

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 2504375-28480
Jane SC 1646

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by 84 Lumber 2383 (Dunn, NC).

Pages or sheets covered by this seal: I75344330 thru I75344357

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

North Carolina COA: C-0844

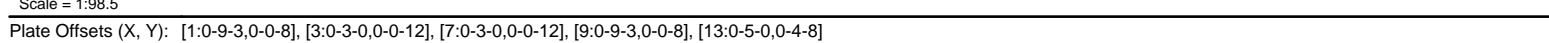


August 4, 2025

Gilbert, Eric

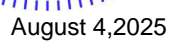
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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.

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334, Run: 8.83 S Jul 24 2025 Print: 8.830 S Jul 24 2025 MiTek Industries, Inc. Fri Aug 01 10:31:44 Page: 1
ID:Q87YnLXfXMY6DAZPSKyC4RysG?R-RfC?PsB70Hg3NSgPqnL8w3ulTXbGKWkRCDoi7J4zJC?f



LUMBER 2) Wind: ASCE 7-16: Vult=130mph (3-second gust)

LOAD CASE(S) Standard

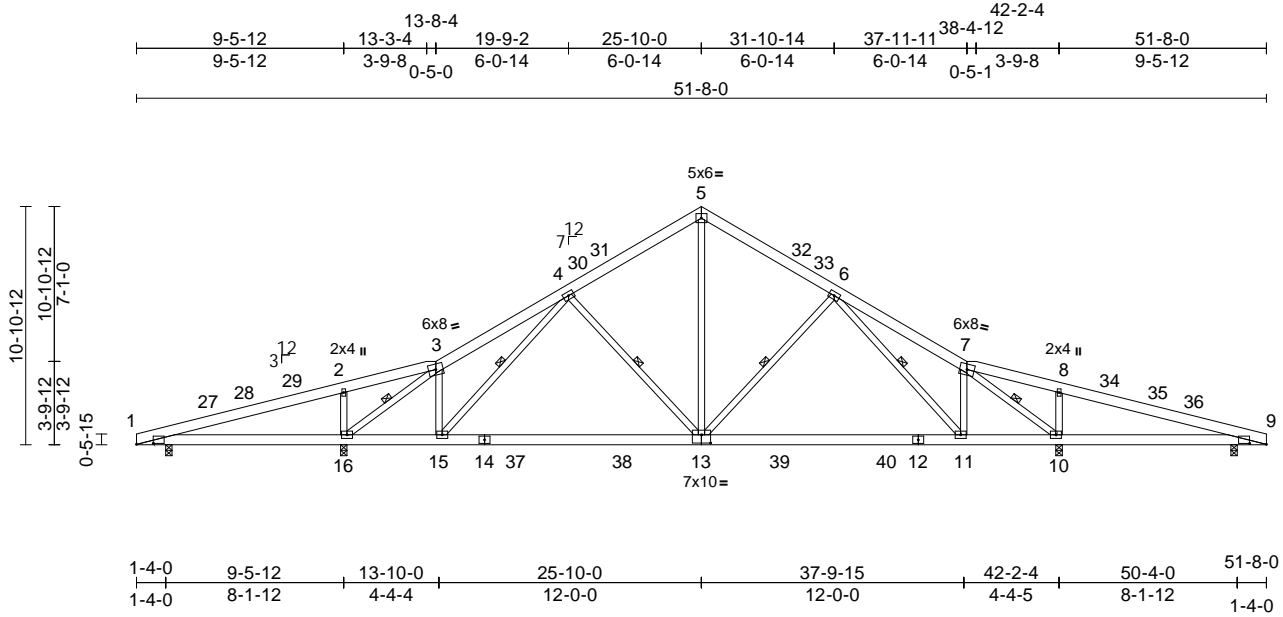


Job	Truss	Truss Type	Qty	Ply	Jane SC 1646	175344331
2504375-28480	A2	Roof Special	1	1	Job Reference (optional)	

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jul 24 2025 Print: 8.830 S Jul 24 2025 MiTek Industries, Inc. Fri Aug 01 10:31:45
ID:5tbxPIX8g2LiWXg6dUPuGEysFys-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:105.4

Plate Offsets (X, Y): [1:0-9-3,0-0-8], [7:0-0-0,0-0-0], [9:0-9-3,0-0-8], [13:0-5-0,0-4-8]

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	0.39	Vert(LL)	-0.18	13-15	>999	240	MT20	244/190
Snow (Pf/Pg)	7.7/10.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.32	13-15	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.04	10	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MS								
BCDL	10.0											
											Weight: 350 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-7-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 3-16, 4-15, 4-13, 6-13, 6-11, 7-10

REACTIONS

(size) 1=0-3-8, 9=0-3-8, 10=0-3-8, 16=0-3-8
Max Horiz 1=-164 (LC 17)
Max Uplift 1=-134 (LC 12), 9=-121 (LC 13), 10=-320 (LC 17), 16=-338 (LC 16)
Max Grav 1=342 (LC 49), 9=342 (LC 50), 10=1946 (LC 3), 16=1946 (LC 3)

FORCES

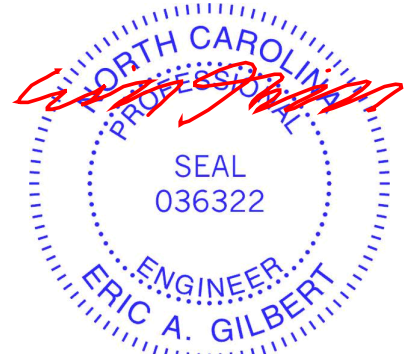
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-98/415, 2-3=-18/391, 3-4=-1585/414, 4-5=-1392/424, 5-6=-1383/422, 6-7=-1585/408, 7-8=-21/360, 8-9=-92/383, 9-10=-307/185, 10-11=-212/1406, 11-12=-200/1457, 12-13=-166/1340, 13-14=-288/102
BOT CHORD 1-2=-486/196, 2-3=-2101/338, 3-4=-2101/338, 4-5=-91/110, 5-6=-398/238, 6-7=-255/1034, 7-8=-398/249, 8-9=-91/110, 9-10=-10/348, 10-11=-2092/338, 11-12=-486/193
WEBS 2-16=-486/196, 3-16=-2101/338, 3-15=0/351, 4-15=-91/110, 4-13=-398/238, 5-13=-255/1034, 6-13=-398/249, 6-11=-91/110, 7-11=-10/348, 7-10=-2092/338, 8-10=-486/193

NOTES

1) 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=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 5-2-0, Interior (1) 5-2-0 to 25-10-0, Exterior(2R) 25-10-0 to 31-0-0, Interior (1) 31-0-0 to 51-8-0 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- All plates are 4x6 (=) MT20 unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 134 lb uplift at joint 1, 121 lb uplift at joint 9, 338 lb uplift at joint 16 and 320 lb uplift at joint 10.

LOAD CASE(S) Standard



August 4, 2025

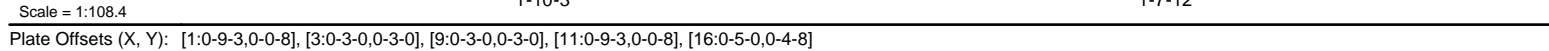
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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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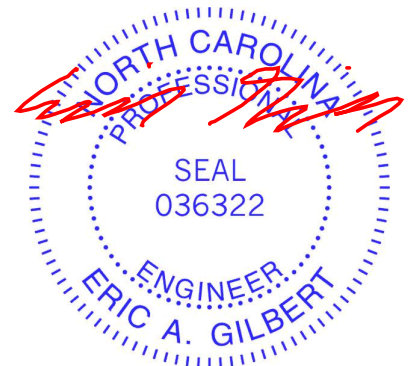
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84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334, Run: 8.83 S Jul 24 2025 Print: 8.830 S Jul 24 2025 MiTek Industries, Inc. Fri Aug 01 10:31:46 Page: 1
ID:HXpxr84N4t?JPScmnQjRbkysFy9-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWCrDoi7J4JcZ?f



LUMBER			
TOP CHORD	2x6 SP No.2		1) Unbalanced roof live loads have been considered for this design.
BOT CHORD	2x6 SP No.2		2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 5-2-0, Interior (1) 5-2-0 to 11-3-4, Exterior(2E) 11-3-4 to 12-9-15, Interior (1) 12-9-15 to 25-10-0, Exterior(2R) 25-10-0 to 31-0-0, Interior (1) 31-0-0 to 40-4-12, Exterior(2R) 40-4-12 to 45-6-12, Interior (1) 45-6-12 to 51-8-0 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
WEBS	2x4 SP No.2		3) T CLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=12.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
BRACING			4) Unbalanced snow loads have been considered for this design.
TOP CHORD	Structural wood sheathing directly applied or 5-11-9 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 3-4, 8-9.		5) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.		6) Provide adequate drainage to prevent water ponding.
WEBS	1 Row at midpt 5-18, 5-16, 7-16, 7-14		7) All plates are 4x6 (=) MT20 unless otherwise indicated.
REACTIONS	(size) 1=0-3-8, 11=0-3-8, 12=0-3-8, 20=0-3-8		8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
	Max Horiz 1=164 (LC 17)		9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BC DL = 10.0psf.
	Max Uplift 1=145 (LC 12), 11=131 (LC 13), 12=327 (LC 17), 20=344 (LC 16)		10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 145 lb uplift at joint 1, 131 lb uplift at joint 11, 344 lb uplift at joint 20 and 327 lb uplift at joint 12.
	Max Grav 1=310 (LC 51), 11=310 (LC 56), 12=2005 (LC 3), 20=2005 (LC 3)		11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
FORCES			
	(lb) - Maximum Compression/Maximum Tension		
TOP CHORD	1-2=100/575, 2-3=279/132, 3-4=191/113, 4-5=1418/374, 5-6=1357/417, 6-7=1347/414, 7-8=1419/367, 8-9=191/91, 9-10=279/116, 10-11=98/540		
BOT CHORD	1-20=452/189, 19-20=452/189, 18-19=190/1222, 14-18=208/1414, 13-14=141/1148, 12-13=440/118, 11-12=440/118		
WEBS	3-19=112/253, 4-19=1925/296, 4-18=0/783, 5-18=234/76, 5-16=375/239, 6-16=236/974, 7-16=376/250, 7-14=233/80, 8-14=0/774, 8-13=1924/301, 9-13=112/253, 2-20=1436/434, 2-19=187/1081, 10-12=1436/431, 10-13=195/1075		
NOTES			

August 4, 2025



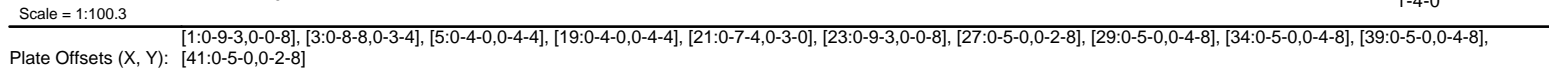
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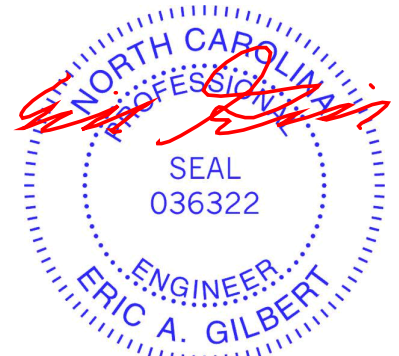
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ID:fZXEQ2DTrrmQcPvK?1NQ8ZysFu5-RfC?PsB70Hg3NSgPqnL8w3ulTXbGKWrCDoI7J4zJC?f




LUMBER		Max Grav	1=713 (LC 53), 23=713 (LC 64), 25=2135 (LC 64), 26=133 (LC 13), 27=257 (LC 64), 28=537 (LC 64), 29=334 (LC 63), 30=391 (LC 64), 31=396 (LC 64), 32=425 (LC 64), 33=448 (LC 2), 34=816 (LC 2), 35=448 (LC 2), 36=422 (LC 63), 37=397 (LC 63), 38=387 (LC 63), 39=334 (LC 64), 40=540 (LC 63), 41=255 (LC 63), 42=138 (LC 12), 43=2141 (LC 63)
TOP CHORD	2x6 SP No.2		
BOT CHORD	2x6 SP No.2		
WEBS	2x4 SP No.2		
OTHERS	2x4 SP No.2		
BRACING		FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (10-0-0 max.): 3-5, 19-21.	TOP CHORD	1-2=-904/317, 2-3=-176/392, 3-4=-130/172, 4-5=-130/172, 5-6=-144/240, 6-7=-73/249, 7-8=-57/120, 8-10=-48/146, 10-11=-25/163, 11-12=-19/171, 12-13=-16/161, 13-14=-11/139, 14-16=-7/108, 16-17=-8/76, 17-18=-31/240, 18-19=-84/218, 19-20=-77/144, 20-21=-77/144, 21-22=-106/393, 22-23=-904/258
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 1-44,43-44,24-25,23-24.	BOT CHORD	1-44=-293/846, 43-44=-293/846, 42-43=-377/232, 41-42=-377/232, 40-41=-58/188, 38-40=-58/188, 37-38=-58/188, 36-37=-58/188, 35-36=-58/188, 33-35=-58/188, 32-33=-44/139, 31-32=-44/139, 30-31=-44/139, 28-30=-44/139, 27-28=-44/139, 26-27=-378/172, 25-26=-378/172, 24-25=-211/846, 23-24=-211/846
WEBS	1 Row at midpt 12-34		
JOINTS	1 Brace at Jt(s): 45, 46, 49, 50, 53, 54, 57, 58		
REACTIONS	(size) 1=0-3-8, 23=0-3-8, 25=33-0-0, 26=33-0-0, 27=33-0-0, 28=33-0-0, 29=33-0-0, 30=33-0-0, 31=33-0-0, 32=33-0-0, 33=33-0-0, 34=33-0-0, 35=33-0-0, 36=33-0-0, 37=33-0-0, 38=33-0-0, 39=33-0-0, 40=33-0-0, 41=33-0-0, 42=33-0-0, 43=33-0-0		
	Max Horiz 1=-164 (LC 70)		
	Max Uplift 1=204 (LC 8), 23=-185 (LC 9), 25=-559 (LC 9), 26=-543 (LC 2), 27=-80 (LC 13), 28=-220 (LC 13), 29=-81 (LC 9), 30=-87 (LC 13), 31=-90 (LC 13), 32=-153 (LC 13), 33=-127 (LC 13), 34=-219 (LC 12), 35=-135 (LC 12), 36=-147 (LC 12), 37=-103 (LC 12), 38=-87 (LC 12), 39=-82 (LC 8), 40=-224 (LC 12), 41=-119 (LC 8), 42=-549 (LC 2), 43=-572 (LC 12)		



Continued on page 2

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Jane SC 1646
2504375-28480	A4	Roof Special Girder	1	1	Job Reference (optional)

I75344333

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jul 24 2025 Print: 8.830 S Jul 24 2025 MiTek Industries, Inc. Fri Aug 01 10:31:47

Page: 2

ID:fZXEQ2DTmmQcPVk?1NQ8ZysFu5-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

WEBS	2-44=-123/561, 2-43=-1268/384, 3-43=-471/141, 3-52=-39/273, 51-52=-46/316, 41-51=-50/322, 5-41=-42/72, 12-34=-183/0, 19-27=-19/54, 27-59=-61/320, 59-60=-66/314, 21-60=-54/273, 21-25=-471/132, 22-25=-1268/375, 22-24=-122/561, 7-47=-158/145, 46-47=-144/138, 45-46=-149/141, 34-45=-152/143, 41-50=-206/25, 49-50=-199/23, 48-49=-198/24, 7-48=-252/31, 34-53=-156/152, 53-54=-153/149, 54-55=-149/147, 17-55=-161/153, 17-56=-255/37, 56-57=-198/29, 57-58=-198/28, 27-58=-206/30, 11-45=-145/64, 35-45=-142/61, 10-46=-105/73, 36-46=-97/69, 8-47=-57/14, 37-47=-77/24, 38-48=-74/12, 39-49=-1/3, 6-50=-304/157, 40-50=-295/157, 4-51=-11/34, 42-52=-68/19, 13-53=-140/57, 33-53=-138/53, 14-54=-110/79, 32-54=-104/75, 16-55=-53/3, 31-55=-69/12, 30-56=-78/12, 29-57=-0/2, 18-58=-300/155, 28-58=-291/153, 20-59=-10/29, 26-60=-67/20	1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (lb/ft) Vert: 1-3=-35, 3-5=-45, 5-12=-35, 12-19=-35, 19-21=-45, 21-23=-35, 61-66=-20 Concentrated Loads (lb) Vert: 44=-240 (F), 43=-243 (F), 25=-243 (F), 24=-240 (F), 79=-263 (F), 80=-217 (F), 81=-243 (F), 82=-243 (F), 83=-243 (F), 84=-243 (F), 85=-243 (F), 86=-243 (F), 87=-243 (F), 88=-243 (F), 89=-243 (F), 90=-243 (F), 91=-243 (F), 92=-243 (F), 93=-243 (F), 94=-243 (F), 95=-243 (F), 96=-243 (F), 97=-217 (F), 98=-263 (F)
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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; TC DL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; 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) TCELL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=12.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
- 5) Unbalanced snow loads have been considered for this design.
- 6) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 7) Provide adequate drainage to prevent water ponding.
- 8) All plates are 2x4 (||) MT20 unless otherwise indicated.
- 9) Gable studs spaced at 2-0-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) * 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.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 204 lb uplift at joint 1, 185 lb uplift at joint 23, 572 lb uplift at joint 43, 119 lb uplift at joint 41, 219 lb uplift at joint 34, 80 lb uplift at joint 27, 559 lb uplift at joint 25, 135 lb uplift at joint 35, 147 lb uplift at joint 36, 103 lb uplift at joint 37, 87 lb uplift at joint 38, 82 lb uplift at joint 39, 224 lb uplift at joint 40, 549 lb uplift at joint 42, 127 lb uplift at joint 33, 153 lb uplift at joint 32, 90 lb uplift at joint 31, 87 lb uplift at joint 30, 81 lb uplift at joint 29, 220 lb uplift at joint 28 and 543 lb uplift at joint 26.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 14) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 3-4-12 from the left end to 48-3-4 to connect truss(es) to front face of bottom chord.
- 15) Fill all nail holes where hanger is in contact with lumber.
- 16) 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

August 4, 2025

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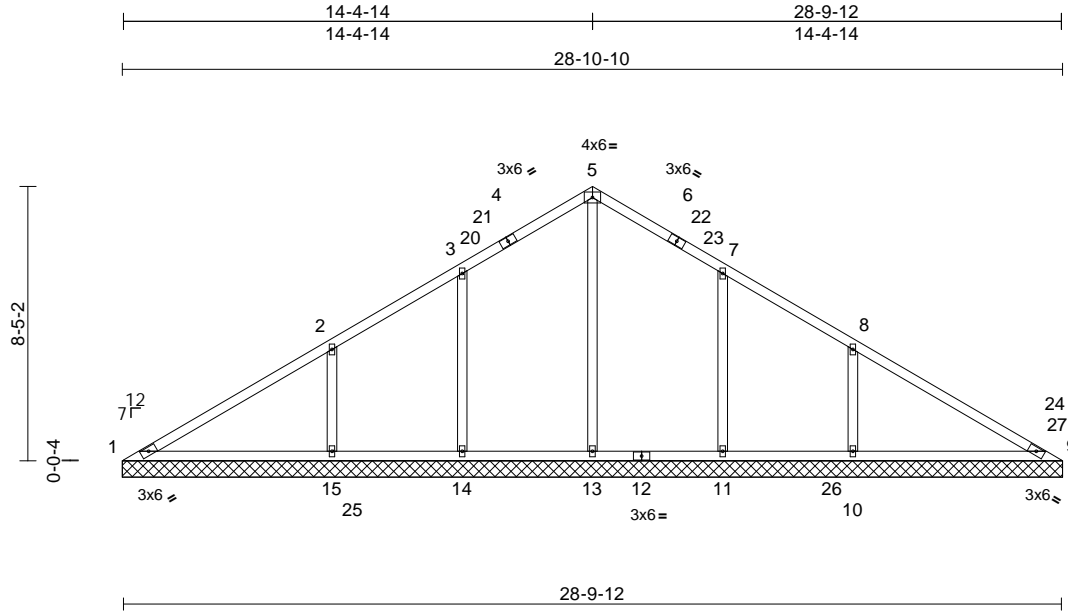
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Jane SC 1646	
2504375-28480	AV1	Valley	2	1	Job Reference (optional)	I75344334

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jul 24 2025 Print: 8.830 S Jul 24 2025 MiTek Industries, Inc. Fri Aug 01 10:31:48
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Page: 1



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	7.7/10.0	Lumber DOL	1.15	BC	0.37	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.58	Horiz(TL)	0.01	15	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MS								
BCDL	10.0											
											Weight: 128 lb	FT = 20%

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

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

REACTIONS (size)
1=28-10-10, 9=28-10-10,
10=28-10-10, 11=28-10-10,
13=28-10-10, 14=28-10-10,
15=28-10-10
Max Horiz 1=193 (LC 13)
Max Uplift 1=14 (LC 12), 10=185 (LC 17),
11=113 (LC 17), 14=112 (LC 16),
15=188 (LC 16)
Max Grav 1=122 (LC 35), 9=92 (LC 36),
10=629 (LC 30), 11=392 (LC 30),
13=721 (LC 29), 14=391 (LC 29),
15=633 (LC 29)

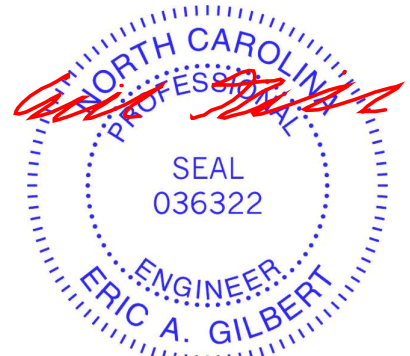
FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-192/460, 2-3=-62/377, 3-5=0/362,
5-7=0/347, 7-8=-9/317, 8-9=-137/399
BOT CHORD 1-15=-288/167, 14-15=-288/167,
13-14=-288/167, 11-13=-288/167,
10-11=-288/167, 9-10=-288/167
WEBS 5-13=-503/7, 3-14=-231/144, 2-15=-365/194,
7-11=-231/144, 8-10=-363/193

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=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 14-5-5, Exterior(2R) 14-5-5 to 17-5-5, Interior (1) 17-5-5 to 28-4-2 zone; cantilever left and right 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.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- All plates are 2x4 (||) MT20 unless otherwise indicated.
- 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 1, 112 lb uplift at joint 14, 188 lb uplift at joint 15, 113 lb uplift at joint 11 and 185 lb uplift at joint 10.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 9.

LOAD CASE(S) Standard



August 4, 2025

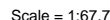
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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

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818 Soundside Road
Edenton, NC 27932

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334, Run: 8.83 S Jul 24 2025 Print: 8.830 S Jul 24 2025 MiTek Industries, Inc. Fri Aug 01 10:31:49 Page: 1
ID: aY0RPzcv VWgekvrBbv8wysG1w-RfC?PsB70Hq3NSqPanL8w3uTXbGKwKRCdoi7J4zJC?f



LUMBER	
TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
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 6-0-0 oc bracing.

REACTIONS (size)	1=23-2-1, 7=23-2-1, 8=23-2-1, 10=23-2-1, 11=23-2-1, 12=23-2-1, 13=23-2-1
Max Horiz	1=154 (LC 13)
Max Uplift	1=-18 (LC 12), 8=-114 (LC 17), 10=-138 (LC 17), 12=-137 (LC 16) 13=-117 (LC 16)
Max Grav	1=121 (LC 30), 7=76 (LC 29), 8=392 (LC 30), 10=440 (LC 30), 11=444 (LC 29), 12=439 (LC 29), 13=397 (LC 29)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-186/164, 2-3=-83/142, 3-4=-72/143,
4-5=-72/131, 5-6=-37/97, 6-7=-123/116

BOT CHORD 1-13=-66/165, 12-13=-66/97, 11-12=-66/97,
10-11=-66/97, 8-10=-66/97, 7-8=-66/108

WEBS 4-11=-247/0, 3-12=-273/163, 2-13=-244/131,
5-10=-241/164, 6-8=-242/130

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=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 11-7-0, Exterior(2R) 11-7-0 to 14-7-0, Interior (1) 14-7-0 to 22-7-9 zone; cantilever left and right 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 7) All plates are 2x4 (||) MT20 unless otherwise indicated.
- 8) Gable requires continuous bottom chord bearing.
- 9) Gable studs spaced at 4-0-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 18 lb uplift at joint 1, 137 lb uplift at joint 12, 117 lb uplift at joint 13, 138 lb uplift at joint 10 and 114 lb uplift at joint 8.
- 13) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 7.

LOAD CASE(S) Standard



August 4, 2025



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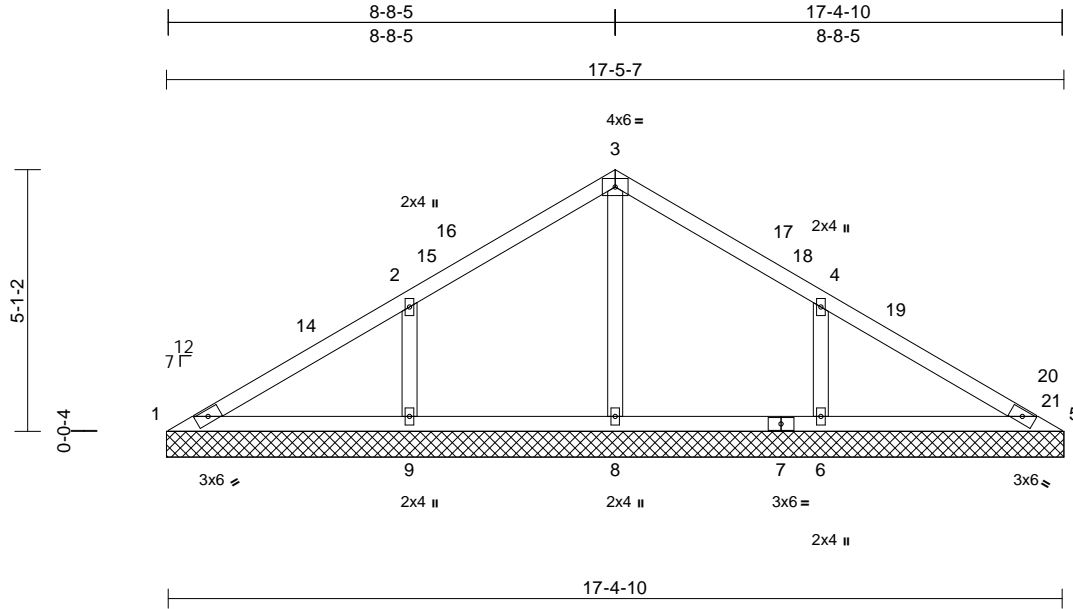
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Jane SC 1646	
2504375-28480	AV3	Valley	2	1	Job Reference (optional)	I75344336

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jul 24 2025 Print: 8.830 S Jul 24 2025 MiTek Industries, Inc. Fri Aug 01 10:31:49
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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	0.29	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	7.7/10.0	Lumber DOL	1.15	BC	0.18	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.14	Horiz(TL)	0.00	9	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MS							Weight: 67 lb	FT = 20%
BCDL	10.0											

LUMBER

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

BRACING

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

REACTIONS

(size) 1=17-5-7, 5=17-5-7, 6=17-5-7, 8=17-5-7, 9=17-5-7
Max Horiz 1=115 (LC 13)
Max Uplift 1=-9 (LC 17), 6=-156 (LC 17), 8=-3 (LC 16), 9=-159 (LC 16)
Max Grav 1=102 (LC 35), 5=73 (LC 36), 6=423 (LC 30), 8=401 (LC 2), 9=427 (LC 29)

FORCES

(lb) - Maximum Compression/Maximum Tension

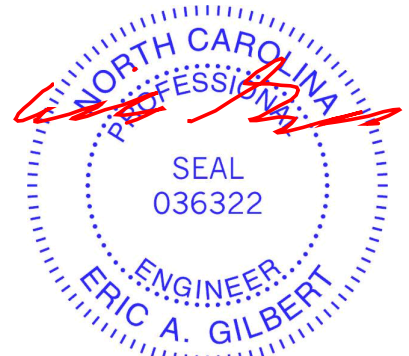
TOP CHORD 1-2=-130/247, 2-3=-14/195, 3-4=0/193, 4-5=-107/216
BOT CHORD 1-9=-138/129, 8-9=-138/91, 6-8=-138/91, 5-6=-138/95
WEBS 3-8=-345/32, 2-9=-303/168, 4-6=-302/167

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 8-8-12, Exterior(2R) 8-8-12 to 11-8-12, Interior (1) 11-8-12 to 16-11-0 zone; cantilever left and right 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.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 9 lb uplift at joint 1, 3 lb uplift at joint 8, 159 lb uplift at joint 9 and 156 lb uplift at joint 6.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 5.

LOAD CASE(S) Standard



August 4, 2025

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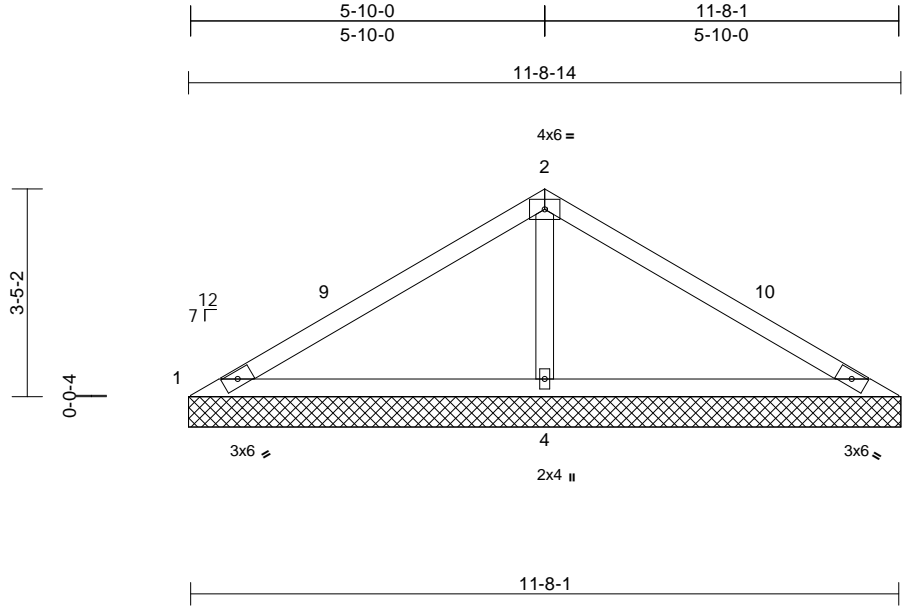
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Jane SC 1646	175344337
2504375-28480	AV4	Valley	2	1	Job Reference (optional)	

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jul 24 2025 Print: 8.830 S Jul 24 2025 MiTek Industries, Inc. Fri Aug 01 10:31:49
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Page: 1



Scale = 1:38

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	0.41	Vert(LL)	n/a	-	n/a	999	MT20
Snow (Pf/Pg)	7.7/10.0	Lumber DOL	1.15	BC	0.35	Vert(TL)	n/a	-	n/a	999	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.14	Horiz(TL)	0.00	4	n/a	n/a	
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MS							
BCDL	10.0										
										Weight: 40 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size)	1=11-8-14, 3=11-8-14, 4=11-8-14
Max Horiz	1=-76 (LC 12)
Max Uplift	1=-53 (LC 36), 3=-53 (LC 35), 4=-167 (LC 16)
Max Grav	1=64 (LC 35), 3=64 (LC 36), 4=926 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-153/494, 2-3=-153/494
BOT CHORD	1-4=-358/191, 3-4=-358/191
WEBS	2-4=-732/270

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=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 5-10-7, Exterior(2R) 5-10-7 to 8-10-7, Interior (1) 8-10-7 to 11-8-14 zone; cantilever left and right 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.

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 53 lb uplift at joint 1, 53 lb uplift at joint 3 and 167 lb uplift at joint 4.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 3.

LOAD CASE(S) Standard



August 4, 2025

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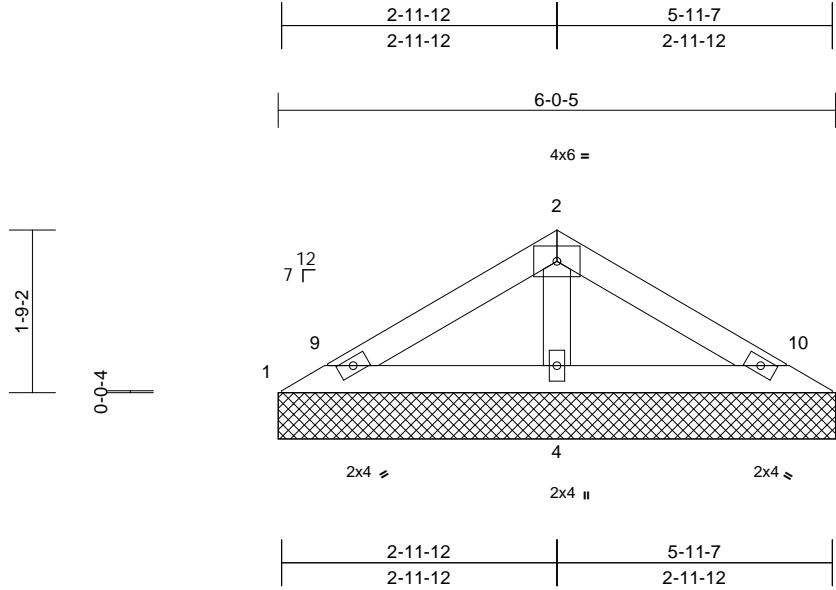
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Jane SC 1646	
2504375-28480	AV5	Valley	2	1	Job Reference (optional)	I75344338

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jul 24 2025 Print: 8.830 S Jul 24 2025 MiTek Industries, Inc. Fri Aug 01 10:31:49
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Scale = 1:24.9

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	7.7/10.0	Lumber DOL	1.15	BC	0.11	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 19 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-11-7 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS

(size)	1=6-0-5, 3=6-0-5, 4=6-0-5
Max Horiz	1=-37 (LC 12)
Max Uplift	1=-11 (LC 16), 3=-17 (LC 17), 4=-60 (LC 16)
Max Grav	1=70 (LC 35), 3=70 (LC 36), 4=377 (LC 2)

FORCES

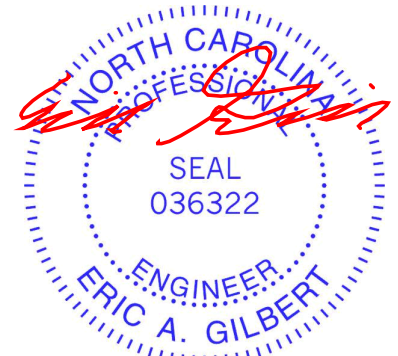
	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-70/152, 2-3=-70/152
BOT CHORD	1-4=-126/106, 3-4=-126/106
WEBS	2-4=-247/135

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=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right 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.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10

- Unbalanced snow loads have been considered for this design.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 11 lb uplift at joint 1, 17 lb uplift at joint 3 and 60 lb uplift at joint 4.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 3.

LOAD CASE(S) Standard



August 4, 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

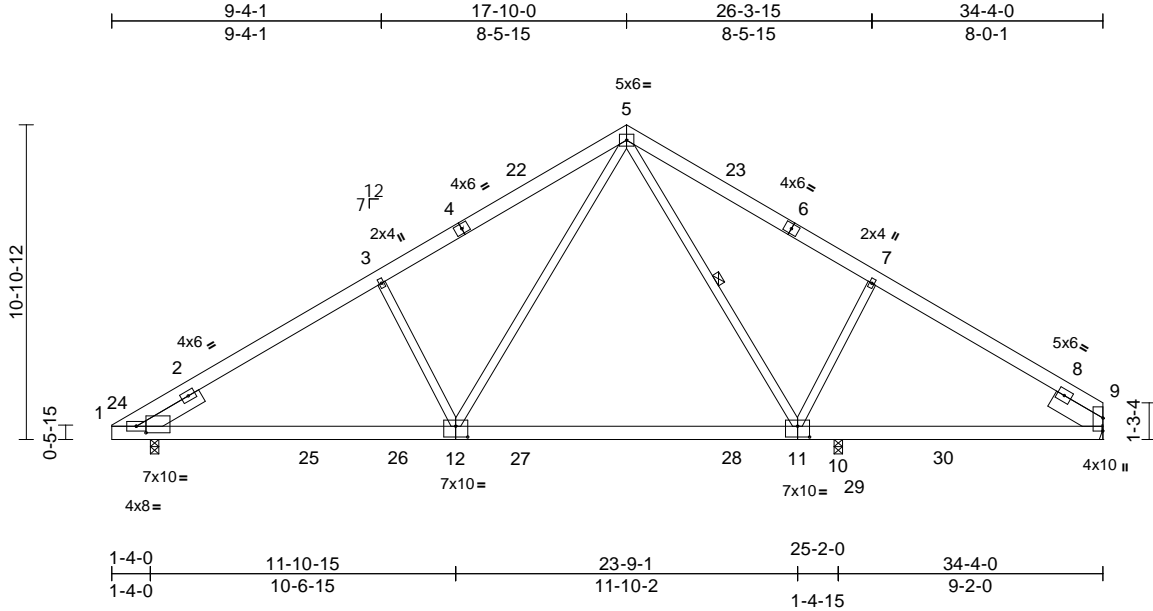
Job	Truss	Truss Type	Qty	Ply	Jane SC 1646	I75344339
2504375-28480	B1	Common	6	1	Job Reference (optional)	

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 E Feb 18 2025 Print: 8.830 E Feb 18 2025 MiTek Industries, Inc. Mon Aug 04 16:22:25

Page: 1

ID:zYfJJgd_sDqYw3lyLLcFEysGAx-1hedvJY1qLK83tu0zWvLfxF6onuK6JsEIE15WyrL6i



Scale = 1:79.8

Plate Offsets (X, Y): [1:0-4-0,0-2-12], [9:0-5-6,0-0-1], [11:0-5-0,0-4-8], [12:0-5-0,0-4-8]

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	0.61	Vert(LL)	-0.30	11-12	>999	240	244/190
Snow (Pf/Pg)	7.7/10.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.51	11-12	>594	180	
TCDL	10.0	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.05	9	n/a	n/a	
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MS							
BCDL	10.0										
Weight: 237 lb FT = 20%											

LUMBER

TOP CHORD 2x6 SP No.2
 BOT CHORD 2x6 SP No.2
 WEBS 2x4 SP No.2
 SLIDER Left 2x6 SP No.2 -- 2-6-0, Right 2x8 SP DSS -- 2-0-0

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-1-1 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 5-11

REACTIONS

(lb/size) 1=832/0-3-8, 9=629/ Mechanical, 10=389/0-3-8
 Max Horiz 1=-226 (LC 12)
 Max Uplift 1=-188 (LC 16), 9=-157 (LC 17), 10=-83 (LC 17)
 Max Grav 1=1423 (LC 29), 9=1090 (LC 30), 10=650 (LC 30)

FORCES

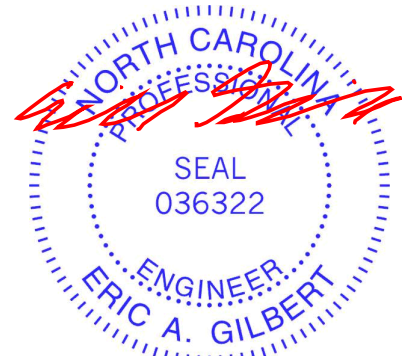
(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=-324/37, 2-3=-1850/296, 3-4=-1711/333, 4-22=-1602/344, 5-22=-1579/367, 5-23=-1181/310, 6-23=-1201/286, 6-7=-1312/275, 7-8=-1451/239, 8-9=-227/15
 BOT CHORD 1-24=0/0, 1-24=0/0, 1-25=-305/1654, 25-26=-305/1654, 12-26=-305/1654, 12-27=-71/1000, 27-28=-71/1000, 11-28=-71/1000, 10-11=-110/1149, 10-29=-110/1149, 29-30=-110/1149, 9-30=-110/1149
 WEBS 3-12=-392/283, 5-12=-218/976, 5-11=-132/307, 7-11=-412/284

NOTES

1) 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=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 1-5-12 to 4-10-15, Interior (1) 4-10-15 to 17-10-0, Exterior(2R) 17-10-0 to 21-3-3, Interior (1) 21-3-3 to 34-4-0 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 188 lb uplift at joint 1, 157 lb uplift at joint 9 and 83 lb uplift at joint 10.

LOAD CASE(S) Standard



August 4,2025

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

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

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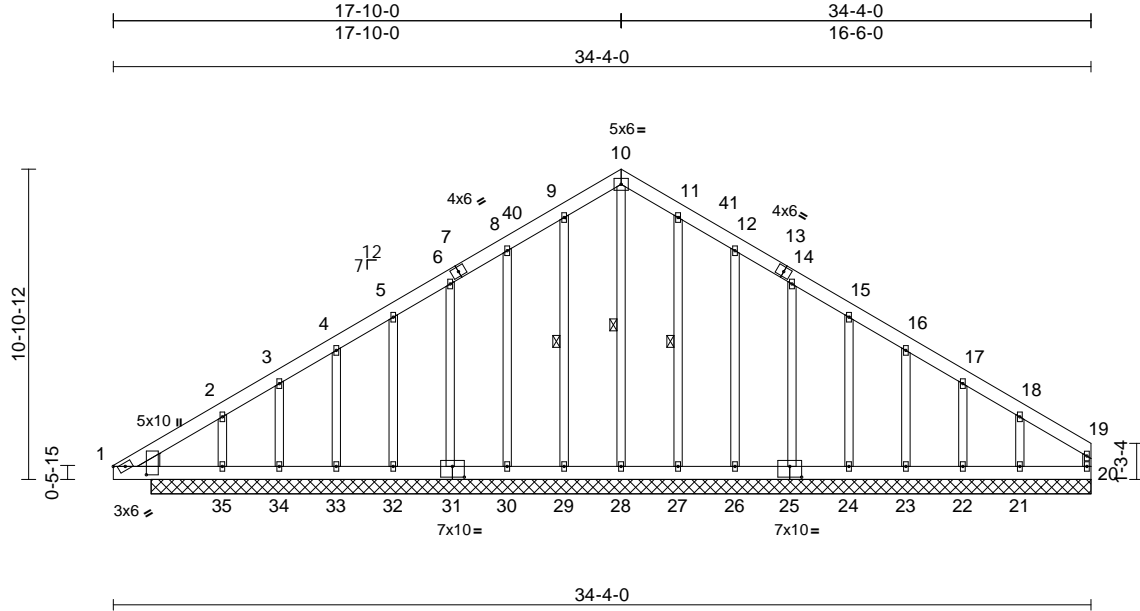
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Jane SC 1646	175344340
2504375-28480	B1E	Common Supported Gable	1	1	Job Reference (optional)	

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jul 24 2025 Print: 8.830 S Jul 24 2025 MiTek Industries, Inc. Fri Aug 01 10:31:50
ID:wIS4anmi3v6nbLQxPrjdUHysGU7-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:80.9

Plate Offsets (X, Y): [1:0-7-6,0-1-1], [1:0-3-8,1-1-15], [25:0-5-0,0-4-8], [31:0-5-0,0-4-8]

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	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	7.7/10.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.14	Horiz(TL)	0.00	20	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MS								
BCDL	10.0											
											Weight: 302 lb	FT = 20%

LUMBER

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

WEBS 1 Row at midpt 10-28, 9-29, 11-27

REACTIONS (size) 1=33-0-0, 20=33-0-0, 21=33-0-0, 22=33-0-0, 23=33-0-0, 24=33-0-0, 25=33-0-0, 26=33-0-0, 27=33-0-0, 28=33-0-0, 29=33-0-0, 30=33-0-0, 31=33-0-0, 32=33-0-0, 33=33-0-0, 34=33-0-0, 35=33-0-0

Max Horiz 1=226 (LC 13)
Max Uplift 1=-104 (LC 12), 20=-22 (LC 13), 21=-138 (LC 17), 22=-42 (LC 17), 23=-67 (LC 17), 24=-60 (LC 17), 25=-64 (LC 17), 26=-74 (LC 17), 27=-27 (LC 17), 29=-37 (LC 16), 30=-71 (LC 16), 31=-63 (LC 16), 32=-60 (LC 16), 33=-70 (LC 16), 34=-29 (LC 16), 35=-175 (LC 16)

Max Grav 1=230 (LC 30), 20=121 (LC 29), 21=228 (LC 30), 22=153 (LC 2), 23=170 (LC 30), 24=166 (LC 30), 25=167 (LC 30), 26=168 (LC 30), 27=163 (LC 36), 28=206 (LC 32), 29=174 (LC 29), 30=165 (LC 29), 31=167 (LC 29), 32=166 (LC 29), 33=172 (LC 29), 34=153 (LC 2), 35=262 (LC 29)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-219/199, 2-3=-174/158, 3-4=-165/159, 4-5=-150/167, 5-6=-137/195, 6-8=-126/223, 8-9=-157/255, 9-10=-171/270, 10-11=-171/270, 11-12=-157/241, 12-14=-126/190, 14-15=-100/143, 15-16=-73/97, 16-17=-68/61, 17-18=-79/45, 18-19=-108/78, 19-20=-88/17
BOT CHORD 1-35=-135/148, 34-35=-59/101, 33-34=-59/101, 32-33=-59/101, 30-32=-59/102, 29-30=-59/102, 28-29=-59/102, 27-28=-59/102, 26-27=-59/102, 24-26=-59/102, 23-24=-58/101, 22-23=-58/101, 21-22=-58/101, 20-21=-58/101
WEBS 10-28=-188/65, 9-29=-133/49, 8-30=-126/83, 6-31=-126/75, 5-32=-126/73, 4-33=-128/76, 3-34=-117/62, 2-35=-173/127, 11-27=-122/39, 12-26=-130/86, 14-25=-126/76, 15-24=-126/73, 16-23=-128/76, 17-22=-118/64, 18-21=-165/119

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=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 1-4-0 to 4-9-3, Exterior(2N) 4-9-3 to 17-10-0, Corner(3R) 17-10-0 to 21-3-3, Exterior(2N) 21-3-3 to 34-2-4 zone; cantilever left and right 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.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- All plates are 2x4 (||) MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.



August 4, 2025

Continued on page 2

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

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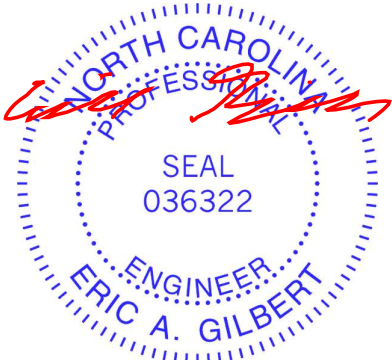
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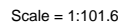
Job	Truss	Truss Type	Qty	Ply	Jane SC 1646
2504375-28480	B1E	Common Supported Gable	1	1	Job Reference (optional)
					I75344340

- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 20, 104 lb uplift at joint 1, 37 lb uplift at joint 29, 71 lb uplift at joint 30, 63 lb uplift at joint 31, 60 lb uplift at joint 32, 70 lb uplift at joint 33, 29 lb uplift at joint 34, 175 lb uplift at joint 35, 27 lb uplift at joint 27, 74 lb uplift at joint 26, 64 lb uplift at joint 25, 60 lb uplift at joint 24, 67 lb uplift at joint 23, 42 lb uplift at joint 22, 138 lb uplift at joint 21 and 104 lb uplift at joint 1.
- 12) Non Standard bearing condition. Review required.

LOAD CASE(S) Standard



August 4,2025

Page: 1[illegible]

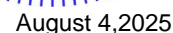
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 204 lb uplift at joint 1, 186 lb uplift at joint 11 and 150 lb uplift at joint 12.

11) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

LOAD CASE(S) Standard

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=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 1-5-12 to 4-10-15, Interior (1) 4-10-15 to 17-10-0, Exterior(2R) 17-10-0 to 21-3-3, Interior (1) 21-3-3 to 34-4-0 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 9) Refer to girder(s) for truss to truss connections.



 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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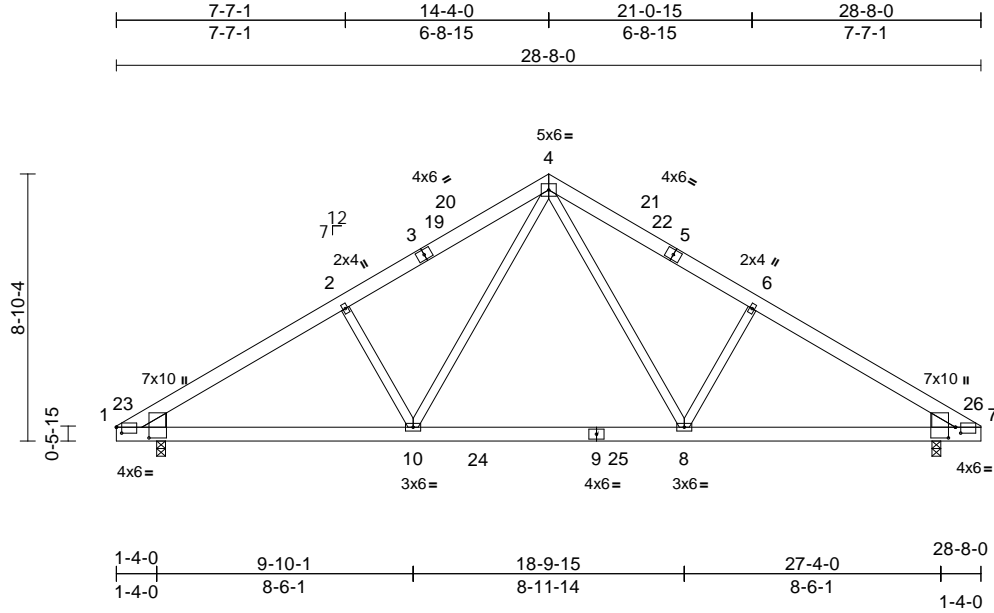
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Jane SC 1646	I75344342
2504375-28480	C1	Common	16	1	Job Reference (optional)	

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

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Page: 1



Scale = 1:76.4

Plate Offsets (X, Y): [1:0-2-1,0-2-6], [1:0-4-4,1-0-15], [7:0-2-1,0-2-6], [7:0-4-4,0-2-13]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	-0.15	8-10	>999	240	244/190
Snow (Pf/Pg)	7.7/10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.26	8-10	>999	180	
TCDL	10.0	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.03	7	n/a	n/a	
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MS							
BCDL	10.0										
Weight: 189 lb FT = 20%											

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-2-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 1=0-3-8, 7=0-3-8
Max Horiz 1=-176 (LC 12)
Max Uplift 1=-159 (LC 16), 7=-159 (LC 17)
Max Grav 1=1214 (LC 29), 7=1214 (LC 30)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-1554/249, 2-4=-1415/298,
4-6=-1415/298, 6-7=-1554/249

BOT CHORD 1-10=-256/1358, 8-10=-79/944,
7-8=-143/1227

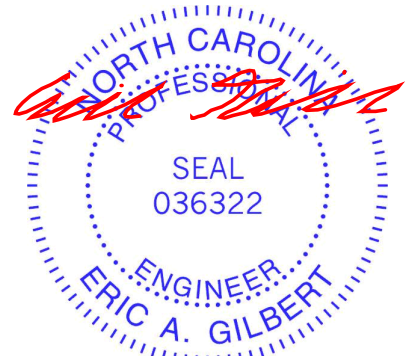
WEBS 4-8=-154/607, 6-8=-284/220, 4-10=-154/607,
2-10=-284/220

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=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 1-5-12 to 4-5-12, Interior (1) 4-5-12 to 14-4-0, Exterior(2R) 14-4-0 to 17-4-0, Interior (1) 17-4-0 to 27-2-4 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 159 lb uplift at joint 7 and 159 lb uplift at joint 1.

LOAD CASE(S) Standard



August 4, 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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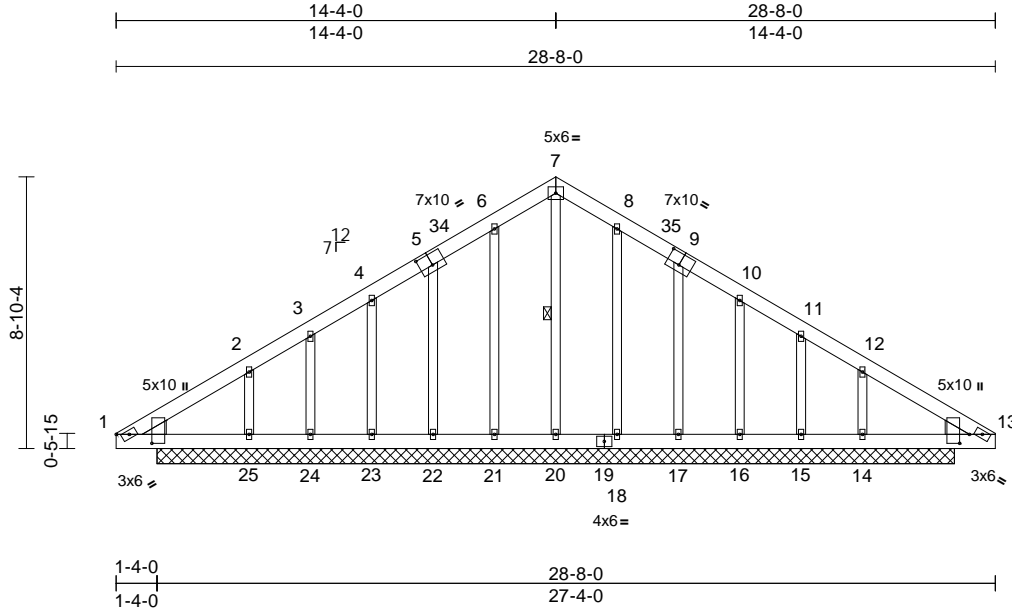
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Jane SC 1646	
2504375-28480	C1E	Common Supported Gable	1	1	Job Reference (optional)	I75344343

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

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Page: 1



Scale = 1:75.1

Plate Offsets (X, Y): [1:0-7-6,0-1-1], [1:0-3-8,1-1-15], [5:0-5-0,0-4-8], [9:0-5-0,0-4-8], [13:0-1-6,0-1-1], [13:0-3-8,0-3-13]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	n/a	-	n/a	999	244/190
Snow (Pf/Pg)	7.7/10.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	n/a	-	n/a	999	
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horiz(TL)	0.00	13	n/a	n/a	
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MS							
BCDL	10.0										
Weight: 226 lb FT = 20%											

LUMBER

TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
OTHERS 2x4 SP No.2
WEDGE Left: 2x6 SP No.2
Right: 2x6 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.
WEBS 1 Row at midpt 7-20

REACTIONS

(size) 1=26-0-0, 13=26-0-0, 14=26-0-0, 15=26-0-0, 16=26-0-0, 17=26-0-0, 18=26-0-0, 20=26-0-0, 21=26-0-0, 22=26-0-0, 23=26-0-0, 24=26-0-0, 25=26-0-0
Max Horiz 1=178 (LC 12)
Max Uplift 1=43 (LC 12), 13=6 (LC 13), 14=144 (LC 17), 15=35 (LC 17), 16=63 (LC 17), 17=71 (LC 17), 18=44 (LC 17), 21=48 (LC 16), 22=69 (LC 16), 23=64 (LC 16), 24=31 (LC 16), 25=157 (LC 16)
Max Grav 1=208 (LC 30), 13=180 (LC 29), 14=254 (LC 30), 15=144 (LC 2), 16=165 (LC 30), 17=168 (LC 30), 18=170 (LC 30), 20=161 (LC 32), 21=174 (LC 29), 22=167 (LC 29), 23=166 (LC 29), 24=144 (LC 2), 25=268 (LC 29)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-156/124, 2-3=-130/96, 3-4=-120/115, 4-6=-123/172, 6-7=-143/207, 7-8=-143/207, 8-10=-123/170, 10-11=-85/84, 11-12=-97/57, 12-13=-119/75

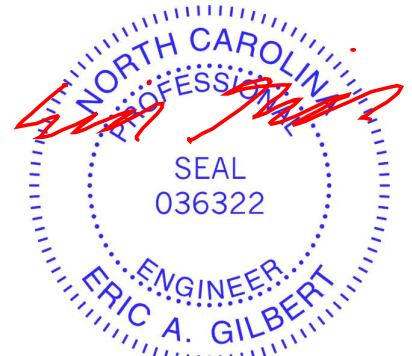
BOT CHORD 1-25=-115/132, 24-25=-60/99, 23-24=-60/99, 22-23=-60/99, 21-22=-60/100, 20-21=-60/100, 18-20=-60/100, 17-18=-60/100, 16-17=-59/98, 15-16=-59/98, 14-15=-59/98, 13-14=-59/98
WEBS 7-20=-134/43, 6-21=-134/59, 5-22=-128/82, 4-23=-121/71, 3-24=-112/60, 2-25=-182/126, 8-18=-130/56, 9-17=-129/84, 10-16=-121/71, 11-15=-114/62, 12-14=-176/121

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=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 1-4-0 to 4-4-0, Exterior(2N) 4-4-0 to 14-4-0, Corner(3R) 14-4-0 to 17-4-0, Exterior(2N) 17-4-0 to 27-4-0 zone; cantilever left and right 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.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- All plates are 2x4 (||) MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 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 43 lb uplift at joint 1, 6 lb uplift at joint 13, 48 lb uplift at joint 21, 69 lb uplift at joint 22, 64 lb uplift at joint 23, 31 lb uplift at joint 24, 157 lb uplift at joint 25, 44 lb uplift at joint 18, 71 lb uplift at joint 17, 63 lb uplift at joint 16, 35 lb uplift at joint 15, 144 lb uplift at joint 14, 43 lb uplift at joint 1 and 6 lb uplift at joint 13.
- Non Standard bearing condition. Review required.

LOAD CASE(S) Standard



August 4, 2025

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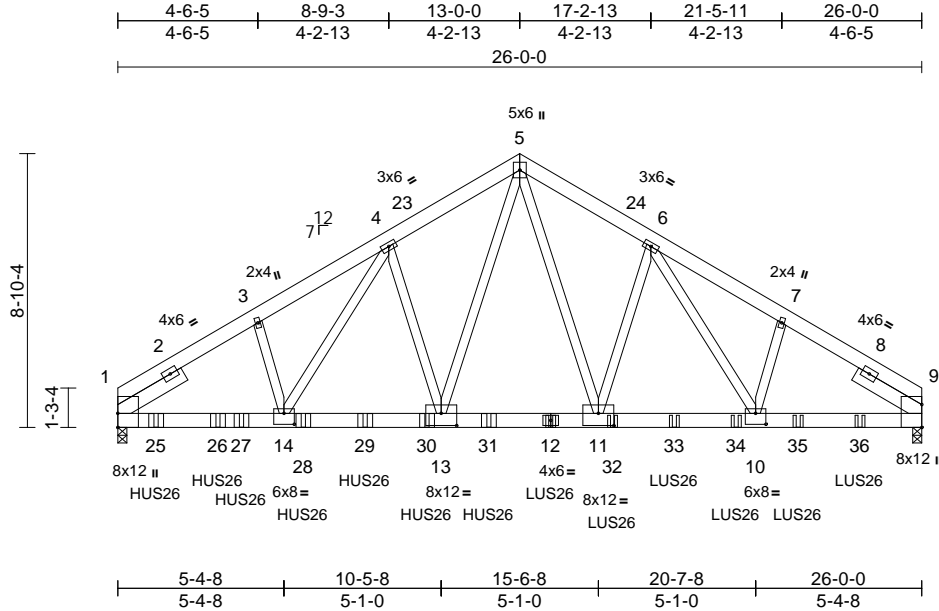
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Jane SC 1646	I75344344
2504375-28480	C1G	Common Girder	1	3	Job Reference (optional)	

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jul 24 2025 Print: 8.830 S Jul 24 2025 MiTek Industries, Inc. Fri Aug 01 10:31:52
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Page: 1



Scale = 1:74.5

Plate Offsets (X, Y): [10:0-4-0,0-4-4], [11:0-6-0,0-4-12], [13:0-6-0,0-4-12], [14:0-4-0,0-4-4]

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	0.85	Vert(LL)	-0.13	13-14	>999	240	MT20	244/190
Snow (Pf/Pg)	7.7/10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.24	13-14	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.46	Horz(CT)	0.07	9	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MS								
BCDL	10.0											
											Weight: 641 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS	(size) 1=0-3-8, 9=0-3-8
	Max Horiz 1=-178 (LC 36)
	Max Uplift 1=-1447 (LC 12), 9=-1212 (LC 13)
	Max Grav 1=10120 (LC 25), 9=8130 (LC 26)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-3=-12807/1858, 3-4=-12442/1871, 4-5=-10327/1600, 5-6=-9840/1552, 6-7=-10732/1683, 7-9=-11079/1668
BOT CHORD	1-14=-1593/10654, 13-14=-1374/9504, 11-13=-986/7195, 10-11=-1227/8756, 9-10=-1310/9052
WEBS	5-11=-779/4529, 6-11=-1195/334, 6-10=-275/1242, 7-10=-208/1186, 5-13=-923/5977, 4-13=-2065/433, 4-14=-464/2897, 3-14=-213/1257

NOTES

- 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-4-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.

- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- Bearing capacity is increased by the plate at joint(s) 1. Plate must be within 1/4 in of bearing surface.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1447 lb uplift at joint 1 and 1212 lb uplift at joint 9.
- Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-2-14 from the left end to 12-0-0 to connect truss(es) to back face of bottom chord.

- Use Simpson Strong-Tie LUS26 (4-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 14-0-0 from the left end to 24-0-0 to connect truss(es) to back face of bottom chord.
 - Fill all nail holes where hanger is in contact with lumber.
- LOAD CASE(S)** Standard
- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-5=-35, 5-9=-35, 15-19=-20
Concentrated Loads (lb)
Vert: 12=-610 (B), 25=-768 (B), 26=-768 (B), 27=-768 (B), 28=-768 (B), 29=-768 (B), 30=-768 (B), 31=-768 (B), 32=-610 (B), 33=-610 (B), 34=-610 (B), 35=-610 (B), 36=-610 (B)



August 4, 2025

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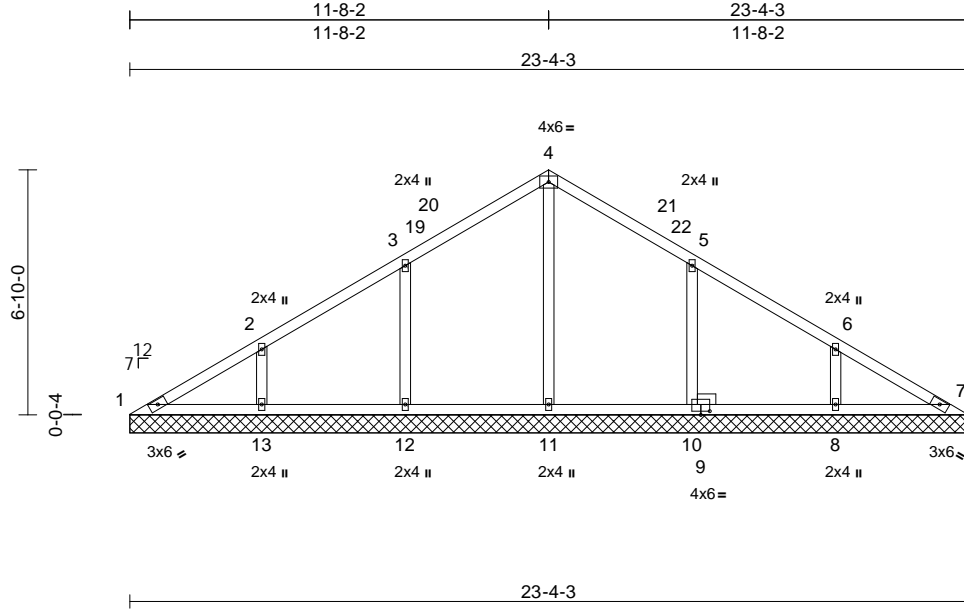
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Jane SC 1646	
2504375-28480	CV1	Valley	1	1	Job Reference (optional)	I75344345

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jul 24 2025 Print: 8.830 S Jul 24 2025 MiTek Industries, Inc. Fri Aug 01 10:31:52
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Page: 1



Scale = 1:64.2

Plate Offsets (X, Y): [9:0-3-0,0-1-4]

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	0.24	Vert(LL)	n/a	-	999	MT20	244/190
Snow (Pf/Pg)	7.7/10.0	Lumber DOL	1.15	BC	0.17	Vert(TL)	n/a	-	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.28	Horiz(TL)	-0.01	7	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MS							
BCDL	10.0										
										Weight: 100 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size) 1=23-4-3, 7=23-4-3, 8=23-4-3, 10=23-4-3, 11=23-4-3, 12=23-4-3, 13=23-4-3
Max Horiz 1=156 (LC 13)
Max Uplift 1=-38 (LC 12), 8=-116 (LC 17), 10=-139 (LC 17), 12=-136 (LC 16), 13=-122 (LC 16)
Max Grav 1=80 (LC 35), 8=400 (LC 30), 10=432 (LC 30), 11=595 (LC 29), 12=441 (LC 29), 13=388 (LC 29)

FORCES

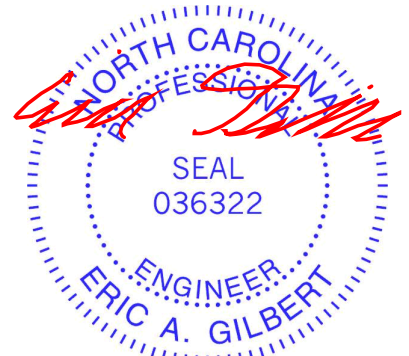
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-113/312, 2-3=-69/291, 3-4=-28/286, 4-5=-28/274, 5-6=0/228, 6-7=-76/240
BOT CHORD 1-13=-173/77, 12-13=-173/69, 11-12=-173/69, 10-11=-173/69, 8-10=-173/69, 7-8=-173/69
WEBS 4-11=-385/0, 3-12=-275/163, 2-13=-240/134, 5-10=-270/164, 6-8=-246/132

NOTES

1) 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=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-7 to 3-0-7, Interior (1) 3-0-7 to 11-8-9, Exterior(2R) 11-8-9 to 14-8-9, Interior (1) 14-8-9 to 22-10-10 zone; cantilever left and right 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.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 38 lb uplift at joint 1, 136 lb uplift at joint 12, 122 lb uplift at joint 13, 139 lb uplift at joint 10 and 116 lb uplift at joint 8.

LOAD CASE(S) Standard



August 4, 2025

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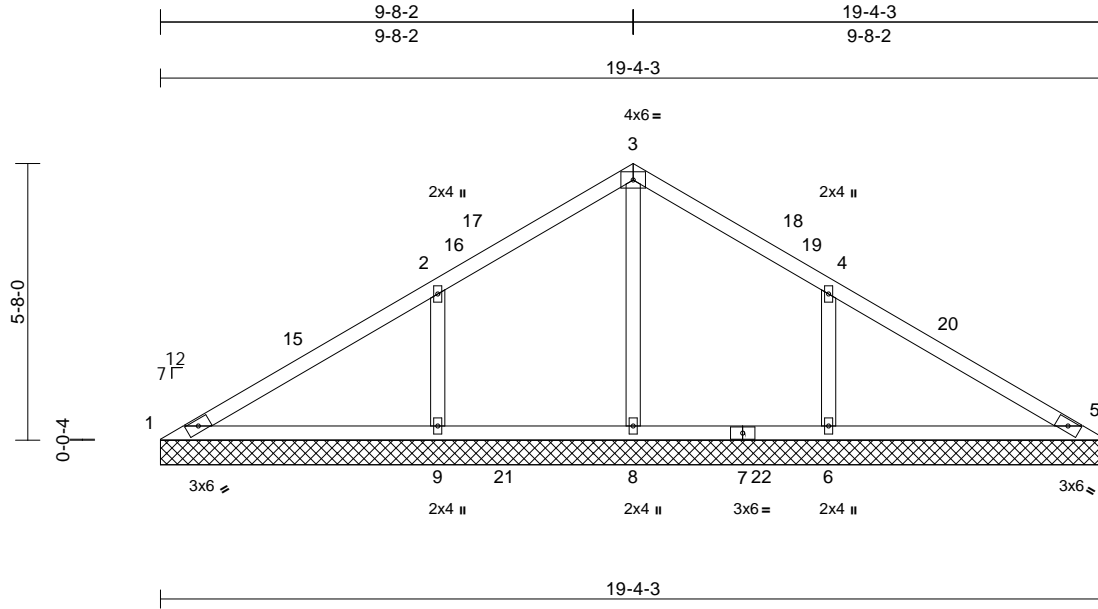
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Jane SC 1646	
2504375-28480	CV2	Valley	1	1	Job Reference (optional)	I75344346

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

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Page: 1



Scale = 1:47.2

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.40	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	7.7/10.0	Lumber DOL	1.15	BC	0.27	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.26	Horiz(TL)	-0.01	5	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MS							
BCDL	10.0									Weight: 76 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size)	1=19-4-3, 5=19-4-3, 6=19-4-3, 8=19-4-3, 9=19-4-3
Max Horiz	1=129 (LC 13)
Max Uplift	1=-54 (LC 36), 6=-178 (LC 17), 9=-185 (LC 16)
Max Grav	1=108 (LC 35), 5=1 (LC 30), 6=569 (LC 30), 8=645 (LC 29), 9=577 (LC 29)

FORCES

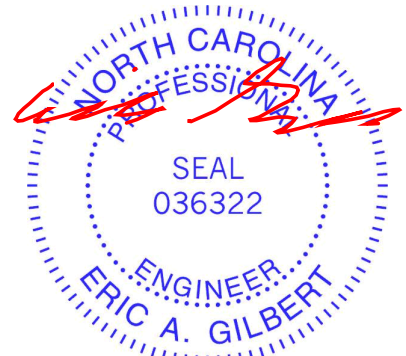
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-131/459, 2-3=0/385, 3-4=0/373, 4-5=-163/445
BOT CHORD	1-9=-335/112, 8-9=-335/112, 6-8=-335/112, 5-6=-335/112
WEBS	3-8=-511/9, 2-9=-348/190, 4-6=-344/188

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=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-7 to 3-0-7, Interior (1) 3-0-7 to 9-8-9, Exterior(2R) 9-8-9 to 12-8-9, Interior (1) 12-8-9 to 18-10-10 zone; cantilever left and right 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.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 54 lb uplift at joint 1, 185 lb uplift at joint 9 and 178 lb uplift at joint 6.

LOAD CASE(S) Standard



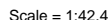
August 4, 2025

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Edenton, NC 27932

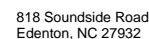
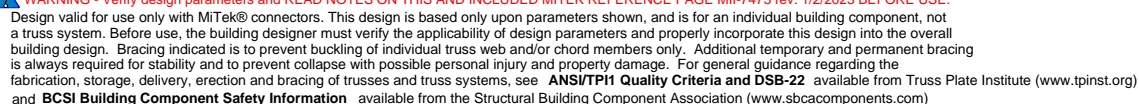
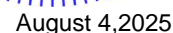
Page: 1

LUMBER

BRACING

NOTES

- LOAD CASE(S)** Standard



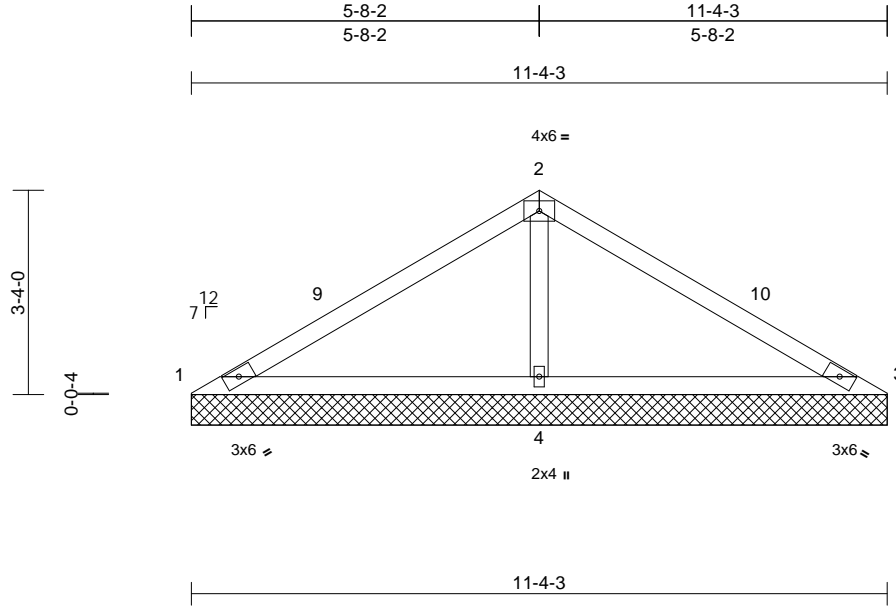
Job	Truss	Truss Type	Qty	Ply	Jane SC 1646	
2504375-28480	CV4	Valley	1	1	Job Reference (optional)	I75344348

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jul 24 2025 Print: 8.830 S Jul 24 2025 MiTek Industries, Inc. Fri Aug 01 10:31:53

Page: 1

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Scale = 1:37.6

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	n/a	-	n/a	999	MT20
Snow (Pf/Pg)	7.7/10.0	Lumber DOL	1.15	BC	0.33	Vert(TL)	n/a	-	n/a	999	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horiz(TL)	0.00	4	n/a	n/a	
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MS							
BCDL	10.0										
										Weight: 39 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size)	1=11-4-3, 3=11-4-3, 4=11-4-3
Max Horiz	1=-74 (LC 12)
Max Uplift	1=-44 (LC 36), 3=-44 (LC 35), 4=-156 (LC 16)
Max Grav	1=70 (LC 35), 3=70 (LC 36), 4=874 (LC 2)

FORCES

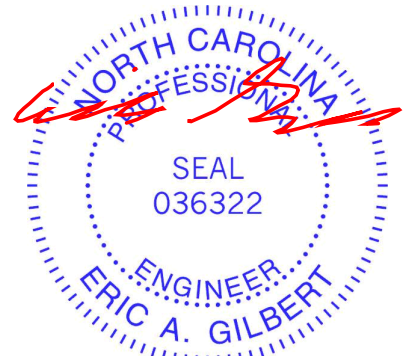
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-141/452, 2-3=-141/452
BOT CHORD	1-4=-324/180, 3-4=-324/180
WEBS	2-4=-683/259

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=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-7 to 3-0-7, Interior (1) 3-0-7 to 5-8-9, Exterior(2R) 5-8-9 to 8-8-9, Interior (1) 8-8-9 to 11-4-10 zone; cantilever left and right 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.

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 44 lb uplift at joint 1, 44 lb uplift at joint 3 and 156 lb uplift at joint 4.

LOAD CASE(S) Standard



August 4, 2025

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

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

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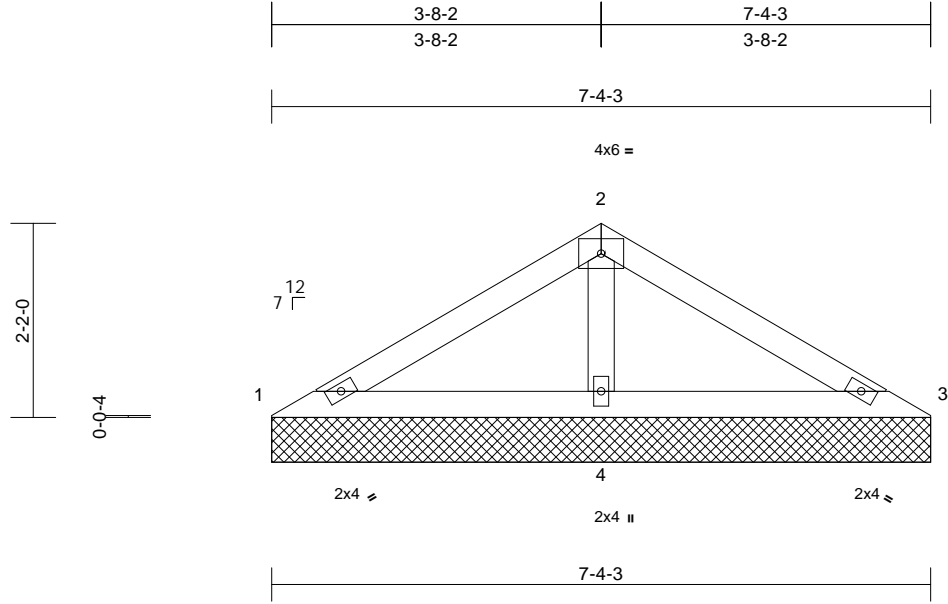
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Jane SC 1646	I75344349
2504375-28480	CV5	Valley	1	1	Job Reference (optional)	

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jul 24 2025 Print: 8.830 S Jul 24 2025 MiTek Industries, Inc. Fri Aug 01 10:31:53
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Scale = 1:25.7

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	0.16	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	7.7/10.0	Lumber DOL	1.15	BC	0.16	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP								
BCDL	10.0											
											Weight: 24 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 7-4-3 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS

(size)	1=7-4-3, 3=7-4-3, 4=7-4-3
Max Horiz	1=47 (LC 15)
Max Uplift	1=-8 (LC 16), 3=-16 (LC 17), 4=-83 (LC 16)
Max Grav	1=73 (LC 35), 3=73 (LC 36), 4=492 (LC 2)

FORCES

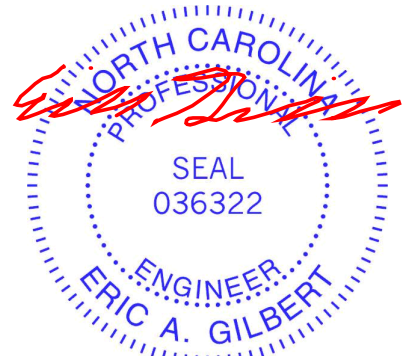
	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-89/219, 2-3=-89/219
BOT CHORD	1-4=-175/135, 3-4=-175/135
WEBS	2-4=-343/173

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=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-7 to 3-0-7, Interior (1) 3-0-7 to 3-8-9, Exterior(2R) 3-8-9 to 6-8-9, Interior (1) 6-8-9 to 7-4-10 zone; cantilever left and right 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.

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 8 lb uplift at joint 1, 16 lb uplift at joint 3 and 83 lb uplift at joint 4.

LOAD CASE(S) Standard



August 4, 2025

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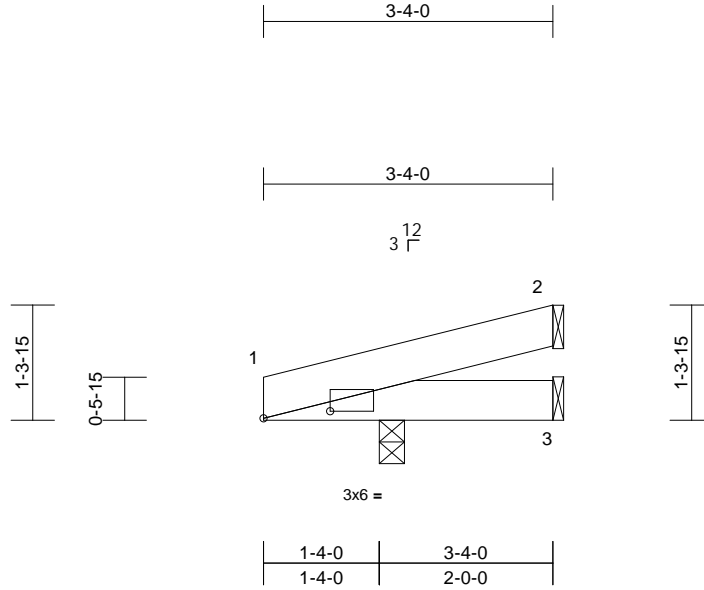
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Jane SC 1646	
2504375-28480	J1	Jack-Open	6	1	Job Reference (optional)	I75344350

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

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Page: 1



Scale = 1:26.5

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

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	0.04	Vert(LL)	0.00	4	>999	240	MT20	244/190
Snow (Pf/Pg)	7.7/10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	4	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	1	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 16 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-4-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=0-3-8, 2= Mechanical, 3= Mechanical
Max Horiz 1=30 (LC 12)
Max Uplift 1=-45 (LC 12), 2=-18 (LC 12)
Max Grav 1=221 (LC 2), 2=32 (LC 2), 3=22 (LC 7)

FORCES (lb) - Maximum Compression/Maximum Tension

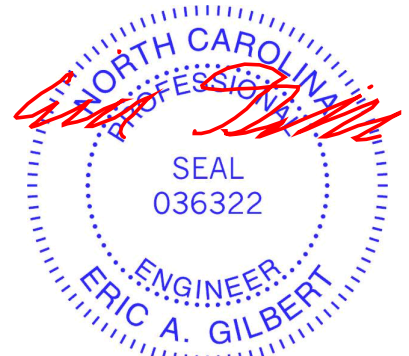
TOP CHORD 1-2=-44/52
BOT CHORD 1-3=-28/0

NOTES

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 45 lb uplift at joint 1 and 18 lb uplift at joint 2.

LOAD CASE(S) Standard



August 4, 2025

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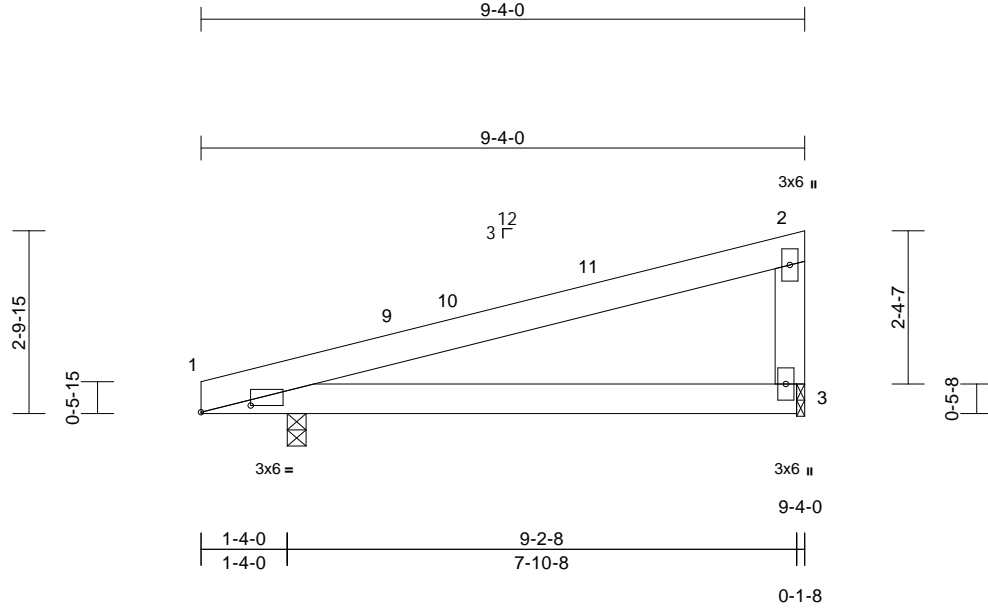
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Jane SC 1646	
2504375-28480	M1	Monopitch	20	1	Job Reference (optional)	I75344351

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

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Page: 1



Scale = 1:35.6

Plate Offsets (X, Y): [1:0-9-3,0-1-4]

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	0.30	Vert(LL)	-0.03	3-8	>999	240	MT20	244/190
Snow (Pf/Pg)	7.7/10.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	-0.06	3-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	1	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MS								
BCDL	10.0											
											Weight: 49 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x6 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) 1=0-3-8, 3=0-1-8
Max Horiz 1=83 (LC 12)
Max Uplift 1=-87 (LC 12), 3=-83 (LC 12)
Max Grav 1=427 (LC 2), 3=302 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension

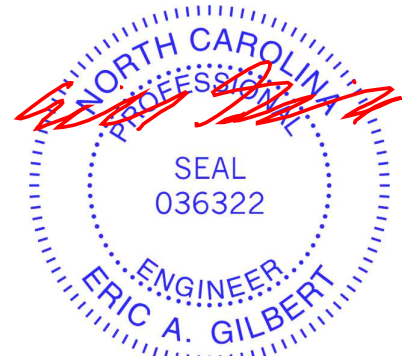
TOP CHORD 1-2=-179/52, 2-3=-198/149
BOT CHORD 1-3=-153/124

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=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 9-1-4 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 3 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 3.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 87 lb uplift at joint 1 and 83 lb uplift at joint 3.

LOAD CASE(S) Standard



August 4,2025

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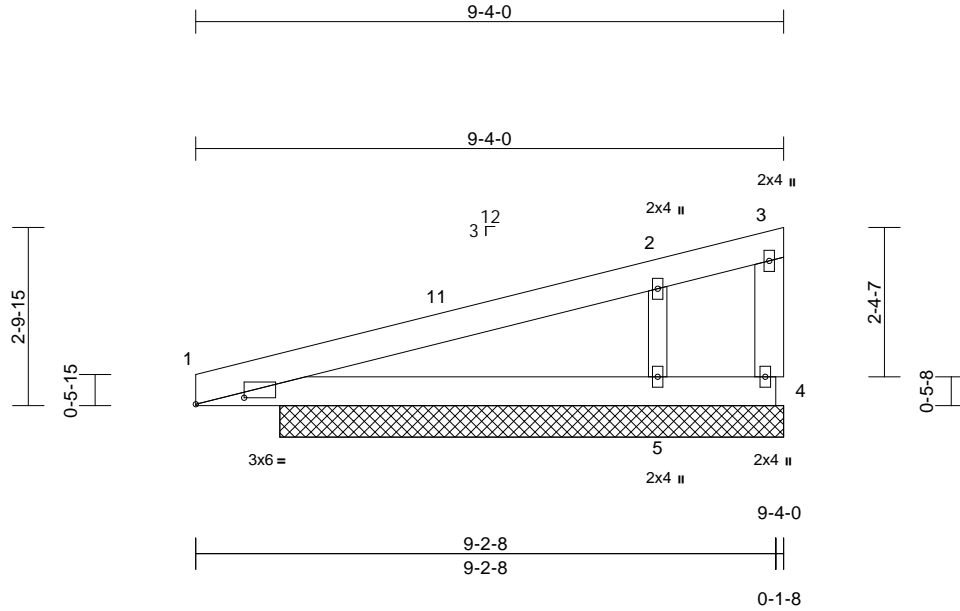
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Jane SC 1646	
2504375-28480	M1E	Monopitch Supported Gable	1	1	Job Reference (optional)	I75344352

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jul 24 2025 Print: 8.830 S Jul 24 2025 MiTek Industries, Inc. Fri Aug 01 10:31:53
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Page: 1



Scale = 1:36.6

Plate Offsets (X, Y): [1:0-9-3,0-1-4]

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	0.16	Vert(LL)	n/a	-	999	MT20	244/190
Snow (Pf/Pg)	7.7/10.0	Lumber DOL	1.15	BC	0.11	Vert(TL)	n/a	-	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	1	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MS							
BCDL	10.0										
										Weight: 51 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x6 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)	1=8-0-0, 4=8-0-0, 5=8-0-0
Max Horiz	1=83 (LC 12)
Max Uplift	1=-56 (LC 12), 4=-70 (LC 2), 5=-136 (LC 12)
Max Grav	1=317 (LC 2), 4=22 (LC 12), 5=482 (LC 2)

FORCES

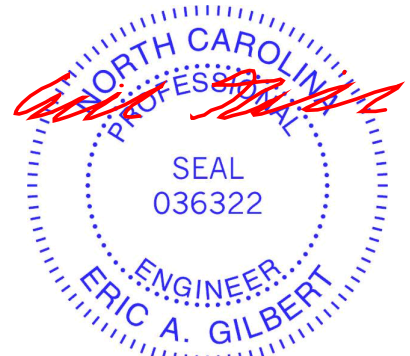
	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-126/69, 2-3=-36/14, 3-4=-40/38
BOT CHORD	1-5=-127/30, 4-5=-5/2
WEBS	2-5=-331/361

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=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-0-0 to 3-0-0, Exterior(2N) 3-0-0 to 9-1-4 zone; cantilever left and right 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.

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- 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 56 lb uplift at joint 1, 70 lb uplift at joint 4, 136 lb uplift at joint 5 and 56 lb uplift at joint 1.
- Non Standard bearing condition. Review required.

LOAD CASE(S) Standard



August 4, 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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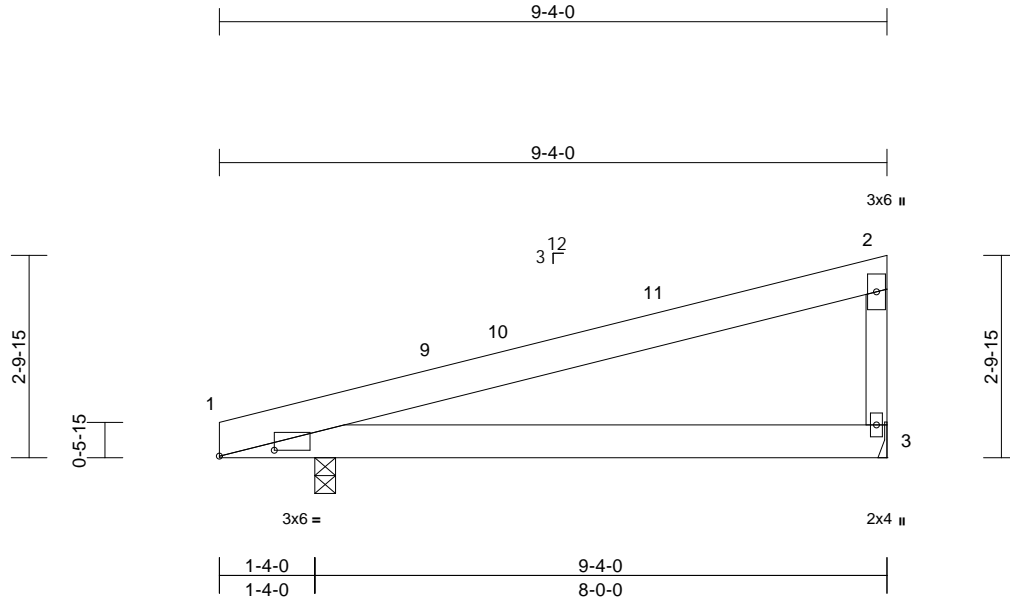
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Jane SC 1646	
2504375-28480	M2	Monopitch	18	1	Job Reference (optional)	I75344353

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jul 24 2025 Print: 8.830 S Jul 24 2025 MiTek Industries, Inc. Fri Aug 01 10:31:54
ID:Lmy5GMrvUnTmOkTaZPX6w3ysGiD-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:32.2

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

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	0.34	Vert(LL)	-0.03	3-8	>999	240	MT20	244/190
Snow (Pf/Pg)	7.7/10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.07	3-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	1	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MS								
BCDL	10.0											
Weight: 47 lb											FT = 20%	

LUMBER

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

BRACING

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

REACTIONS (size) 1=0-3-8, 3= Mechanical
Max Horiz 1=84 (LC 12)
Max Uplift 1=-88 (LC 12), 3=-84 (LC 12)
Max Grav 1=430 (LC 2), 3=305 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

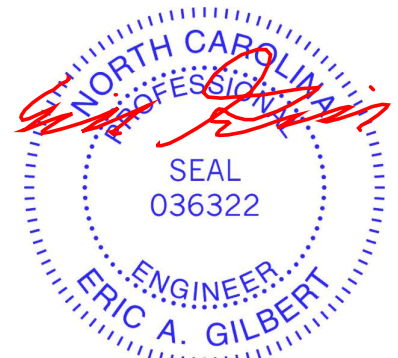
TOP CHORD 1-2=-143/69, 2-3=-202/149
BOT CHORD 1-3=-154/92

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=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0'-0" to 3'-0", Interior (1) 3'-0" to 9'-2-4 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.

- 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 88 lb uplift at joint 1 and 84 lb uplift at joint 3.

LOAD CASE(S) Standard



August 4,2025

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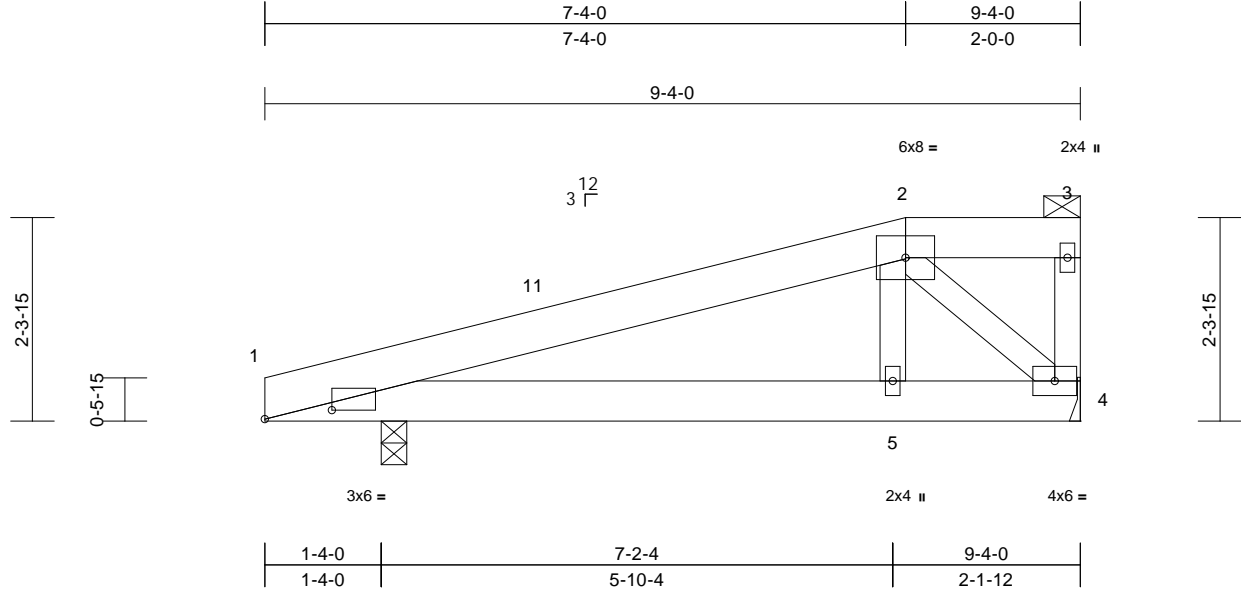
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Jane SC 1646	
2504375-28480	M3	Half Hip	2	1	Job Reference (optional)	I75344354

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jul 24 2025 Print: 8.830 S Jul 24 2025 MiTek Industries, Inc. Fri Aug 01 10:31:54
ID:e6tkkxlqwLmjpVwTO9ljYysGi6-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:26.4

Plate Offsets (X, Y): [1:0-9-3,0-1-4]

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	0.16	Vert(LL)	-0.01	6	>999	240	MT20	244/190
Snow (Pf/Pg)	12.7/10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.02	5-10	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 52 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 2-3.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=0-3-8, 4= Mechanical
Max Horiz 1=68 (LC 12)
Max Uplift 1=-92 (LC 12), 4=-79 (LC 12)
Max Grav 1=430 (LC 2), 4=305 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

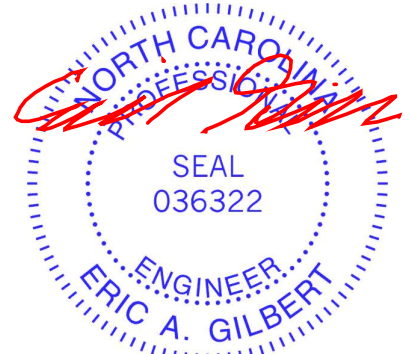
TOP CHORD 1-2=-356/151, 2-3=-4/1, 3-4=-44/20
BOT CHORD 1-5=-181/304, 4-5=-181/295
WEBS 2-5=-2/195, 2-4=-413/255

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=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 7-4-0, Exterior(2E) 7-4-0 to 9-2-4 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=12.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
- Unbalanced snow loads have been considered for this design.

- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 92 lb uplift at joint 1 and 79 lb uplift at joint 4.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



August 4, 2025

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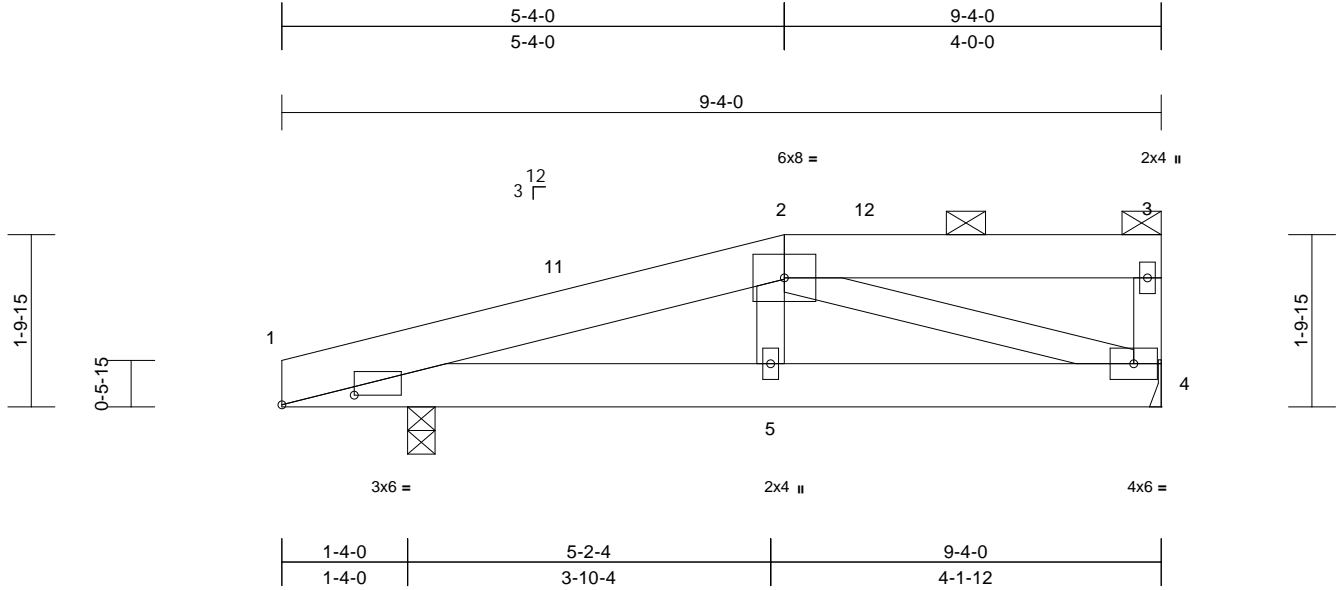
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Jane SC 1646	175344355
2504375-28480	M4	Half Hip	2	1	Job Reference (optional)	

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jul 24 2025 Print: 8.830 S Jul 24 2025 MiTek Industries, Inc. Fri Aug 01 10:31:54
ID: _4gdnS?RfSz3qaNuGxIwPbysGi1-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:24.5

Plate Offsets (X, Y): [1:0-9-3,0-1-4]

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	0.10	Vert(LL)	0.01	5	>999	240	MT20	244/190
Snow (Pf/Pg)	12.7/10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.01	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MS								
BCDL	10.0											
											Weight: 53 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 2-3.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 1=0-3-8, 4= Mechanical
Max Horiz 1=49 (LC 12)
Max Uplift 1=-96 (LC 12), 4=-76 (LC 12)
Max Grav 1=430 (LC 2), 4=305 (LC 2)

FORCES

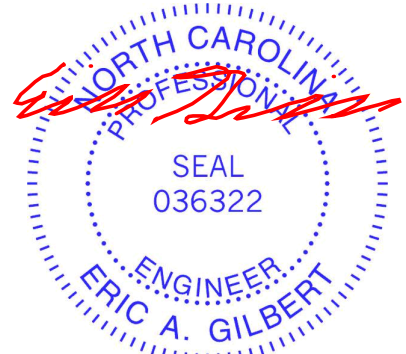
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-466/217, 2-3=-43/19, 3-4=-121/81
BOT CHORD 1-5=-233/422, 4-5=-237/418
WEBS 2-5=0/132, 2-4=-398/231

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=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 5-4-0, Exterior(2E) 5-4-0 to 9-2-4 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=12.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
- Unbalanced snow loads have been considered for this design.

- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 96 lb uplift at joint 1 and 76 lb uplift at joint 4.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



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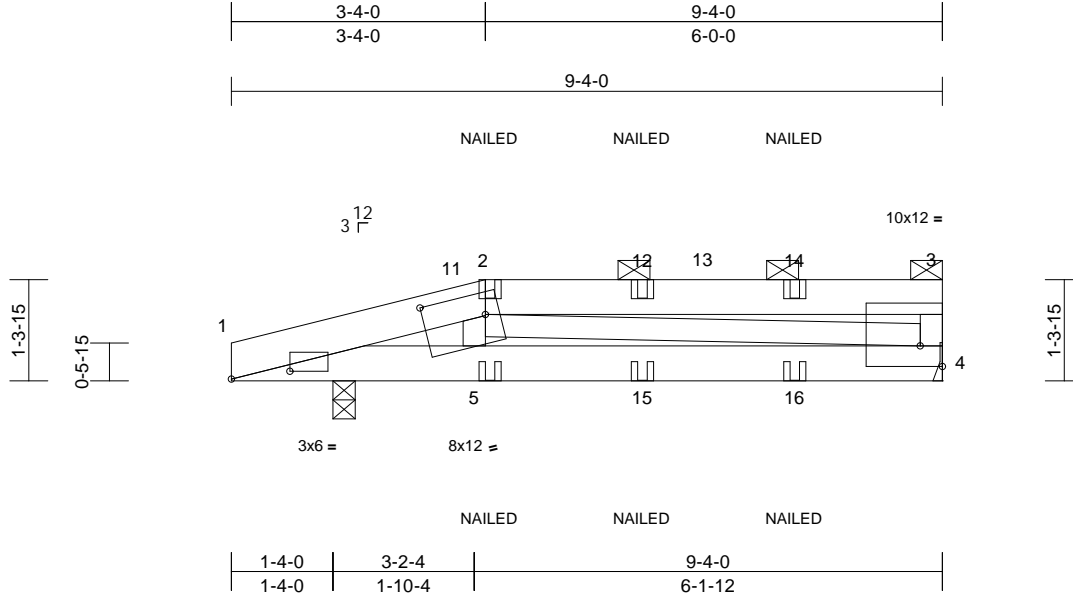
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Jane SC 1646	
2504375-28480	M5	Half Hip	2	1	Job Reference (optional)	I75344356

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jul 24 2025 Print: 8.830 S Jul 24 2025 MiTek Industries, Inc. Fri Aug 01 10:31:54
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Page: 1



Scale = 1:30.2

Plate Offsets (X, Y): [1:0-9-3,0-1-4], [3:Edge,0-3-4], [5:0-9-12,0-3-8]

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	0.21	Vert(LL)	-0.01	4-5	>999	240	MT20	244/190
Snow (Pf/Pg)	12.7/10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.03	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0 *	Code	IRC2021/TPI2014	Matrix-MS								
BCDL	10.0											
											Weight: 54 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 2-3.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=0-3-8, 4= Mechanical
Max Horiz 1=31 (LC 12)
Max Uplift 1=-99 (LC 12), 4=-73 (LC 12)
Max Grav 1=427 (LC 2), 4=302 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-507/235, 2-3=-173/92, 3-4=-183/123
BOT CHORD 1-5=-242/478, 4-5=-262/485
WEBS 2-5=-39/132, 2-4=-315/172

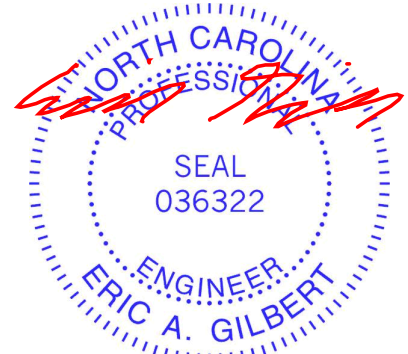
NOTES

- 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=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior (1) 3-0-0 to 3-4-0, Exterior(2R) 3-4-0 to 7-6-15, Interior (1) 7-6-15 to 9-2-4 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=12.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0
- Unbalanced snow loads have been considered for this design.

- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 99 lb uplift at joint 1 and 73 lb uplift at joint 4.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-35, 2-3=-45, 4-6=-20
Concentrated Loads (lb)
Vert: 5=0 (F), 15=0 (F), 16=0 (F)



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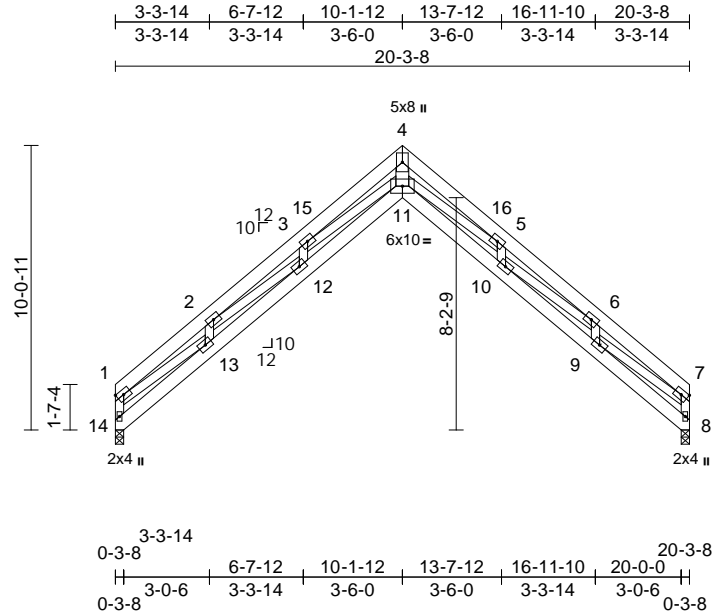
Job	Truss	Truss Type	Qty	Ply	Jane SC 1646	
2504375-28480	S1	Roof Special	18	1	Job Reference (optional)	I75344357

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334,

Run: 8.83 S Jul 24 2025 Print: 8.830 S Jul 24 2025 MiTek Industries, Inc. Fri Aug 01 10:31:54

Page: 1

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Scale = 1:81.5

Plate Offsets (X, Y): [5:0-0-0,0-0-0], [6:0-0-0,0-0-0]

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	0.28	Vert(LL)	-0.28	11	>872	240	MT20	244/190
Snow (Pf/Pg)	7.7/10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.55	11	>437	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.97	8	n/a	n/a		
BCLL	0.0*	Code	IRC2021/TPI2014	Matrix-MS								
BCDL	10.0											
											Weight: 171 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.2 *Except* 11-4:2x6 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-6-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-11-11 oc bracing.

REACTIONS

(size) 8=0-3-8, 14=0-3-8
Max Horiz 14=196 (LC 10)
Max Uplift 8=111 (LC 15), 14=111 (LC 14)
Max Grav 8=800 (LC 2), 14=800 (LC 2)

FORCES

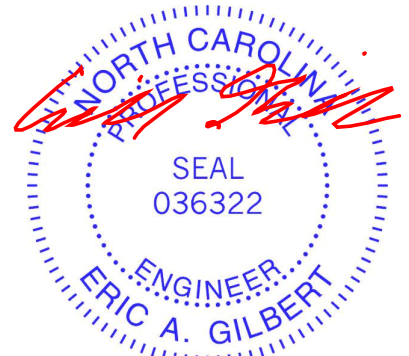
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-14=-840/236, 1-2=-2403/583,
2-3=-3658/707, 3-4=-3858/362,
4-5=-3897/391, 5-6=-3525/423,
6-7=-2317/313, 7-8=-805/135
BOT CHORD 13-14=-261/334, 12-13=-625/2297,
11-12=-674/3616, 10-11=-297/3338,
9-10=-232/2037, 8-9=-19/115
WEBS 4-11=-395/4684, 3-11=-100/443,
2-13=-471/138, 1-13=-408/1861,
2-12=-51/1238, 3-12=-218/34,
5-11=-299/671, 5-10=-221/37,
6-10=-68/1258, 6-9=-450/78, 7-9=-209/1795

NOTES

1) 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=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 10-1-12, Exterior(2R) 10-1-12 to 13-1-12, Interior (1) 13-1-12 to 20-1-12 zone; cantilever left and right 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.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=10.0 psf; Pf=7.7 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
- All plates are 4x6 (=) MT20 unless otherwise indicated.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- N/A
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 14, 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 111 lb uplift at joint 14 and 111 lb uplift at joint 8.

LOAD CASE(S) Standard



August 4, 2025

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

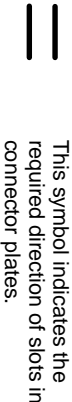
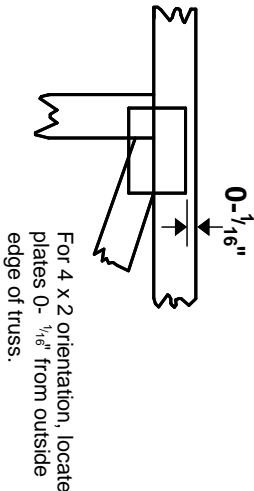
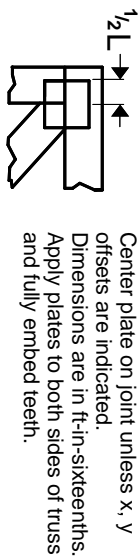
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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

PLATE SIZE

4 X 4

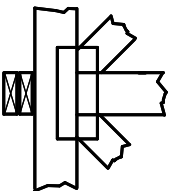
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

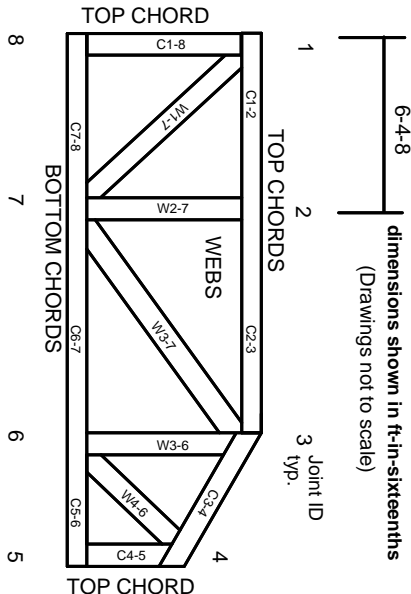
BEARING



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

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

Numbering System



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

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

Product Code Approvals

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

Design General Notes

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

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General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

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