



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 (1) FLY HEADER	END REACTION (UP TO)	REQ'D STUDS FOR (1) 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				

		Lillington / Harnett			
		778 Beacon Hill Road			
		2nd Floor			
		8/6/25			
		Johnnie Baggett			
		House Account			
CITY / CO.	ADDRESS	MODEL	DATE REV.	DRAWN BY	SALES REP.

Site Name	Lot 48 Duncan's Creek	The Apex - Gerogian - Face	Seal Date	Quote #	250231 - B
BUILDER	JOB NAME	PLAN	SEAL DATE	QUOTE #	JOB #

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 19.2" oc U.O.N.

Dimension Notes
1. All exterior wall to wall dimensions are to face of wall 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

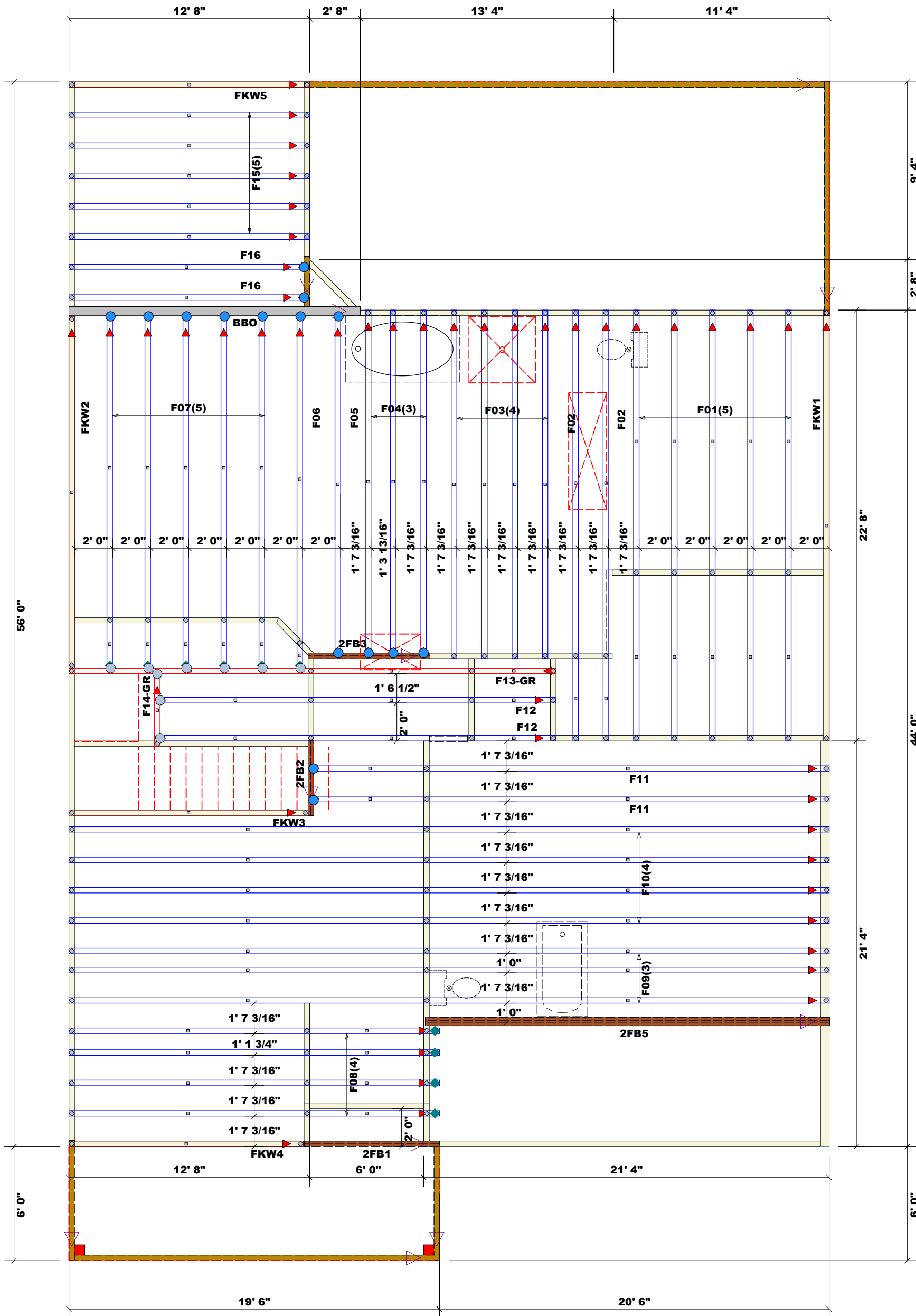
All Walls Shown Are
Considered Load Bearing

= 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	

Products				
Net Qty	Piles	Product	Length	PlotID
2	2	1-3/4"x 14" LVL Kerto-S	7' 1 1/2"	2FB1
2	2	1-3/4"x 14" LVL Kerto-S	6' 5"	2FB3
2	2	1-3/4"x 14" LVL Kerto-S	3' 11"	2FB2
3	3	1-3/4"x 23-7/8" LVL Kerto-S	21' 3"	2FB5

Nail Information		Connector Information				
Truss	Header	Supported Member	Qty	Manuf	Product	Sym
16d/3-1/2"	16d/3-1/2"	NA	15	USP	HUS410	●
10d/3"	10d/3"	Varies	9	USP	MSH422	●



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: 250231-B
Lot 48 Duncans Creek

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Pages or sheets covered by this seal: I75443976 thru I75443996

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

North Carolina COA: C-0844

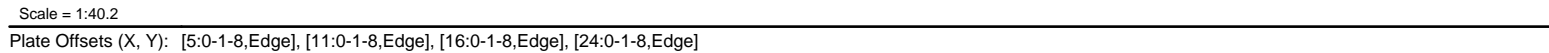


August 7, 2025

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: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:41:18 Page: 1
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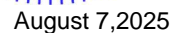


LUMBER		
TOP CHORD	2x4 SP No.1(flat)	4) Recommend 2x6 strongbacks, on edge, spaced at 10'-00"-00" oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
BOT CHORD	2x4 SP No.1(flat)	5) CAUTION, Do not erect truss backwards.
WEBS	2x4 SP No.3(flat)	
OTHERS	2x4 SP No.3(flat)	

BRACING		
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.	
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.	
REACTIONS	(size)	15=0-3-8, 19=0-3-8, 26=0-3-8
	Max Grav	15=395 (LC 4), 19=1482 (LC 1), 26=676 (LC 10)
FORCES		
	(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-26=-36/0, 14-15=-55/0, 1-2=0/0, 2-3=-1280/0, 3-4=-1962/0, 4-5=-1962/0, 5-6=-1669/0, 6-7=-719/118, 7-8=0/1338, 8-9=0/1338, 9-11=-352/444, 11-12=-680/149, 12-13=-680/149, 13-14=-3/0	
BOT CHORD	25-26=0/795, 24-25=0/1735, 23-24=0/1962, 22-23=0/1962, 20-22=0/1355, 19-20=-343/60, 18-19=-682/17, 17-18=-149/680, 16-17=-149/680, 15-16=16/437	

WEBS 8-19=-119/0, 2-26=-1014/0, 2-25=0/632,
3-25=-593/0, 3-24=-16/392, 4-24=-174/2,
7-19=-1294/0, 7-20=0/905, 6-20=-871/0,
6-22=0/466, 5-22=-545/0, 5-23=-52/124,
13-15=-544/20, 13-16=-170/310,
9-19=-914/0, 9-18=0/578, 11-18=-635/0,
11-17=0/133, 12-16=-163/73

- 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.



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/TP1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

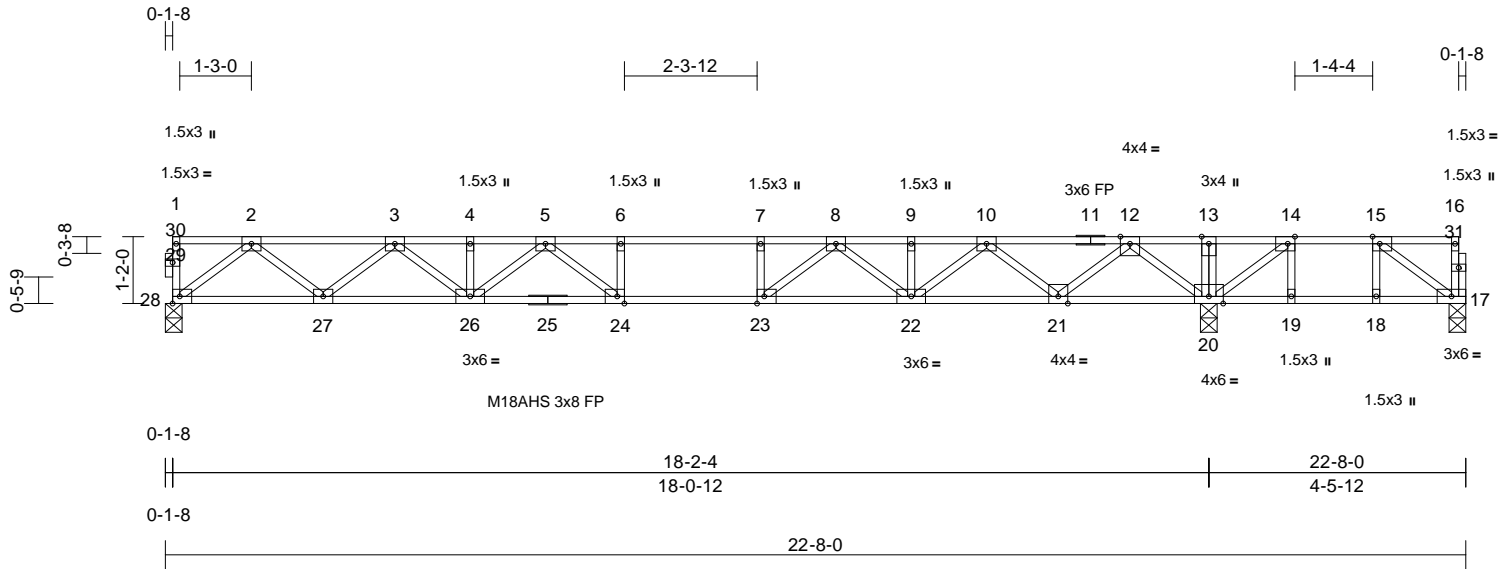
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek
250231-B	F02	FLOOR	2	1	Job Reference (optional)
					I75443977

Comtech, Inc, Fayetteville, NC - 28314,

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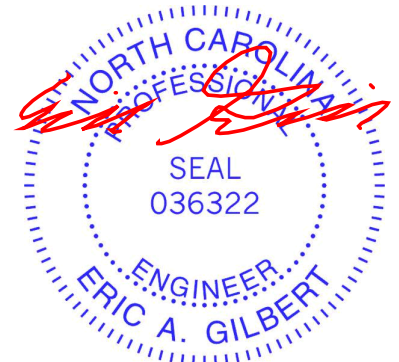


Scale = 1:40.2									
Plate Offsets (X, Y): [14:0-1-8,Edge], [15:0-1-8,Edge], [23:0-1-8,Edge], [24:0-1-8,Edge]									
Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl
TCLL	40.0	Plate Grip DOL	1.00	TC	0.70	Vert(LL)	-0.23	24-26	>940
TCDL	10.0	Lumber DOL	1.00	BC	0.75	Vert(CT)	-0.32	24-26	>683
BCLL	0.0	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.05	20	n/a
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S					n/a
						PLATES		GRIP	
						M18AHS		186/179	
						MT20		244/190	
						Weight: 114 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)	17=0-3-8, 20=0-3-8, 28=0-3-8	
Max Uplift	17=-210 (LC 3)	
Max Grav	17=112 (LC 4), 20=1311 (LC 1), 28=730 (LC 10)	
FORCES		
(lb) - Maximum Compression/Maximum Tension		
TOP CHORD	1-28=-28/0, 16-17=-116/0, 1-2=0/0, 2-3=-1488/0, 3-4=-2486/0, 4-5=-2486/0, 5-6=-2849/0, 6-7=-2849/0, 7-8=-2849/0, 8-9=-2046/0, 9-10=-2046/0, 10-12=-777/0, 12-13=0/1153, 13-14=0/1153, 14-15=-37/490, 15-16=-7/0	
BOT CHORD	27-28=0/872, 26-27=0/2082, 24-26=0/2754, 23-24=0/2849, 22-23=0/2470, 21-22=0/1499, 20-21=-88/17, 19-20=-490/37, 18-19=-490/37, 17-18=-490/37	
WEBS	13-20=-39/61, 2-28=-1113/0, 2-27=0/802, 3-27=-774/0, 3-26=0/515, 4-26=-69/0, 12-20=-1377/0, 12-21=0/998, 10-21=-947/0, 10-22=0/705, 9-22=-97/0, 8-22=-550/0, 8-23=0/674, 5-26=-343/0, 5-24=-125/404, 6-24=-198/8, 7-23=-310/0, 15-17=-41/611, 14-20=-938/0, 14-19=0/224, 15-18=-191/0	

- NOTES**
- 1) Unbalanced floor live loads have been considered for this design.
 - 2) All plates are MT20 plates unless otherwise indicated.
 - 3) All plates are 3x4 (=) MT20 unless otherwise indicated.

- 4) Plates checked for a plus or minus 1 degree rotation about its center.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 210 lb uplift at joint 17.
 - 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



August 7, 2025

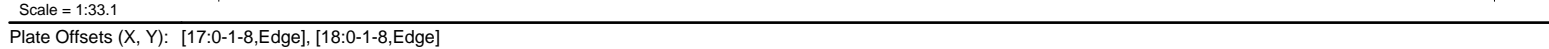
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

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NUMBER	
TOP CHORD	2x4 SP No.1(flat)
BOT CHORD	2x4 SP No.1(flat)
WEBS	2x4 SP No.3(flat)
OTHERS	2x4 SP No.3(flat)
BRACING	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
REACTIONS	(size) 14=0-3-8, 22=0-3-8 Max Grav 14=787 (LC 1), 22=792 (LC 1)
FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-22=-28/0, 13-14=-28/0, 1-2=0/0, 2-3=-1642/0, 3-4=-2786/0, 4-5=-2786/0, 5-6=-3382/0, 6-7=-3382/0, 7-8=-3382/0, 8-10=-2806/0, 10-11=-2806/0, 11-12=-1675/0, 12-13=-2/0
BOT CHORD	21-22=0/951, 19-21=0/2306, 18-19=0/3137, 17-18=0/3382, 16-17=0/3150, 15-16=0/2333, 14-15=0/990
WEBS	2-22=-1214/0, 2-21=0/899, 3-21=-864/0, 3-19=0/612, 12-14=-1240/0, 12-15=0/892, 11-15=-857/0, 11-16=0/604, 10-16=-82/0, 4-19=83/0, 5-19=-448/0, 5-18=-24/589, 8-16=-439/0, 8-17=-36/578, 7-17=-270/0, 6-18=-275/0

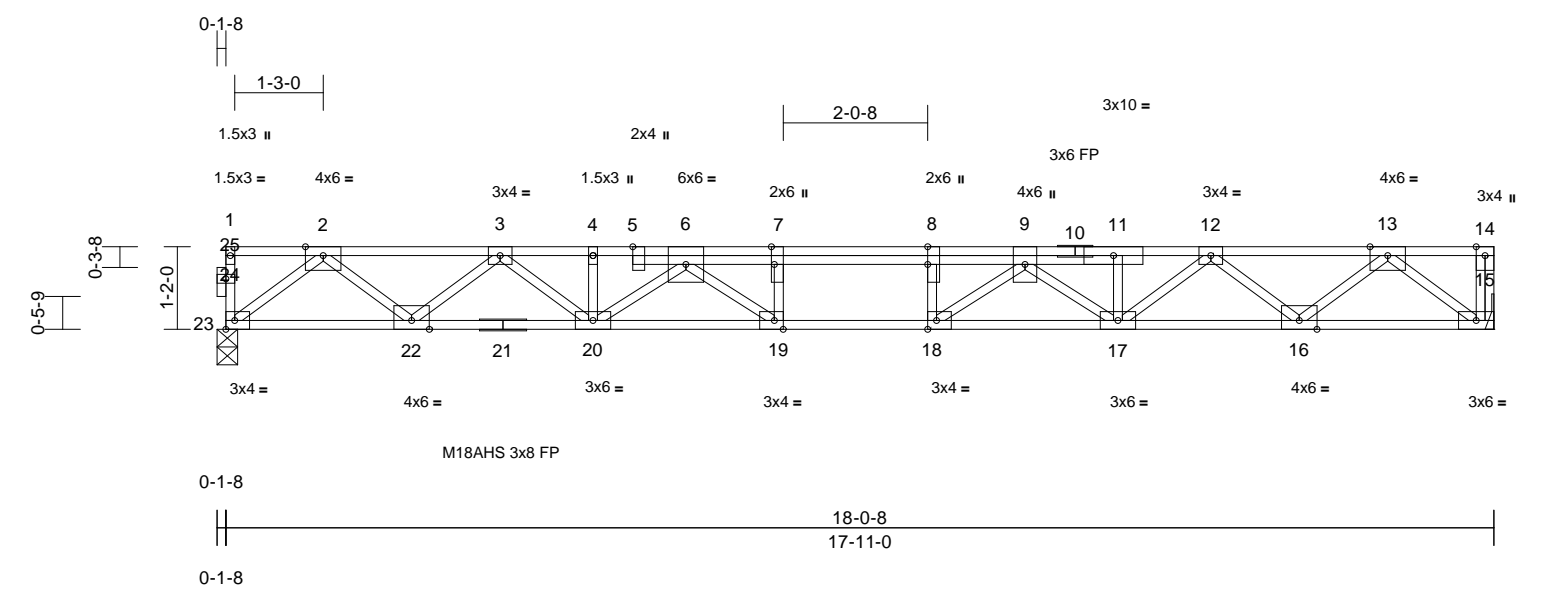
- 1) Unbalanced floor live loads have been considered for this design.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls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

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

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Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek
250231-B	F04	Floor	3	1	Job Reference (optional)
					I75443979



Scale = 1:32.6

Plate Offsets (X, Y): [4:0-1-8,0-6-12], [7:0-3-0,Edge], [8:0-3-0,Edge], [18:0-1-8,Edge], [19:0-1-8,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	0.17	Vert(LL)	-0.24	18-19	>880	480	M18AHS	186/179
TCDL	10.0	Lumber DOL	1.00	BC	0.80	Vert(CT)	-0.33	18-19	>640	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.07	15	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S								
											Weight: 100 lb	FT = 20%F, 11%E

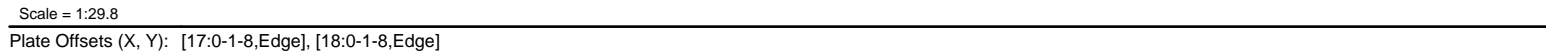
- LUMBER**
TOP CHORD 2x4 SP 2400F 2.0E(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)
- BRACING**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
- REACTIONS** (lb/size) 15=975/ Mechanical, 23=975/0-3-8
- FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2014/0, 3-4=-3396/0, 4-5=-3396/0, 5-6=-3397/0, 6-7=-4335/0, 7-8=-4335/0, 8-9=-4335/0, 9-10=-3443/0, 10-11=-3437/0, 11-12=-3443/0, 12-13=-2054/0
BOT CHORD 22-23=0/1168, 21-22=0/2827, 20-21=0/2827, 19-20=0/3961, 18-19=0/4335, 17-18=0/4046, 16-17=0/2856, 15-16=0/1219
WEBS 2-23=-1492/0, 2-22=0/1101, 3-22=-1058/0, 3-20=0/726, 6-20=-705/0, 6-19=0/784, 7-19=-423/0, 13-15=-1529/0, 13-16=0/1087, 12-16=-1043/0, 12-17=0/750, 9-17=-753/0, 9-18=-82/721, 8-18=-385/50

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



August 7,2025

Comtech, Inc, Fayetteville, NC - 28314, Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:41:19 Page: 1
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LUMBER		LOAD CASE(S)	Standard
TOP CHORD	2x4 SP 2400F 2.0E(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) 14= Mechanical, 22= Mechanical		
	Max Grav 14=963 (LC 1), 22=963 (LC 1)		
FORCES	(lb) - Maximum Compression/Maximum Tension		
TOP CHORD	1-22=-39/0, 13-14=-39/0, 1-2=0/0, 2-3=-2023/0, 3-4=-3369/0, 4-5=-3369/0, 5-6=-4004/0, 6-7=-4004/0, 7-8=-4004/0, 8-10=-3369/0, 10-11=-3369/0, 11-12=-2023/0, 12-13=0/0		
BOT CHORD	21-22=0/1202, 19-21=0/2811, 18-19=0/3763, 17-18=0/4004, 16-17=0/3763, 15-16=0/2811, 14-15=0/1202		
WEBS	2-22=-1508/0, 2-21=0/1069, 3-21=-1026/0, 3-19=0/712, 12-14=-1508/0, 12-15=0/1069, 11-15=-1026/0, 11-16=0/712, 10-16=-104/0, 8-16=-504/0, 8-17=-85/626, 4-19=-104/0, 5-19=-504/0, 5-18=-85/626, 6-18=-296/3, 7-17=-296/3		

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

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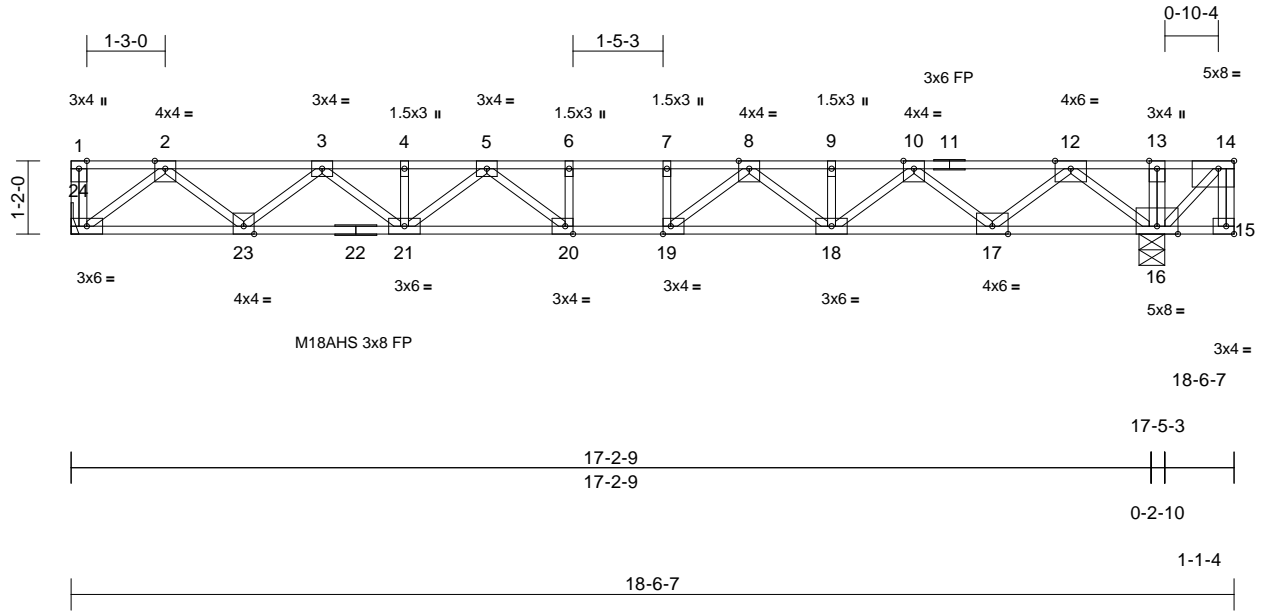


Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek
250231-B	F06	Floor	1	1	175443981
Job Reference (optional)					

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:41:20
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Page: 1



Scale = 1:36.7

Plate Offsets (X, Y): [14:0-3-0,Edge], [19:0-1-8,Edge], [20:0-1-8,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	0.76	Vert(LL)	-0.26	19-20	>803	480	M18AHS	186/179
TCDL	10.0	Lumber DOL	1.00	BC	0.85	Vert(CT)	-0.33	20-21	>627	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.72	Horz(CT)	0.06	16	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 98 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) 16=0-4-15, 24= Mechanical
	Max Grav 16=3307 (LC 1), 24=906 (LC 3)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-24=-39/0, 14-15=-16/0, 1-2=0/0, 2-3=-1882/0, 3-4=-3090/0, 4-5=-3090/0, 5-6=-3548/95, 6-7=-3548/95, 7-8=-3548/95, 8-9=-2835/715, 9-10=-2835/715, 10-12=-1438/1406, 12-13=0/2262, 13-14=0/2261
BOT CHORD	23-24=0/1128, 21-23=0/2606, 20-21=0/3419, 19-20=-95/3548, 18-19=-438/3264, 17-18=-1043/2254, 16-17=-1801/595, 15-16=0/0
WEBS	13-16=-152/0, 2-24=-1415/0, 2-23=0/983, 3-23=-942/0, 3-21=-27/618, 4-21=-91/1, 12-16=-1648/0, 12-17=0/1254, 10-17=-1217/0, 10-18=0/903, 9-18=-114/0, 8-18=-716/0, 8-19=-3/919, 5-21=-420/108, 5-20=-461/460, 6-20=-209/154, 7-19=-399/0, 14-16=-3096/0

NOTES

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

- 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.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1400 lb down at 18-4-15, and 700 lb down at 18-4-15 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 + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 15-24=-10, 1-14=-100
Concentrated Loads (lb)
Vert: 14=-2100 (F=-1400, B=-700)



August 7, 2025

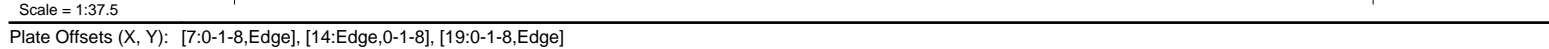
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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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Comtech, Inc, Fayetteville, NC - 28314, Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:41:20 Page: 1
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LUMBER		3) Refer to girder(s) for truss connections.
TOP CHORD	2x4 SP No.1(flat)	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.
BOT CHORD	2x4 SP No.1(flat) *Except* 21-14:2x4 SP 2400F 2.0E(flat)	5) CAUTION, Do not erect truss backwards.
WEBS	2x4 SP No.3(flat) *Except* 14-12:2x4 SP No.2(flat)	6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 700 lb down at 18-4-15 on top chord. The design/selection of such connection device(s) is the responsibility of others.
OTHERS	2x4 SP No.3(flat)	7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
BRACING		LOAD CASE(S) Standard
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.	1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.	Uniform Loads (lb/ft) Vert: 14-23=-10, 1-13=-100
REACTIONS	(size) 15=0-3-8, 23= Mechanical Max Grav 15=2765 (LC 1), 23=813 (LC 3)	Concentrated Loads (lb) Vert: 13=-1400 (F=-700)
FORCES	(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-23=-39/0, 13-14=-1447/0, 1-2=0/0, 2-3=-1647/79, 3-4=-2631/311, 4-5=-2631/311, 5-6=-2778/987, 6-7=-2778/987, 7-8=-2237/1559, 8-10=-1011/2408, 10-11=0/3441, 11-12=0/3441, 12-13=0/0	
BOT CHORD	22-23=-13/1004, 20-22=-161/2264, 19-20=-552/2836, 18-19=-987/2778, 17-18=-987/2778, 16-17=-1981/1770, 15-16=-2876/219, 14-15=-1648/0 11-15=-135/0, 10-15=-1695/0, 10-16=0/1279, 8-16=-1226/0, 8-17=0/936, 7-17=-1263/0, 7-18=-26/424, 2-23=-1259/17, 2-22=-85/837, 3-22=-803/107, 3-20=-192/470, 4-20=-76/13, 5-20=-262/307, 5-19=-770/250, 6-19=-107/198, 12-14=0/2194, 12-15=-2384/0	
WEBS		

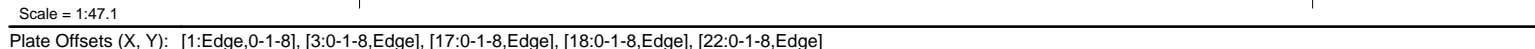
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WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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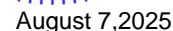


Comtech, Inc, Fayetteville, NC - 28314, Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:41:20 Page: 1
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LUMBER		4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
TOP CHORD	2x4 SP No.1(flat)	5) CAUTION, Do not erect truss backwards.
BOT CHORD	2x4 SP No.1(flat)	6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 300 lb down at 0-1-8 on top chord. The design/selection of such connection device(s) is the responsibility of others.
WEBS	2x4 SP No.3(flat)	7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
OTHERS	2x4 SP No.3(flat)	
BRACING		LOAD CASE(S) Standard
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.	1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.	Uniform Loads (lb/ft) Vert: 15-25=-8, 1-14=-80
REACTIONS (size) 15=0-3-8, 20=0-3-8, 24=0-3-8		Concentrated Loads (lb) Vert: 1=-1452 (F=-300)
	Max Grav 15=496 (LC 11), 20=953 (LC 4), 24=1789 (LC 3)	
FORCES (lb) - Maximum Compression/Maximum Tension		
TOP CHORD	1-25=-23/0, 14-15=-29/0, 1-2=0/785, 2-3=0/786, 3-4=-77/695, 4-5=-77/695, 5-6=0/938, 6-7=0/938, 7-8=-632/289, 8-9=-1328/0, 9-10=-1328/0, 10-11=-1328/0, 11-13=-949/0, 13-14=-2/0	
BOT CHORD	24-25=-1/0, 23-24=-695/77, 22-23=-695/77, 20-22=-724/0, 19-20=-463/198, 18-19=-114/1054, 17-18=0/1328, 16-17=0/1248, 15-16=0/609	
WEBS	2-24=-97/0, 6-20=-106/0, 3-24=-495/0, 5-20=-471/0, 5-22=0/339, 4-22=-177/0, 3-23=-23/67, 7-20=-942/0, 7-19=0/611, 8-19=-617/0, 13-15=-762/0, 13-16=0/443, 11-16=-390/0, 11-17=-102/223, 8-18=0/494, 9-18=-224/0, 10-17=-115/44, 1-24=-1653/0	

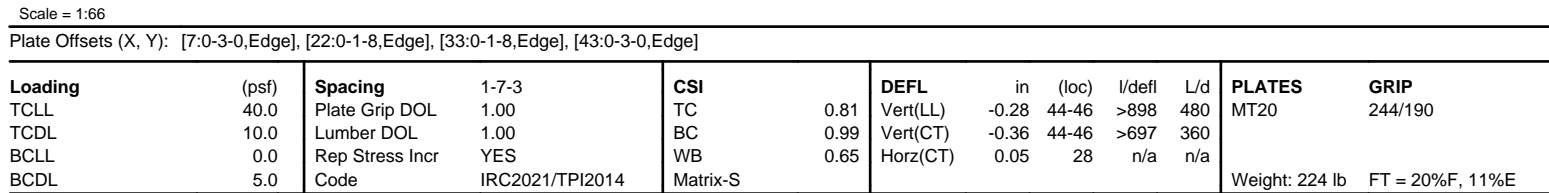
- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 (=) MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.



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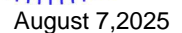
WEBS

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

NOTES

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

LOAD CASE(S) Standard

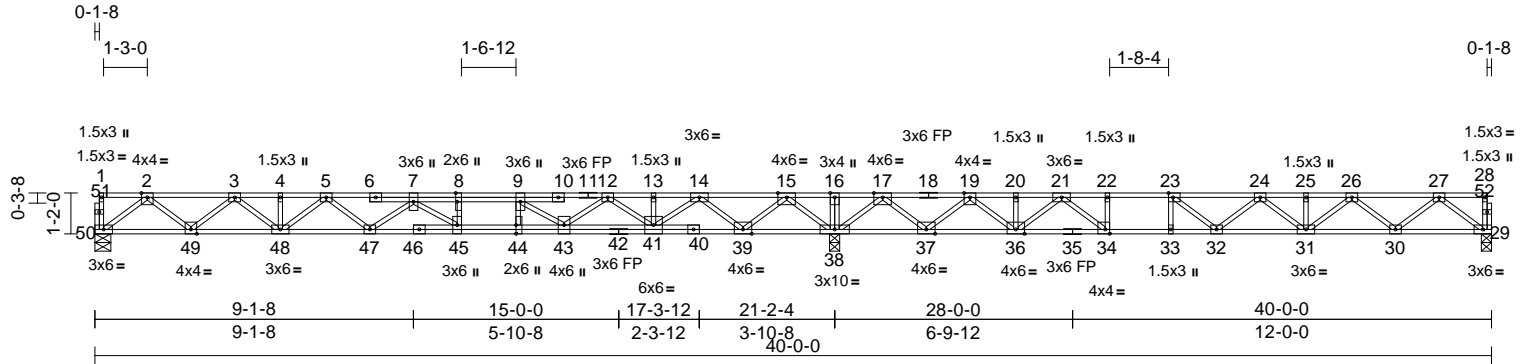


Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek
250231-B	F10	Floor	4	1	Job Reference (optional)
					I75443985

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Page: 1



Scale = 1:66

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

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.82	Vert(LL)	-0.29	45-47	>874	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	1.00	Vert(CT)	-0.37	45-47	>677	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.05	29	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 220 lb	FT = 20%F, 11%E

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

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

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

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

WEBS
16-38=-92/0, 2-50=-1262/0, 2-49=0/912, 3-49=-879/0, 3-48=0/628, 4-48=-86/0, 5-48=-448/0, 5-47=-22/308, 7-47=-357/77, 7-45=-525/166, 8-45=-82/123, 15-38=-1725/0, 15-39=0/1370, 14-39=-1341/0, 14-41=0/1144, 13-41=-88/0, 12-41=-944/0, 12-43=0/796, 9-43=-1110/0, 9-44=0/342, 27-29=-1092/0, 27-30=0/754, 26-30=-715/0, 26-31=-44/436, 25-31=-19/15, 17-38=-1595/0, 17-37=0/1246, 19-37=-1195/0, 19-36=0/961, 20-36=-117/0, 21-36=-841/0, 21-34=0/1054, 22-34=-407/0, 24-31=-391/39, 24-32=-275/20, 23-32=0/577, 23-33=-309/0

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

LOAD CASE(S) Standard



August 7, 2025

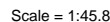
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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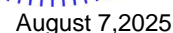
Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.70	Vert(LL)	-0.29	30-32	>872	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.88	Vert(CT)	-0.40	30-32	>634	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.59	Horz(CT)	0.06	23	n/a	n/a		
BCDL	5.0	Code	IRC2021/TP12014	Matrix-S							Weight: 160 lb	FT = 20%F, 11%E

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

NOTES

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

LOAD CASE(S) Standard



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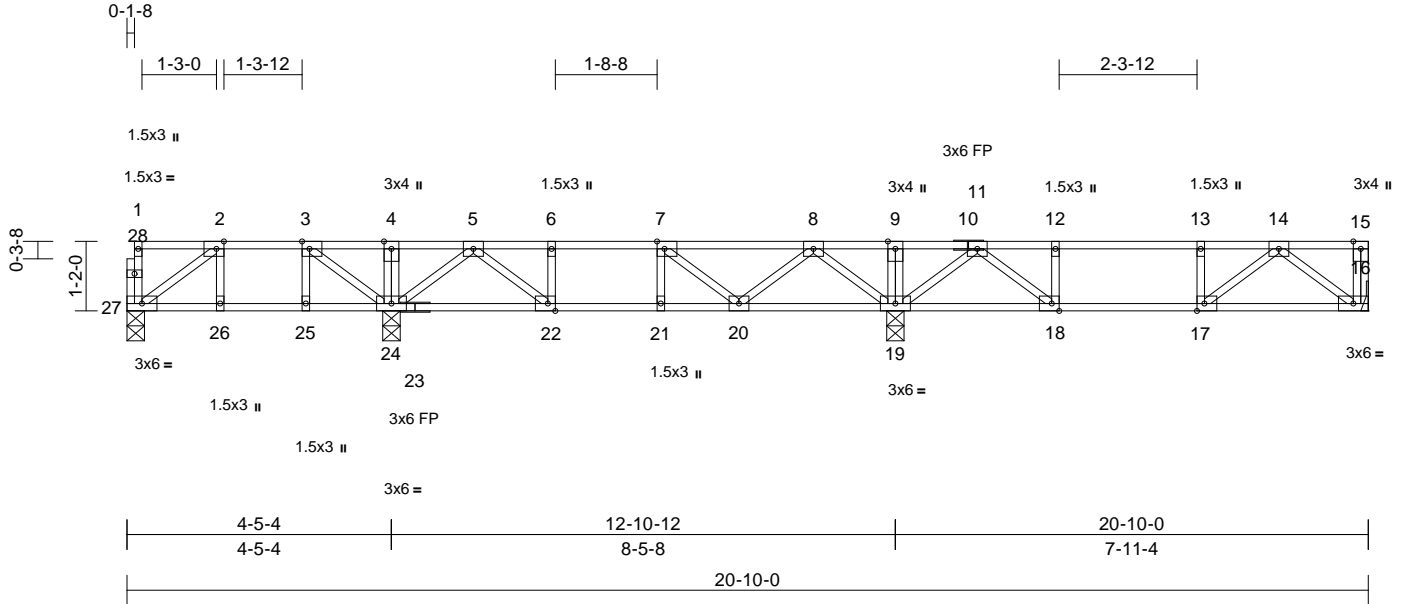
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek
250231-B	F12	Floor	2	1	Job Reference (optional)
					I75443987

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Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:41:21
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Page: 1



Scale = 1:38.7

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

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

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
6-0-0 oc bracing: 19-20,18-19.

REACTIONS (size) 16= Mechanical, 19=0-3-8, 24=0-3-8, 27=0-3-8
Max Grav 16=324 (LC 5), 19=792 (LC 11), 24=551 (LC 16), 27=190 (LC 14)

FORCES (lb) - Maximum Compression/Maximum Tension

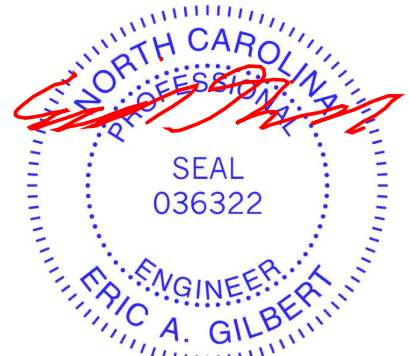
TOP CHORD 1-27=-53/0, 15-16=-46/0, 1-2=-3/0, 2-3=-199/0, 3-4=-33/116, 4-5=-33/116, 5-6=-636/0, 6-7=-636/0, 7-8=-491/0, 8-9=0/394, 9-11=0/394, 11-12=-542/0, 12-13=-542/0, 13-14=-542/0, 14-15=0/0
BOT CHORD 26-27=0/199, 25-26=0/199, 24-25=0/199, 22-24=0/365, 21-22=0/636, 20-21=0/636, 19-20=-11/298, 18-19=-102/259, 17-18=0/542, 16-17=0/351
WEBS 4-24=-125/0, 9-19=-106/0, 2-27=-242/0, 3-24=-292/0, 2-26=-13/14, 3-25=0/33, 8-19=-603/0, 5-24=-475/0, 8-20=0/293, 5-22=0/346, 7-20=-253/0, 6-22=-162/0, 7-21=-44/17, 11-19=-528/0, 11-18=0/440, 14-16=-440/0, 14-17=-10/244, 13-17=-140/11, 12-18=-228/0

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.
- 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



August 7, 2025

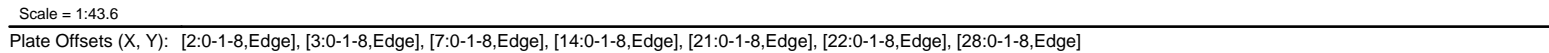
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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818 Soundside Road
Edenton, NC 27932

Comtech, Inc, Fayetteville, NC - 28314, Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:41:21 Page: 1
ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RIC?PsB70Hq3NSgPqnL8w3uITxbGKwRCdoi7J4zJC?i



BLUMER
TOP CHORD 2x4 SP No.1(flat) *Except* 11-18:2x4 SP 2400F 2.0E(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

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=0-3-8, 24=0-3-8, 29=0-3-8, 32=0-3-8
Max Grav 19=835 (LC 13), 24=1448 (LC 11), 29=668 (LC 3), 32=214 (LC 14)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-32=-72/0, 18-19=-54/0, 1-2=-4/0, 2-3=-200/11, 3-4=0/222, 4-5=0/222, 5-6=-622/95, 6-7=-622/95, 7-8=-360/261, 8-9=0/1004, 9-10=0/1004, 10-12=-1096/15, 12-13=-2403/0, 13-14=-2403/0, 14-15=-2421/0, 15-17=-1776/0, 17-18=-3/0

BOT CHORD 31-32=-11/200, 30-31=-11/200, 29-30=-11/200, 28-29=-73/362, 27-28=-95/622, 25-27=-95/622, 24-25=-413/74, 23-24=-239/425, 22-23=0/1787, 21-22=0/2403, 20-21=0/2478, 19-20=0/1027

WEBS 4-29=-145/0, 9-24=-95/0, 2-32=-243/15, 3-29=-412/0, 2-31=-29/2, 3-30=0/50, 8-24=-833/0, 5-29=-543/0, 8-25=0/456, 5-28=-28/337, 7-25=-458/0, 6-28=-167/13, 7-27=-14/67, 10-24=-1357/0, 10-23=0/912, 12-23=-945/0, 17-19=-1284/0, 17-20=0/967, 15-20=-901/0, 15-21=-315/191, 12-22=0/974, 13-22=-460/0, 14-21=-109/89

- 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.

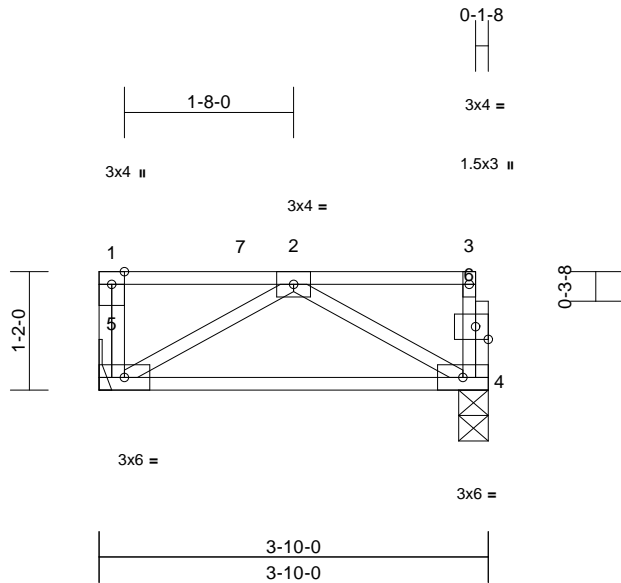
WARNING – Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEL REFERENCE PAGE MIT-TR-17-0169, 1/12/2023 BEFORE USE.

Design valid for use only with MiTeTe® 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/TP1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Components Association (www.sbcacomponents.com)



818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek
250231-B	F14-GR	Floor Girder	1	1	I75443989
Job Reference (optional)					



Scale = 1:22.7

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

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	0.38	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.14	Vert(CT)	-0.02	4-5	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.10	Horz(CT)	0.00	4	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 22 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.1(flat)

BOT CHORD 2x4 SP No.1(flat)

WEBS 2x4 SP No.3(flat)

OTHERS 2x4 SP No.3(flat)

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

BRACING

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

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

REACTIONS (size) 4=0-3-8, 5= Mechanical

Max Grav 4=523 (LC 1), 5=331 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-5=-109/0, 3-4=-312/0, 1-2=0/0, 2-3=-19/0

BOT CHORD 4-5=0/357

WEBS 2-4=-391/0, 2-5=-413/0

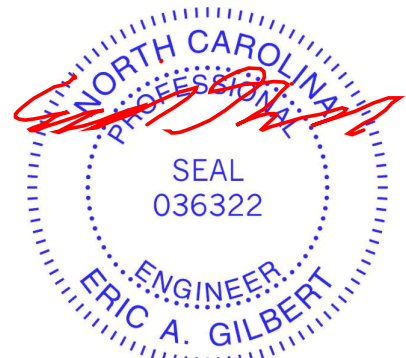
- NOTES**
- Plates checked for a plus or minus 1 degree rotation about its center.
 - Refer to girder(s) for truss to truss connections.
 - Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their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

LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (lb/ft)

Vert: 4-5=-8, 1-3=-80



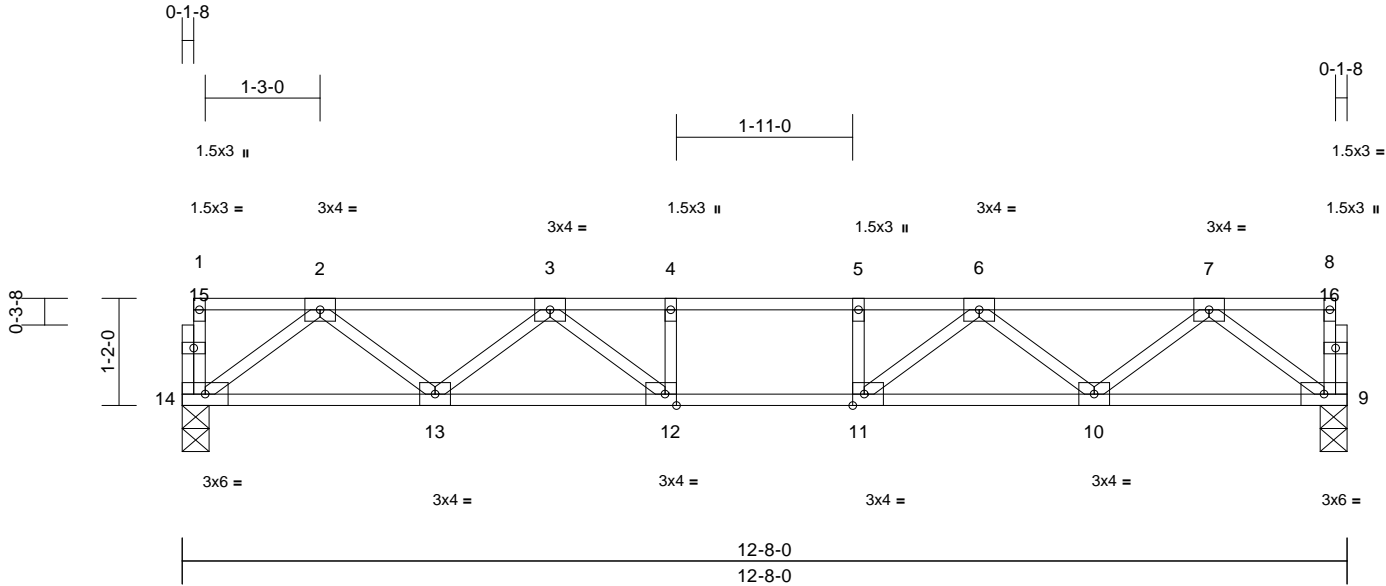
August 7,2025

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek
250231-B	F15	Floor	5	1	175443990
Job Reference (optional)					

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:41:21
ID:3uY_8Oep1_ZOjqzSUMln8uyqc9d-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:25.1																	
Plate Offsets (X, Y): [11:0-1-8,Edge], [12:0-1-8,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		0.26		Vert(LL)	-0.07	12-13	>999	360	MT20	244/190
TCDL		10.0	Lumber DOL		1.00		BC		0.35		Vert(CT)	-0.09	12-13	>999	240		
BCLL		0.0	Rep Stress Incr		YES		WB		0.24		Horz(CT)	0.02	9	n/a	n/a		
BCDL		5.0	Code		IRC2021/TPI2014		Matrix-S										
															Weight: 63 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, 14=0-3-8
	Max Grav 9=541 (LC 1), 14=541 (LC 1)
FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-14=-29/0, 8-9=-29/0, 1-2=-2/0, 2-3=-1057/0, 3-4=-1596/0, 4-5=-1596/0, 5-6=-1596/0, 6-7=-1057/0, 7-8=-2/0
BOT CHORD	13-14=0/668, 12-13=0/1418, 11-12=0/1596, 10-11=0/1418, 9-10=0/668
WEBS	7-9=-836/0, 2-14=-836/0, 7-10=0/506, 2-13=0/506, 6-10=-470/0, 3-13=-470/0, 6-11=0/388, 3-12=0/388, 4-12=-183/0, 5-11=-183/0

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

LOAD CASE(S) Standard



August 7,2025

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)



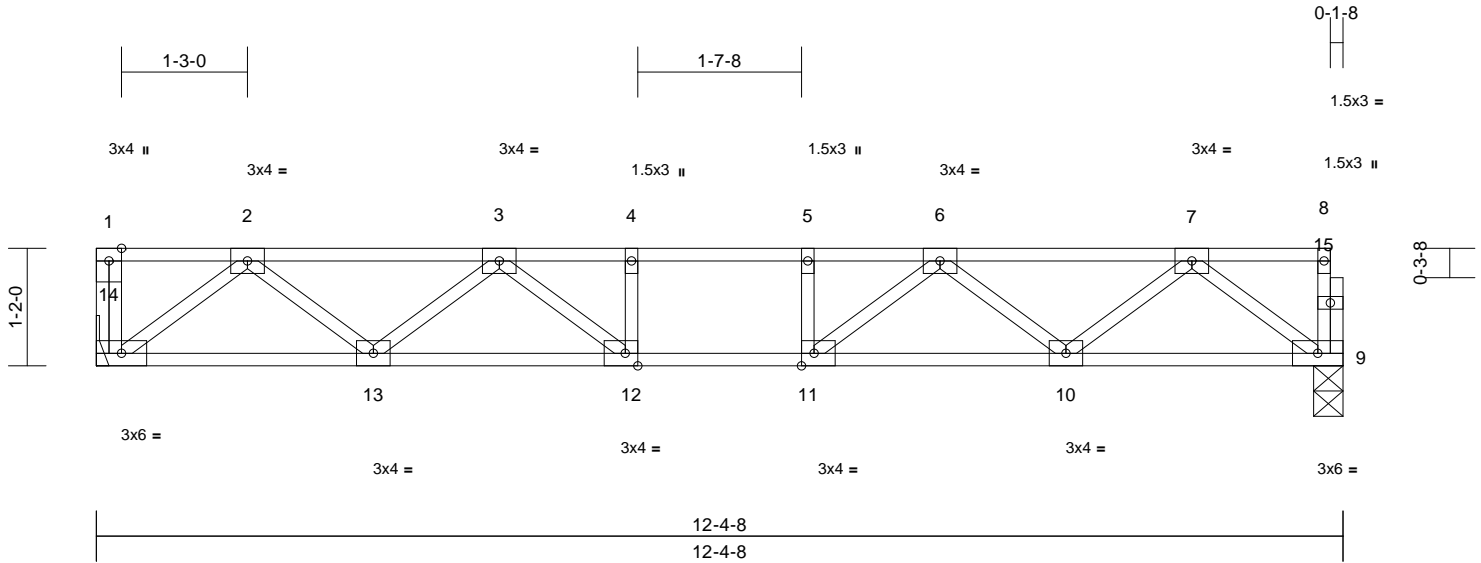
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek	
250231-B	F16	Floor	2	1		I75443991
Job Reference (optional)						

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:41:21
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Page: 1



Scale = 1:22.9

Plate Offsets (X, Y): [11:0-1-8,Edge], [12:0-1-8,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	0.22	Vert(LL)	-0.06	12-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.32	Vert(CT)	-0.08	12-13	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.23	Horz(CT)	0.02	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 63 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, 14= Mechanical
Max Grav 9=528 (LC 1), 14=533 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-14=-32/0, 8-9=-29/0, 1-2=0/0, 2-3=-1025/0, 3-4=-1527/0, 4-5=-1527/0, 5-6=-1527/0, 6-7=-1025/0, 7-8=-2/0

BOT CHORD 13-14=0/651, 12-13=0/1371, 11-12=0/1527, 10-11=0/1371, 9-10=0/651

WEBS 7-9=-814/0, 2-14=-817/0, 7-10=0/487, 2-13=0/487, 6-10=-451/0, 3-13=-450/0, 6-11=0/352, 3-12=0/352, 4-12=-163/0, 5-11=-163/0

NOTES

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

LOAD CASE(S) Standard



August 7, 2025

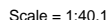
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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818 Soundside Road
Edenton, NC 27932

Comtech, Inc, Fayetteville, NC - 28314, Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:41:21 Page: 1
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LUMBER		WEBS	2-37=-130/0, 3-36=-134/0, 4-35=-133/0,
TOP CHORD	2x4 SP No.1(flat)		5-34=-133/0, 6-33=-133/0, 7-32=-133/0,
BOT CHORD	2x4 SP No.1(flat)		8-30=-133/0, 9-29=-133/0, 10-28=-133/0,
WEBS	2x4 SP No.3(flat)		11-27=-133/0, 12-26=-133/0, 13-25=-133/0,
OTHERS	2x4 SP No.3(flat)		15-24=-133/0, 16-23=-133/0, 17-22=-134/0,
BRACING			18-21=-132/0

BRACING

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

REACTIONS

(size)	20=22-8-0, 21=22-8-0, 22=22-8-0, 23=22-8-0, 24=22-8-0, 25=22-8-0, 26=22-8-0, 27=22-8-0, 28=22-8-0, 29=22-8-0, 30=22-8-0, 32=22-8-0, 33=22-8-0, 34=22-8-0, 35=22-8-0, 36=22-8-0, 37=22-8-0, 38=22-8-0
Max Grav	20=54 (LC 1), 21=146 (LC 1), 22=147 (LC 1), 23=147 (LC 1), 24=147 (LC 1), 25=147 (LC 1), 26=147 (LC 1), 27=147 (LC 1), 28=147 (LC 1), 29=147 (LC 1), 30=147 (LC 1), 32=147 (LC 1), 33=147 (LC 1), 34=147 (LC 1), 35=146 (LC 1), 36=148 (LC 1), 37=141 (LC 1), 38=57 (LC 1)

FORCES

(Ib) - Maximum Compression/Maximum Tension

TOP CHORD 1-38=51/0, 19-20=50/0, 1-2=-8/0, 2-3=-8/0,
3-4=-8/0, 4-5=-8/0, 5-6=-8/0, 6-7=-8/0,
7-8=-8/0, 8-9=-8/0, 9-10=-8/0, 10-11=-8/0,
11-12=-8/0, 12-13=-8/0, 13-15=-8/0,
15-16=-8/0, 16-17=-8/0, 17-18=-8/0,
18-19=-8/0

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

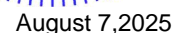
WEBS

2-37=-130/0, 3-36=-134/0, 4-35=-133/0,
5-34=-133/0, 6-33=-133/0, 7-32=-133/0,
8-30=-133/0, 9-29=-133/0, 10-28=-133/0,
11-27=-133/0, 12-26=-133/0, 13-25=-133/0,
15-24=-133/0, 16-23=-133/0, 17-22=-134/0,
18-21=-132/0

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



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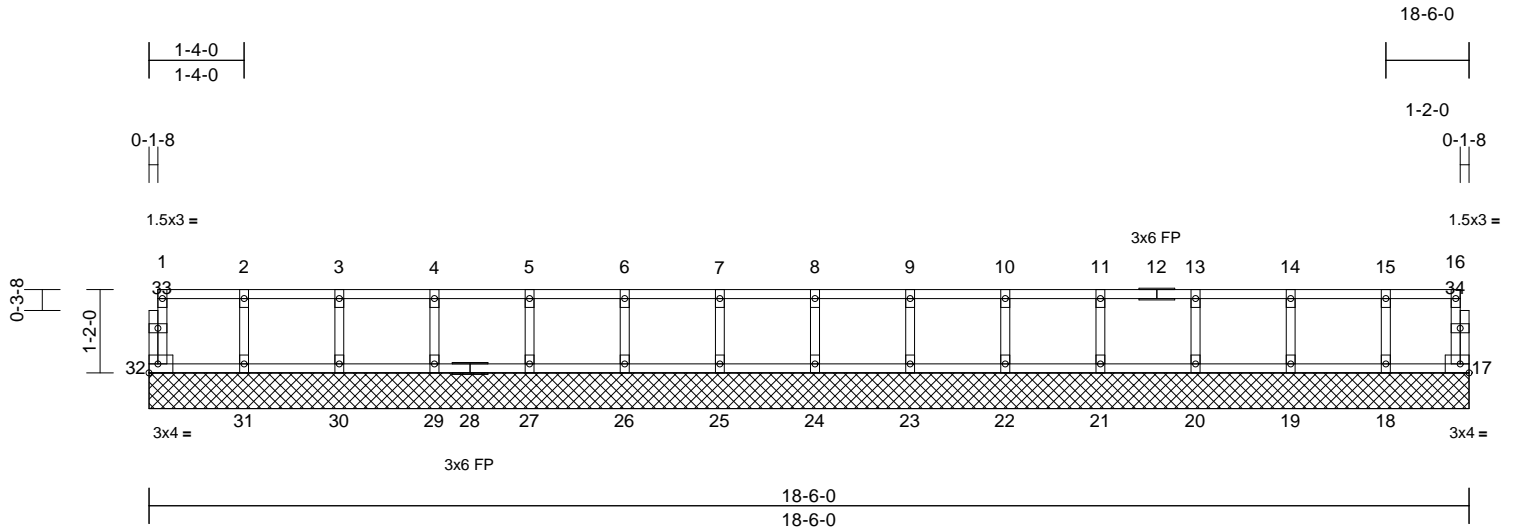
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek	
250231-B	FKW2	Floor Supported Gable	1	1	Job Reference (optional)	I75443993

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:41:21
ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3uITXbGKwRCDoi7J4zJC?f

Page: 1



Scale = 1:32.3

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	17	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 77 lb	FT = 20%F, 11%E

LUMBER

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

BRACING

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

REACTIONS	(size)	17=18-6-0, 18=18-6-0, 19=18-6-0, 20=18-6-0, 21=18-6-0, 22=18-6-0, 23=18-6-0, 24=18-6-0, 25=18-6-0, 26=18-6-0, 27=18-6-0, 29=18-6-0, 30=18-6-0, 31=18-6-0, 32=18-6-0
Max Grav		17=46 (LC 1), 18=132 (LC 1), 19=150 (LC 1), 20=146 (LC 1), 21=147 (LC 1), 22=147 (LC 1), 23=147 (LC 1), 24=147 (LC 1), 25=147 (LC 1), 26=147 (LC 1), 27=147 (LC 1), 29=147 (LC 1), 30=147 (LC 1), 31=145 (LC 1), 32=54 (LC 1)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-32=-50/0, 16-17=-41/0, 1-2=-8/0, 2-3=-8/0, 3-4=-8/0, 4-5=-8/0, 5-6=-8/0, 6-7=-8/0, 7-8=-8/0, 8-9=-8/0, 9-10=-8/0, 10-11=-8/0, 11-13=-8/0, 13-14=-8/0, 14-15=-8/0, 15-16=-8/0
BOT CHORD	31-32=0/8, 30-31=0/8, 29-30=0/8, 27-29=0/8, 26-27=0/8, 25-26=0/8, 24-25=0/8, 23-24=0/8, 22-23=0/8, 21-22=0/8, 20-21=0/8, 19-20=0/8, 18-19=0/8, 17-18=0/8
WEBS	2-31=-131/0, 3-30=-134/0, 4-29=-133/0, 5-27=-133/0, 6-26=-133/0, 7-25=-133/0, 8-24=-133/0, 9-23=-133/0, 10-22=-133/0, 11-21=-134/0, 13-20=-133/0, 14-19=-136/0, 15-18=-122/0

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



August 7, 2025

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

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

ENGINEERING BY
TRENCO
A MiTek Affiliate

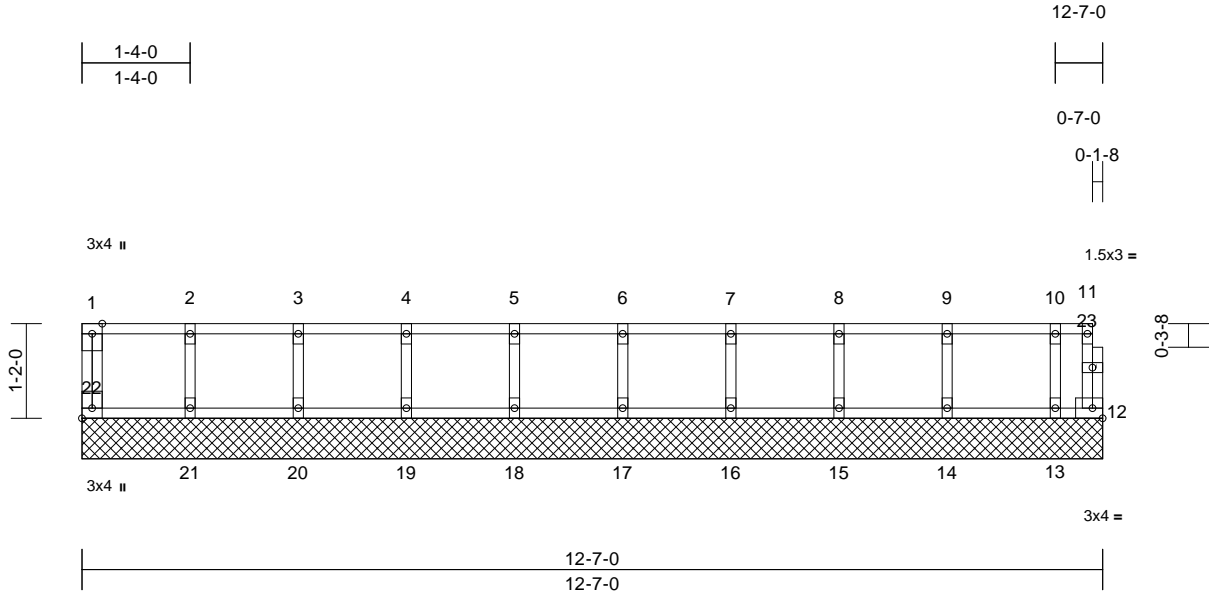
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek	
250231-B	FKW3	Floor Supported Gable	1	1	Job Reference (optional)	I75443994

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:41:21
ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcD0i7J4zJC?f

Page: 1



Scale = 1:28.4

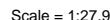
Plate Offsets (X, Y): [22:Edge,0-1-8]												
Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	12	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 55 lb	FT = 20%F, 11%E

- LUMBER**
- TOP CHORD 2x4 SP No.1(flat)
- 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) 12=12-7-0, 13=12-7-0, 14=12-7-0, 15=12-7-0, 16=12-7-0, 17=12-7-0, 18=12-7-0, 19=12-7-0, 20=12-7-0, 21=12-7-0, 22=12-7-0
- Max Grav 12=8 (LC 1), 13=81 (LC 1), 14=122 (LC 1), 15=116 (LC 1), 16=118 (LC 1), 17=117 (LC 1), 18=117 (LC 1), 19=117 (LC 1), 20=117 (LC 1), 21=118 (LC 1), 22=47 (LC 1)
- FORCES** (lb) - Maximum Compression/Maximum Tension
- TOP CHORD 1-22=-44/0, 11-12=-1/0, 1-2=-5/0, 2-3=-5/0, 3-4=-5/0, 4-5=-5/0, 5-6=-5/0, 6-7=-5/0, 7-8=-5/0, 8-9=-5/0, 9-10=-5/0, 10-11=-5/0
- BOT CHORD 21-22=0/5, 20-21=0/5, 19-20=0/5, 18-19=0/5, 17-18=0/5, 16-17=0/5, 15-16=0/5, 14-15=0/5, 13-14=0/5, 12-13=0/5
- WEBS 2-21=-106/0, 3-20=-107/0, 4-19=-107/0, 5-18=-107/0, 6-17=-107/0, 7-16=-107/0, 8-15=-106/0, 9-14=-111/0, 10-13=-81/0
- NOTES**
- 1) All plates are 1.5x3 (||) MT20 unless otherwise indicated.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 3) Gable requires continuous bottom chord bearing.
- 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 5) Gable studs spaced at 1-4-0 oc.
- 6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 7) CAUTION, Do not erect truss backwards.
- LOAD CASE(S)** Standard



August 7, 2025

Comtech, Inc, Fayetteville, NC - 28314, Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:41:21 Page: 1
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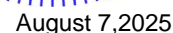
LUMBER		6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
TOP CHORD	2x4 SP No.1(flat)	
BOT CHORD	2x4 SP No.1(flat)	
WEBS	2x4 SP No.3(flat)	
OTHERS	2x4 SP No.3(flat)	
		LOAD CASE(S) Standard

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

REACTIONS (size)	
	12=12-4-0, 13=12-4-0, 14=12-4-0, 15=12-4-0, 16=12-4-0, 17=12-4-0, 18=12-4-0, 19=12-4-0, 20=12-4-0, 21=12-4-0
Max Grav	12=79 (LC 1), 13=160 (LC 1), 14=143 (LC 1), 15=148 (LC 1), 16=146 (LC 1), 17=147 (LC 1), 18=146 (LC 1), 19=149 (LC 1), 20=136 (LC 1), 21=61 (LC 1)

FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-21=-54/0, 11-12=0/19, 1-2=-15/0, 2-3=-15/0, 3-4=-15/0, 4-5=-15/0, 5-6=-15/0, 6-7=-15/0, 7-8=-15/0, 8-9=-15/0, 9-10=-15/0, 10-11=-3/0
BOT CHORD	20-21=0/15, 19-20=0/15, 18-19=0/15, 17-18=0/15, 16-17=0/15, 15-16=0/15, 14-15=0/15, 13-14=0/15, 12-13=0/15
WEBS	2-20=-127/0, 3-19=-135/0, 4-18=-133/0, 5-17=-133/0, 6-16=-133/0, 7-15=-134/0, 8-14=-131/0, 9-13=-143/0, 10-12=-93/0

- 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" 0c.



 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/TP1 Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Components Association (www.sbcacomponents.com)

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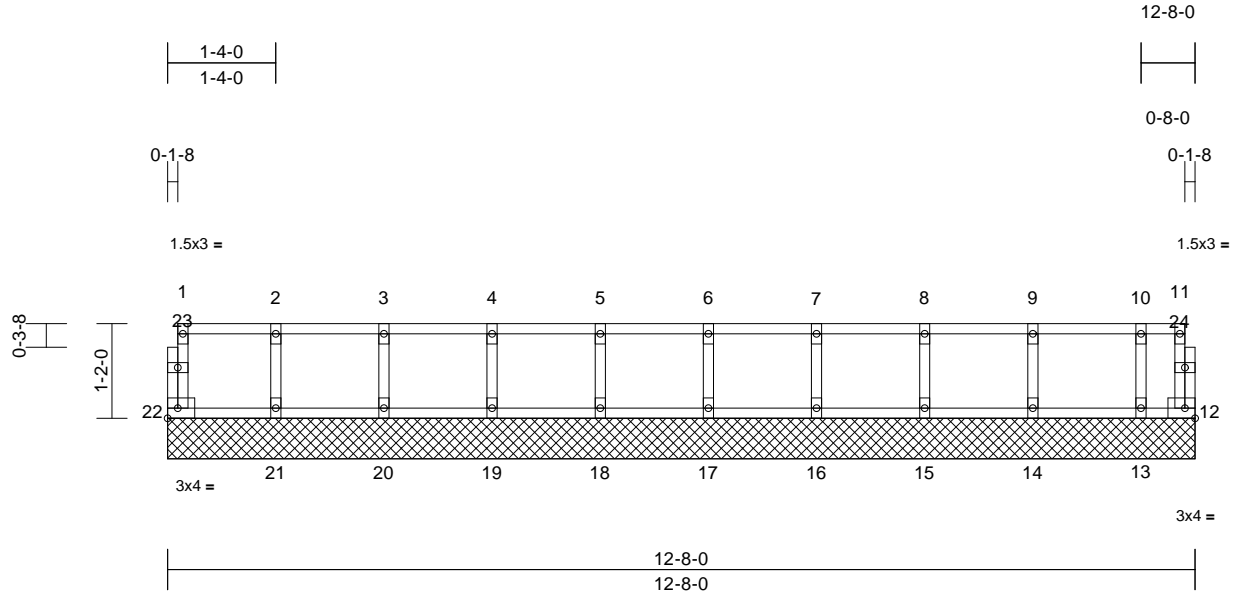
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek	I75443996
250231-B	FKW5	Floor Supported Gable	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:41:21
ID:pXL0rRIBAUa8un_7TYpl8UyqcBM-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC7f

Page: 1



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	12	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R						Weight: 55 lb	FT = 20%F, 11%E

LUMBER

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

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

LOAD CASE(S) Standard

BRACING

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

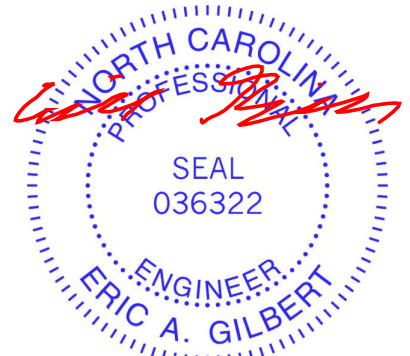
REACTIONS (size) 12=12-8-0, 13=12-8-0, 14=12-8-0, 15=12-8-0, 16=12-8-0, 17=12-8-0, 18=12-8-0, 19=12-8-0, 20=12-8-0, 21=12-8-0, 22=12-8-0
Max Grav 12=16 (LC 1), 13=106 (LC 1), 14=153 (LC 1), 15=145 (LC 1), 16=147 (LC 1), 17=147 (LC 1), 18=147 (LC 1), 19=147 (LC 1), 20=147 (LC 1), 21=148 (LC 1), 22=52 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-22=-49/0, 11-12=-8/0, 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
BOT CHORD 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, 12-13=0/6
WEBS 2-21=-133/0, 3-20=-134/0, 4-19=-133/0, 5-18=-133/0, 6-17=-133/0, 7-16=-134/0, 8-15=-132/0, 9-14=-139/0, 10-13=-102/0

NOTES

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



August 7, 2025

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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

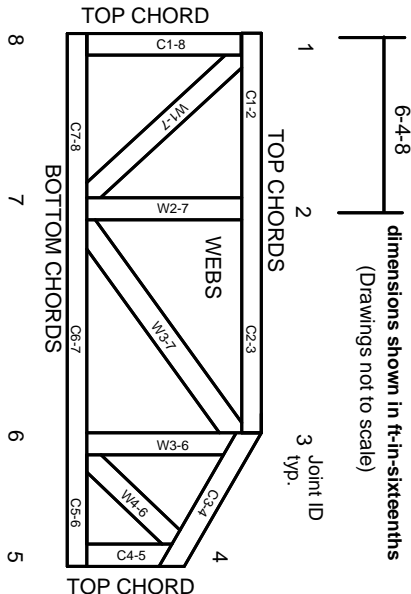


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System





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

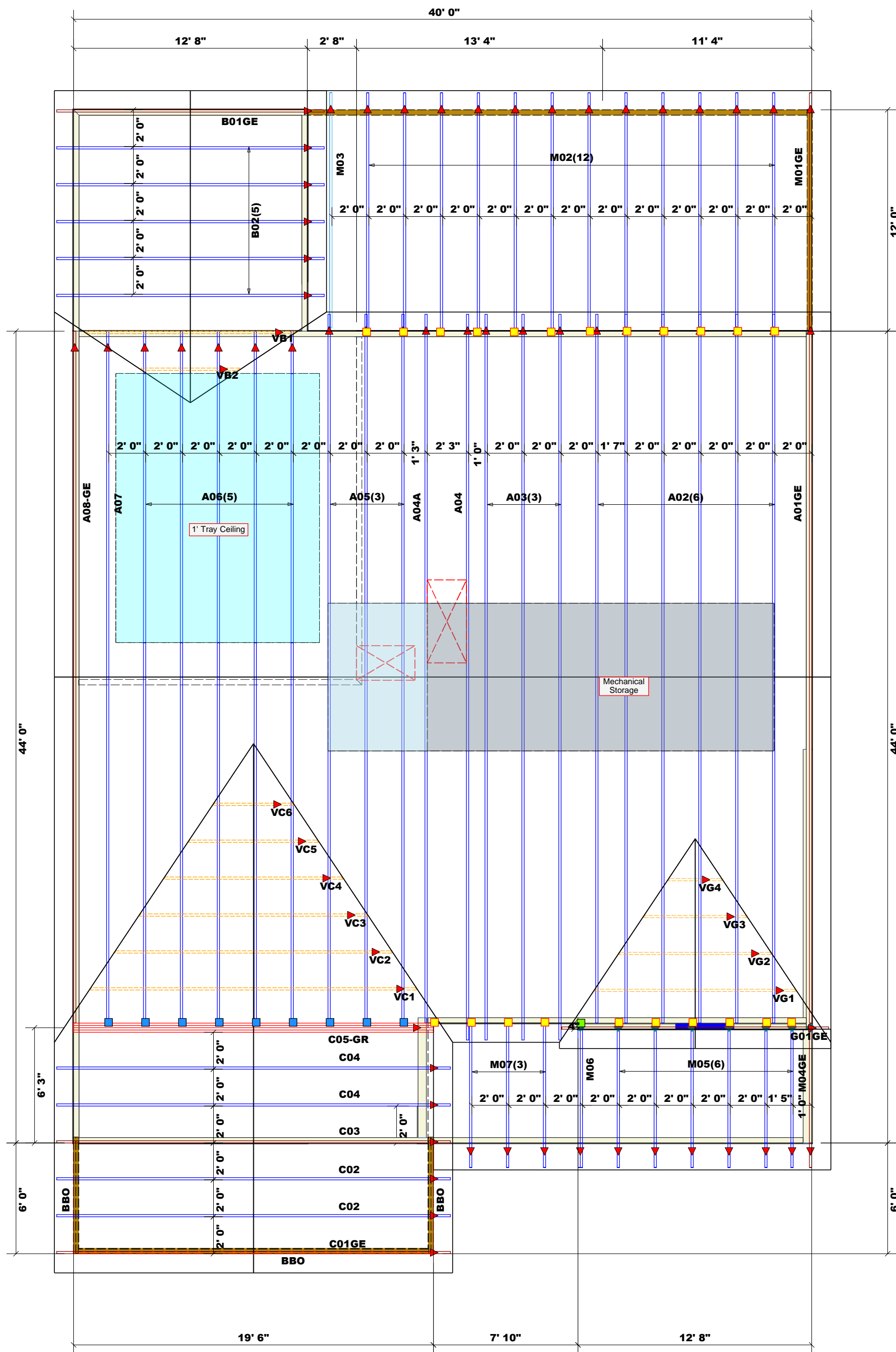
END REACTION (UP TO)	REQ'D STUDS FOR (1) PLY HEADER	END REACTION (UP TO)	REQ'D STUDS FOR (3) PLY HEADER	END REACTION (UP TO)	REQ'D STUDS FOR (4) PLY HEADER
1700	1	2550	1	3400	1
3400	2	5100	2	6800	2
5100	3	7650	3	10200	3
6800	4	10200	4	13600	4
8500	5	12750	5	17000	5
10200	6	15300	6		
11900	7				
13600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

	Lillington / Harnett				
	778 Beacon Hill Road				
	Roof				
	8/6/25				
	Johnnie Baggett				
	House Account				

	CITY / CO.				
	ADDRESS				
	MODEL				
	DATE REV.				
	DRAWN BY				
	SALES REP.				

	Site Name				
	Lot 48 Duncan's Creek				
	The Apex - Georgian - Face				
	Seal Date				
	Quote #				
	250231 - A				

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



Dimension Notes
1. All exterior wall to wall dimensions are to face of wall 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.

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				

Products					
Net Qty	Plies	Product	Length	PlotID	
2	2	1-3/4"x 14" LVL Kerto-S	7' 1 1/2"	2FB1	
2	2	1-3/4"x 14" LVL Kerto-S	6' 5"	2FB3	
2	2	1-3/4"x 14" LVL Kerto-S	3' 11"	2FB2	
3	3	1-3/4"x 23-7/8" LVL Kerto-S	21' 3"	2FB5	

Nail Information		Connector Information				
Truss	Header	Supported Member	Qty	Manuf	Product	Sym
10d/3"	10d/3"	NA	22	USP	JUS24	
16d/3-1/2"	16d/3-1/2"	NA	9	USP	HUS26	
10d/3"	16d/3-1/2"	NA	1	USP	THD26-2	

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: 250231-A
Lot 48 Duncans Creek

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Pages or sheets covered by this seal: I75443999 thru I75444034

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

North Carolina COA: C-0844

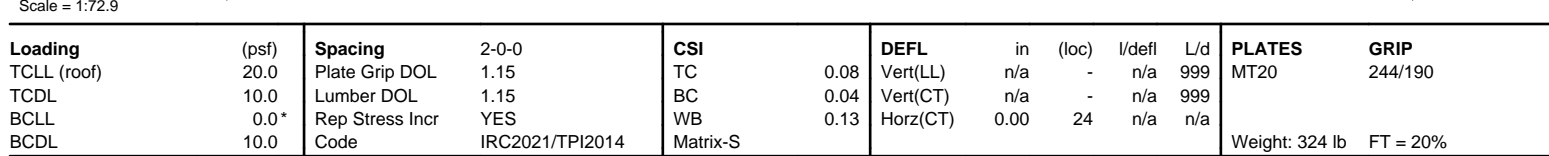


August 7, 2025

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: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:42:12 Page: 1
ID:6XJu5EDhIaLDyBK4rF8nKyOFED-RfC?PsB70Hg3NSgPqnL8w3ulTXBgKWRcDoi7J4zJC?f




August 7, 2025

Continued on page 2

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek
250231-A	A01GE	COMMON SUPPORTED GAB	1	1	I75443999
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:42:12
ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWwCDoi7J4zJC?f

Page: 2

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

LOAD CASE(S) Standard



August 7, 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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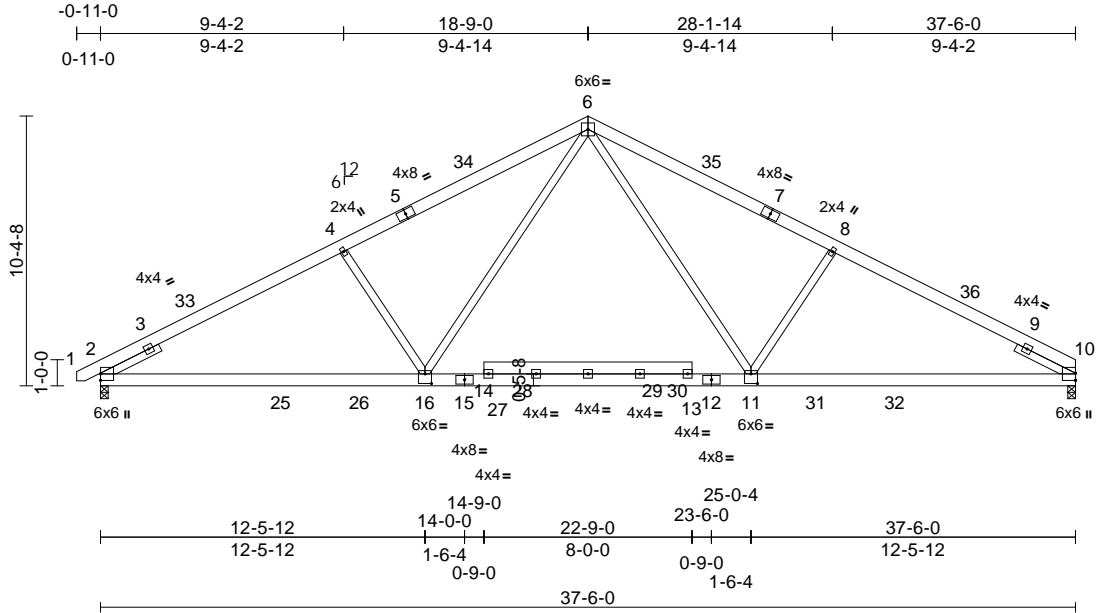
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek	I75444000
250231-A	A02	FINK	6	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:42:13
ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3uITXbGKwRCDoi7J4zJC?f

Page: 1



Scale = 1:88.6

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	-0.18	11-16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.37	11-16	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.07	10	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS		Wind(LL)	0.06	11-16	>999	240	Weight: 265 lb	FT = 20%

LUMBER

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

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=128 (LC 9)
Max Grav	2=1927 (LC 2), 10=1888 (LC 2)

FORCES

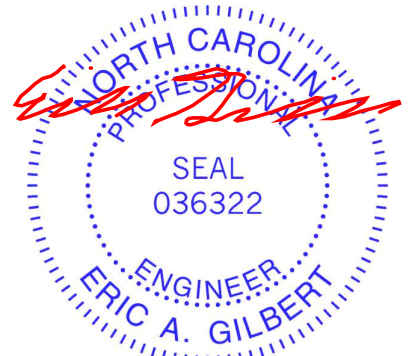
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/20, 2-4=-3096/329, 4-6=-2895/350, 6-8=-2897/356, 8-10=-3097/335
BOT CHORD	2-16=-194/2740, 11-16=-19/1875, 10-11=-180/2695
WEBS	4-16=-485/315, 6-16=-11/1219, 6-11=-12/1221, 8-11=-487/316

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 18-9-0, Exterior(2R) 18-9-0 to 23-1-13, Interior (1) 23-1-13 to 37-6-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 200.0lb AC unit load placed on the bottom chord, 18-9-0 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.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



August 7, 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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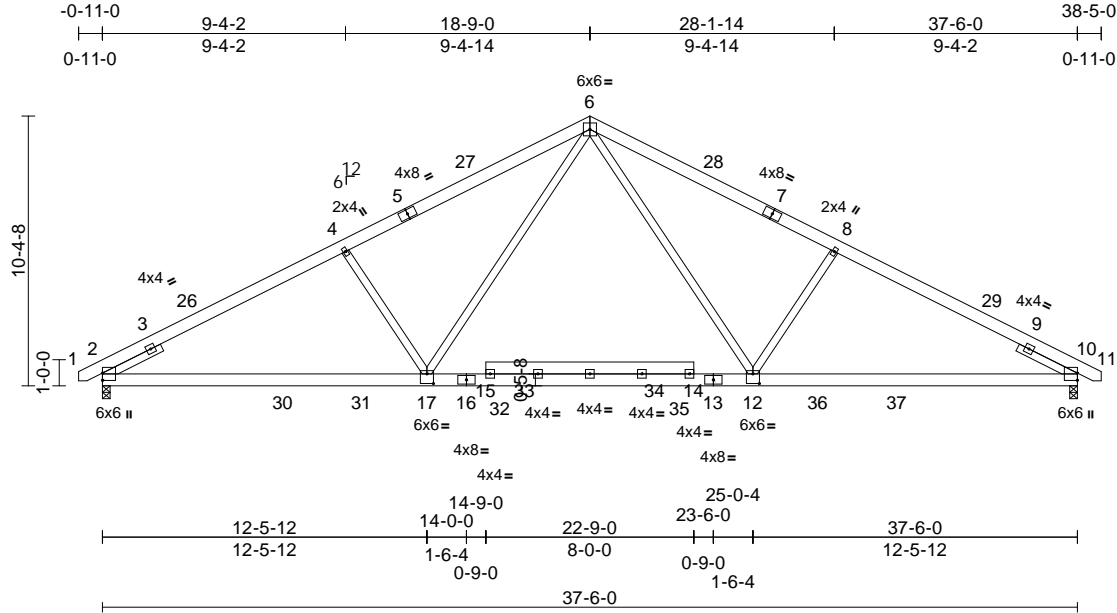
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek	175444001
250231-A	A03	COMMON	3	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:42:13
ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDdi7J4zJC?f

Page: 1



Scale = 1:88.6

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	-0.18	12-17	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.37	12-17	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.07	10	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS		Wind(LL)	0.06	12-17	>999	240	Weight: 268 lb	FT = 20%

LUMBER

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

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

FORCES

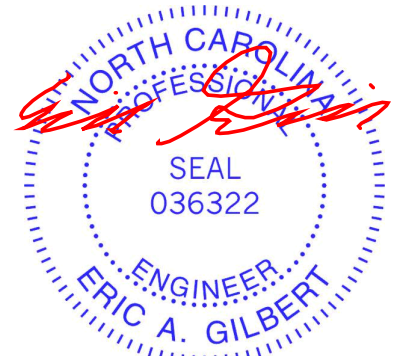
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/20, 2-4=-3095/329, 4-6=-2895/350, 6-8=-2895/350, 8-10=-3095/329, 10-11=0/20
BOT CHORD	2-17=-167/2744, 12-17=0/1879, 10-12=-165/2692
WEBS	4-17=-485/315, 6-17=-12/1219, 6-12=-12/1219, 8-12=-485/315

NOTES

- 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 18-9-0, Exterior(2R) 18-9-0 to 23-1-13, Interior (1) 23-1-13 to 38-3-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 200.0lb AC unit load placed on the bottom chord, 18-9-0 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.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



August 7, 2025

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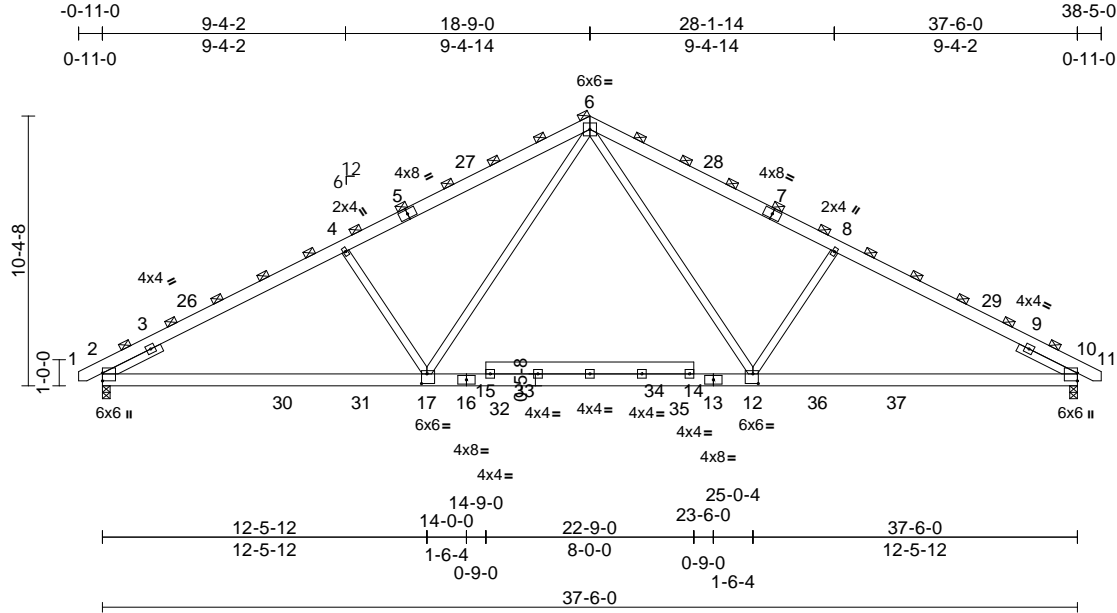
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek	I75444002
250231-A	A04	COMMON	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:42:13
ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDdi7J4zJC?f

Page: 1



Scale = 1:88.6

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	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.20	12-17	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.39	12-17	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.33	Horz(CT)	0.08	10	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS		Wind(LL)	0.06	12-17	>999	240	Weight: 268 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size)	2=0-3-8, 10=0-3-8
Max Horiz	2=-135 (LC 10)
Max Uplift	2=-6 (LC 12), 10=-6 (LC 13)
Max Grav	2=2040 (LC 2), 10=2040 (LC 2)

FORCES

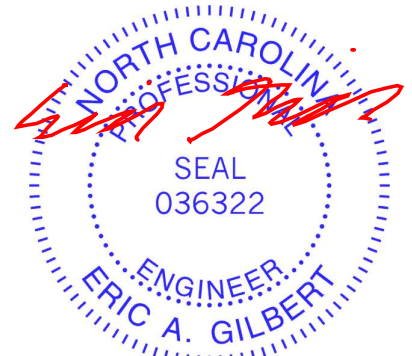
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/22, 2-4=-3282/366, 4-6=-3067/387, 6-8=-3067/387, 8-10=-3282/366, 10-11=0/22
BOT CHORD	2-17=-192/2912, 12-17=0/1980, 10-12=-189/2858
WEBS	4-17=-530/342, 6-17=-26/1303, 6-12=-26/1303, 8-12=-530/342

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 18-9-0, Exterior(2R) 18-9-0 to 23-1-13, Interior (1) 23-1-13 to 38-3-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 200.0lb AC unit load placed on the bottom chord, 18-9-0 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 6 lb uplift at joint 2 and 6 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



August 7, 2025

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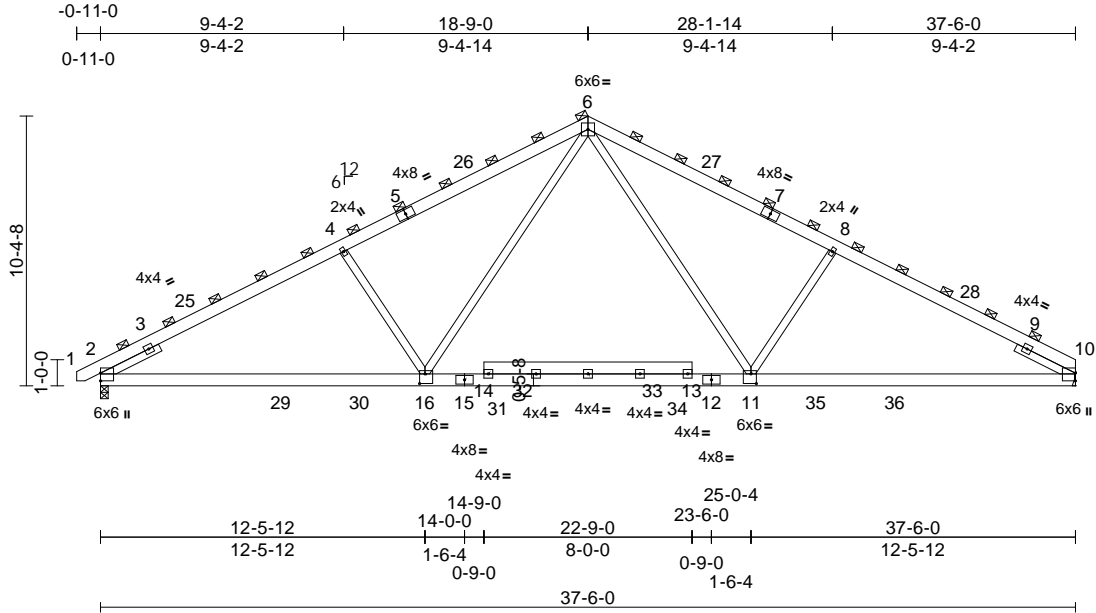
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek	I75444003
250231-A	A04A	COMMON	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:42:14
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Page: 1



Scale = 1:88.6

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

Loading	(psf)	Spacing	2-1-8	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.20	11-16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.39	11-16	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.33	Horz(CT)	0.08	10	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS		Wind(LL)	0.06	11-16	>999	240	Weight: 265 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS	(size) 2=0-3-8, 10= Mechanical
	Max Horiz 2=136 (LC 9)
	Max Uplift 2=-6 (LC 12)
	Max Grav 2=2041 (LC 2), 10=2000 (LC 2)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/22, 2-4=-3283/366, 4-6=-3068/387, 6-8=-3069/393, 8-10=-3284/372
BOT CHORD	2-16=-221/2908, 11-16=-24/1975, 10-11=-206/2860
WEBS	4-16=-530/342, 6-16=-26/1303, 6-11=-26/1305, 8-11=-532/342

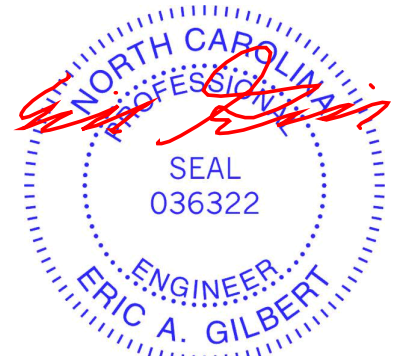
NOTES

- 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 18-9-0, Exterior(2R) 18-9-0 to 23-1-13, Interior (1) 23-1-13 to 37-6-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 200.0lb AC unit load placed on the bottom chord, 18-9-0 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 6 lb uplift at joint 2.

- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



August 7, 2025

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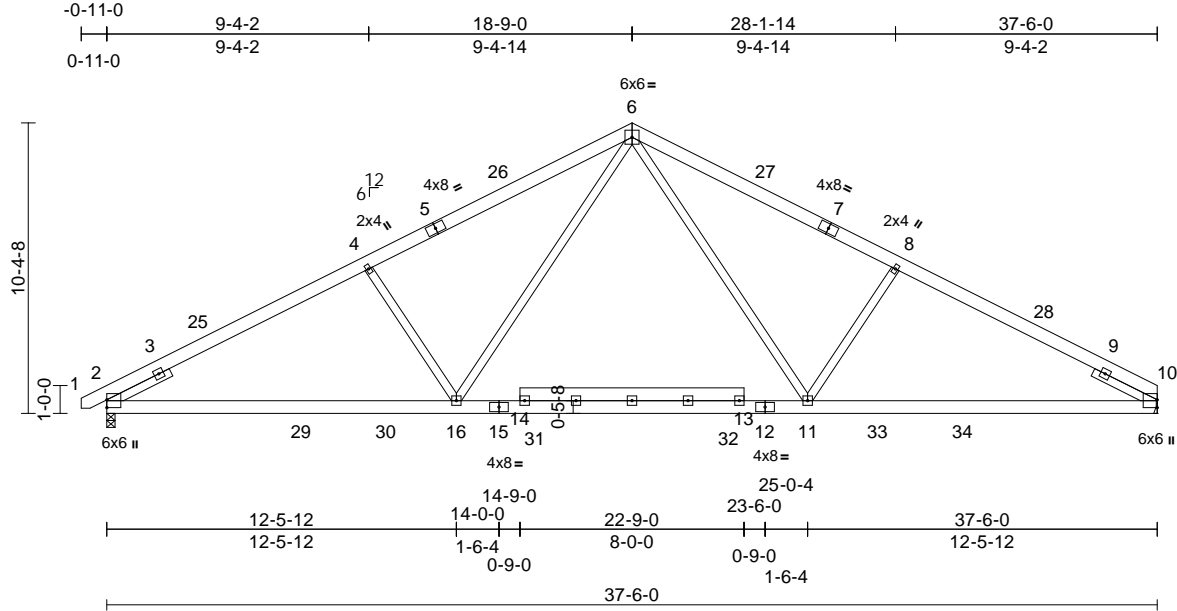
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek	
250231-A	A05	COMMON	3	1	Job Reference (optional)	I75444004

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:42:14
ID:6XJu5EDhIOALdYBk4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:82.3

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	0.29	Vert(LL)	-0.18	11-16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.28	11-16	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.06	10	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS		Wind(LL)	0.06	11-16	>999	240	Weight: 265 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS	(size) 2=0-3-8, 10= Mechanical
	Max Horiz 2=128 (LC 9)
	Max Uplift 2=-100 (LC 12), 10=-89 (LC 13)
	Max Grav 2=1827 (LC 2), 10=1788 (LC 2)

FORCES

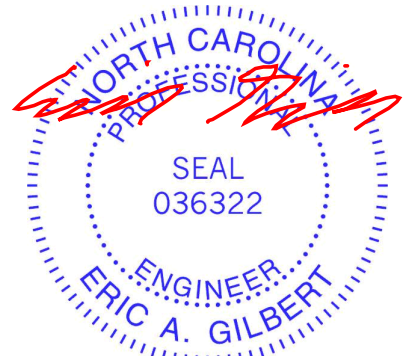
	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/20, 2-4=-2884/541, 4-6=-2682/563, 6-8=-2684/569, 8-10=-2886/547
BOT CHORD	2-16=-378/2556, 11-16=-154/1740, 10-11=-364/2511
WEBS	4-16=-502/298, 6-16=-120/1110, 6-11=-120/1113, 8-11=-504/298

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-2 to 3-7-11, Interior (1) 3-7-11 to 18-9-0, Exterior(2R) 18-9-0 to 23-1-13, Interior (1) 23-1-13 to 37-6-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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.

- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint 2 and 89 lb uplift at joint 10.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



August 7, 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



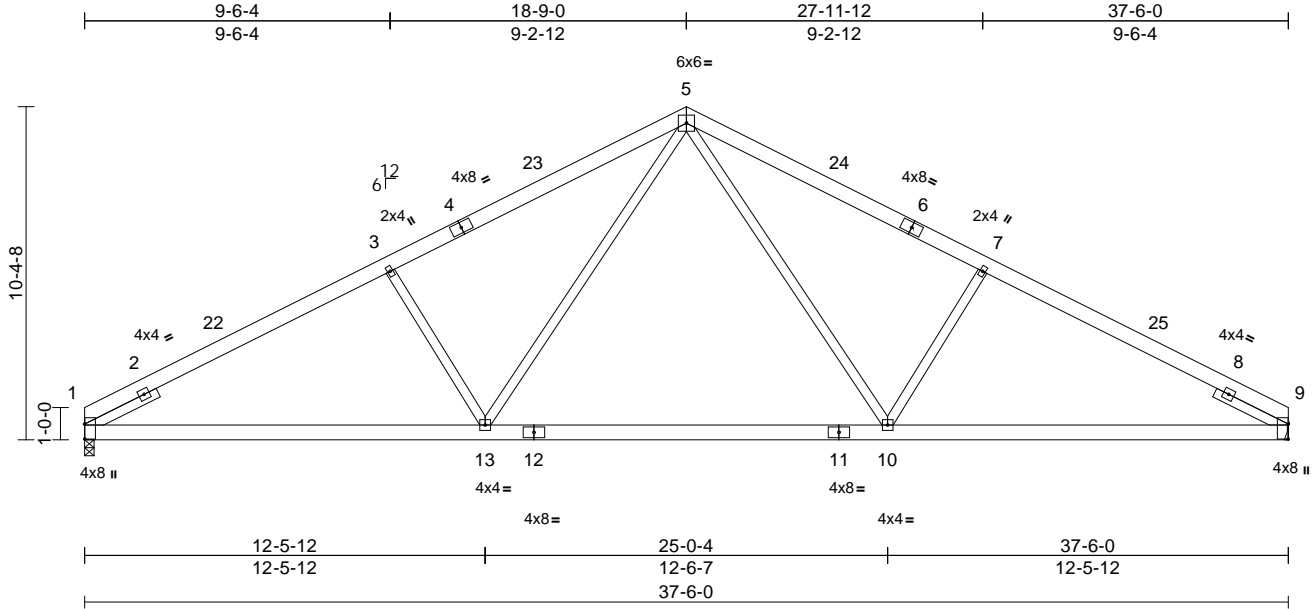
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek	
250231-A	A07	Common	1	1	Job Reference (optional)	I75444006

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:42:14
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Page: 1



Scale = 1:71.8

Plate Offsets (X, Y): [1:0-5-10,0-0-1], [9:0-5-10,0-0-1]

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	0.27	Vert(LL)	-0.11	10-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.27	10-13	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.06	9	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS		Wind(LL)	0.06	10-13	>999	240	Weight: 244 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) 1=0-3-8, 9= Mechanical
Max Horiz 1=122 (LC 9)
Max Uplift 1=89 (LC 12), 9=89 (LC 13)
Max Grav 1=1500 (LC 1), 9=1500 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-3=-2423/541, 3-5=-2190/571,
5-7=-2190/571, 7-9=-2423/541

BOT CHORD 1-13=-371/2084, 10-13=-151/1440,
9-10=-357/2084

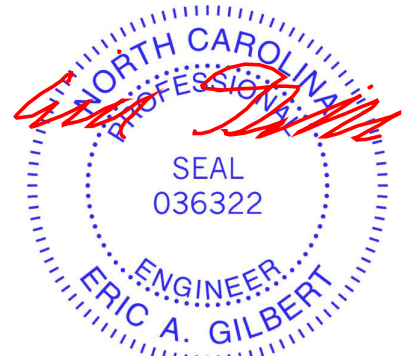
WEBS 3-13=-500/300, 5-13=-126/802,
5-10=-126/802, 7-10=-500/300

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 18-9-0, Exterior(2R) 18-9-0 to 23-1-13, Interior (1) 23-1-13 to 37-6-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 0.0psf on the bottom chord in all areas where a rectangle 0-00 tall by 0-00 wide will fit between the bottom chord and any other members.

- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 89 lb uplift at joint 1 and 89 lb uplift at joint 9.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



August 7, 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.sbcacomponents.com)

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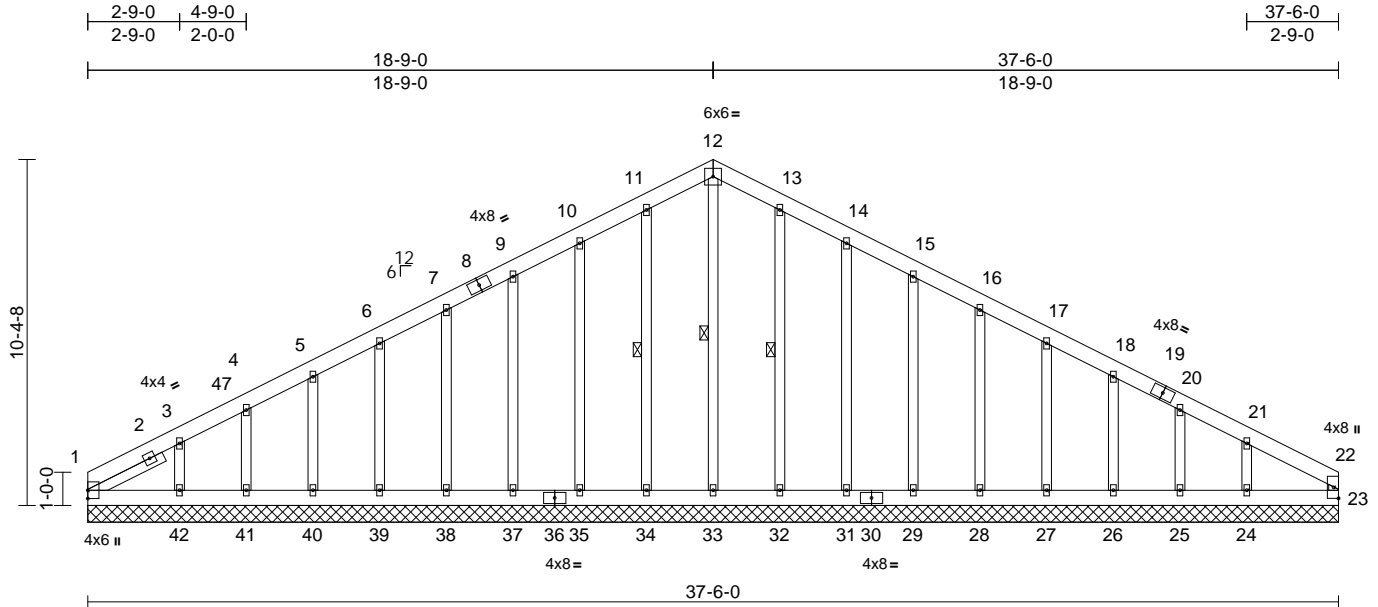
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek	I75444007
250231-A	A08-GE	Common Supported Gable	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:42:14
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Page: 1



Scale = 1:69.1

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	0.09	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.13	Horiz(TL)	0.01	23	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS							
Weight: 323 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 -- 2-6-0
BRACING		TOP CHORD	Structural wood sheathing directly applied, except end verticals.
		BOT CHORD	Rigid ceiling directly applied.
		WEBS	1 Row at midpt 12-33, 11-34, 13-32
REACTIONS (size)		1=37'-6-0, 23=37'-6-0, 24=37'-6-0, 25=37'-6-0, 26=37'-6-0, 27=37'-6-0, 28=37'-6-0, 29=37'-6-0, 31=37'-6-0, 32=37'-6-0, 33=37'-6-0, 34=37'-6-0, 35=37'-6-0, 37=37'-6-0, 38=37'-6-0, 39=37'-6-0, 40=37'-6-0, 41=37'-6-0, 42=37'-6-0	
		Max Horiz	1=192 (LC 12)
		Max Uplift	1=37 (LC 13), 24=151 (LC 13), 25=45 (LC 13), 26=73 (LC 13), 27=68 (LC 13), 28=69 (LC 13), 29=70 (LC 13), 31=81 (LC 13), 32=27 (LC 13), 34=39 (LC 12), 35=78 (LC 12), 37=70 (LC 12), 38=69 (LC 12), 39=68 (LC 12), 40=74 (LC 12), 41=45 (LC 12), 42=163 (LC 12)
		Max Grav	1=165 (LC 21), 23=124 (LC 22), 24=209 (LC 26), 25=147 (LC 1), 26=162 (LC 26), 27=160 (LC 1), 28=160 (LC 1), 29=160 (LC 1), 31=162 (LC 26), 32=160 (LC 26), 33=193 (LC 22), 34=160 (LC 25), 35=162 (LC 25), 37=160 (LC 1), 38=160 (LC 1), 39=159 (LC 1), 40=164 (LC 25), 41=143 (LC 1), 42=220 (LC 25)

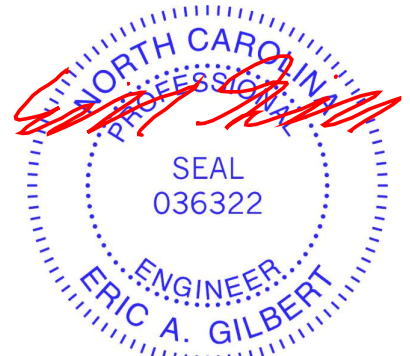
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD		22-23=87/0, 1-3=238/104, 3-4=164/107, 4-5=130/131, 5-6=101/161, 6-7=84/191, 7-9=87/221, 9-10=107/279, 10-11=130/343, 11-12=141/377, 12-13=141/377, 13-14=130/343, 14-15=107/279, 15-16=87/221, 16-17=67/163, 17-18=55/106, 18-20=61/48, 20-21=88/20, 21-22=152/43
BOT CHORD		1-42=35/159, 41-42=35/159, 40-41=35/159, 39-40=35/159, 38-39=35/159, 37-38=35/159, 35-37=35/159, 34-35=35/159, 33-34=35/159, 32-33=35/159, 31-32=35/159, 29-31=35/159, 28-29=35/159, 27-28=35/159, 26-27=35/159, 25-26=35/159, 24-25=35/159, 23-24=35/159
WEBS		12-33=189/29, 11-34=120/63, 10-35=122/120, 9-37=120/107, 7-38=120/105, 6-39=120/105, 5-40=121/106, 4-41=113/109, 3-42=151/230, 13-32=120/53, 14-31=122/120, 15-29=120/107, 16-28=120/105, 17-27=120/105, 18-26=121/107, 20-25=111/112, 21-24=155/242

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-0-0 to 4-4-13, Exterior(2N) 4-4-13 to 18-9-0, Corner(3R) 18-9-0 to 23-1-13, Exterior(2N) 23-1-13 to 37-4-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 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 0.0psf on the bottom chord in all areas where a rectangle 0-00 tall by 0-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 37 lb uplift at joint 1, 39 lb uplift at joint 34, 78 lb uplift at joint 35, 70 lb uplift at joint 37, 69 lb uplift at joint 38, 68 lb uplift at joint 39, 74 lb uplift at joint 40, 45 lb uplift at joint 41, 163 lb uplift at joint 42, 27 lb uplift at joint 32, 81 lb uplift at joint 31, 70 lb uplift at joint 29, 69 lb uplift at joint 28, 68 lb uplift at joint 27, 73 lb uplift at joint 26, 45 lb uplift at joint 25, 151 lb uplift at joint 24 and 37 lb uplift at joint 1.



August 7, 2025

Continued on page 2

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek
250231-A	A08-GE	Common Supported Gable	1	1	I75444007
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:42:14
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Page: 2

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



August 7, 2025

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Edenton, NC 27932

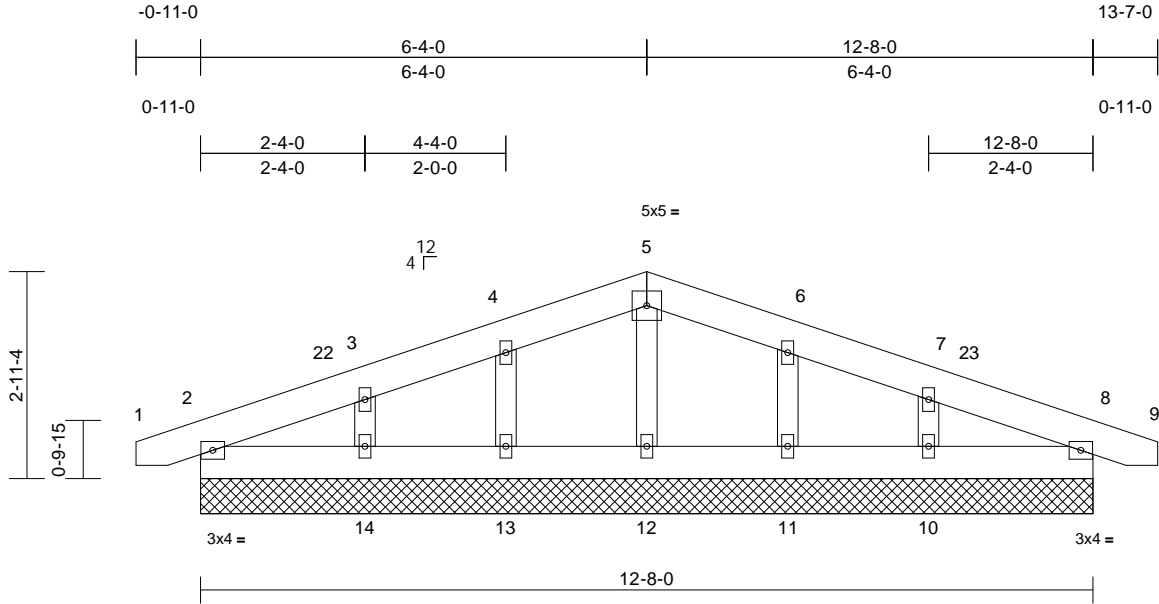
Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek	
250231-A	B01GE	Common Supported Gable	1	1	Job Reference (optional)	I75444008

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:42:14

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Scale = 1:32.7

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	0.02	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.01	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	8	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS						Weight: 75 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size) 2=12-8-0, 8=12-8-0, 10=12-8-0,
11=12-8-0, 12=12-8-0, 13=12-8-0,
14=12-8-0
Max Horiz 2=-28 (LC 13)
Max Uplift 2=-27 (LC 8), 8=-32 (LC 9), 10=-34
(LC 13), 11=-23 (LC 9), 13=-22 (LC
8), 14=-36 (LC 12)
Max Grav 2=136 (LC 1), 8=136 (LC 1),
10=186 (LC 26), 11=158 (LC 26),
12=143 (LC 1), 13=158 (LC 25),
14=186 (LC 25)

FORCES

(lb) - Maximum Compression/Maximum
Tension

TOP CHORD 1-2=0/13, 2-3=-43/31, 3-4=-42/91,
4-5=-55/145, 5-6=-55/142, 6-7=-42/86,
7-8=-39/26, 8-9=0/13

BOT CHORD 2-14=-20/43, 13-14=0/43, 12-13=0/43,
11-12=0/43, 10-11=0/43, 8-10=-1/43

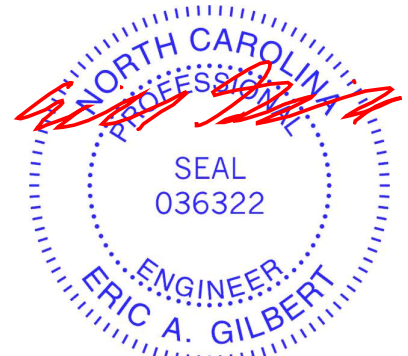
WEBS 5-12=-100/64, 4-13=-123/179,
3-14=-131/190, 6-11=-123/179,
7-10=-131/190

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) -0-8-5 to 3-8-8, Exterior(2N) 3-8-8 to 6-4-0,
Corner(3R) 6-4-0 to 10-8-13, Exterior(2N) 10-8-13 to
13-4-5 zone;C-C for members and forces & MWFRS for
reactions shown; Lumber DOL=1.60 plate grip
DOL=1.60

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 (||) MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 2, 32 lb uplift at joint 8, 22 lb uplift at joint 13, 36 lb uplift at joint 14, 23 lb uplift at joint 11, 34 lb uplift at joint 10, 27 lb uplift at joint 2 and 32 lb uplift at joint 8.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



August 7, 2025

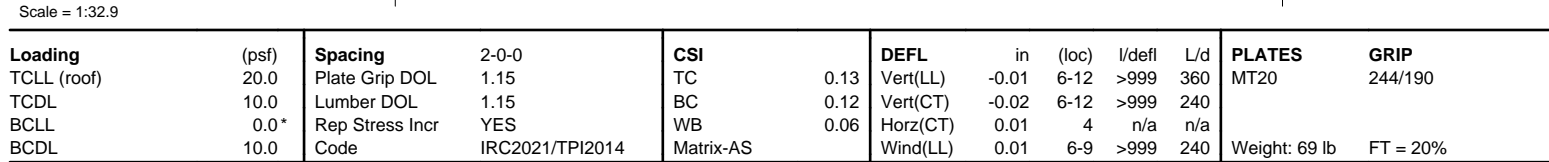
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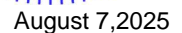
818 Soundside Road
Edenton, NC 27932

Comtech, Inc, Fayetteville, NC - 28314, Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:42:14 Page: 1
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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) -0-8-5 to 3-8-8, Interior (1) 3-8-8 to 6-4-0, Interior (2R) 6-4-0 to 10-8-13, Interior (1) 10-8-13 to 13-4-5 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 65 lb uplift at joint 2 and 65 lb uplift at joint 4.

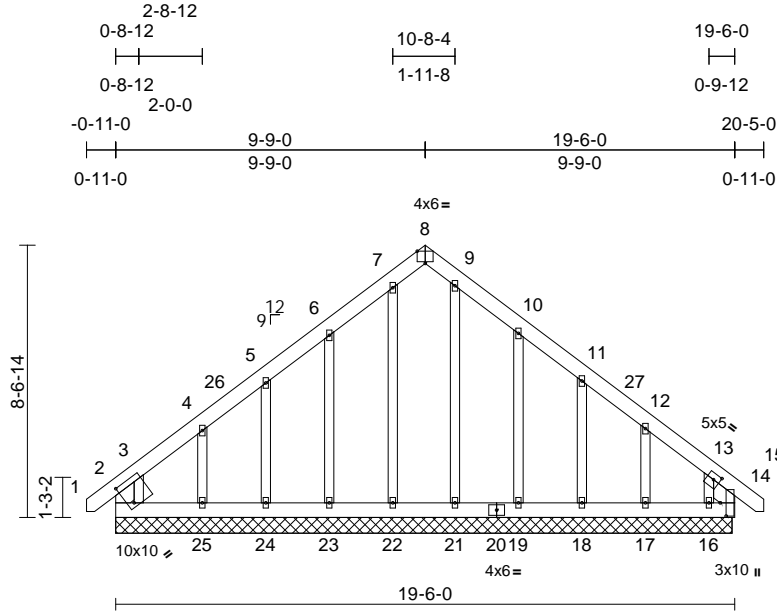


Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek	
250231-A	C01GE	GABLE	1	1	Job Reference (optional)	I75444010

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:42:14
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Page: 1



Scale = 1:72.6

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	14	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S							
										Weight: 171 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 -- 0-10-6, Right 2x6 SP No.1 -- 0-11-10

BOT CHORD	2-25=-104/231, 24-25=-94/221, 23-24=-94/221, 22-23=-94/221, 21-22=-94/221, 19-21=-94/221, 18-19=-94/221, 17-18=-94/221, 16-17=-94/221, 14-16=-94/221
WEBS	7-22=-116/32, 6-23=-145/153, 5-24=-132/126, 4-25=-176/201, 9-21=-91/0, 10-19=-147/151, 11-18=-140/134, 12-17=-144/167, 13-16=-143/240

LOAD CASE(S) Standard

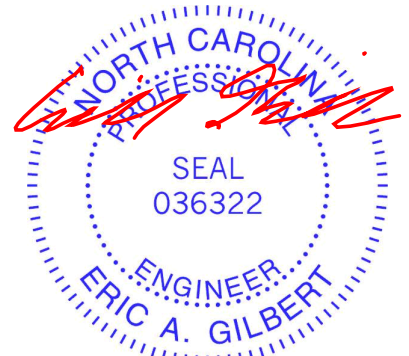
BRACING	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS	(size)	2=19-5-0, 14=19-5-0, 16=19-5-0, 17=19-5-0, 18=19-5-0, 19=19-5-0, 21=19-5-0, 22=19-5-0, 23=19-5-0, 24=19-5-0, 25=19-5-0
Max Horiz	2=241 (LC 11)	
Max Uplift	2=-16 (LC 8), 14=-95 (LC 11), 16=-242 (LC 13), 17=-107 (LC 13), 18=-99 (LC 13), 19=-115 (LC 13), 22=-8 (LC 9), 23=-115 (LC 12), 24=-84 (LC 12), 25=-179 (LC 12)	
Max Grav	2=197 (LC 21), 14=278 (LC 13), 16=174 (LC 11), 17=184 (LC 20), 18=180 (LC 20), 19=187 (LC 20), 21=130 (LC 1), 22=155 (LC 19), 23=187 (LC 19), 24=163 (LC 19), 25=222 (LC 19)	

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

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-9-8 to 3-7-5, Exterior(2N) 3-7-5 to 9-9-0, Corner(3R) 9-9-0 to 14-1-13, Exterior(2N) 14-1-13 to 20-3-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 16 lb uplift at joint 2, 8 lb uplift at joint 22, 115 lb uplift at joint 23, 84 lb uplift at joint 24, 179 lb uplift at joint 25, 115 lb uplift at joint 19, 99 lb uplift at joint 18, 95 lb uplift at joint 14, 107 lb uplift at joint 17 and 242 lb uplift at joint 16.
- Non Standard bearing condition. Review required.



August 7, 2025

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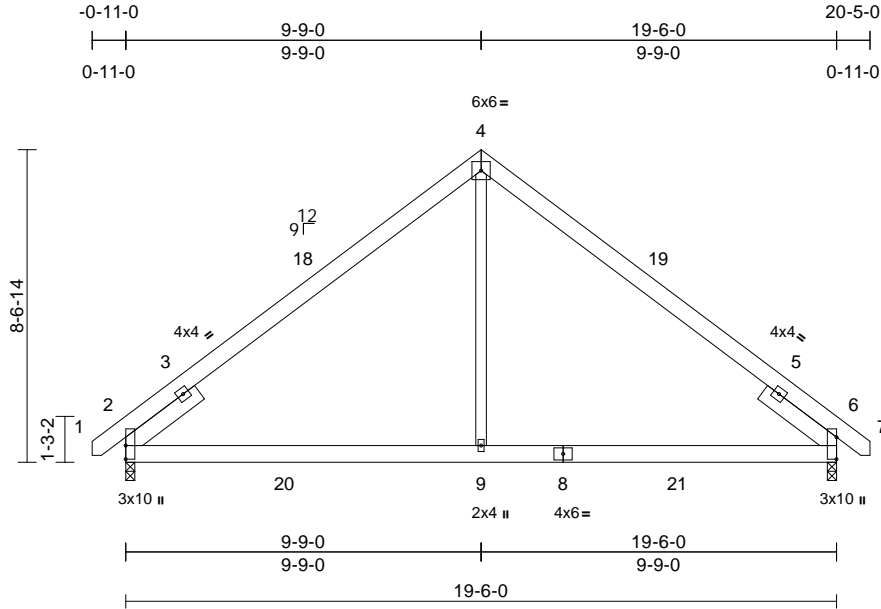
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek	I75444011
250231-A	C02	COMMON	2	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:42:14
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Page: 1



Scale = 1:63.2

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	0.34	Vert(LL)	-0.08	9-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.12	9-12	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.27	Horz(CT)	0.03	2	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS		Wind(LL)	0.09	9-12	>999	240	Weight: 132 lb	FT = 20%

LUMBER

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

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

LOAD CASE(S) Standard

BRACING

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

REACTIONS

(size)	2=0-3-0, 6=0-3-0
Max Horiz	2=-190 (LC 10)
Max Uplift	2=-111 (LC 9), 6=-111 (LC 8)
Max Grav	2=1030 (LC 2), 6=1030 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/29, 2-4=-931/487, 4-6=-931/487, 6-7=0/28
BOT CHORD	2-9=-196/747, 6-9=-196/747
WEBS	4-9=-253/747

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-8 to 3-7-5, Interior (1) 3-7-5 to 9-9-0, Exterior(2R) 9-9-0 to 14-1-13, Interior (1) 14-1-13 to 20-3-8 zone; 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 111 lb uplift at joint 2 and 111 lb uplift at joint 6.



August 7, 2025

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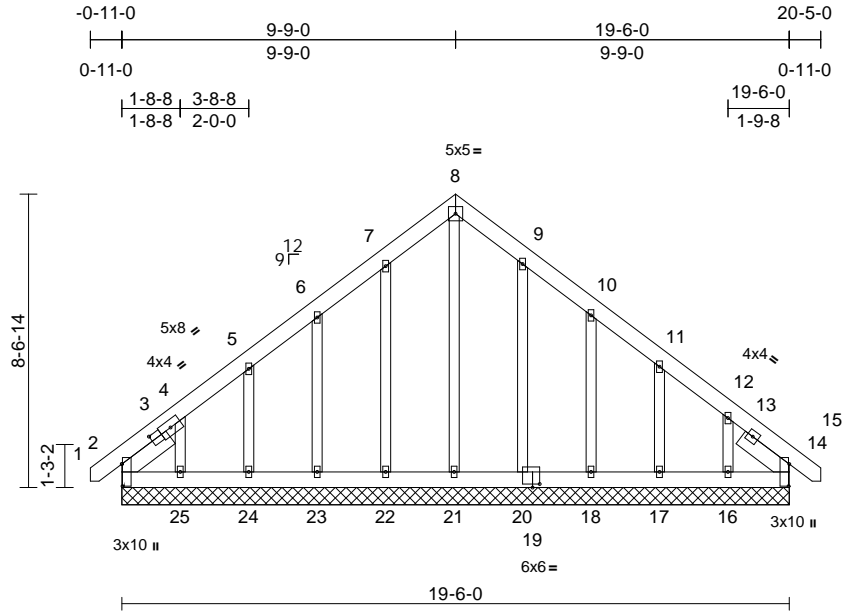
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek
250231-A	C03	COMMON SUPPORTED GAB	1	1	Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:42:15
ID:6XJu5EDhIOALdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcD0i7J4zJC?f

Page: 1



Scale = 1:67.3												
Plate Offsets (X, Y): [2:0-7-12,0-0-4], [2:1-1-6,0-2-0], [14:0-7-12,0-0-4], [19:0-2-8,0-1-4]												
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 175 lb	FT = 20%

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

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

REACTIONS (size)
2=19-6-0, 14=19-6-0, 16=19-6-0, 17=19-6-0, 18=19-6-0, 20=19-6-0, 21=19-6-0, 22=19-6-0, 23=19-6-0, 24=19-6-0, 25=19-6-0
Max Horiz 2=240 (LC 9)
Max Uplift 2=90 (LC 8), 14=29 (LC 9), 16=184 (LC 13), 17=92 (LC 13), 18=111 (LC 13), 20=69 (LC 13), 22=81 (LC 12), 23=103 (LC 12), 24=122 (LC 12), 25=153 (LC 12)
Max Grav 2=220 (LC 20), 14=187 (LC 22), 16=194 (LC 20), 17=179 (LC 20), 18=184 (LC 20), 20=174 (LC 20), 21=164 (LC 22), 22=186 (LC 19), 23=177 (LC 19), 24=200 (LC 19), 25=177 (LC 19)

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

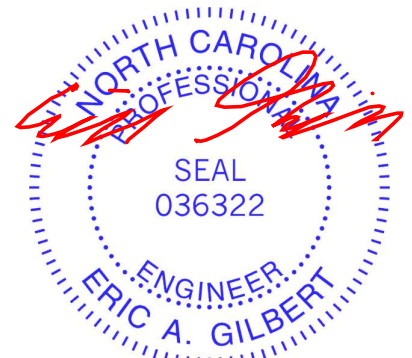
BOT CHORD 2-25=102/177, 24-25=87/197, 23-24=87/197, 22-23=87/197, 21-22=87/197, 20-21=87/198, 18-20=87/198, 17-18=87/198, 16-17=87/198, 14-16=87/198
WEBS 8-21=159/48, 7-22=146/105, 6-23=137/141, 5-24=160/169, 3-25=142/199, 9-20=134/96, 10-18=144/145, 11-17=141/143, 12-16=148/223

NOTES

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

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

LOAD CASE(S) Standard



August 7, 2025

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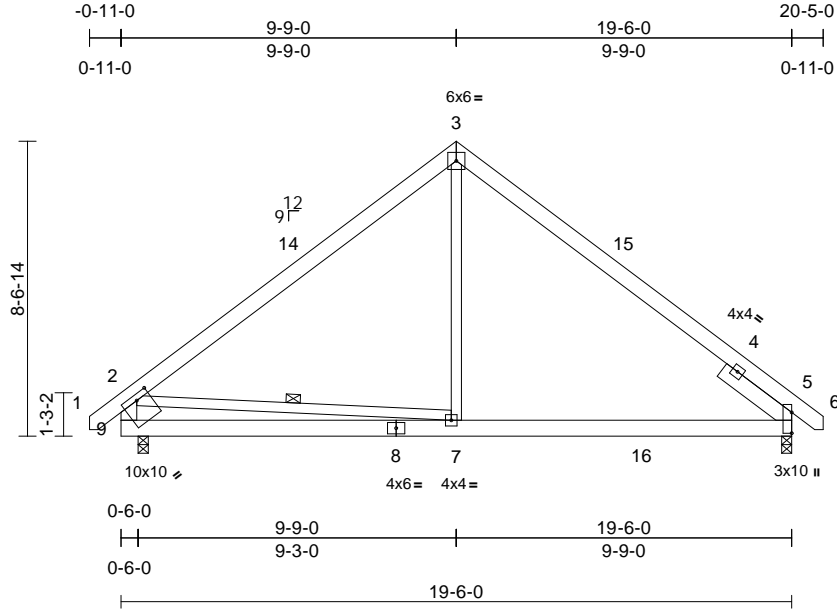
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek	
250231-A	C04	COMMON	2	1	Job Reference (optional)	I75444013

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:42:15
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Page: 1



Scale = 1:67

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

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)	-0.10	7-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.14	7-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	-0.02	5	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS		Wind(LL)	0.05	7-12	>999	240	Weight: 141 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 2-7

REACTIONS	(size) 5=0-3-8, 9=0-3-8
	Max Horiz 9=-214 (LC 10)
	Max Uplift 5=-46 (LC 13), 9=-48 (LC 12)
	Max Grav 5=998 (LC 20), 9=967 (LC 19)

FORCES

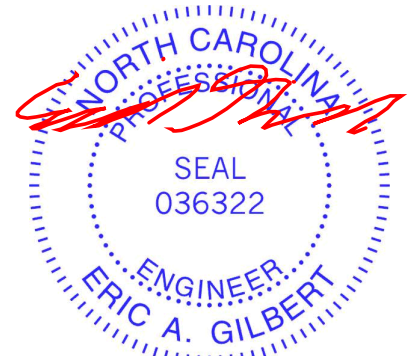
	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/37, 2-3=-1014/217, 3-5=-864/214, 5-6=0/28, 2-9=-831/258
BOT CHORD	7-9=-287/775, 5-7=-93/723
WEBS	3-7=0/569, 2-7=-241/335

NOTES

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

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 48 lb uplift at joint 9 and 46 lb uplift at joint 5.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



August 7, 2025

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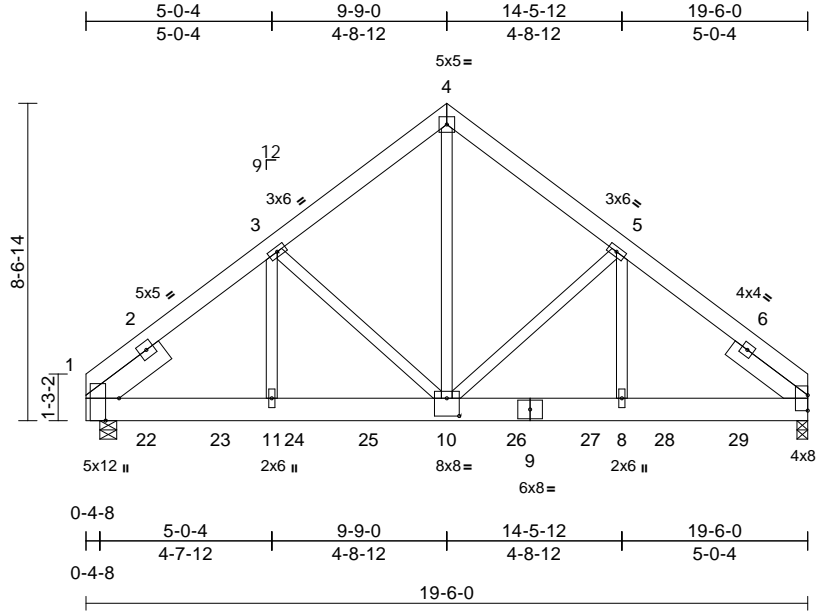
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek	
250231-A	C05-GR	Common Girder	1	4	Job Reference (optional)	I75444014

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:42:15
ID:6XJu5EDhOALdYBK4rF8nKyOFED-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:62.2

Plate Offsets (X, Y): [1:0-7-4,Edge], [10:0-4-0,0-5-12]

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)	-0.05	10-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.09	10-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.48	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS		Wind(LL)	0.03	10-11	>999	240	Weight: 690 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SP No.1
BOT CHORD	2x8 SP No.1
WEBS	2x4 SP No.2
SLIDER	Left 2x8 SP No.1 -- 2-6-0, Right 2x6 SP No.1 -- 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=0-5-8, 7=0-3-8
Max Horiz	1=-175 (LC 6)
Max Uplift	7=-476 (LC 9)
Max Grav	1=9840 (LC 2), 7=7213 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-3=-7889/553, 3-4=-6157/498, 4-5=-6169/499, 5-7=-8374/584
BOT CHORD	1-11=-438/6086, 10-11=-438/6086, 8-10=-398/6465, 7-8=-398/6465
WEBS	3-11=-137/2817, 3-10=-1954/221, 4-10=-489/6753, 5-10=-2094/262, 5-8=-166/2892

NOTES

- 4-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 - 4 rows staggered at 0-4-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
Attach BC w/ 1/2" diam. bolts (ASTM A-307) in the center of the member w/washers at 4-0-0 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); cantilever left exposed ; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Solid blocking is required on both sides of the truss at joint(s), 1.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 476 lb uplift at joint 7.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1985 lb down at 0-4-12, 1768 lb down and 101 lb up at 1-7-12, 1768 lb down and 101 lb up at 3-7-12, 1768 lb down and 101 lb up at 5-7-12, 1474 lb down and 101 lb up at 7-7-12, 1474 lb down and 101 lb up at 9-7-12, 1474 lb down and 101 lb up at 11-7-12, 1474 lb down and 101 lb up at 13-7-12, and 1474 lb down and 101 lb up at 15-7-12, and 1480 lb down and 101 lb up at 17-7-12 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: 1-4=-60, 4-7=-60, 12-18=-20

Concentrated Loads (lb)

Vert: 10=-1474 (B), 14=-1679 (B), 22=-1480 (B), 23=-1480 (B), 24=-1480 (B), 25=-1474 (B), 26=-1474 (B), 27=-1474 (B), 28=-1474 (B), 29=-1480 (B)



August 7, 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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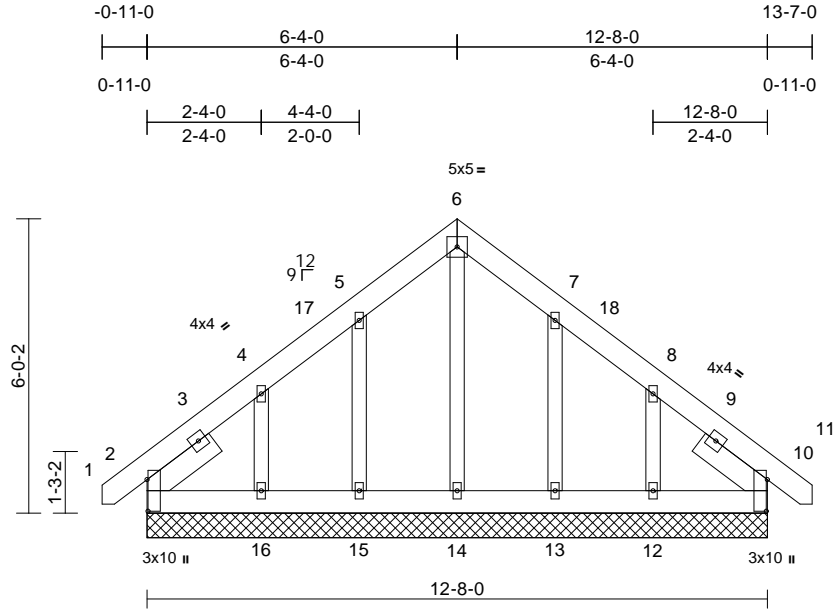
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek
250231-A	G01GE	GABLE	1	1	I75444015
Job Reference (optional)					

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:42:15
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Page: 1



Scale = 1:47

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

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

LUMBER

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

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=12-8-0, 10=12-8-0, 12=12-8-0, 13=12-8-0, 14=12-8-0, 15=12-8-0, 16=12-8-0
Max Horiz	2=164 (LC 9)
Max Uplift	2=46 (LC 8), 10=11 (LC 9), 12=166 (LC 13), 13=75 (LC 13), 15=76 (LC 12), 16=174 (LC 12)
Max Grav	2=194 (LC 20), 10=176 (LC 1), 12=218 (LC 20), 13=172 (LC 20), 14=133 (LC 22), 15=174 (LC 19), 16=227 (LC 19)

FORCES

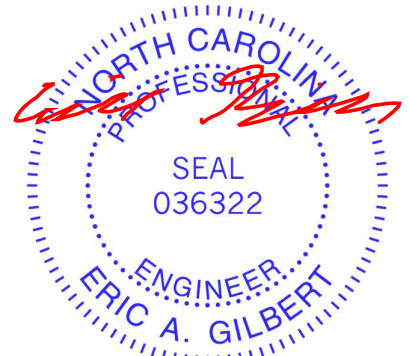
	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-9/0, 2-4=-167/106, 4-5=-117/129, 5-6=-136/224, 6-7=-136/224, 7-8=-90/126, 8-10=-142/62, 10-11=-9/0
BOT CHORD	2-16=-55/134, 15-16=-55/134, 14-15=-55/134, 13-14=-55/134, 12-13=-55/134, 10-12=-55/134
WEBS	6-14=-145/42, 5-15=-139/141, 4-16=-171/275, 7-13=-137/140, 8-12=-171/273

NOTES

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed: MWFRS (envelope) exterior zone and C-C Corner(3E) -0-9-8 to 3-7-5, Exterior(2N) 3-7-5 to 6-4-0, Corner(3R) 6-4-0 to 10-8-13, Exterior(2N) 10-8-13 to 13-5-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 (||) MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 46 lb uplift at joint 2, 11 lb uplift at joint 10, 76 lb uplift at joint 15, 174 lb uplift at joint 16, 75 lb uplift at joint 13 and 166 lb uplift at joint 12.

LOAD CASE(S) Standard



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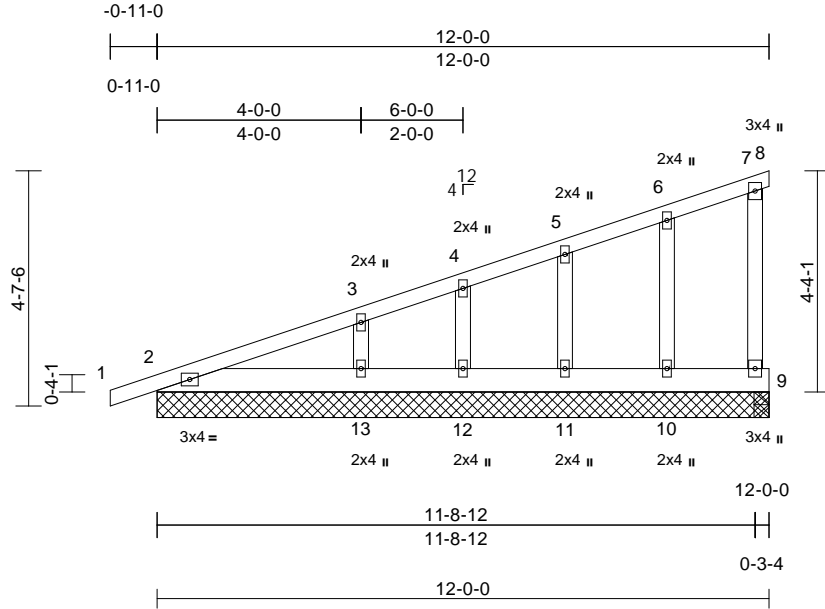
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek	
250231-A	M01GE	Monopitch	1	1	Job Reference (optional)	I75444016

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:42:15
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Scale = 1:45.2

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	0.00	2-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	2-13	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S		Wind(LL)	0.00	2-13	>999	240	Weight: 65 lb	FT = 20%

LUMBER

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

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)	2=12-0-0, 8=12-0-0, 9=12-0-0, 10=12-0-0, 11=12-0-0, 12=12-0-0, 13=12-0-0
Max Horiz	2=207 (LC 8)
Max Uplift	2=40 (LC 8), 8=5 (LC 8), 9=28 (LC 12), 10=53 (LC 8), 11=62 (LC 12), 12=38 (LC 8), 13=104 (LC 12)
Max Grav	2=194 (LC 1), 8=4 (LC 1), 9=69 (LC 1), 10=157 (LC 1), 11=177 (LC 1), 12=94 (LC 1), 13=314 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

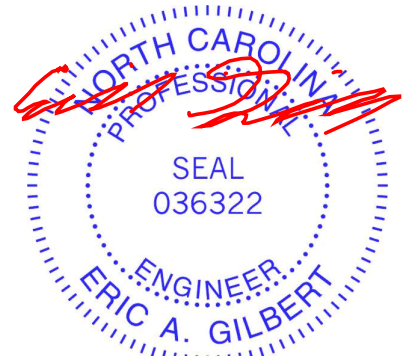
TOP CHORD	1-2=0/20, 2-3=-292/91, 3-4=-194/54, 4-5=-149/47, 5-6=-88/29, 6-7=-31/13, 7-8=-4/1, 7-9=-55/70
BOT CHORD	2-13=-2/1, 12-13=-2/1, 11-12=-2/1, 10-11=-2/1, 9-10=-2/1
WEBS	6-10=-118/157, 5-11=-129/171, 4-12=-84/116, 3-13=-209/269

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-11-0 to 3-5-13, Exterior(2N) 3-5-13 to 12-0-0 zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 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 5 lb uplift at joint 8, 28 lb uplift at joint 9, 40 lb uplift at joint 2, 53 lb uplift at joint 10, 62 lb uplift at joint 11, 38 lb uplift at joint 12 and 104 lb uplift at joint 13.

LOAD CASE(S) Standard



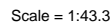
August 7, 2025

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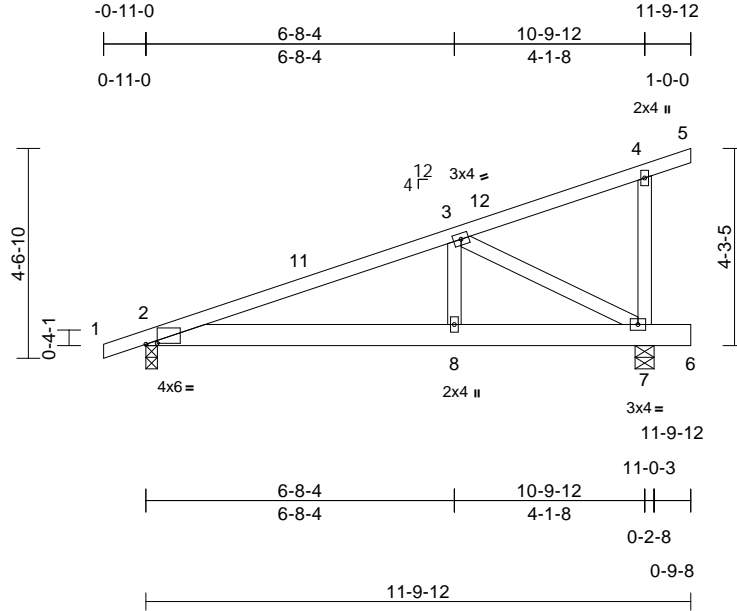
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek	I75444018
250231-A	M03	Monopitch	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:42:15
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Scale = 1:49.9

Plate Offsets (X, Y): [2:0-2-15,0-0-4]

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	0.21	Vert(LL)	-0.02	8-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.05	8-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS		Wind(LL)	0.04	8-10	>999	240	Weight: 62 lb	FT = 20%

LUMBER

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

- 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

BRACING

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

REACTIONS

(size) 2=0-3-0, 7=0-4-15
Max Horiz 2=141 (LC 8)
Max Uplift 2=-182 (LC 8), 7=-187 (LC 8)
Max Grav 2=489 (LC 1), 7=508 (LC 1)

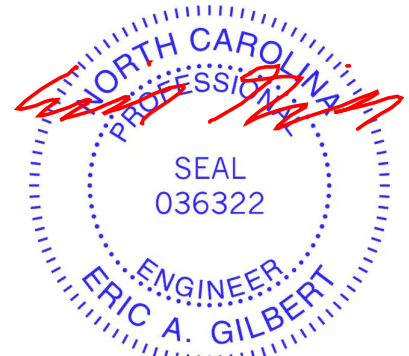
FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/20, 2-3=-674/410, 3-4=-65/30, 4-5=-19/0
BOT CHORD 2-8=-531/596, 7-8=-531/596, 6-7=0/0
WEBS 4-7=-154/145, 3-8=-189/267, 3-7=-674/601

NOTES

- 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 11-9-12 zone; end vertical left exposed; 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 0.0psf on the bottom chord in all areas where a rectangle 0-00 tall by 0-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 182 lb uplift at joint 2 and 187 lb uplift at joint 7.



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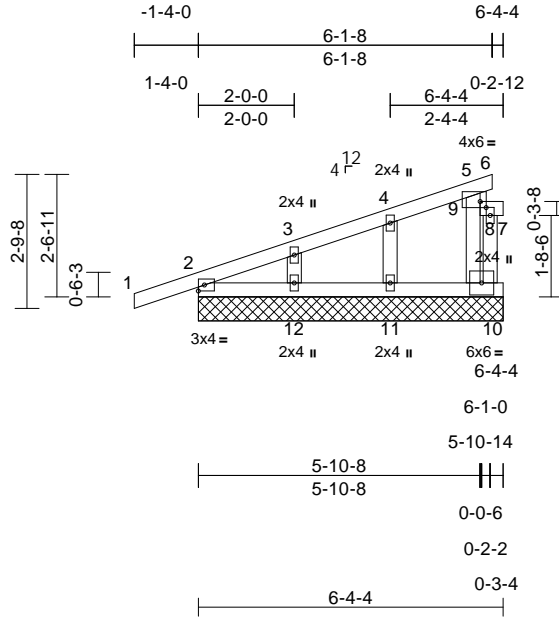
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek
250231-A	M04GE	GABLE	1	1	Job Reference (optional)
					I75444019

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:42:15
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Page: 1



Scale = 1:48

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

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	0.16	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	NO	WB	0.04	Horz(CT)	0.00	7	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-P							
										Weight: 30 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. Except: 6-0-0 oc bracing: 5-9
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS	(size)	2=6-4-4, 7=6-4-4, 10=6-4-4, 11=6-4-4, 12=6-4-4
	Max Horiz	2=119 (LC 8)
	Max Uplift	2=-81 (LC 8), 7=-86 (LC 1), 10=-217 (LC 12), 11=-61 (LC 8), 12=-53 (LC 12)
	Max Grav	2=193 (LC 1), 7=26 (LC 8), 10=767 (LC 1), 11=174 (LC 1), 12=132 (LC 1)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/14, 2-3=-168/35, 3-4=-87/8, 4-5=-58/8, 5-6=-8/0, 9-10=-391/491, 5-9=-53/115
BOT CHORD	2-12=-46/35, 11-12=-46/35, 10-11=-46/35, 8-9=-11/11, 7-8=0/0
WEBS	3-12=-130/212, 4-11=-130/247, 8-10=-163/169

NOTES

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

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -1-4-0 to 3-0-13, Exterior(2N) 3-0-13 to 6-1-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 81 lb uplift at joint 2, 86 lb uplift at joint 7, 53 lb uplift at joint 12, 61 lb uplift at joint 11 and 217 lb uplift at joint 10.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 200 lb down and 225 lb up at 5-8-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 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: 1-5=-60, 5-6=-60, 2-10=-20, 7-9=-20
Concentrated Loads (lb)

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



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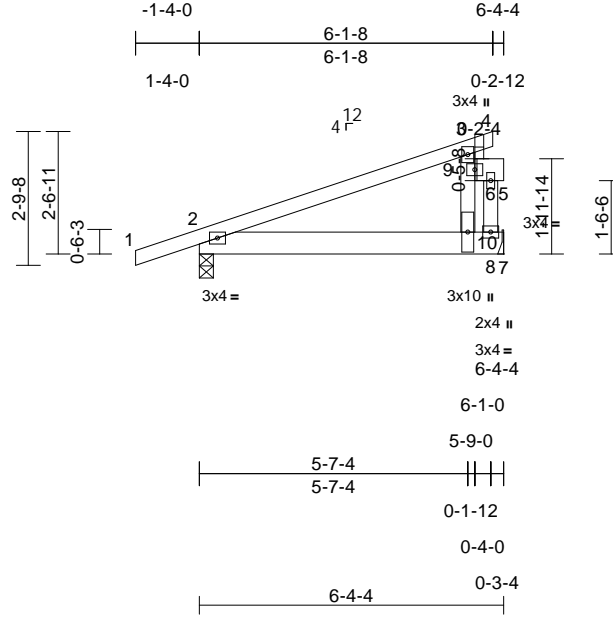
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek	
250231-A	M05	MONOPITCH	6	1	Job Reference (optional)	I75444020

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:42:15
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Page: 1



Scale = 1:48.1

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	0.32	Vert(LL)	-0.03	10-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.07	10-13	>981	240		
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)	0.06	10-13	>999	240	Weight: 32 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. Except: 6-0-0 oc bracing: 3-9
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size)	2=0-3-8, 8= Mechanical
Max Horiz	2=87 (LC 8)
Max Uplift	2=-72 (LC 8), 8=-115 (LC 12)
Max Grav	2=374 (LC 1), 8=1129 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/25, 2-3=-172/41, 3-4=-10/0, 9-10=-696/592, 3-9=-166/215
BOT CHORD	2-10=0/101, 8-10=0/0, 7-8=0/0, 6-9=0/0, 5-6=0/0
WEBS	6-8=-50/12

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-4-0 to 3-0-13, Interior (1) 3-0-13 to 6-1-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 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 72 lb uplift at joint 2 and 115 lb uplift at joint 8.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 360 lb down and 259 lb up at 6-4-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 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, 7-11=-20, 6-9=-130, 5-6=-20
Concentrated Loads (lb)
Vert: 9=-500, 8=-360 (F)



August 7, 2025

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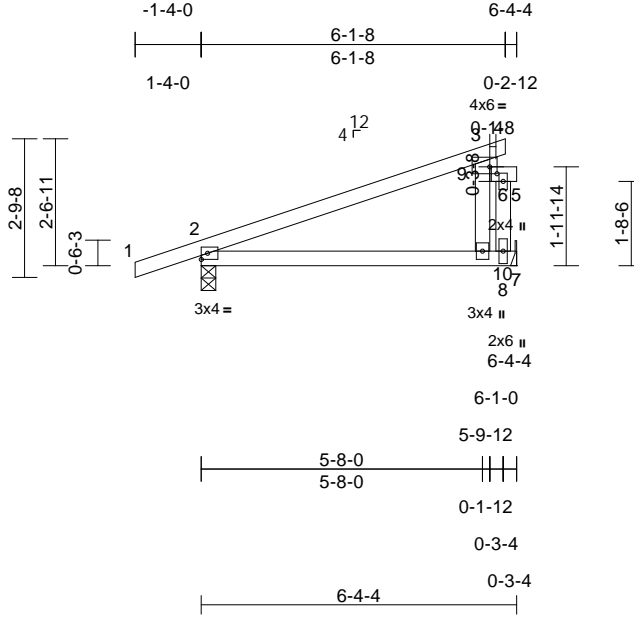
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek	
250231-A	M06	MONOPITCH	1	2	Job Reference (optional)	I75444021

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:42:16
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Scale = 1:46.4

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	-0.04	10-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.09	10-13	>844	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MP		Wind(LL)	0.07	10-13	>999	240	Weight: 54 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
Except:
6-0-0 oc bracing: 3-9
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 8= Mechanical
Max Horiz 2=87 (LC 8)
Max Uplift 2=-69 (LC 8), 8=-92 (LC 12)
Max Grav 2=353 (LC 1), 8=896 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/25, 2-3=-258/66, 3-4=-9/0,
9-10=-490/451, 3-9=-188/236
BOT CHORD 2-10=-189/92, 8-10=0/0, 7-8=0/0, 6-9=0/0,
5-6=0/0
WEBS 6-8=-23/0

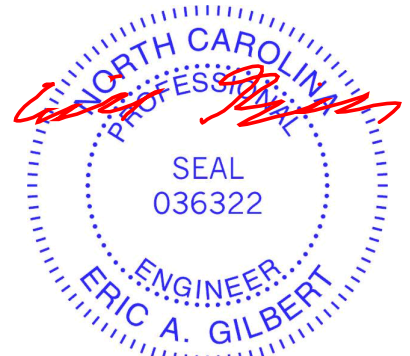
NOTES

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-4-0 to 3-0-13, Interior (1) 3-0-13 to 6-1-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 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 69 lb uplift at joint 2 and 92 lb uplift at joint 8.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 360 lb down and 259 lb up at 6-4-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-60, 3-4=-60, 7-11=-20, 5-9=-20
Concentrated Loads (lb)
Vert: 9=-300, 8=-360 (F)



August 7, 2025

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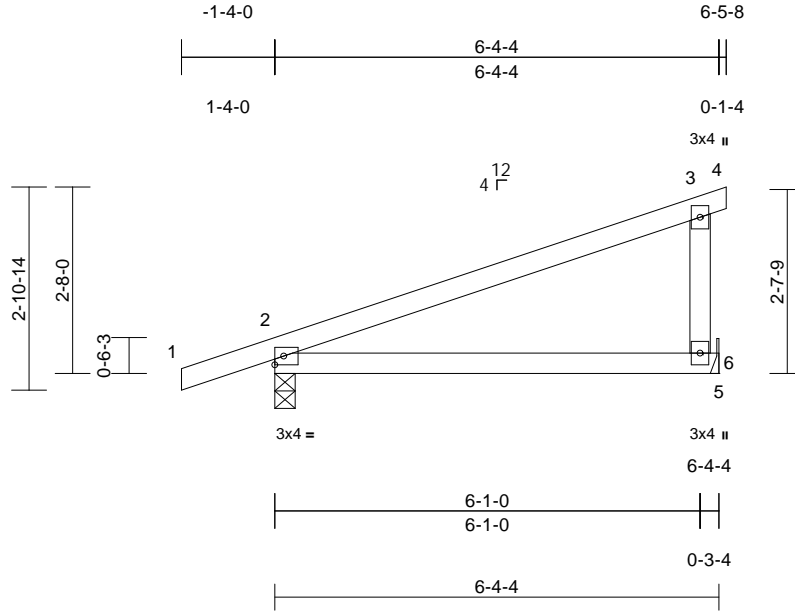
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek	I75444022
250231-A	M07	MONOPITCH	3	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

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Scale = 1:33

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.05	6-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.11	6-9	>659	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS		Wind(LL)	0.07	6-9	>999	240	Weight: 25 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 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=0-3-8, 6= Mechanical
Max Horiz 2=91 (LC 8)
Max Uplift 2=-65 (LC 8), 6=-41 (LC 12)
Max Grav 2=331 (LC 1), 6=263 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/25, 2-3=-340/133, 3-4=-7/0,
3-6=-187/236

BOT CHORD 2-6=-220/125, 5-6=0/0

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -1-4-0 to 3-0-13, Interior (1) 3-0-13 to 6-5-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 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 41 lb uplift at joint 6 and 65 lb uplift at joint 2.



August 7, 2025

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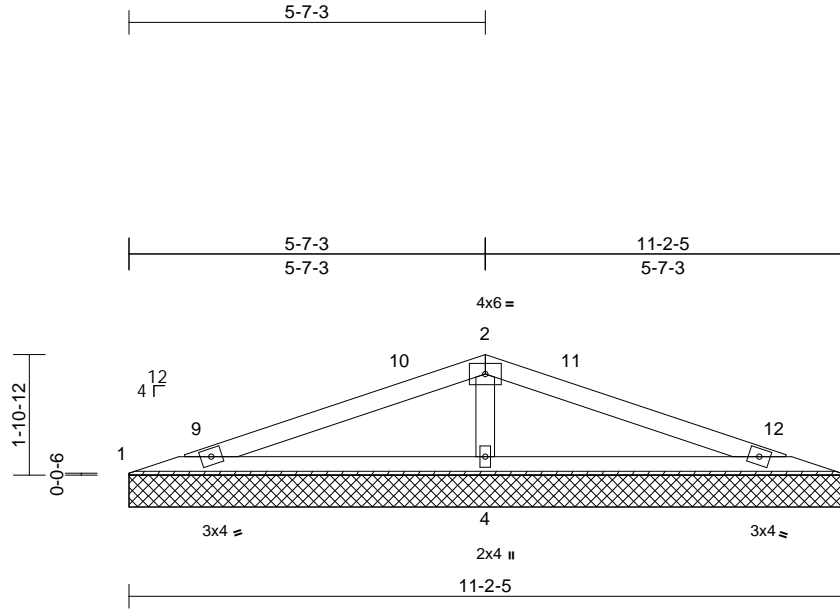
Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek	I75444023
250231-A	VB1	Valley	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

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Scale = 1:36.2

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	0.22	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	4	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS							Weight: 33 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.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS

(size)	1=11-2-5, 3=11-2-5, 4=11-2-5
Max Horiz	1=21 (LC 16)
Max Uplift	1=-16 (LC 12), 3=-19 (LC 13), 4=-44 (LC 8)
Max Grav	1=119 (LC 25), 3=119 (LC 26), 4=728 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-236/416, 2-3=-218/416
BOT CHORD	1-4=-348/279, 3-4=-348/279
WEBS	2-4=-541/416

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) 0-1-2 to 4-5-15, Interior (1) 4-5-15 to 5-8-5, Exterior(2R) 5-8-5 to 10-1-1, Interior (1) 10-1-1 to 11-3-7 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 16 lb uplift at joint 1, 19 lb uplift at joint 3 and 44 lb uplift at joint 4.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard



August 7, 2025

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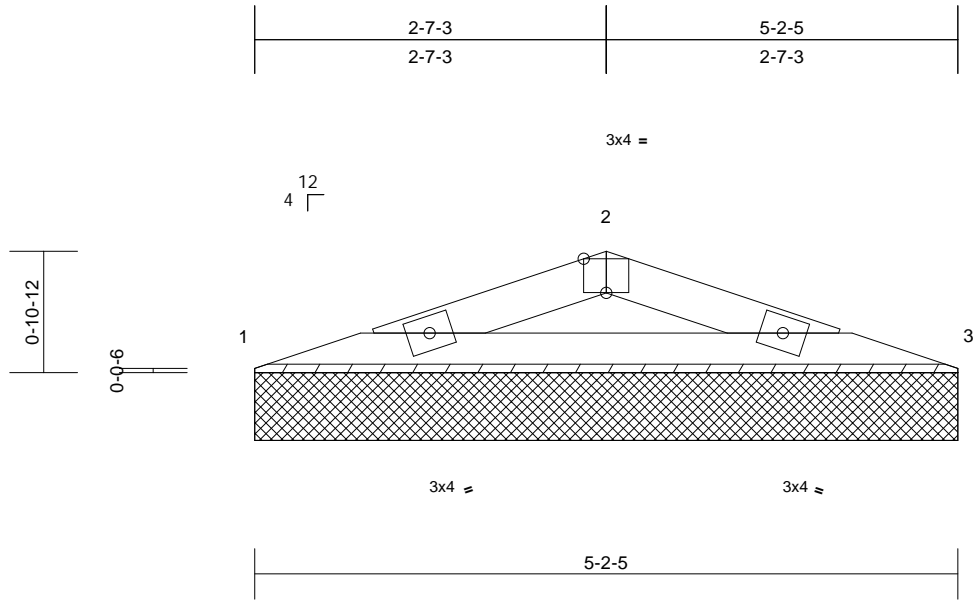
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek	I75444024
250231-A	VB2	Valley	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:42:16
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Page: 1



Scale = 1:17

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.01	3	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS							Weight: 13 lb FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size) 1=5-2-5, 3=5-2-5
Max Horiz 1=9 (LC 16)
Max Uplift 1=-16 (LC 8), 3=-16 (LC 9)
Max Grav 1=208 (LC 1), 3=208 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-476/476, 2-3=-476/418
BOT CHORD 1-3=-453/444

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 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 16 lb uplift at joint 1 and 16 lb uplift at joint 3.

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

LOAD CASE(S) Standard



August 7, 2025

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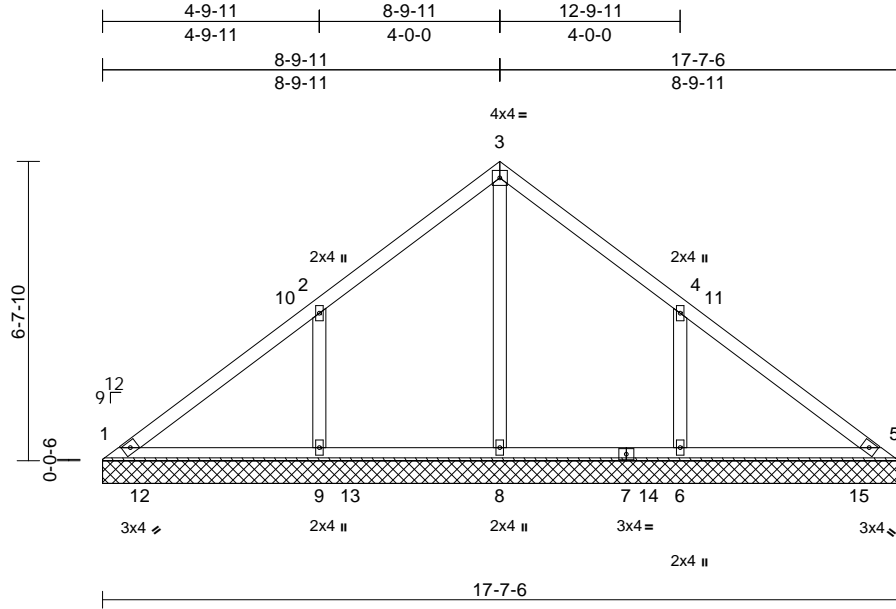
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek	I75444025
250231-A	VC1	Valley	1	1	Job Reference (optional)	

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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	0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 76 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size) 1=17-7-6, 5=17-7-6, 6=17-7-6, 8=17-7-6, 9=17-7-6
Max Horiz 1=-151 (LC 8)
Max Uplift 1=-4 (LC 8), 6=-140 (LC 13), 9=-140 (LC 12)
Max Grav 1=191 (LC 20), 5=169 (LC 19), 6=549 (LC 20), 8=398 (LC 22), 9=549 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension

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

BOT CHORD 1-9=-51/99, 8-9=-51/99, 6-8=-51/99, 5-6=-51/99

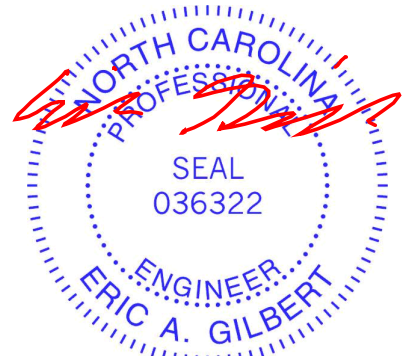
WEBS 3-8=-148/0, 2-9=-335/250, 4-6=-335/250

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-5-5 to 4-10-3, Interior (1) 4-10-3 to 8-10-3, Exterior(2R) 8-10-3 to 13-3-0, Interior (1) 13-3-0 to 17-3-1 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.

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

LOAD CASE(S) Standard



August 7, 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
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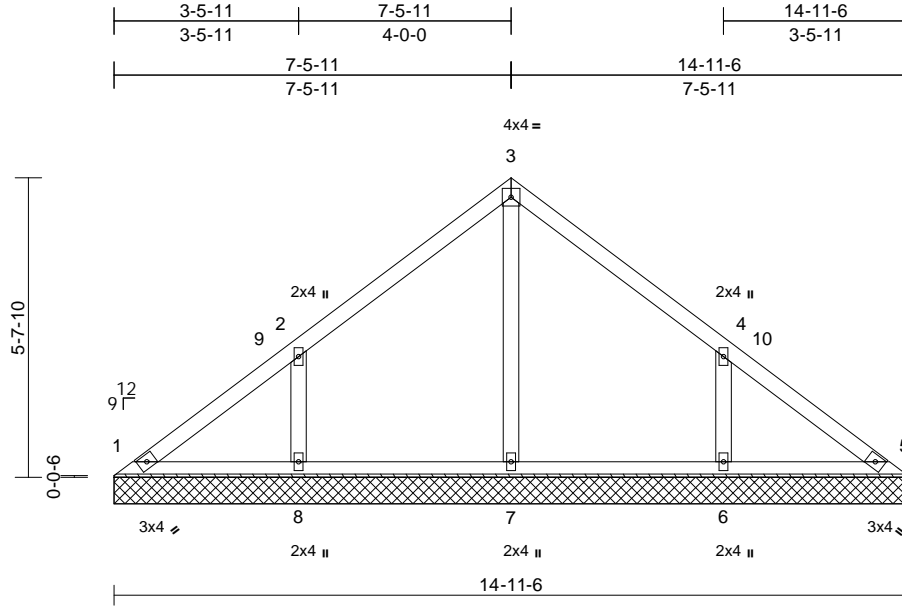
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek	I75444026
250231-A	VC2	Valley	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:42:16
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Page: 1



Scale = 1:43.4

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	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 62 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size) 1=14-11-6, 5=14-11-6, 6=14-11-6, 7=14-11-6, 8=14-11-6
Max Horiz 1=-127 (LC 8)
Max Uplift 1=-14 (LC 8), 6=-118 (LC 13), 8=-118 (LC 12)
Max Grav 1=131 (LC 20), 5=115 (LC 1), 6=363 (LC 20), 7=244 (LC 1), 8=363 (LC 19)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-127/99, 2-3=-138/137, 3-4=-125/130, 4-5=-97/58
BOT CHORD 1-8=-39/85, 7-8=-39/85, 6-7=-39/85, 5-6=-39/85
WEBS 3-7=-164/0, 2-8=-281/245, 4-6=-281/245

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-5-5 to 4-10-1, Interior (1) 4-10-1 to 7-6-3, Exterior(2R) 7-6-3 to 11-11-0, Interior (1) 11-11-0 to 14-7-1 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.

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



August 7, 2025

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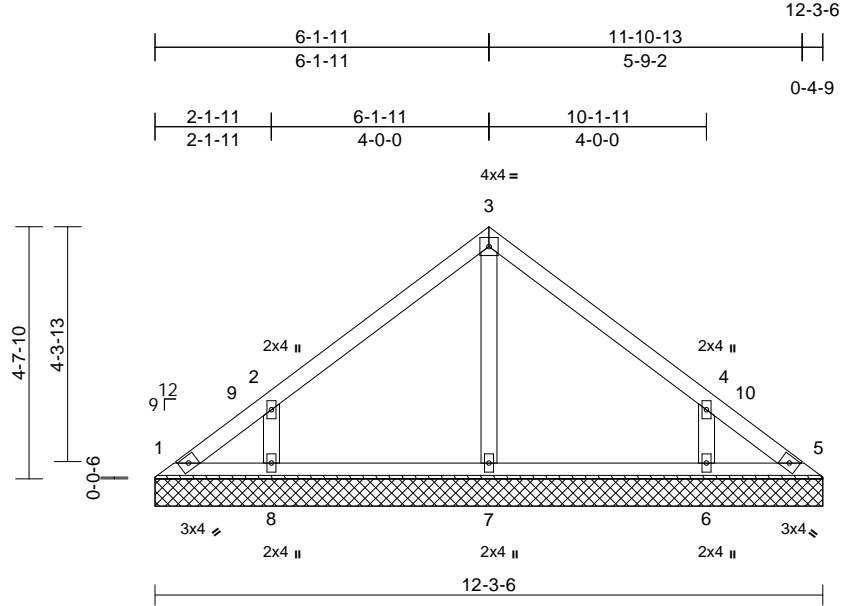
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek	
250231-A	VC3	Valley	1	1	Job Reference (optional)	I75444027

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:42:16
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Page: 1



Scale = 1:42.4

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	0.13	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	5	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S						Weight: 49 lb	FT = 20%

LUMBER

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

BRACING

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

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

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-106/88, 2-3=-135/122, 3-4=-125/117, 4-5=-84/55
BOT CHORD	1-8=-28/68, 7-8=-28/68, 6-7=-28/68, 5-6=-28/68
WEBS	3-7=-167/27, 2-8=-256/262, 4-6=-256/262

NOTES

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

- 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 31 lb uplift at joint 1, 11 lb uplift at joint 5, 107 lb uplift at joint 8 and 107 lb uplift at joint 6.

LOAD CASE(S) Standard



August 7, 2025

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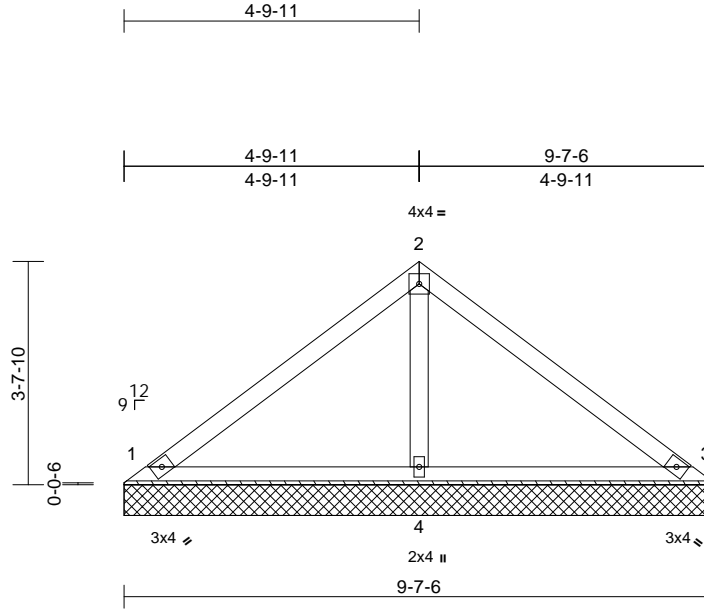
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek	I75444028
250231-A	VC4	Valley	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:42:16
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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	3	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 35 lb FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size)	1=9-7-6, 3=9-7-6, 4=9-7-6
Max Horiz	1=79 (LC 9)
Max Uplift	1=-21 (LC 12), 3=-29 (LC 13)
Max Grav	1=182 (LC 1), 3=182 (LC 1), 4=342 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

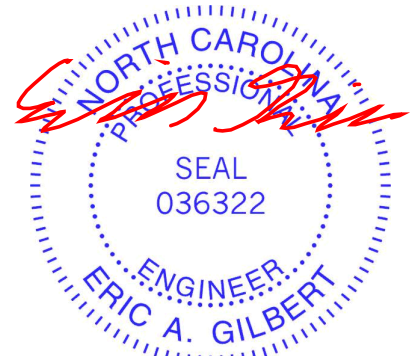
TOP CHORD	1-2=-142/86, 2-3=-135/90
BOT CHORD	1-4=-15/62, 3-4=-15/62
WEBS	2-4=-211/128

NOTES

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

- * 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 21 lb uplift at joint 1 and 29 lb uplift at joint 3.

LOAD CASE(S) Standard



August 7, 2025

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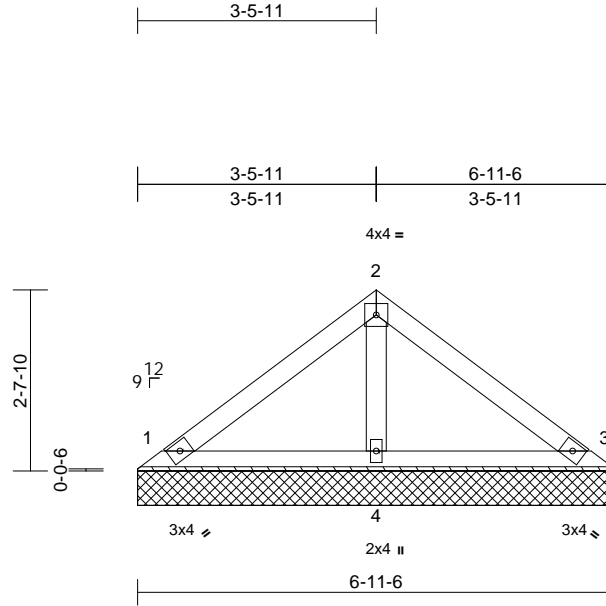
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek
250231-A	VC5	Valley	1	1	I75444029
Job Reference (optional)					

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:42:16
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Page: 1



Scale = 1:33.5

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	0.15	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.07	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: 25 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=6-11-6, 3=6-11-6, 4=6-11-6
Max Horiz 1=-55 (LC 10)
Max Uplift 1=-21 (LC 12), 3=-27 (LC 13)
Max Grav 1=138 (LC 1), 3=138 (LC 1), 4=216 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

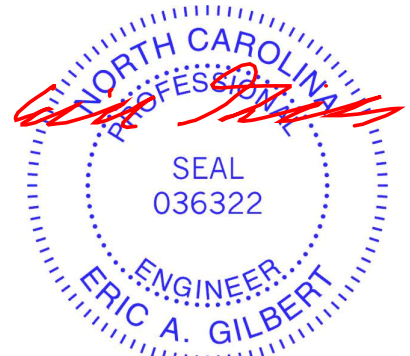
TOP CHORD 1-2=-90/68, 2-3=-82/69
BOT CHORD 1-4=-11/40, 3-4=-11/40
WEBS 2-4=-139/98

NOTES

- 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 21 lb uplift at joint 1 and 27 lb uplift at joint 3.

LOAD CASE(S) Standard



August 7, 2025

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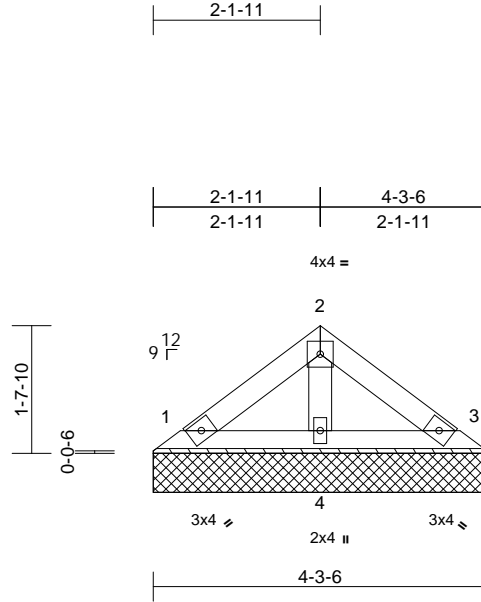
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek
250231-A	VC6	Valley	1	1	I75444030
Job Reference (optional)					

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:42:16
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Page: 1



Scale = 1:29.5

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	0.05	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.02	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: 14 lb FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 4-4-6 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size)	1=4-3-6, 3=4-3-6, 4=4-3-6
Max Horiz	1=-31 (LC 10)
Max Uplift	1=-12 (LC 12), 3=-15 (LC 13)
Max Grav	1=78 (LC 1), 3=78 (LC 1), 4=122 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

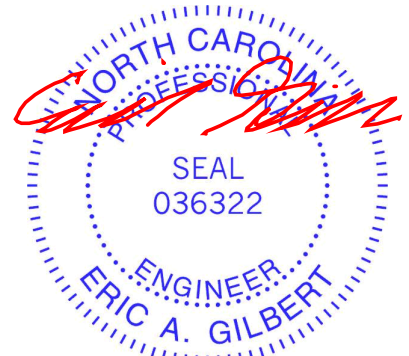
TOP CHORD	1-2=-51/43, 2-3=-47/43
BOT CHORD	1-4=-6/23, 3-4=-6/23
WEBS	2-4=-79/64

NOTES

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

- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 12 lb uplift at joint 1 and 15 lb uplift at joint 3.

LOAD CASE(S) Standard



August 7,2025

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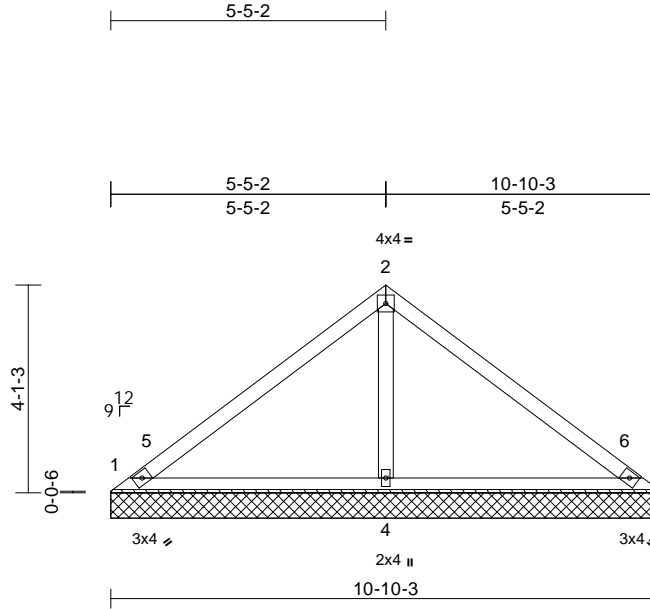
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek	I75444031
250231-A	VG1	Valley	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

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Page: 1



Scale = 1:45.5

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	0.27	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(TL)	n/a	-	n/a	999	244/190
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: 40 lb FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size) 1=10-10-3, 3=10-10-3, 4=10-10-3
Max Horiz 1=90 (LC 9)
Max Uplift 1=24 (LC 12), 3=33 (LC 13)
Max Grav 1=207 (LC 1), 3=207 (LC 1), 4=389 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

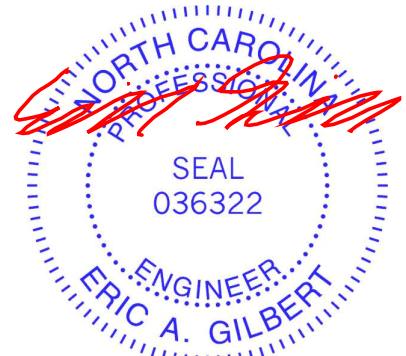
TOP CHORD 1-2=-162/102, 2-3=-154/97
BOT CHORD 1-4=-17/71, 3-4=-17/71
WEBS 2-4=-240/135

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-5-5 to 4-10-1, Interior (1) 4-10-1 to 5-5-10, Exterior(2R) 5-5-10 to 9-10-6, Interior (1) 9-10-6 to 10-5-14 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 24 lb uplift at joint 1 and 33 lb uplift at joint 3.

LOAD CASE(S) Standard



August 7, 2025

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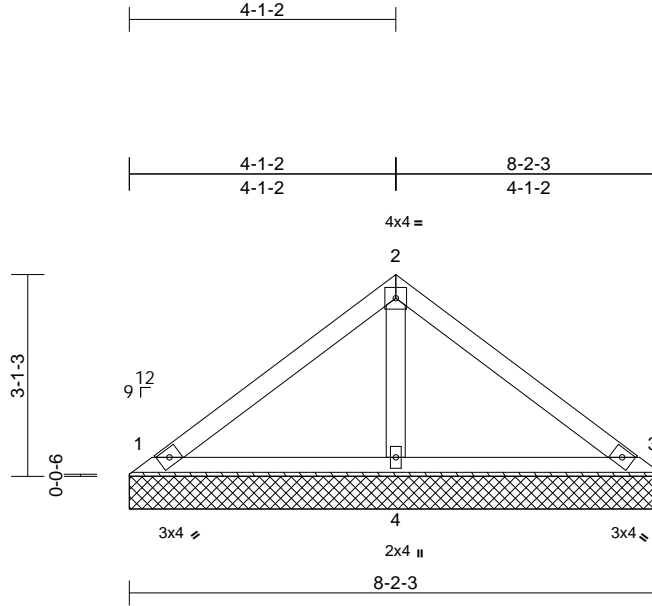
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek	I75444032
250231-A	VG2	Valley	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:42:16
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Page: 1



Scale = 1:35.4

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	0.21	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	0.03	Horiz(TL)	0.00	3	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 30 lb FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size)	1=8-2-3, 3=8-2-3, 4=8-2-3
Max Horiz	1=66 (LC 9)
Max Uplift	1=-26 (LC 12), 3=-32 (LC 13)
Max Grav	1=166 (LC 1), 3=166 (LC 1), 4=259 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

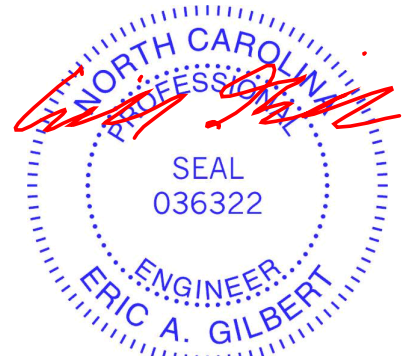
TOP CHORD	1-2=-108/75, 2-3=-99/77
BOT CHORD	1-4=-14/48, 3-4=-14/48
WEBS	2-4=-167/108

NOTES

- 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 26 lb uplift at joint 1 and 32 lb uplift at joint 3.

LOAD CASE(S) Standard



August 7, 2025

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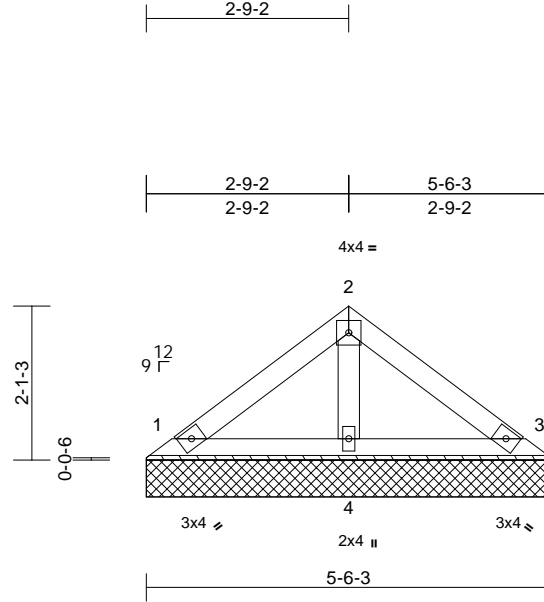
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek	I75444033
250231-A	VG3	Valley	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Aug 06 10:42:16
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Page: 1



Scale = 1:31.4

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	0.09	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(TL)	n/a	-	n/a	999	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: 19 lb FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-7-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 1=5-6-3, 3=5-6-3, 4=5-6-3
Max Horiz 1=-42 (LC 8)
Max Uplift 1=-16 (LC 12), 3=-20 (LC 13)
Max Grav 1=106 (LC 1), 3=106 (LC 1), 4=166 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

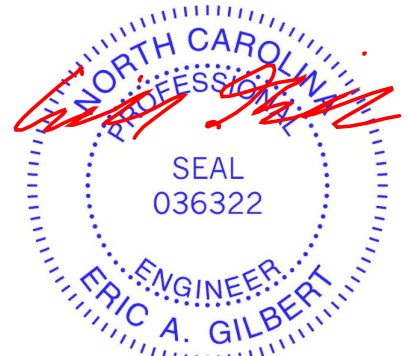
TOP CHORD 1-2=-69/57, 2-3=-63/57
BOT CHORD 1-4=-9/31, 3-4=-9/31
WEBS 2-4=-107/83

NOTES

- 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 16 lb uplift at joint 1 and 20 lb uplift at joint 3.

LOAD CASE(S) Standard



August 7, 2025

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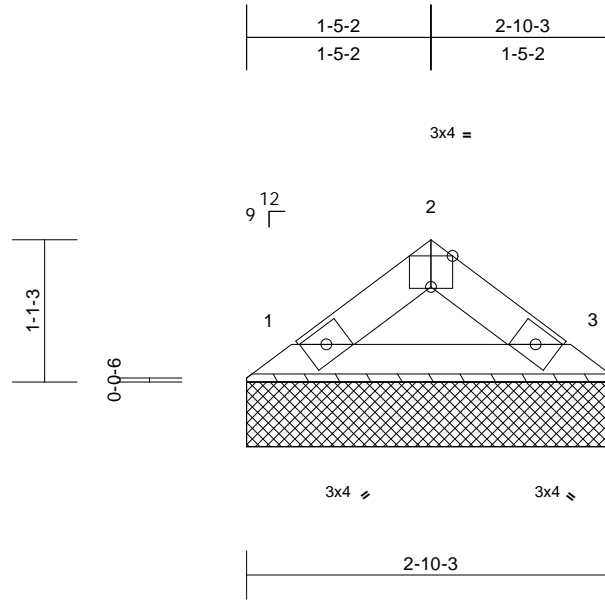
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 48 Duncans Creek	I75444034
250231-A	VG4	Valley	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

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Page: 1



Scale = 1:17.8

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 8 lb FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-11-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

Max Horiz 1=-19 (LC 10)
Max Uplift 1=-4 (LC 12), 3=-4 (LC 13)
Max Grav 1=82 (LC 1), 3=82 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

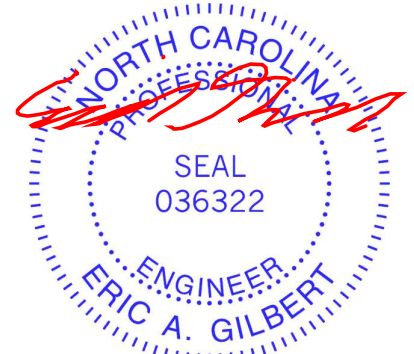
TOP CHORD 1-2=-66/59, 2-3=-66/61
BOT CHORD 1-3=-17/42

NOTES

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

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

LOAD CASE(S) Standard



August 7, 2025

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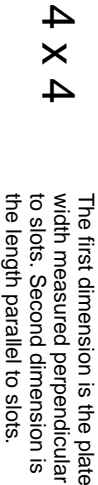
Symbols

PLATE LOCATION AND ORIENTATION

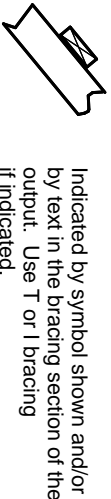


* Plate location details available in MITek software or upon request.

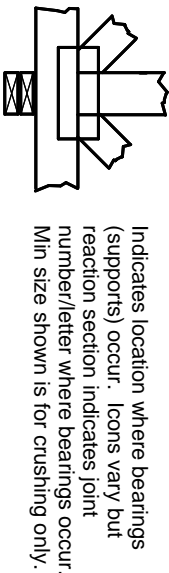
PLATE SIZE



LATERAL BRACING LOCATION

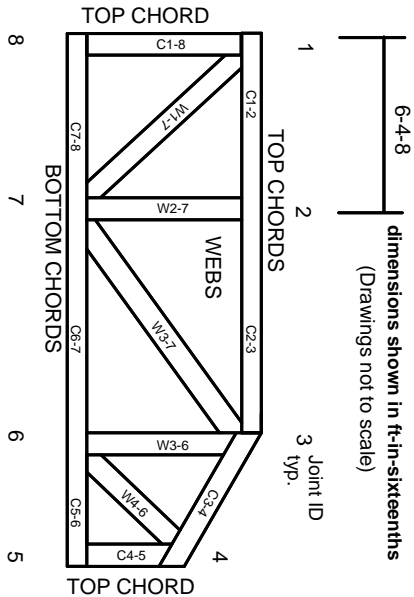


BEARING



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

Numbering System



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

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

Product Code Approvals

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

Design General Notes

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

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General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

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