8, 20=0-3-8
Max Grav 12=893 (LC 1), 20=899 (LC 1)

FORCES (lb) - Maximum Compression/Maximum
Tension

TOP CHORD 1-20=-35/0, 11-12=-41/0, 1-2=0/0,
2-3=-1827/0, 3-4=-3040/0, 4-5=-3040/0,
5-6=-3468/0, 6-7=-3468/0, 7-8=-3003/0,
8-10=-1869/0, 10-11=-2/0

BOT CHORD 19-20=0/1073, 17-19=0/2554, 16-17=0/3362,
15-16=0/3468, 14-15=0/3468, 13-14=0/2582,
12-13=0/1117

WEBS 2-20=-1370/0, 2-19=0/982, 3-19=-945/0,
3-17=0/621, 10-12=-1399/0, 10-13=0/979,
8-13=-928/0, 8-14=0/596, 7-14=-751/0,
4-17=-87/0, 5-17=-411/0, 5-16=-166/492,
6-16=-219/0, 7-15=-74/197

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

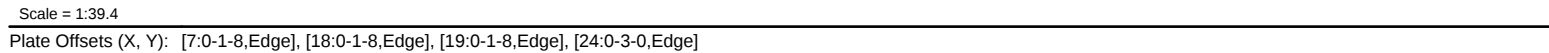
September 16, 2025

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

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

TRENCO
ENGINEERING BY
A MiTek Affiliate818 Soundside Road
Edenton, NC 27932

Comtech, Inc, Fayetteville, NC - 28314, Run: 25.30 S Sep 7 2025 Print: 25.3.0 S Sep 7 2025 MiTek Industries, Inc. Mon Sep 15 13:24:53 Page: 1
ID:JQb1igK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCdJ7J4zJC?f



LUMBER		2) All plates are MT20 plates unless otherwise indicated.
TOP CHORD	2x4 SP No.1(flat)	3) All plates are 3x4 (=) MT20 unless otherwise indicated.
BOT CHORD	2x4 SP No.1(flat)	4) Plates checked for a plus or minus 1 degree rotation about its center.
WEBS	2x4 SP No.3(flat)	5) Refer to girder(s) for truss to truss connections.
OTHERS	2x4 SP No.3(flat)	6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 65 lb uplift at joint 17.
BRACING		7) 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.
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.	8) CAUTION, Do not erect truss backwards.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.	LOAD CASE(S) Standard
REACTIONS	(size) 17= Mechanical, 20=0-3-0, 29=0-3-8	
	Max Uplift 17=65 (LC 3)	
	Max Grav 17=330 (LC 4), 20=1556 (LC 1), 29=829 (LC 10)	

NOTES

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

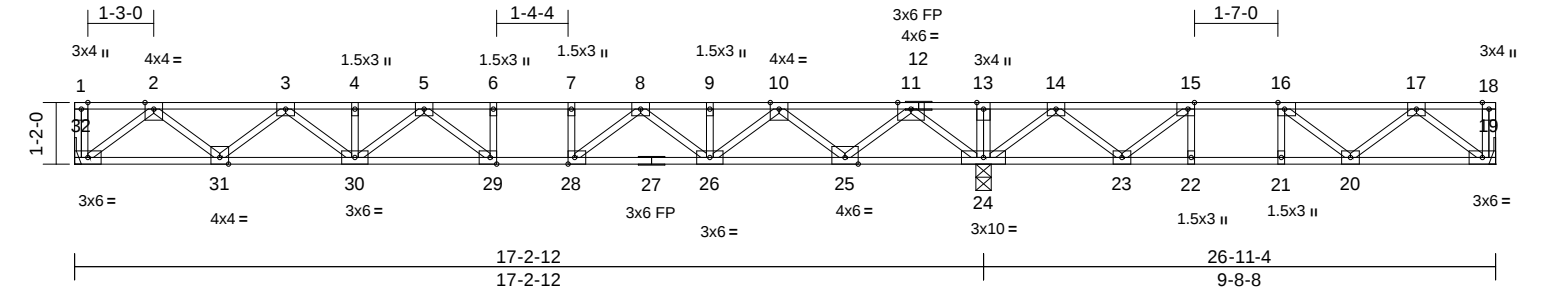


WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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.sbccomponents.com)



Job	Truss	Truss Type	Qty	Ply	Lot 54 Duncan's Creek
251278-B	F03	Floor	3	1	176366208
Job Reference (optional)					



Scale = 1:43.7

Plate Offsets (X, Y): [15:0-1-8,Edge], [16:0-1-8,Edge], [28:0-1-8,Edge], [29:0-1-8,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	0.64	Vert(LL)	-0.21	29-30	>974	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.73	Vert(CT)	-0.29	29-30	>712	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.59	Horz(CT)	0.04	24	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 138 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)

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) 19= Mechanical, 24=0-3-8, 32= Mechanical

Max Uplift 19=54 (LC 3)

Max Grav 19=442 (LC 4), 24=1814 (LC 1), 32=832 (LC 10)

FORCES (lb) - Maximum Compression/Maximum Tension

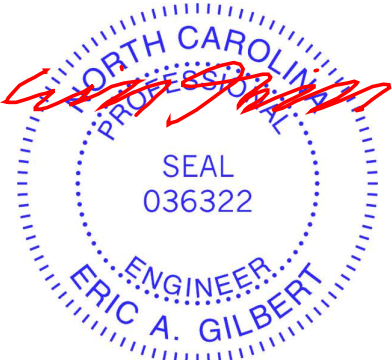
TOP CHORD 1-32=-39/0, 18-19=-29/9, 1-2=0/0, 2-3=-1696/0, 3-4=-2727/0, 4-5=-2727/0, 5-6=-2948/0, 6-7=-2948/0, 7-8=-2948/0, 8-9=-2022/0, 9-10=-2022/0, 10-11=-468/115, 11-13=0/2101, 13-14=0/2101, 14-15=-364/1054, 15-16=-820/577, 16-17=-714/242, 17-18=0/0

BOT CHORD 31-32=0/1030, 30-31=0/2335, 29-30=0/2961, 28-29=0/2948, 26-28=0/2535, 25-26=0/1360, 24-25=-785/0, 23-24=-1413/0, 22-23=-577/820, 21-22=-577/820, 20-21=-577/820, 19-20=-65/534

WEBS 13-24=-128/0, 2-32=-1292/0, 11-24=-1651/0, 2-31=0/867, 11-25=0/1232, 3-31=-831/0, 10-25=-1193/0, 3-30=0/501, 4-30=-81/0, 10-26=0/881, 9-26=-112/0, 5-30=-299/0, 8-26=-692/0, 5-29=-304/286, 8-28=0/743, 6-29=-135/90, 7-28=-325/0, 17-19=-670/82, 14-24=-1077/0, 17-20=-230/234, 14-23=0/771, 16-20=-136/428, 15-23=-943/0, 15-22=0/302, 16-21=-276/0

NOTES

- Unbalanced floor live loads have been considered for this design.
 - 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 54 lb uplift at joint 19.
 - 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.
- LOAD CASE(S) Standard



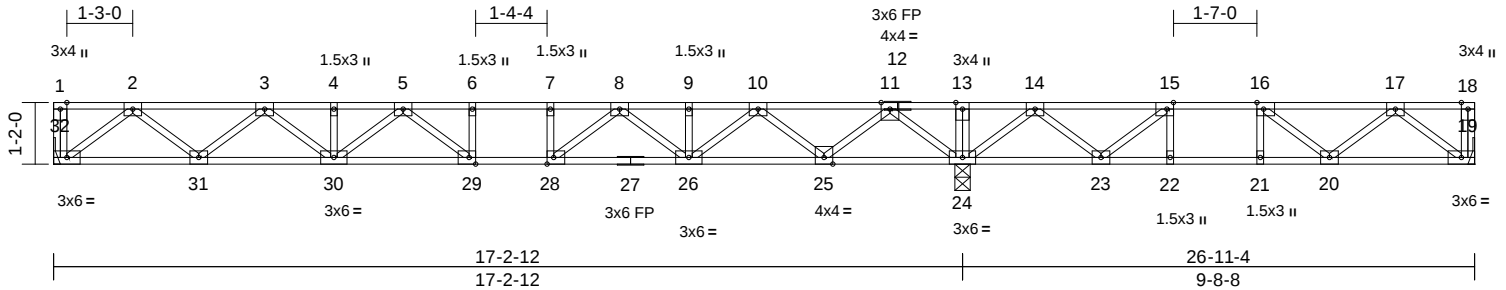
September 16,2025

Job	Truss	Truss Type	Qty	Ply	Lot 54 Duncan's Creek
251278-B	F04	FLOOR	6	1	176366209
Job Reference (optional)					

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Sep 7 2025 Print: 25.3.0 S Sep 7 2025 MiTek Industries, Inc. Mon Sep 15 13:24:54
ID:JQb1igK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:43.7

Plate Offsets (X, Y): [15:0-1-8,Edge], [16:0-1-8,Edge], [28:0-1-8,Edge], [29:0-1-8,Edge]

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.51	Vert(LL)	-0.17	29-30	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.58	Vert(CT)	-0.23	29-30	>891	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.03	24	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 138 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)

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) 19= Mechanical, 24=0-3-8, 32= Mechanical
Max Uplift 19=-43 (LC 3)
Max Grav 19=354 (LC 4), 24=1450 (LC 1), 32=666 (LC 10)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-32=-31/0, 18-19=-23/7, 1-2=0/0, 2-3=-1356/0, 3-4=-2180/0, 4-5=-2180/0, 5-6=-2357/0, 6-7=-2357/0, 7-8=-2357/0, 8-9=-1617/0, 9-10=-1617/0, 10-11=-374/92, 11-13=0/1679, 13-14=0/1679, 14-15=-291/843, 15-16=-655/462, 16-17=-570/193, 17-18=0/0
BOT CHORD 31-32=0/823, 30-31=0/1866, 29-30=0/2368, 28-29=0/2357, 26-28=0/2027, 25-26=0/1087, 24-25=-627/0, 23-24=-1129/0, 22-23=-462/655, 21-22=-462/655, 20-21=-462/655, 19-20=-52/427
WEBS 13-24=-102/0, 2-32=-1033/0, 11-24=-1320/0, 2-31=0/693, 11-25=0/985, 3-31=-664/0, 10-25=-954/0, 3-30=0/400, 4-30=-65/0, 10-26=0/704, 9-26=-90/0, 5-30=-239/0, 8-26=-553/0, 5-29=-243/229, 8-28=0/594, 6-29=-108/72, 7-28=-259/0, 17-19=-536/65, 14-24=-861/0, 17-20=-184/187, 14-23=0/616, 16-20=-108/342, 15-23=-754/0, 15-22=0/242, 16-21=-220/0

NOTES

- Unbalanced floor live loads have been considered for this design.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 43 lb uplift at joint 19.
- 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.

LOAD CASE(S) Standard



September 16, 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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TRENCO
A MiTek Affiliate

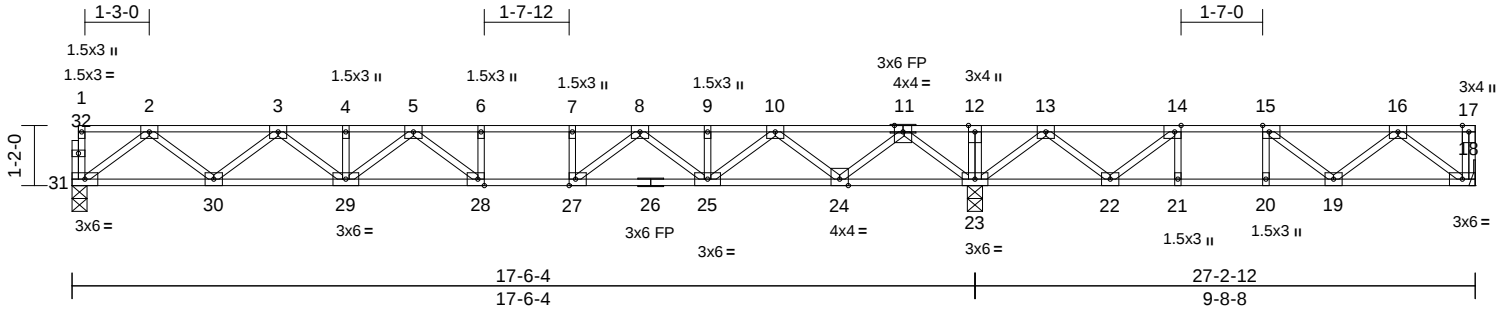
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 54 Duncan's Creek
251278-B	F05	Floor	4	1	176366210
Job Reference (optional)					

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Sep 7 2025 Print: 25.3.0 S Sep 7 2025 MiTek Industries, Inc. Mon Sep 15 13:24:54
ID:JQb1gK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:44.7

Plate Offsets (X, Y): [14:0-1-8,Edge], [15:0-1-8,Edge], [27:0-1-8,Edge], [28:0-1-8,Edge]

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.52	Vert(LL)	-0.19	28-29	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.65	Vert(CT)	-0.25	28-29	>821	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.04	23	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 138 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) 18= Mechanical, 23=0-3-8, 31=0-3-8
Max Uplift 18=-46 (LC 3)
Max Grav 18=354 (LC 4), 23=1465 (LC 1), 31=673 (LC 10)

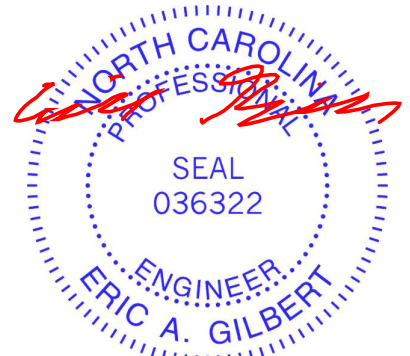
FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-31=-28/0, 17-18=-23/8, 1-2=-2/0, 2-3=-1387/0, 3-4=-2244/0, 4-5=-2244/0, 5-6=-2443/0, 6-7=-2443/0, 7-8=-2443/0, 8-9=-1653/0, 9-10=-1653/0, 10-12=-379/1699, 12-13=0/1699, 13-14=-290/862, 14-15=-655/475, 15-16=-570/201, 16-17=0/0
BOT CHORD 30-31=0/839, 29-30=0/1914, 28-29=0/2445, 27-28=0/2443, 25-27=0/2079, 24-25=0/1107, 23-24=-630/0, 22-23=-1153/0, 21-22=-475/655, 20-21=-475/655, 19-20=-475/655, 18-19=-56/427
WEBS 12-23=-102/0, 2-31=-1051/0, 2-30=0/713, 3-30=-685/0, 3-29=0/421, 4-29=-64/0, 11-23=-1340/0, 11-24=0/1004, 10-24=-972/0, 10-25=0/723, 9-25=-94/0, 8-25=-572/0, 8-27=0/643, 5-29=-257/0, 5-28=-236/251, 6-28=-122/65, 7-27=-285/0, 16-18=-536/70, 13-23=-864/0, 16-19=-189/187, 13-22=0/620, 15-19=-108/350, 14-22=-760/0, 14-21=0/245, 15-20=-224/0

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) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 46 lb uplift at joint 18.
- 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



September 16, 2025

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

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ENGINEERING BY
TRENCO
A MiTek Affiliate

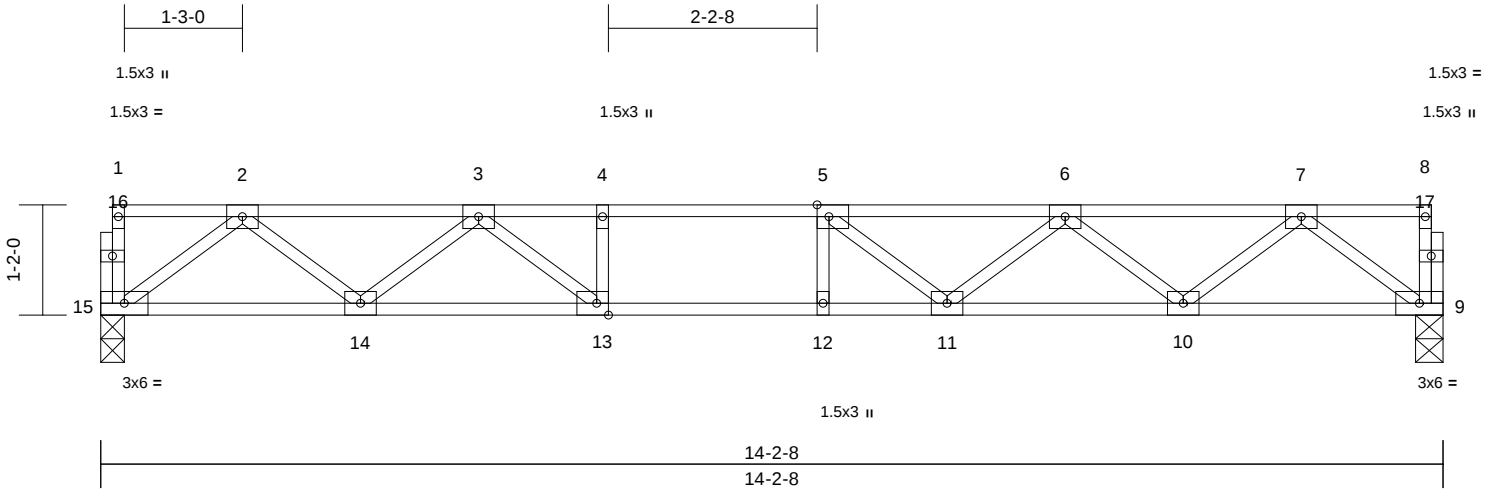
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 54 Duncan's Creek
251278-B	F07	FLOOR	2	1	176366211
Job Reference (optional)					

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Sep 7 2025 Print: 25.3.0 S Sep 7 2025 MiTek Industries, Inc. Mon Sep 15 13:24:54
ID:JQb1igK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:24.4

Plate Offsets (X, Y): [5:0-1-8,Edge], [13:0-1-8,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	0.56	Vert(LL)	-0.17	11-12	>965	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.84	Vert(CT)	-0.23	11-12	>728	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.04	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 70 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.

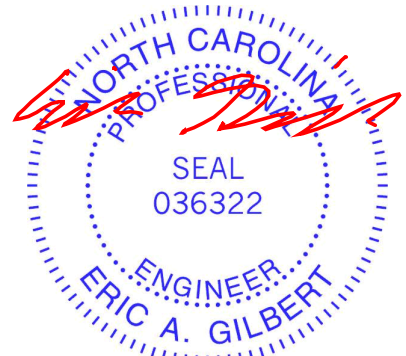
REACTIONS (size) 9=0-3-8, 15=0-3-0
Max Grav 9=761 (LC 1), 15=761 (LC 1)

FORCES (lb) - Maximum Compression/Maximum
Tension
TOP CHORD 1-15=-35/0, 8-9=-43/0, 1-2=-2/0, 2-3=-1521/0,
3-4=-2508/0, 4-5=-2508/0, 5-6=-2350/0,
6-7=-1541/0, 7-8=-3/0
BOT CHORD 14-15=0/944, 13-14=0/2093, 12-13=0/2508,
11-12=0/2508, 10-11=0/2118, 9-10=0/937
WEBS 2-15=-1183/0, 2-14=0/751, 3-14=-744/0,
3-13=0/715, 4-13=-303/0, 7-9=-1172/0,
7-10=0/787, 6-10=-751/0, 6-11=0/386,
5-11=-421/24, 5-12=-151/72

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.

LOAD CASE(S) Standard



September 16, 2025

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

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

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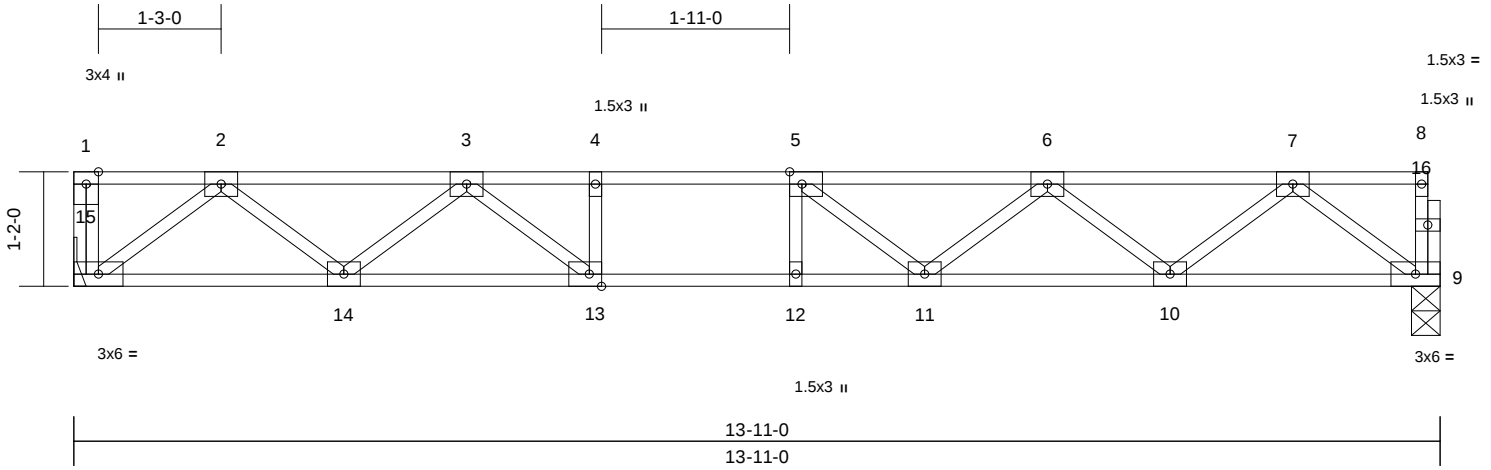
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 54 Duncan's Creek
251278-B	F08	Floor	2	1	176366212
Job Reference (optional)					

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Sep 7 2025 Print: 25.3.0 S Sep 7 2025 MiTek Industries, Inc. Mon Sep 15 13:24:54
ID:JQb1igK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:23.5

Plate Offsets (X, Y): [5:0-1-8,Edge], [13:0-1-8,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	0.48	Vert(LL)	-0.15	11-12	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.78	Vert(CT)	-0.20	11-12	>836	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.03	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 70 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.

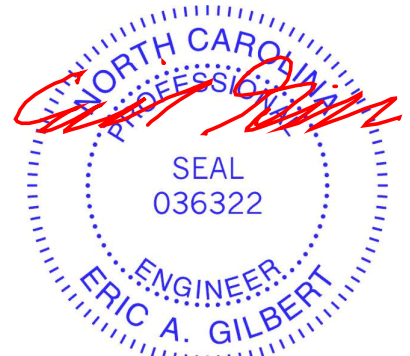
REACTIONS (size) 9=0-3-8, 15= Mechanical
Max Grav 9=745 (LC 1), 15=752 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-15=-39/0, 8-9=-43/0, 1-2=0/0, 2-3=-1483/0, 3-4=-2411/0, 4-5=-2411/0, 5-6=-2271/0, 6-7=-1501/0, 7-8=-3/0
BOT CHORD 14-15=0/924, 13-14=0/2034, 12-13=0/2411, 11-12=0/2411, 10-11=0/2059, 9-10=0/916
WEBS 2-15=-1159/0, 2-14=0/728, 3-14=-717/0, 3-13=0/658, 4-13=-270/0, 7-9=-1146/0, 7-10=0/763, 6-10=-725/0, 6-11=0/358, 5-11=-387/39, 5-12=-148/68

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) 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



September 16, 2025

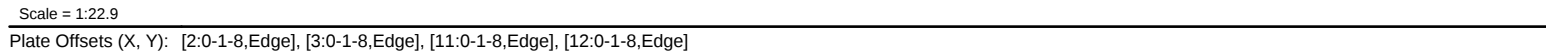
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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

Comtech, Inc, Fayetteville, NC - 28314, Run: 25.30 S Sep 7 2025 Print: 25.3.0 S Sep 7 2025 MiTek Industries, Inc. Mon Sep 15 13:24:54 Page: 1
ID:JQb1igK2ne3CQdgy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRCDoi7J4CZ?fi



LUMBER	
TOP CHORD	2x4 SP No.1(flat)
BOT CHORD	2x4 SP No.1(flat)
WEBS	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)	10= Mechanical, 13=0-3-8, 16= Mechanical
Max Grav	10=429 (LC 7), 13=770 (LC 1), 16=310 (LC 10)
FORCES	
	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-16=-91/0, 9-10=-60/0, 1-2=0/0, 2-3=-410/0, 3-4=-64/184, 4-5=-67/181, 5-6=-763/0, 6-7=-763/0, 7-8=-763/0, 8-9=0/0
BOT CHORD	15-16=0/410, 14-15=0/410, 13-14=0/410, 12-13=0/455, 11-12=0/763, 10-11=0/470
WEBS	4-13=-195/0, 2-16=-465/0, 3-13=-533/0, 2-15=-18/21, 3-14=0/53, 5-13=-595/0, 8-10=-590/0, 5-12=0/462, 8-11=0/374, 6-12=-250/0, 7-11=-207/0

- LOAD CASE(S) Standard

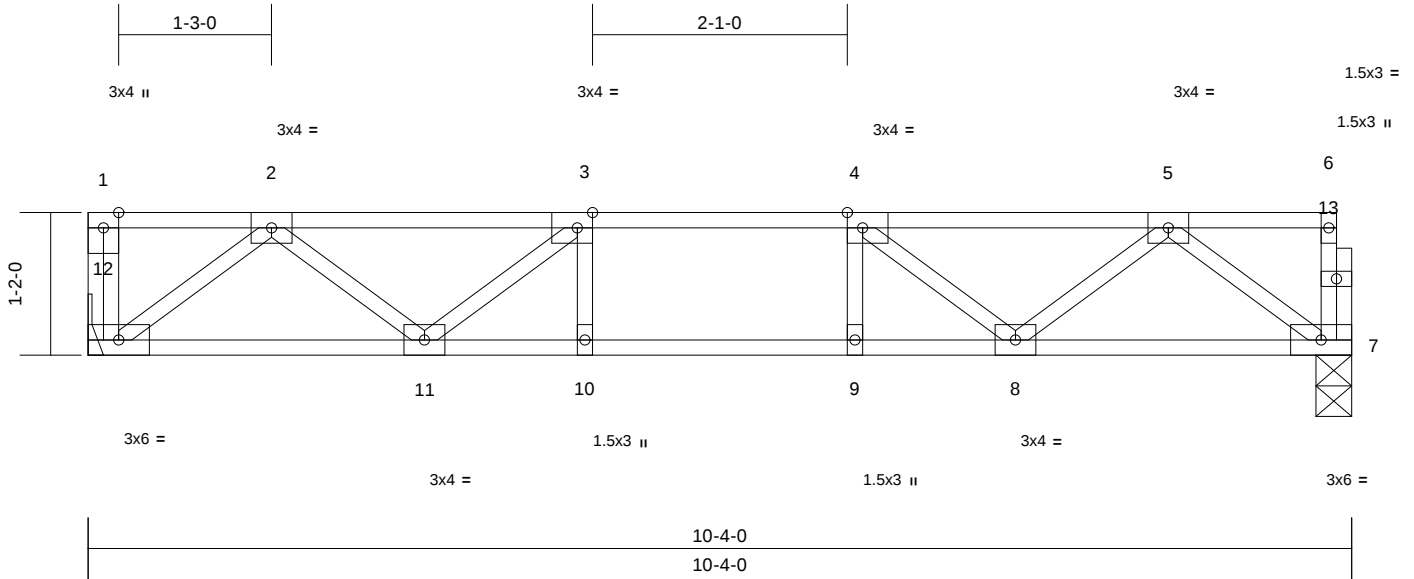


Job 251278-B	Truss F10	Truss Type FLOOR	Qty 5	Ply 1	Lot 54 Duncan's Creek Job Reference (optional)	176366214
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Sep 7 2025 Print: 25.3.0 S Sep 7 2025 MiTek Industries, Inc. Mon Sep 15 13:24:54
ID:JQb1igK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:18.8

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

Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.19	Vert(LL)	-0.05	8-9	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.33	Vert(CT)	-0.06	8-9	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.01	7	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 52 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.

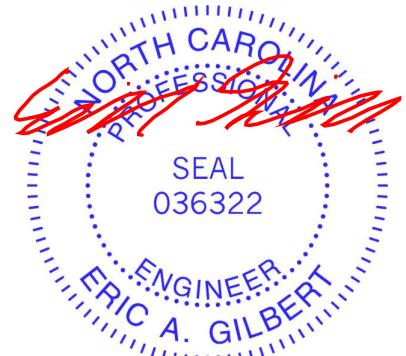
REACTIONS (size) 7=0-3-8, 12= Mechanical
Max Grav 7=438 (LC 1), 12=443 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-12=-30/0, 6-7=-27/0, 1-2=0/0, 2-3=-799/0, 3-4=-1055/0, 4-5=-799/0, 5-6=-2/0
BOT CHORD 11-12=0/533, 10-11=0/1055, 9-10=0/1055, 8-9=0/1055, 7-8=0/533
WEBS 2-12=-669/0, 2-11=0/347, 3-11=-359/0, 3-10=-58/81, 5-7=-666/0, 5-8=0/347, 4-8=-359/0, 4-9=-58/81

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.

LOAD CASE(S) Standard



September 16, 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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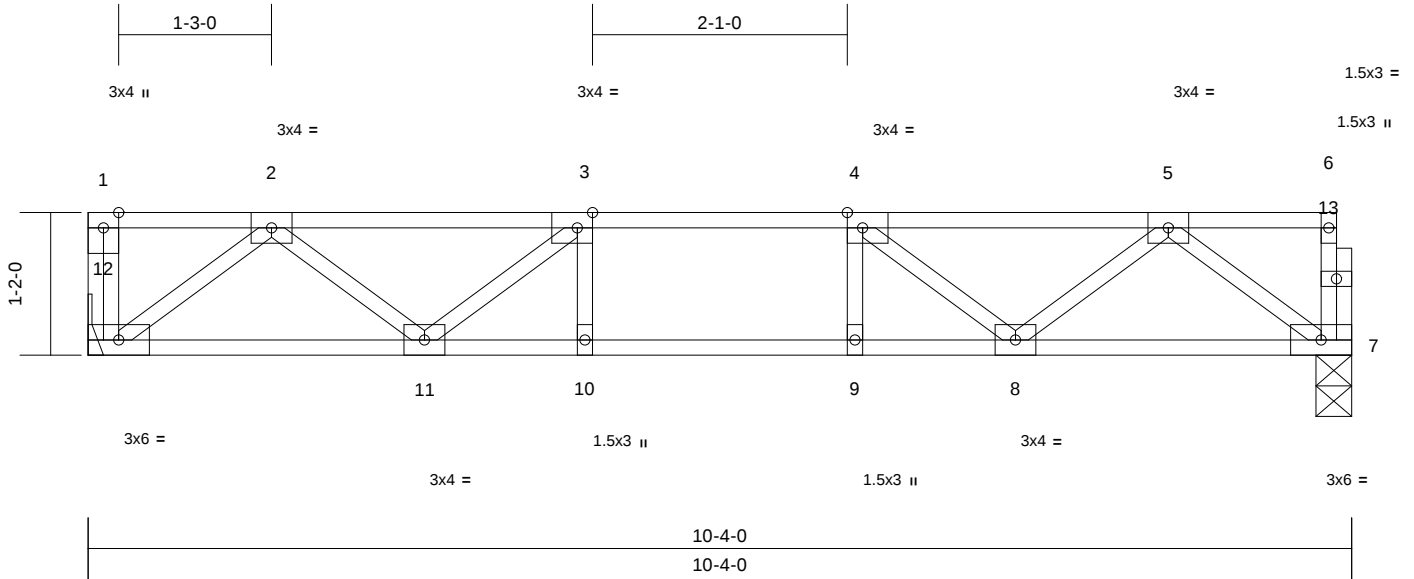
818 Soundside Road
Edenton, NC 27932

Job 251278-B	Truss F11	Truss Type FLOOR	Qty 6	Ply 1	Lot 54 Duncan's Creek Job Reference (optional)	176366215
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Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Sep 7 2025 Print: 25.3.0 S Sep 7 2025 MiTek Industries, Inc. Mon Sep 15 13:24:54
ID:JQb1igK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:18.8

Plate Offsets (X, Y): [3:0-1-8,Edge], [4:0-1-8,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	0.24	Vert(LL)	-0.06	8-9	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.42	Vert(CT)	-0.07	8-9	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.01	7	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 52 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) 7=0-3-8, 12= Mechanical
Max Grav 7=548 (LC 1), 12=555 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-12=-37/0, 6-7=-33/0, 1-2=0/0, 2-3=-1000/0, 3-4=-1319/0, 4-5=-1000/0, 5-6=-2/0

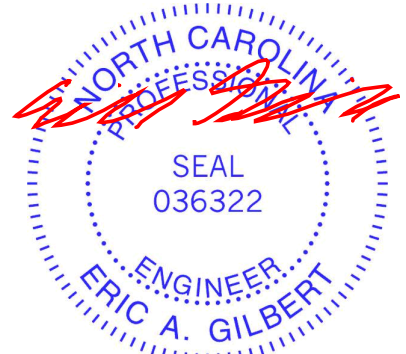
BOT CHORD 11-12=0/667, 10-11=0/1319, 9-10=0/1319, 8-9=0/1319, 7-8=0/666

WEBS 2-12=-836/0, 2-11=0/434, 3-11=-449/0, 5-7=-833/0, 5-8=0/434, 4-8=-449/0, 4-9=-73/101, 3-10=-73/102

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.

LOAD CASE(S) Standard



September 16, 2025

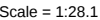
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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818 Soundside Road
Edenton, NC 27932

Comtech, Inc, Fayetteville, NC - 28314, Run: 25.30 S Sep 7 2025 Print: 25.3.0 S Sep 7 2025 MiTek Industries, Inc. Mon Sep 15 13:24:54 Page: 1
ID:JQb1igK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCd0i7J4zJC?f



LUMBER		1) All plates are 1.5x3 () MT20 unless otherwise indicated.
TOP CHORD	2x4 SP No.1(flat)	2) Plates checked for a plus or minus 1 degree rotation about its center.
BOT CHORD	2x4 SP No.1(flat)	3) Gable requires continuous bottom chord bearing.
WEBS	2x4 SP No.3(flat)	4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
OTHERS	2x4 SP No.3(flat)	5) Gable studs spaced at 1-3-0 oc.
BRACING		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.
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=16-8-0, 18=16-8-0, 19=16-8-0,	

LOAD CASE(S) Standard

NOTES



 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 MITER REFERENCE PAGE MIT-17-19 (Rev. 1/2/2025) BEFORE USE.

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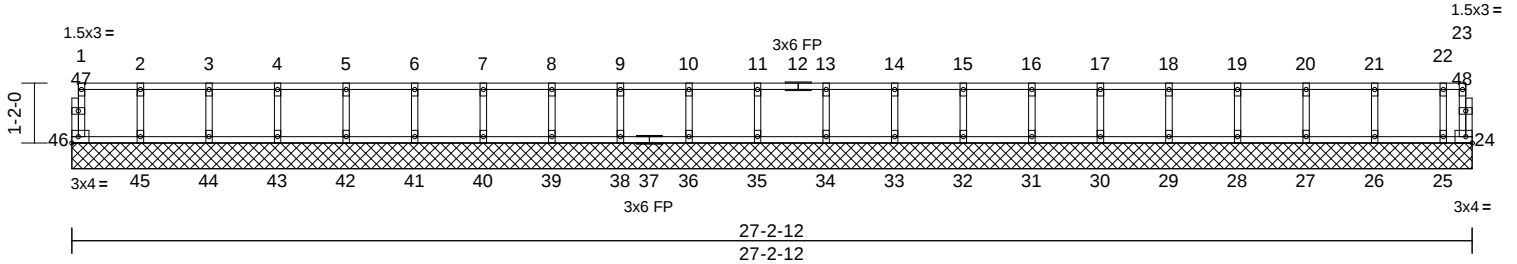
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 54 Duncan's Creek
251278-B	FKW2	Floor Supported Gable	1	1	176366217
Job Reference (optional)					

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Sep 7 2025 Print: 25.3.0 S Sep 7 2025 MiTek Industries, Inc. Mon Sep 15 13:24:54
ID:JQb1gK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:44.8

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	0.06	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	24	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R						Weight: 113 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) 24=27-2-12, 25=27-2-12, 26=27-2-12, 27=27-2-12, 28=27-2-12, 29=27-2-12, 30=27-2-12, 31=27-2-12, 32=27-2-12, 33=27-2-12, 34=27-2-12, 35=27-2-12, 36=27-2-12, 38=27-2-12, 39=27-2-12, 40=27-2-12, 41=27-2-12, 42=27-2-12, 43=27-2-12, 44=27-2-12, 45=27-2-12, 46=27-2-12
Max Grav 24=7 (LC 1), 25=103 (LC 1), 26=153 (LC 1), 27=145 (LC 1), 28=147 (LC 1), 29=147 (LC 1), 30=147 (LC 1), 31=147 (LC 1), 32=147 (LC 1), 33=147 (LC 1), 34=147 (LC 1), 35=147 (LC 1), 36=147 (LC 1), 38=147 (LC 1), 39=147 (LC 1), 40=147 (LC 1), 41=147 (LC 1), 42=147 (LC 1), 43=147 (LC 1), 44=147 (LC 1), 45=148 (LC 1), 46=52 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-46=-48/0, 23-24=0/2, 1-2=-6/0, 2-3=-6/0, 3-4=-6/0, 4-5=-6/0, 5-6=-6/0, 6-7=-6/0, 7-8=-6/0, 8-9=-6/0, 9-10=-6/0, 10-11=-6/0, 11-13=-6/0, 13-14=-6/0, 14-15=-6/0, 15-16=-6/0, 16-17=-6/0, 17-18=-6/0, 18-19=-6/0, 19-20=-6/0, 20-21=-6/0, 21-22=-6/0, 22-23=-6/0
BOT CHORD 45-46=0/6, 44-45=0/6, 43-44=0/6, 42-43=0/6, 41-42=0/6, 40-41=0/6, 39-40=0/6, 38-39=0/6, 36-38=0/6, 35-36=0/6, 34-35=0/6, 33-34=0/6, 32-33=0/6, 31-32=0/6, 30-31=0/6, 29-30=0/6, 28-29=0/6, 27-28=0/6, 26-27=0/6, 25-26=0/6, 24-25=0/6
WEBS 2-45=-133/0, 3-44=-134/0, 4-43=-133/0, 5-42=-133/0, 6-41=-133/0, 7-40=-133/0, 8-39=-133/0, 9-38=-133/0, 10-36=-133/0, 11-35=-133/0, 13-34=-133/0, 14-33=-133/0, 15-32=-133/0, 16-31=-133/0, 17-30=-133/0, 18-29=-133/0, 19-28=-134/0, 20-27=-132/0, 21-26=-139/0, 22-25=-102/0

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



September 16, 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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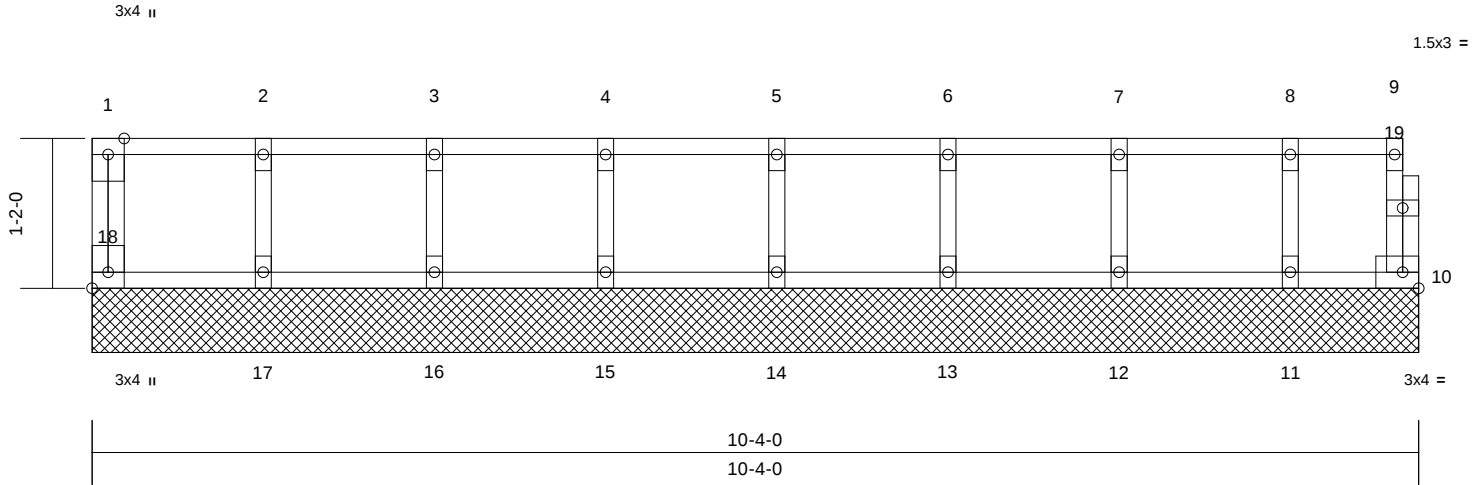
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 54 Duncan's Creek
251278-B	FKW3	Floor Supported Gable	1	1	176366218
Job Reference (optional)					

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Sep 7 2025 Print: 25.3.0 S Sep 7 2025 MiTek Industries, Inc. Mon Sep 15 13:24:54
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Page: 1



Scale = 1:17.9

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

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	0.06	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	10	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 45 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)

- 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.

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.

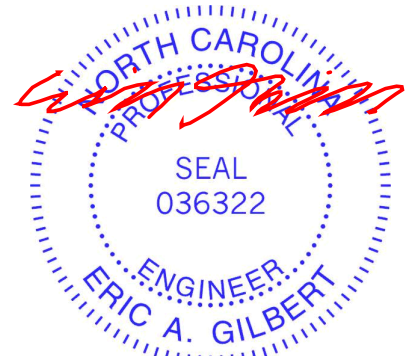
REACTIONS (size) 10=10-4-0, 11=10-4-0, 12=10-4-0, 13=10-4-0, 14=10-4-0, 15=10-4-0, 16=10-4-0, 17=10-4-0, 18=10-4-0
Max Grav 10=37 (LC 1), 11=122 (LC 1), 12=152 (LC 1), 13=145 (LC 1), 14=147 (LC 1), 15=147 (LC 1), 16=147 (LC 1), 17=146 (LC 1), 18=60 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-18=-55/0, 9-10=-32/0, 1-2=-7/0, 2-3=-7/0, 3-4=-7/0, 4-5=-7/0, 5-6=-7/0, 6-7=-7/0, 7-8=-7/0, 8-9=-7/0
BOT CHORD 17-18=0/7, 16-17=0/7, 15-16=0/7, 14-15=0/7, 13-14=0/7, 12-13=0/7, 11-12=0/7, 10-11=0/7
WEBS 2-17=-132/0, 3-16=-134/0, 4-15=-133/0, 5-14=-134/0, 6-13=-132/0, 7-12=-138/0, 8-11=-113/0

NOTES

- All plates are 1.5x3 (II) 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.



September 16,2025

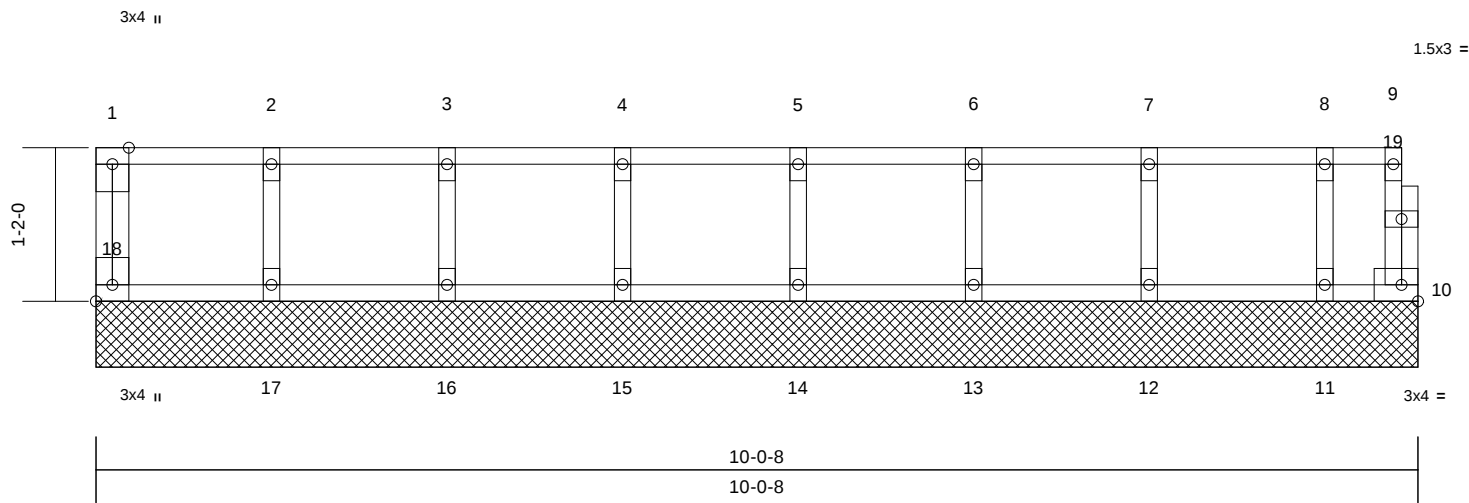
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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

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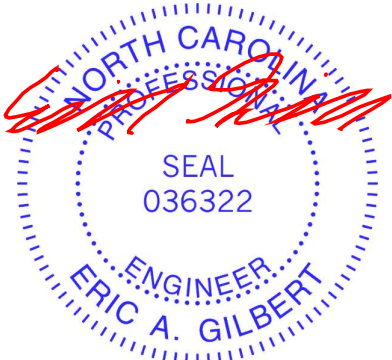
Job	Truss	Truss Type	Qty	Ply	Lot 54 Duncan's Creek
251278-B	FKW4	Floor Supported Gable	1	1	176366219
Job Reference (optional)					



Scale = 1:17.5									
Plate Offsets (X, Y): [18:Edge,0-1-8]									
Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in (loc)	l/defl	L/d
TCLL	40.0	Plate Grip DOL	1.00	TC	0.05	Vert(LL)	n/a	-	n/a 999
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	10	n/a
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R					
Weight: 44 lb FT = 20%F, 11%E									

LUMBER			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.
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			7) CAUTION, Do not erect truss backwards.
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)			LOAD CASE(S) Standard
	10=10-0-8, 11=10-0-8, 12=10-0-8, 13=10-0-8, 14=10-0-8, 15=10-0-8, 16=10-0-8, 17=10-0-8, 18=10-0-8		
Max Grav	10=15 (LC 1), 11=85 (LC 1), 12=122 (LC 1), 13=116 (LC 1), 14=118 (LC 1), 15=117 (LC 1), 16=117 (LC 1), 17=118 (LC 1), 18=47 (LC 1)		
FORCES (lb) - Maximum Compression/Maximum Tension			
TOP CHORD	1-18=-44/0, 9-10=-10/0, 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		
BOT CHORD	17-18=0/5, 16-17=0/5, 15-16=0/5, 14-15=0/5, 13-14=0/5, 12-13=0/5, 11-12=0/5, 10-11=0/5		
WEBS	2-17=-106/0, 3-16=-107/0, 4-15=-106/0, 5-14=-107/0, 6-13=-105/0, 7-12=-111/0, 8-11=-82/0		

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.		



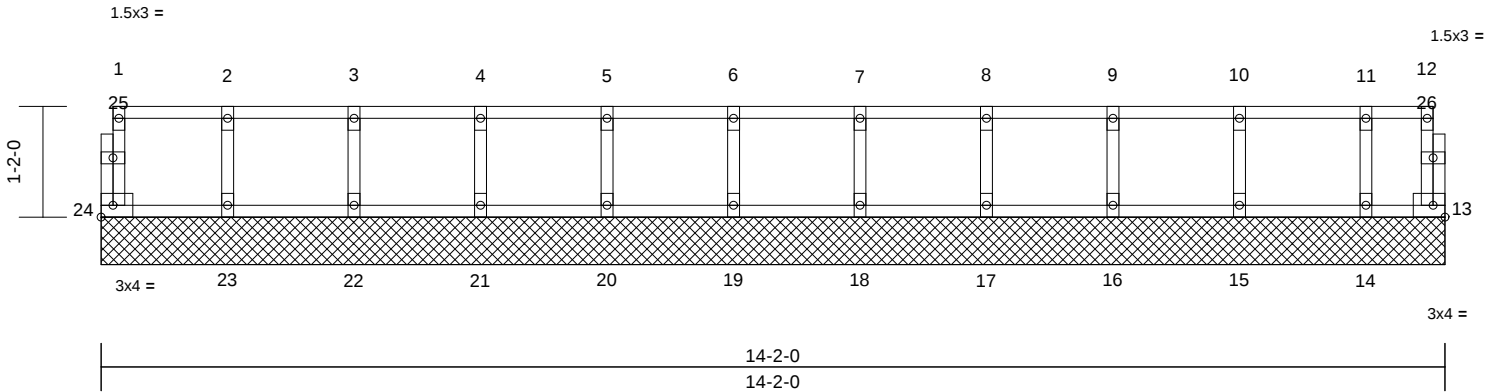
September 16,2025

Job	Truss	Truss Type	Qty	Ply	Lot 54 Duncan's Creek
251278-B	FKW5	Floor Supported Gable	1	1	176366220
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.30 S Sep 7 2025 Print: 25.3.0 S Sep 7 2025 MiTek Industries, Inc. Mon Sep 15 13:24:55
ID:JQb1gK2ne3CQdqy3dwnCxyStrD-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:24.3

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	0.06	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	13	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 60 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) 13=14-2-0, 14=14-2-0, 15=14-2-0, 16=14-2-0, 17=14-2-0, 18=14-2-0, 19=14-2-0, 20=14-2-0, 21=14-2-0, 22=14-2-0, 23=14-2-0, 24=14-2-0
Max Grav 13=27 (LC 1), 14=113 (LC 1), 15=153 (LC 1), 16=145 (LC 1), 17=147 (LC 1), 18=147 (LC 1), 19=147 (LC 1), 20=147 (LC 1), 21=147 (LC 1), 22=147 (LC 1), 23=148 (LC 1), 24=52 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-24=-49/0, 12-13=-21/0, 1-2=-6/0, 2-3=-6/0, 3-4=-6/0, 4-5=-6/0, 5-6=-6/0, 6-7=-6/0, 7-8=-6/0, 8-9=-6/0, 9-10=-6/0, 10-11=-6/0, 11-12=-6/0
BOT CHORD 23-24=0/6, 22-23=0/6, 21-22=0/6, 20-21=0/6, 19-20=0/6, 18-19=0/6, 17-18=0/6, 16-17=0/6, 15-16=0/6, 14-15=0/6, 13-14=0/6
WEBS 2-23=-132/0, 3-22=-134/0, 4-21=-133/0, 5-20=-133/0, 6-19=-133/0, 7-18=-133/0, 8-17=-134/0, 9-16=-132/0, 10-15=-138/0, 11-14=-107/0

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



September 16, 2025

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

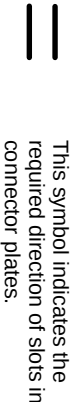
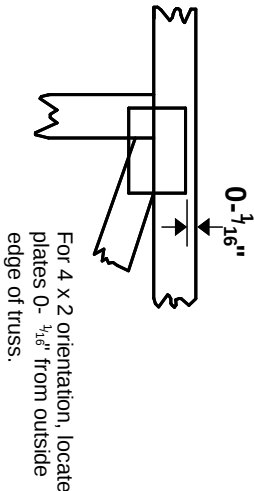
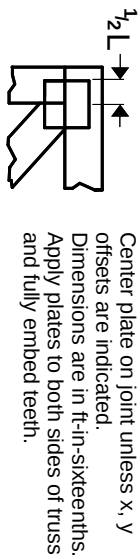
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Symbols

PLATE LOCATION AND ORIENTATION



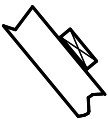
* Plate location details available in MITek software or upon request.

PLATE SIZE

4 X 4

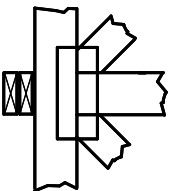
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

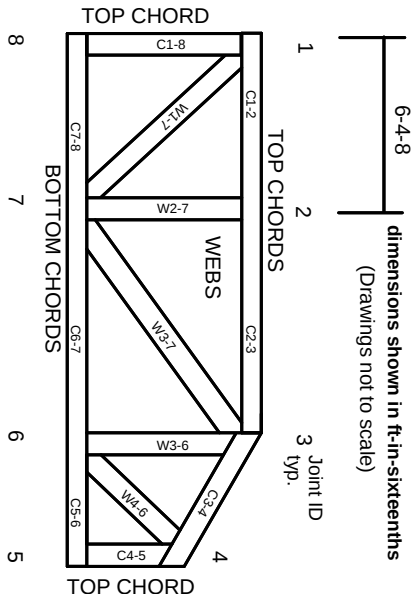
BEARING



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

Industry Standards:
ANSI/TP1.1: 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



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

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

Product Code Approvals

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

Design General Notes

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

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General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.

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