

Trenco

818 Soundside Rd
Edenton, NC 27932

Re: CL 2862 CP 3 CAR
CL 2862 CP 3 CAR

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: I76728375 thru I76728400

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

North Carolina COA: C-0844

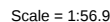


October 1, 2025

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 Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 12:18:34 Page: 1
ID:EVZkaA ?4?SCw7klcBiiR?yYRyz-RfC?PsB70Ha3NSaPanL8w3ulTXbGKWRCdoi7J4zJC?f



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	-0.13	8-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.28	8-14	>806	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.04	6	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS							Weight: 80 lb	FT = 20%

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 119 lb uplift at joint 2 and 119 lb uplift at joint 6.

LOAD CASE(S)	Standard
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TOP CHORD	Structural wood sheathing directly applied or 4-3-6 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 9-3-9 oc bracing.

REACTIONS (size) 2=0-3-8, 6=0-3-8
 Max Horiz 2=44 (LC 11)
 Max Uplift 2=-119 (LC 12), 6=-119 (LC 12)
 Max Grav 2=820 (LC 1), 6=820 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/19, 2-3=-1698/464, 3-4=-1267/305,
4-5=-1267/305, 5-6=-1698/464, 6-7=0/19

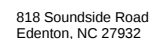
BOT CHORD $2-6=-387/1588$

WEBS 4-8=-33/545, 5-8=-483/241, 3-8=-483/241

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft;
B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Exterior(2E) -1.0-0 to
3-6-6, Interior (1) 3-6-6 to 9-6-0, Exterior(2R) 9-6-0 to
14-2-4, Interior (1) 14-2-4 to 20-0-0 zone; C-C for
members and forces & MWFRS for reactions shown;
Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 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.



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 Components Association (www.sbcacomponents.com)

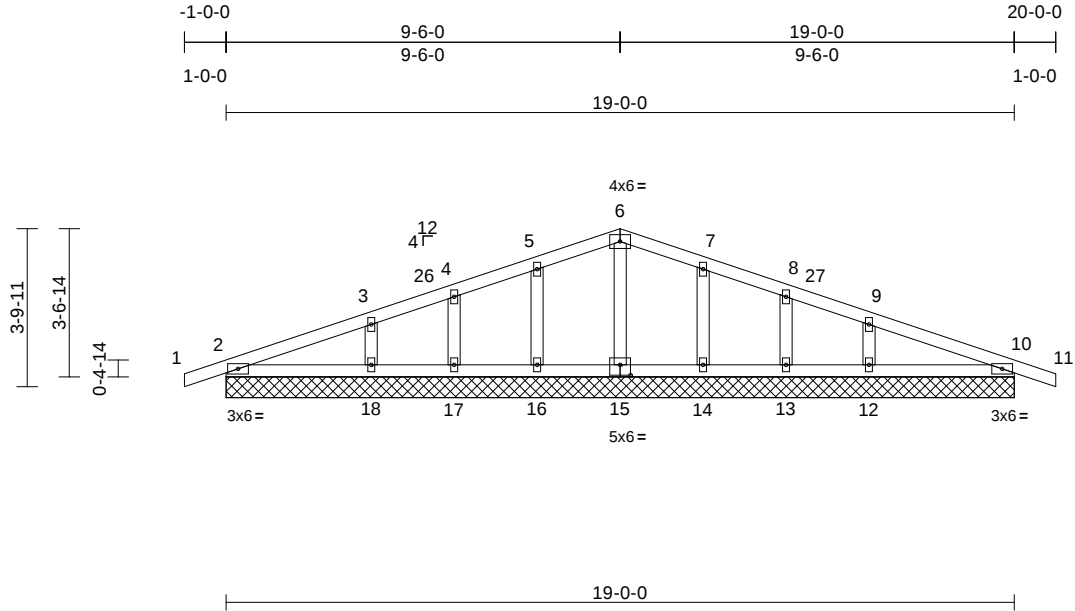


Job	Truss	Truss Type	Qty	Ply	CL 2862 CP 3 CAR	176728376
CL 2862 CP 3 CAR	3C1E	Common Supported Gable	1	1	Job Reference (optional)	

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

Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 12:18:35
ID:UVXa13Jy?kW17jk8eAovYyYRyZ-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrcD0i7J4zJC?f

Page: 1



Scale = 1:55.5

Plate Offsets (X, Y): [15:0-3-0,0-3-0]

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	0.10	Vert(LL)	n/a	-	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	10	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS						Weight: 81 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 6'-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10'-0-0 oc bracing.

REACTIONS

(size) 2=19-0-0, 10=19-0-0, 12=19-0-0, 13=19-0-0, 14=19-0-0, 15=19-0-0, 16=19-0-0, 17=19-0-0, 18=19-0-0
Max Horiz 2=44 (LC 11)
Max Uplift 2=-53 (LC 12), 10=-53 (LC 12), 12=-34 (LC 12), 13=-21 (LC 12), 14=-27 (LC 12), 16=-27 (LC 12), 17=-21 (LC 12), 18=-34 (LC 12)
Max Grav 2=196 (LC 1), 10=196 (LC 1), 12=267 (LC 24), 13=117 (LC 1), 14=180 (LC 24), 15=126 (LC 1), 16=180 (LC 23), 17=117 (LC 1), 18=267 (LC 23)

FORCES

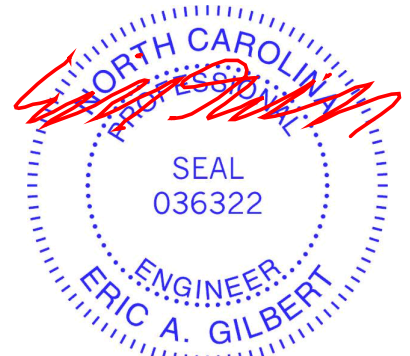
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/19, 2-3=-59/26, 3-4=-59/66, 4-5=-48/98, 5-6=-60/135, 6-7=-60/132, 7-8=-48/93, 8-9=-54/61, 9-10=-46/16, 10-11=0/19
BOT CHORD 2-18=-3/51, 17-18=-3/51, 16-17=-3/51, 14-16=-3/51, 13-14=-3/51, 12-13=-3/51, 10-12=-3/51
WEBS 6-15=-88/1, 5-16=-135/122, 4-17=-95/92, 3-18=-183/124, 7-14=-135/122, 8-13=-95/93, 9-12=-183/124

NOTES

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -1-0-0 to 3-6-0, Exterior(2N) 3-6-0 to 9-6-0, Corner(3R) 9-6-0 to 14-0-6, Exterior(2N) 14-0-6 to 20-0-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 (||) MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2'-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-06-00 tall by 2'-00-00 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 53 lb uplift at joint 2, 53 lb uplift at joint 10, 27 lb uplift at joint 16, 21 lb uplift at joint 17, 34 lb uplift at joint 18, 27 lb uplift at joint 14, 21 lb uplift at joint 13, 34 lb uplift at joint 12, 53 lb uplift at joint 2 and 53 lb uplift at joint 10.
- 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 10, 23.

LOAD CASE(S) Standard



October 1,2025

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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TRENCO
A MiTek Affiliate

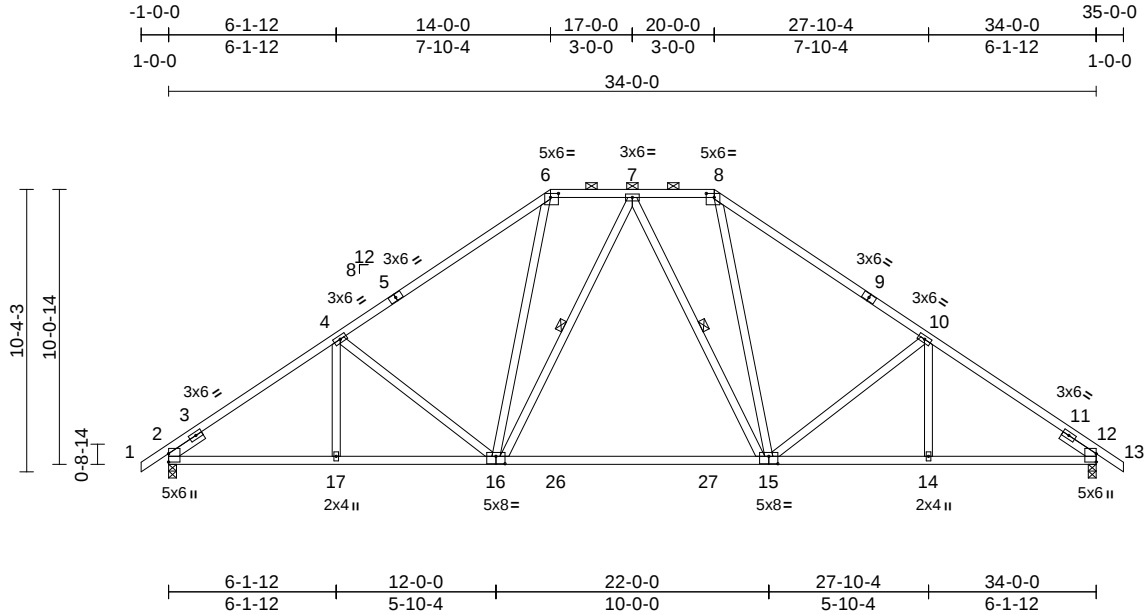
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CL 2862 CP 3 CAR	176728377
CL 2862 CP 3 CAR	A01	Piggyback Base	4	1	Job Reference (optional)	

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Page: 1



Scale = 1:84.4

Plate Offsets (X, Y): [6:0-3-8,0-1-12], [8:0-3-8,0-1-12], [15:0-4-0,0-3-4], [16:0-4-0,0-3-4]

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	0.84	Vert(LL)	-0.39	15-16	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.63	15-16	>649	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.43	Horz(CT)	0.09	12	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS							Weight: 212 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP DSS *Except* 6-8:2x4 SP No.2,
1-5,9-13:2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 1-6-0, Right 2x4 SP No.2
-- 1-6-0

BRACING

TOP CHORD Structural wood sheathing directly applied,
except
2-0-0 oc purlins (4-10-5 max.): 6-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc
bracing.

WEBS 1 Row at midpt 7-16, 7-15

REACTIONS (size) 2=0-3-8, 12=0-3-8
Max Horiz 2=-224 (LC 10)
Max Uplift 2=-184 (LC 12), 12=-184 (LC 12)
Max Grav 2=1600 (LC 17), 12=1600 (LC 18)

FORCES

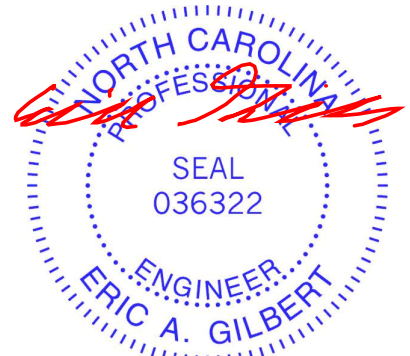
(lb) - Maximum Compression/Maximum
Tension
TOP CHORD 1-2=0/33, 2-4=-2175/256, 4-6=-1840/283,
6-7=-1334/293, 7-8=-1334/293,
8-10=-1840/283, 10-12=-2175/256,
12-13=0/33
BOT CHORD 2-17=-101/1897, 14-17=-101/1897,
12-14=-101/1729
WEBS 4-17=0/149, 4-16=-456/184, 6-16=-6/667,
7-16=-204/112, 7-15=-204/111, 8-15=-6/667,
10-15=-456/184, 10-14=0/149

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=6.0psf; h=30ft;
B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Exterior (2) zone;
cantilever left and right exposed ; end vertical left and
right exposed;C-C for members and forces & MWFRS
for reactions shown; Lumber DOL=1.60 plate grip
DOL=1.60
- 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 184 lb uplift at joint
2 and 184 lb uplift at joint 12.
- 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



October 1,2025

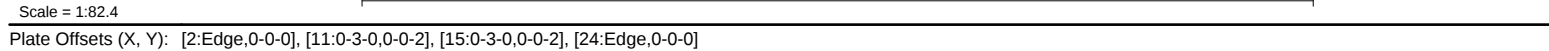
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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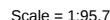
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84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334, Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 12:18:36 Page: 1
ID:tcjtP4rr1WQdHicMVD41aUzppip-RfC?PsB70Hq3NSgPqnL8w3uITxbGKwRCDoi7J4zJC?i



LUMBER		TOP CHORD	1-2=0/14, 2-4=207/167, 4-5=159/117, 5-6=146/106, 6-8=134/85, 8-9=121/123, 9-10=150/184, 10-11=152/189, 11-12=139/187, 12-13=139/187, 13-14=139/187, 14-15=139/187, 15-16=152/189, 16-17=150/184, 17-18=109/123, 18-20=77/73, 20-21=89/31, 21-22=104/43, 22-24=147/87, 24-25=0/14
TOP CHORD	2x4 SP No.2		
BOT CHORD	2x4 SP No.2	BOT CHORD	2-42=71/145, 41-42=71/145, 40-41=71/145, 39-40=71/145, 38-39=71/145, 36-38=71/145, 35-36=71/145, 34-35=71/145, 33-34=71/145, 32-33=71/145, 30-32=71/145, 29-30=71/145, 28-29=71/145, 27-28=71/145, 26-27=71/145, 24-26=71/145
OTHERS	2x4 SP No.2		
SLIDER	Left 2x4 SP No.2 -- 1-9-4, Right 2x4 SP No.2 -- 1-9-4	WEBS	13-34, 12-35, 10-36, 14-33, 16-32
BRACING			
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 11-15.		
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.		
WEBS	1 Row at midpt		
REACTIONS (size)			
	2=34-0-0, 24=34-0-0, 26=34-0-0, 27=34-0-0, 28=34-0-0, 29=34-0-0, 30=34-0-0, 32=34-0-0, 33=34-0-0, 34=34-0-0, 35=34-0-0, 36=34-0-0, 38=34-0-0, 39=34-0-0, 40=34-0-0, 41=34-0-0, 42=34-0-0		
Max Horiz	2=224 (LC 11)		
Max Uplift	2=-8 (LC 8), 26=-87 (LC 12), 27=-35 (LC 12), 28=-50 (LC 12), 29=-43 (LC 12), 30=-63 (LC 12), 34=-47 (LC 12), 38=-63 (LC 12), 39=-43 (LC 12), 40=-50 (LC 12), 41=-35 (LC 12), 42=-87 (LC 12)		
Max Grav	2=227 (LC 18), 24=201 (LC 1), 26=242 (LC 18), 27=142 (LC 18), 28=172 (LC 18), 29=164 (LC 18), 30=172 (LC 18), 32=150 (LC 24), 33=149 (LC 24), 34=165 (LC 24), 35=149 (LC 23), 36=160 (LC 17), 38=168 (LC 17), 39=165 (LC 17), 40=173 (LC 17), 41=141 (LC 1), 42=253 (LC 17)		
FORCES			
	(lb) - Maximum Compression/Maximum Tension		
		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=6.0psf; h=30ft; B=45ft; L=45ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 3) 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.
			5) All plates are 2x4 (II) MT20 unless otherwise indicated. 6) Gable requires continuous bottom chord bearing. 7) Gable studs spaced at 2-0-0 oc. 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 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. 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 8 lb uplift at joint 2, 47 lb uplift at joint 34, 63 lb uplift at joint 38, 43 lb uplift at joint 39, 50 lb uplift at joint 40, 35 lb uplift at joint 41, 87 lb uplift at joint 42, 63 lb uplift at joint 30, 43 lb uplift at joint 29, 50 lb uplift at joint 28, 35 lb uplift at joint 27 and 87 lb uplift at joint 26. 11) 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

October 1, 2025

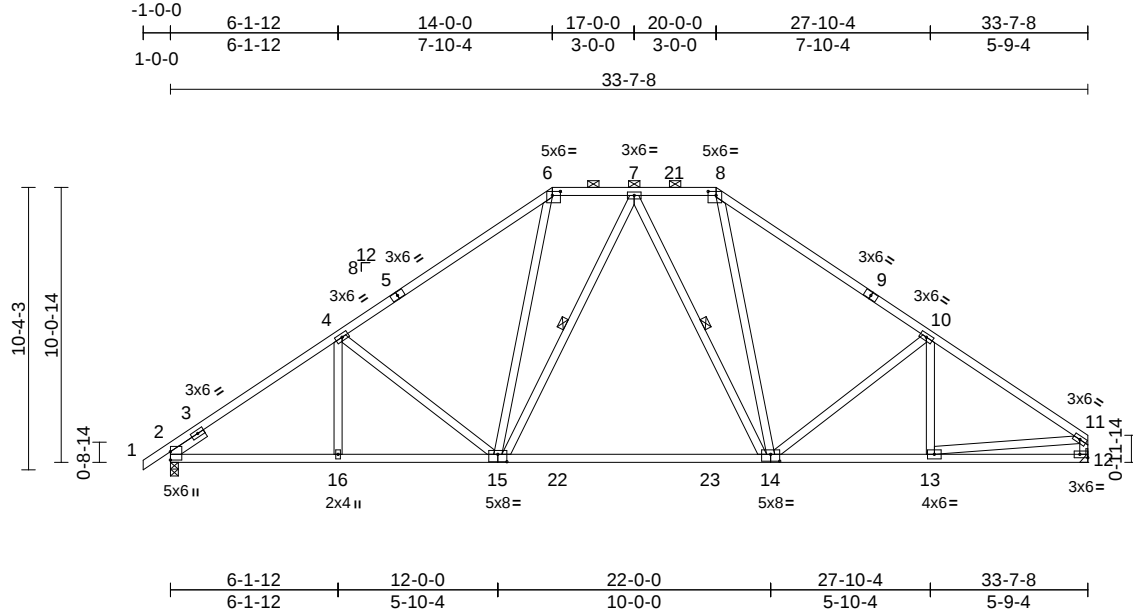
Page: 1

Job	Truss	Truss Type	Qty	Ply	CL 2862 CP 3 CAR	176728380
CL 2862 CP 3 CAR	A02	Piggyback Base	3	1	Job Reference (optional)	

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

Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 12:18:37
ID:tcjtP4rr1WQdHicMVD41aUzppip-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:84.4

Plate Offsets (X, Y): [6:0-3-8,0-1-12], [8:0-3-8,0-1-12], [12:Edge,0-1-8], [14:0-4-0,0-3-0], [15:0-4-0,0-3-4]

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	0.88	Vert(LL)	-0.38	14-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.62	14-15	>646	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.43	Horz(CT)	0.06	12	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS								
Weight: 216 lb											FT = 20%	

LUMBER

TOP CHORD 2x4 SP DSS *Except* 6-8,9-11:2x4 SP No.2,
1-5:2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 1-6-0

BRACING

TOP CHORD Structural wood sheathing directly applied,
except end verticals, and 2-0-0 oc purlins
(4-10-15 max.): 6-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc
bracing.

WEBS 1 Row at midpt 7-15, 7-14

REACTIONS (size) 2=0-3-8, 12= Mechanical
Max Horiz 2=236 (LC 11)
Max Uplift 2=-183 (LC 12), 12=-145 (LC 12)
Max Grav 2=1578 (LC 17), 12=1518 (LC 18)

FORCES (lb) - Maximum Compression/Maximum
Tension

TOP CHORD 1-2=0/33, 2-4=-2139/253, 4-6=-1803/280,
6-7=-1308/291, 7-8=-1280/289,
8-10=-1771/277, 10-11=-2024/239,
11-12=-1410/177

BOT CHORD 2-16=-124/1862, 13-16=-124/1862,
12-13=-9/191

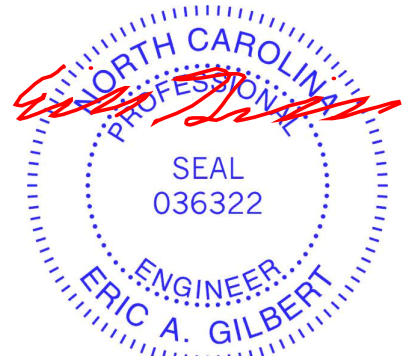
WEBS 4-16=0/149, 4-15=-458/184, 6-15=-4/648,
7-15=-183/123, 7-14=-225/96, 8-14=-3/642,
10-14=-387/176, 10-13=-88/76,
11-13=-108/1428

NOTES

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft;
B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Exterior (2) zone;
cantilever left and right exposed ; end vertical left and
right exposed;C-C for members and forces & MWFRS
for reactions shown; Lumber DOL=1.60 plate grip
DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 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.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 183 lb uplift at joint
2 and 145 lb uplift at joint 12.
- 8) 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



October 1,2025

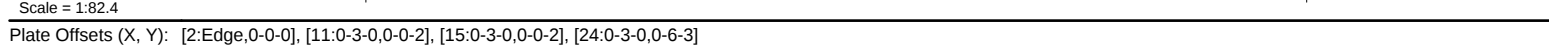
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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818 Soundside Road
Edenton, NC 27932

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334, Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 12:18:37 Page: 1
ID:tcjtP4rr1WQdHicMVD41aUzppip-RfC?PsB70Hg3NSgPqnL8w3ulTXbGKwRCDoi7J4zJC?i



LUMBER		TOP CHORD	1-2=0/14, 2-4=-215/171, 4-5=-166/120, 5-6=-153/110, 6-8=-141/88, 8-9=-129/131, 9-10=-157/192, 10-11=-159/196, 11-12=-145/193, 12-13=-145/193, 13-14=-145/193, 14-15=-145/193, 15-16=-159/196, 16-17=-157/192, 17-18=-116/131, 18-20=-84/81, 20-21=-89/29, 21-22=-101/36, 22-24=-141/81	6) Gable requires continuous bottom chord bearing.
TOP CHORD	2x4 SP No.2		7) Gable studs spaced at 2-0-0 oc.	
BOT CHORD	2x4 SP No.2		8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.	
OTHERS	2x4 SP No.2		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.	
SLIDER	Left 2x4 SP No.2 -- 1-9-4, Right 2x6 SP No.2 -- 1-5-8		10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 12 lb uplift at joint 2, 48 lb uplift at joint 33, 64 lb uplift at joint 37, 43 lb uplift at joint 38, 50 lb uplift at joint 39, 35 lb uplift at joint 40, 85 lb uplift at joint 41, 64 lb uplift at joint 29, 43 lb uplift at joint 28, 51 lb uplift at joint 27, 29 lb uplift at joint 26 and 110 lb uplift at joint 25.	
BRACING		BOT CHORD	11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 11-15.			
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.			
WEBS	1 Row at midpt 13-33, 12-34, 10-35, 14-32, 16-31			
REACTIONS (size)	2=33-7-8, 24=33-7-8, 25=33-7-8, 26=33-7-8, 27=33-7-8, 28=33-7-8, 29=33-7-8, 31=33-7-8, 32=33-7-8, 33=33-7-8, 34=33-7-8, 35=33-7-8	WEBS		

October 1, 2025

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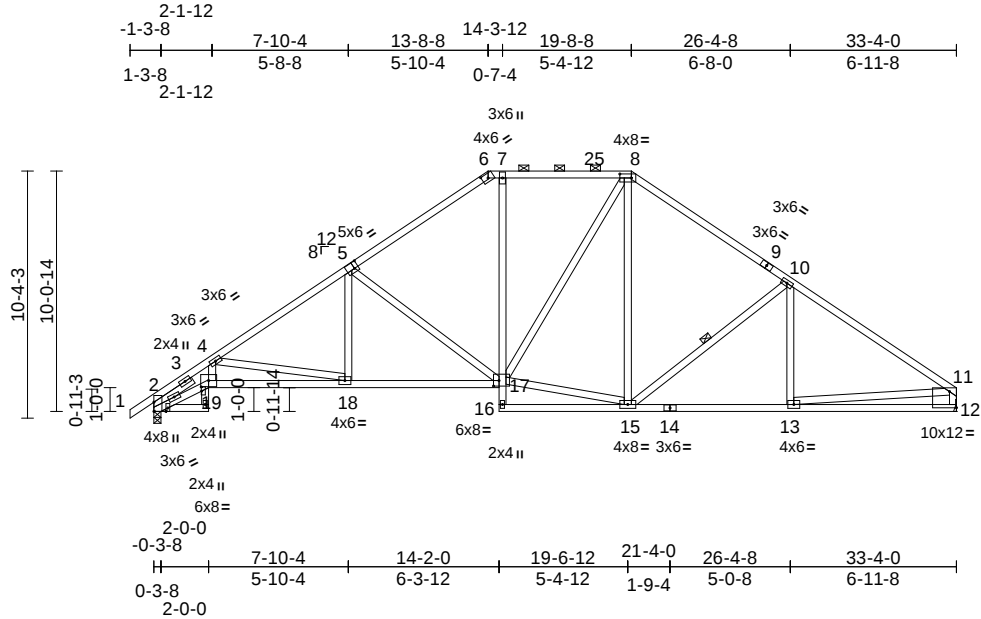
Job	Truss	Truss Type	Qty	Ply	CL 2862 CP 3 CAR	I76728382
CL 2862 CP 3 CAR	A02T	Piggyback Base	6	1	Job Reference (optional)	

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

Run: 8.83 E Nov 14 2024 Print: 8.830 E Nov 14 2024 MiTek Industries, Inc. Wed Oct 01 14:38:13

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Scale = 1:81.3

Plate Offsets (X, Y): [2:0-4-11,Edge], [5:0-2-0,0-3-4], [6:0-3-0,0-2-3], [8:0-5-12,0-2-0], [12:Edge,0-8-2], [17:0-2-12,0-2-12], [19:0-2-1,0-0-3]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.95	Vert(LL)	-0.13	18-19	>999	240	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.29	17-18	>999	180	
BCLL	0.0*	Rep Stress Incr	NO	WB	0.76	Horz(CT)	0.17	12	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS							
Weight: 226 lb FT = 20%											

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2 *Except* 19-17:2x4 SP No.1, 2-19:2x4 SP DSS
WEBS	2x4 SP No.2
SLIDER	Left 2x4 SP No.2 -- 2-0-0

BRACING

TOP CHORD	Structural wood sheathing directly applied or 1-6-7 oc purlins, except end verticals, and 2-0-0 oc purlins (3-8-6 max.): 6-8.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 15-16.
WEBS	1 Row at midpt 10-15

REACTIONS

(size)	2=0-3-8, 12= Mechanical
Max Horiz	2=236 (LC 11)
Max Uplift	2=182 (LC 12), 12=146 (LC 12)
Max Grav	2=1400 (LC 1), 12=1338 (LC 1)

FORCES

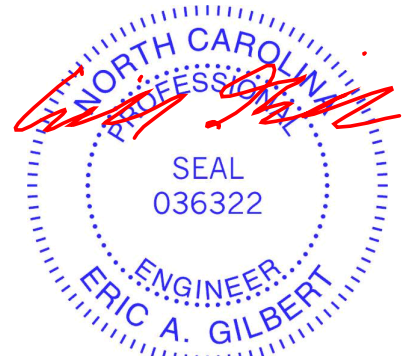
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/33, 2-3=-1738/213, 3-4=-3660/395, 4-5=-2163/267, 5-6=-1579/282, 6-7=-1232/276, 7-25=-1246/279, 8-25=-1246/279, 8-9=-1350/282, 9-10=-1472/242, 10-11=-1823/233, 11-12=-1272/181
BOT CHORD	18-19=-283/2818, 17-18=-88/1738, 16-17=0/91, 7-17=-34/522, 15-16=-10/7, 14-15=-90/1432, 13-14=-90/1432, 12-13=-45/238, 2-19=-296/3151
WEBS	4-18=-1092/200, 5-18=0/440, 5-17=-680/159, 15-17=0/1136, 8-17=-44/337, 8-15=-28/274, 10-15=-438/157, 10-13=0/186, 11-13=-45/1202, 4-19=-36/1124

NOTES

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 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.
- 6) All bearings are assumed to be User Defined crushing capacity of 425 psi.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 146 lb uplift at joint 12 and 182 lb uplift at joint 2.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



October 1, 2025

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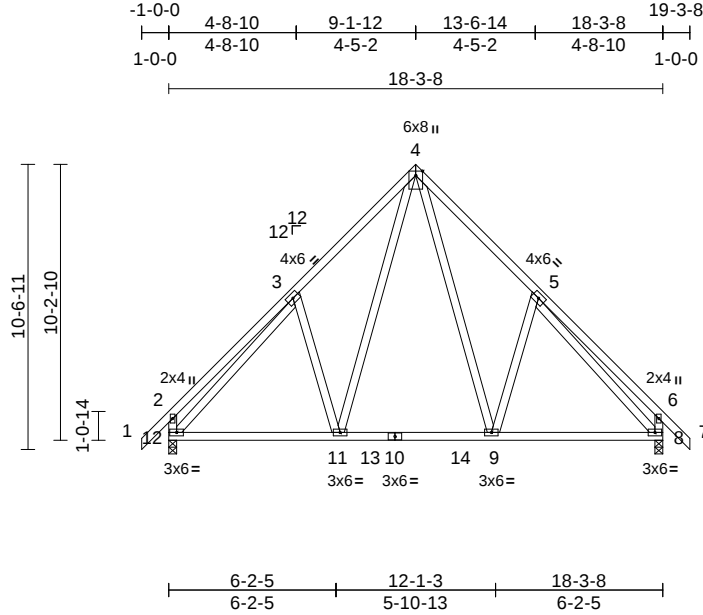
Job	Truss	Truss Type	Qty	Ply	CL 2862 CP 3 CAR	I76728383
CL 2862 CP 3 CAR	B1	Common	1	1	Job Reference (optional)	

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

Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 12:18:38

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Scale = 1:85.3

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	-0.04	9-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.07	11-12	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS							Weight: 138 lb	FT = 20%

LUMBER

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

- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 120 lb uplift at joint 12 and 120 lb uplift at joint 8.

LOAD CASE(S) Standard

BRACING

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

REACTIONS

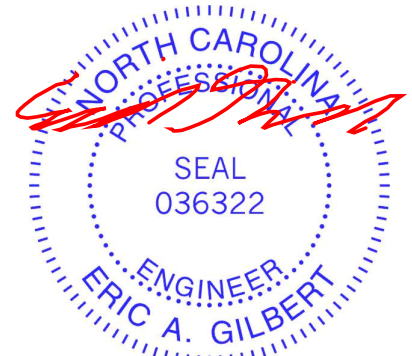
(size) 8=0-3-8, 12=0-3-8
Max Horiz 12=-288 (LC 10)
Max Uplift 8=-120 (LC 12), 12=-120 (LC 12)
Max Grav 8=864 (LC 18), 12=864 (LC 17)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/49, 2-3=-328/182, 3-4=-789/261, 4-5=-789/261, 5-6=-328/182, 6-7=0/49, 2-12=-374/198, 6-8=-374/198
BOT CHORD 11-12=-28/676, 9-11=0/469, 8-9=0/571
WEBS 4-9=-134/481, 5-9=-228/213, 4-11=-134/481, 3-11=-227/213, 3-12=-678/0, 5-8=-677/0

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.



October 1, 2025

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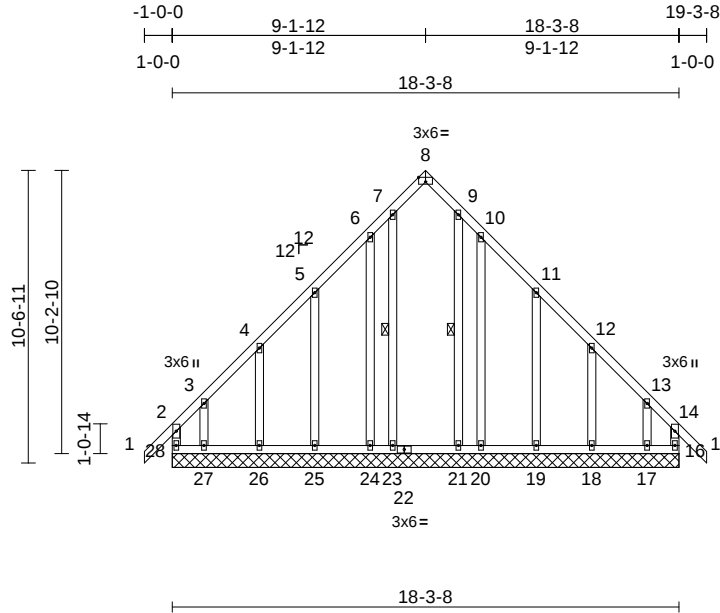
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CL 2862 CP 3 CAR	176728384
CL 2862 CP 3 CAR	B1E	GABLE	1	1	Job Reference (optional)	

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

Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 12:18:38
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Page: 1



Scale = 1:83.2

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.01	16	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 153 lb FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 7-23, 9-21

REACTIONS (size)
16=18-3-8, 17=18-3-8, 18=18-3-8, 19=18-3-8, 20=18-3-8, 21=18-3-8, 23=18-3-8, 24=18-3-8, 25=18-3-8, 26=18-3-8, 27=18-3-8, 28=18-3-8
Max Horiz 28=288 (LC 10)
Max Uplift 16=169 (LC 11), 17=236 (LC 12), 18=66 (LC 12), 19=96 (LC 12), 20=126 (LC 12), 24=126 (LC 12), 25=96 (LC 12), 26=66 (LC 12), 27=236 (LC 12), 28=198 (LC 10)
Max Grav 16=265 (LC 8), 17=237 (LC 11), 18=214 (LC 18), 19=226 (LC 18), 20=134 (LC 18), 21=163 (LC 18), 23=180 (LC 17), 24=128 (LC 17), 25=226 (LC 17), 26=213 (LC 17), 27=253 (LC 10), 28=286 (LC 18)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-28=-218/133, 1-2=0/49, 2-3=-241/222, 3-4=-145/151, 4-5=-127/109, 5-6=-106/83, 6-7=-124/189, 7-8=-84/104, 8-9=-84/104, 9-10=-124/189, 10-11=-90/83, 11-12=-111/89, 12-13=-130/131, 13-14=-240/197, 14-15=0/49, 14-16=-202/124

BOT CHORD 27-28=-147/224, 26-27=-147/224, 25-26=-147/224, 24-25=-147/224, 23-24=-147/224, 21-23=-147/224, 20-21=-147/224, 19-20=-147/224, 18-19=-147/224, 17-18=-147/224, 16-17=-147/224
WEBS 7-23=-135/40, 9-21=-135/40, 6-24=-123/140, 5-25=-150/118, 4-26=-148/102, 3-27=-162/153, 10-20=-123/140, 11-19=-151/118, 12-18=-148/102, 13-17=-161/153

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 (I) MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 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, with BCDL = 10.0psf.

10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 198 lb uplift at joint 28, 169 lb uplift at joint 16, 126 lb uplift at joint 24, 96 lb uplift at joint 25, 66 lb uplift at joint 26, 236 lb uplift at joint 27, 126 lb uplift at joint 20, 96 lb uplift at joint 19, 66 lb uplift at joint 18 and 236 lb uplift at joint 17.

LOAD CASE(S) Standard



October 1, 2025

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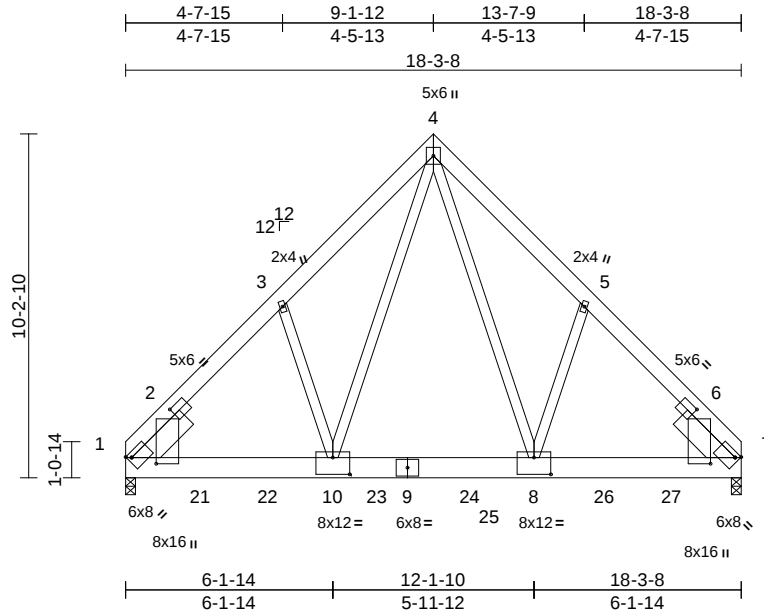
Job	Truss	Truss Type	Qty	Ply	CL 2862 CP 3 CAR	176728385
CL 2862 CP 3 CAR	BGR	Common Girder	1	3	Job Reference (optional)	

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

Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 12:18:38

Page: 1

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Scale = 1:68.5

Plate Offsets (X, Y): [1:0-1-6,Edge], [1:1-9-12,0-2-8], [1:0-2-3,0-8-12], [7:0-1-6,Edge], [7:1-9-12,0-2-8], [7:0-2-3,0-8-12], [8:0-6-0,0-6-0], [10:0-6-0,0-6-0]

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	0.15	Vert(LL)	-0.05	8-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	-0.10	8-10	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.35	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS							Weight: 519 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size)	1=0-3-8, 7=0-3-8
Max Horiz	1=-229 (LC 10)
Max Uplift	1=-855 (LC 12), 7=-711 (LC 12)
Max Grav	1=7376 (LC 18), 7=6033 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-3=-6090/768, 3-4=-5925/886, 4-5=-5979/893, 5-7=-6138/774
BOT CHORD	1-10=-472/4180, 8-10=-288/2965, 7-8=-451/4221
WEBS	4-8=-600/4234, 5-8=-160/298, 4-10=-585/4108, 3-10=-160/305

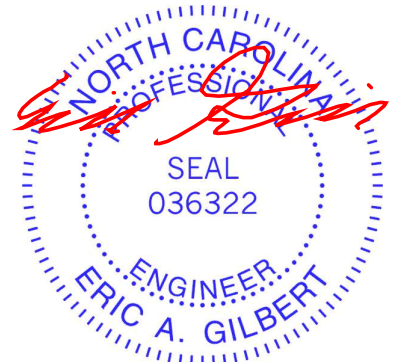
NOTES

- 3-ply truss to be connected together with 10d (0.148"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-6-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft;
B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Exterior (2) zone;
cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 855 lb uplift at joint 1 and 711 lb uplift at joint 7.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1497 lb down and 153 lb up at 0-0-0, 1483 lb down and 157 lb up at 2-2-12, 1318 lb down and 158 lb up at 4-2-12, 1318 lb down and 158 lb up at 6-2-12, 1318 lb down and 158 lb up at 8-2-12, 1318 lb down and 158 lb up at 10-2-12, 1318 lb down and 158 lb up at 12-2-12, and 1318 lb down and 158 lb up at 14-2-12, and 1483 lb down and 157 lb up at 16-2-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 4-13=-60, 4-18=-60, 1-7=-20
Concentrated Loads (lb)
Vert: 1=-1326 (B), 9=-1318 (B), 8=-1318 (B), 10=-1318 (B), 21=-1318 (B), 22=-1318 (B), 24=-1318 (B), 26=-1318 (B), 27=-1318 (B)



October 1,2025

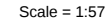
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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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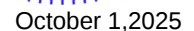
818 Soundside Road
Edenton, NC 27932

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334, Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 12:18:39 Page: 1
ID:tcjtP4rr1WQdHicMVD41aUzppip-RfC?PsB70Hq3NSgPqnL8w3uITxbGKwRCDoi7J4zJC?i



NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCFL=6.0psf; BCDL=6.0psf; h=30ft;
B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Exterior (2) zone;
cantilever left and right exposed ; end vertical left and
right exposed; C-C for members and forces & MWFRS
for reactions shown; Lumber DOL=1.60 plate grip
DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss
only. For studs exposed to wind (normal to the face),
see Standard Industry Gable End Details as applicable,
or consult qualified building designer as per ANSI/TPI 1.
- 4) Gable requires continuous bottom chord bearing.



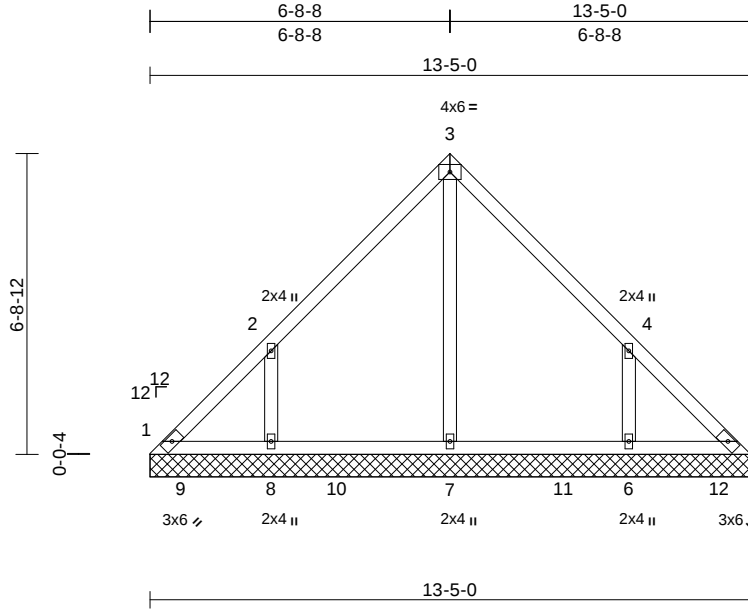
Job	Truss	Truss Type	Qty	Ply	CL 2862 CP 3 CAR	
CL 2862 CP 3 CAR	BV2	Valley	1	1	Job Reference (optional)	I76728387

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

Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 12:18:39

Page: 1

ID:tcjtP4rr1WQdHicMVD41aUzppip-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:51.5

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.18	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.17	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.10	Horiz(TL)	0.00	5	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S						Weight: 62 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 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS	(size)	1=13-5-0, 5=13-5-0, 6=13-5-0, 7=13-5-0, 8=13-5-0
	Max Horiz	1=-162 (LC 10)
	Max Uplift	1=-42 (LC 10), 5=-14 (LC 11), 6=-162 (LC 12), 8=-162 (LC 12)
	Max Grav	1=144 (LC 18), 5=123 (LC 17), 6=420 (LC 18), 7=346 (LC 17), 8=421 (LC 17)

FORCES

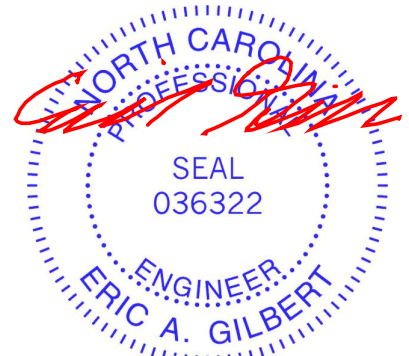
	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-152/136, 2-3=-165/102, 3-4=-147/102, 4-5=-122/96
BOT CHORD	1-8=-60/86, 7-8=-60/86, 6-7=-60/86, 5-6=-60/86
WEBS	3-7=-145/0, 2-8=-286/203, 4-6=-286/203

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.

- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 42 lb uplift at joint 1, 14 lb uplift at joint 5, 162 lb uplift at joint 8 and 162 lb uplift at joint 6.

LOAD CASE(S) Standard



October 1,2025

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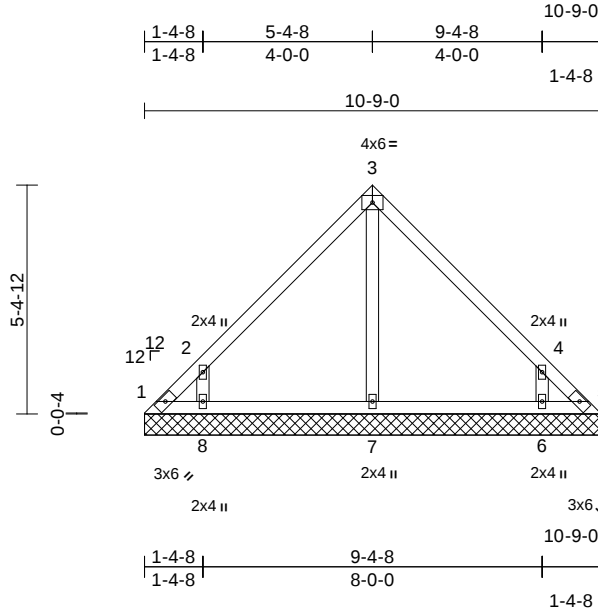
Job	Truss	Truss Type	Qty	Ply	CL 2862 CP 3 CAR	176728388
CL 2862 CP 3 CAR	BV3	Valley	1	1	Job Reference (optional)	

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

Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 12:18:39

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 47 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS	(size)	1=10-9-0, 5=10-9-0, 6=10-9-0, 7=10-9-0, 8=10-9-0
	Max Horiz	1=-128 (LC 10)
	Max Uplift	1=-118 (LC 10), 5=-96 (LC 11), 6=-166 (LC 12), 8=-166 (LC 12)
	Max Grav	1=97 (LC 9), 5=92 (LC 12), 6=362 (LC 18), 7=227 (LC 1), 8=362 (LC 17)

FORCES

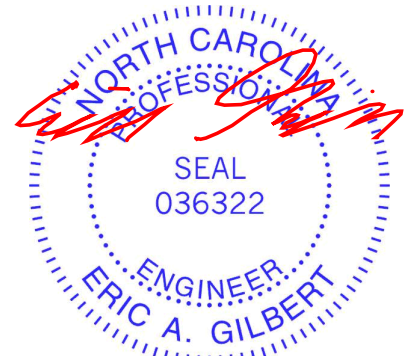
	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-131/143, 2-3=-161/78, 3-4=-149/78, 4-5=-118/112
BOT CHORD	1-8=-43/71, 7-8=-43/71, 6-7=-43/71, 5-6=-43/71
WEBS	3-7=-142/0, 4-6=-305/217, 2-8=-305/217

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4'-0" 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 118 lb uplift at joint 1, 96 lb uplift at joint 5, 166 lb uplift at joint 6 and 166 lb uplift at joint 8.

LOAD CASE(S) Standard



October 1, 2025

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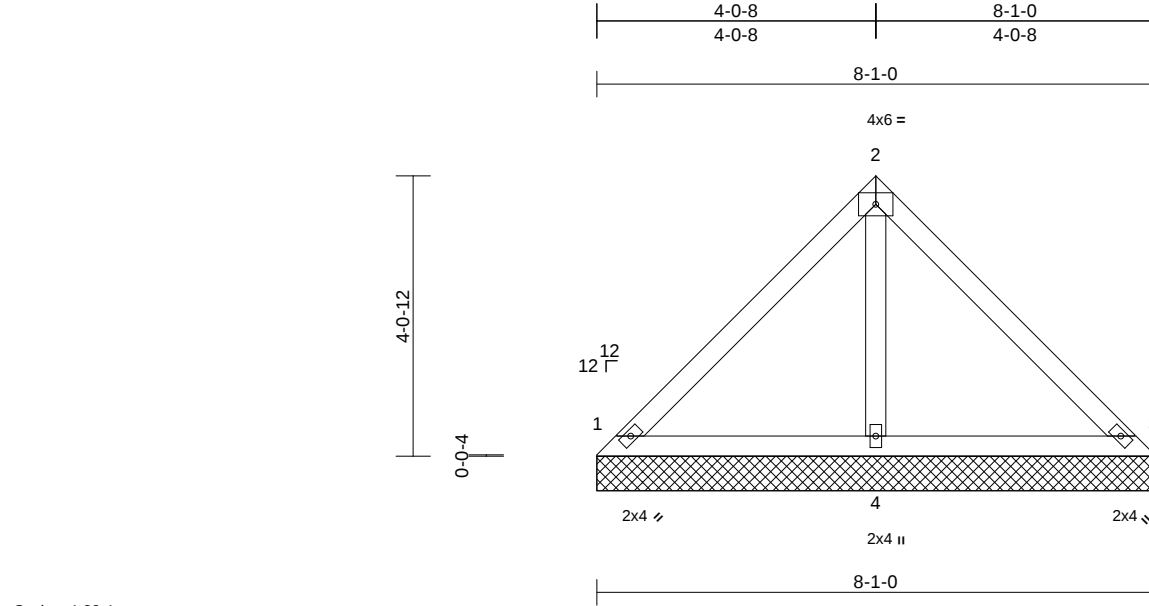
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CL 2862 CP 3 CAR	I76728389
CL 2862 CP 3 CAR	BV4	Valley	1	1	Job Reference (optional)	

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

Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 12:18:39
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Page: 1



Scale = 1:33.4

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	0.29	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 33 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 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 1=8-1-0, 3=8-1-0, 4=8-1-0
Max Horiz 1=94 (LC 11)
Max Uplift 1=45 (LC 12), 3=45 (LC 12)
Max Grav 1=177 (LC 1), 3=177 (LC 1), 4=239 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-134/53, 2-3=-117/53
BOT CHORD 1-4=-29/59, 3-4=-29/59
WEBS 2-4=-146/39

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 45 lb uplift at joint 1 and 45 lb uplift at joint 3.

LOAD CASE(S) Standard



October 1, 2025

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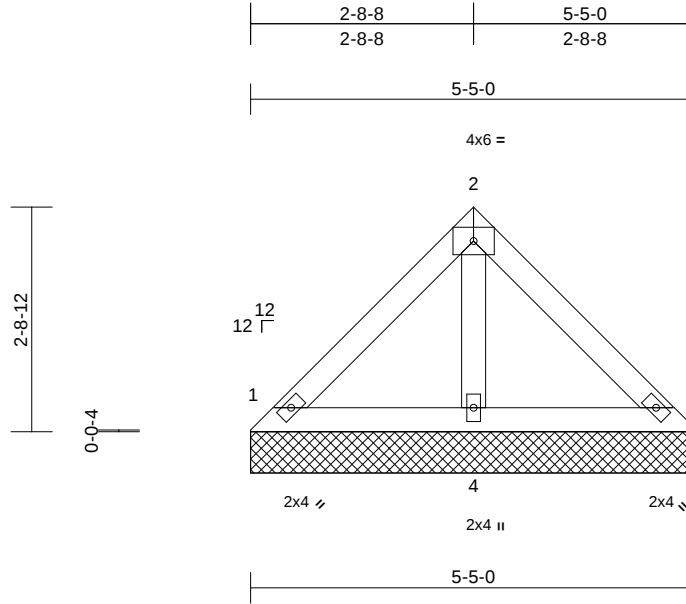
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CL 2862 CP 3 CAR	176728390
CL 2862 CP 3 CAR	BV5	Valley	1	1	Job Reference (optional)	

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

Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 12:18:39
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Page: 1



Scale = 1:28

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.01	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 21 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 5-5-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 1=5-5-0, 3=5-5-0, 4=5-5-0
Max Horiz 1=-60 (LC 10)
Max Uplift 1=-29 (LC 12), 3=-29 (LC 12)
Max Grav 1=114 (LC 1), 3=114 (LC 1), 4=153 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

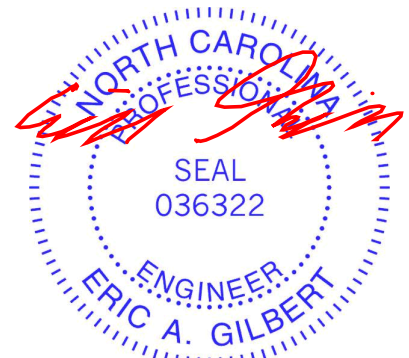
TOP CHORD 1-2=-86/31, 2-3=-75/29
BOT CHORD 1-4=-18/38, 3-4=-18/38
WEBS 2-4=-94/19

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 1 and 29 lb uplift at joint 3.

LOAD CASE(S) Standard



October 1, 2025

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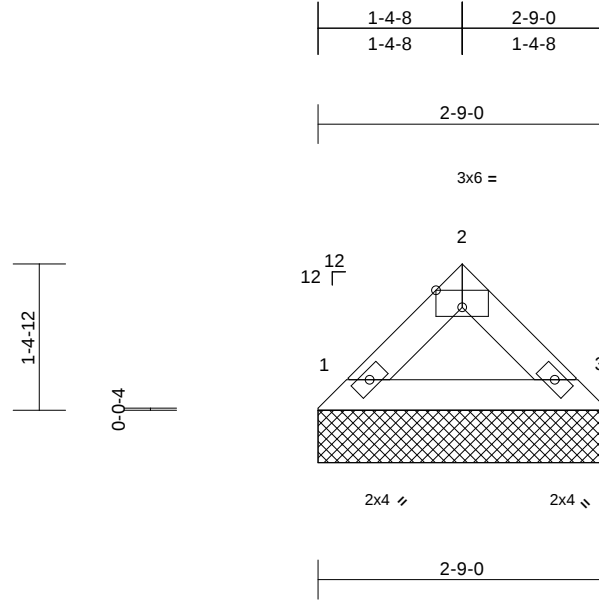
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CL 2862 CP 3 CAR	I76728391
CL 2862 CP 3 CAR	BV6	Valley	1	1	Job Reference (optional)	

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

Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 12:18:40
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Page: 1



Scale = 1:22

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 9 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-9-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

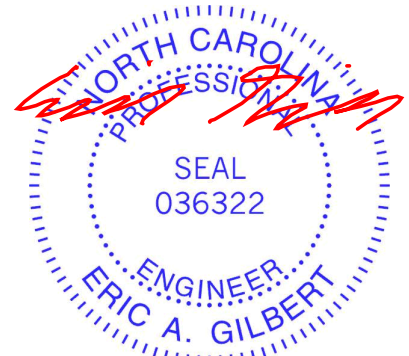
REACTIONS (size) 1=2-9-0, 3=2-9-0
Max Horiz 1=27 (LC 11)
Max Uplift 1=-9 (LC 12), 3=-9 (LC 12)
Max Grav 1=84 (LC 1), 3=84 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-62/24, 2-3=-62/24
BOT CHORD 1-3=-3/36

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 9 lb uplift at joint 1 and 9 lb uplift at joint 3.
- LOAD CASE(S)** Standard



October 1, 2025

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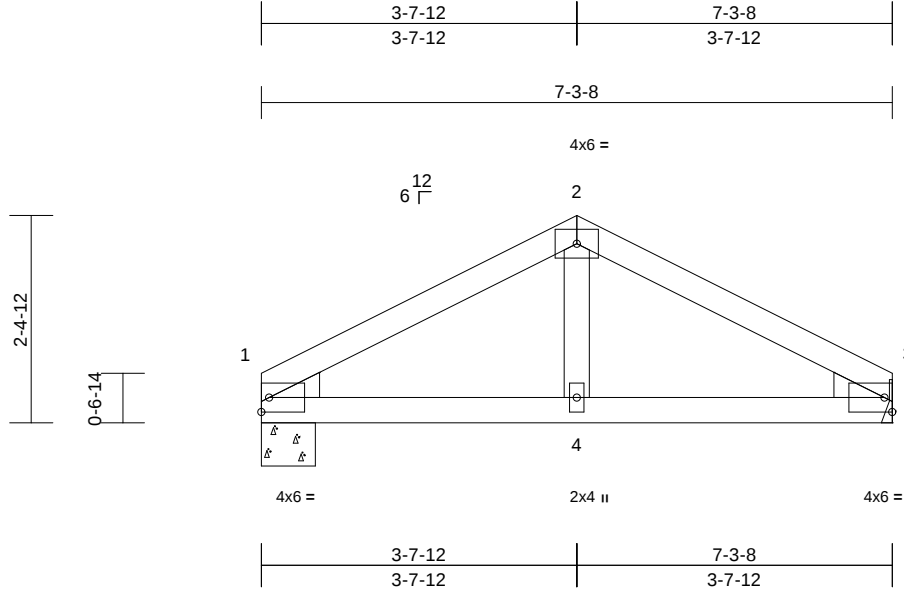
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CL 2862 CP 3 CAR	176728392
CL 2862 CP 3 CAR	C1	Common	1	1	Job Reference (optional)	

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

Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 12:18:40
ID:tcjP4rr1WQdHicMVD41aUzppip-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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	0.14	Vert(LL)	-0.01	4-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.01	4-10	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	1	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MP							Weight: 28 lb	FT = 20%

LUMBER

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

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

LOAD CASE(S) Standard

BRACING

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

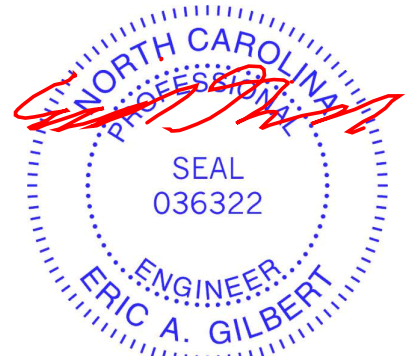
REACTIONS (size) 1=0-7-8, 3= Mechanical
Max Horiz 1=-36 (LC 10)
Max Uplift 1=-32 (LC 12), 3=-32 (LC 12)
Max Grav 1=292 (LC 1), 3=292 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-353/53, 2-3=-353/53
BOT CHORD 1-4=-19/276, 3-4=-19/276
WEBS 2-4=0/153

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft;
B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Exterior (2) zone;
cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.



October 1,2025

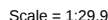
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334, Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 12:18:40 Page: 1
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LUMBER

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 68 lb uplift at joint 2 and 68 lb uplift at joint 4.

LOAD CASE(S) Standard

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

REACTIONS (size) 2=0-3-0, 4=0-3-0
 Max Horiz 2=-46 (LC 10)
 Max Uplift 2=-68 (LC 12), 4=-68 (LC 12)
 Max Grav 2=352 (LC 1), 4=352 (LC 1)

FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/27, 2-3=-334/42, 3-4=-334/42, 4-5=0/27

BOT CHORD 2-6=0/258, 4-6=0/258
WEBS 3-6=0/149

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCFL=6.0psf; BCDL=6.0psf; h=30ft;
B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Exterior (2) zone;
cantilever left and right exposed ; end vertical left
and right exposed; C-C for members and forces & MWFRS
for reactions shown; Lumber DOL=1.60 plate grip
DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf
on the bottom chord in all areas where a rectangle
3-06-00 tall by 2-00-00 wide will fit between the bottom
chord and any other members.



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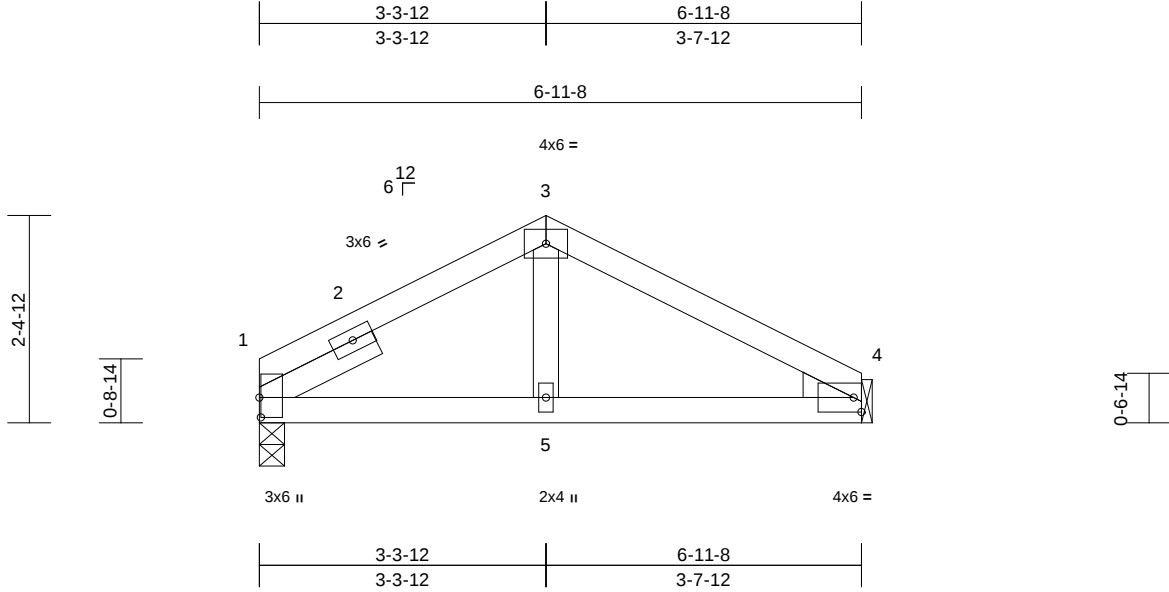
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CL 2862 CP 3 CAR	176728394
CL 2862 CP 3 CAR	C2	Common	2	1	Job Reference (optional)	

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

Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 12:18:40
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Page: 1



Scale = 1:26.6

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	-0.01	5-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.01	5-12	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	1	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MP							Weight: 28 lb	FT = 20%

LUMBER

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

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 1 and 30 lb uplift at joint 4.

LOAD CASE(S) Standard

BRACING

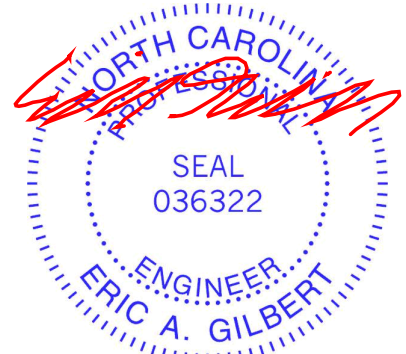
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=0-3-8, 4= Mechanical
Max Horiz 1=-35 (LC 10)
Max Uplift 1=-31 (LC 12), 4=-30 (LC 12)
Max Grav 1=278 (LC 1), 4=278 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-279/51, 3-4=-322/50
BOT CHORD 1-5=-34/249, 4-5=-18/249
WEBS 3-5=0/141

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.



October 1, 2025

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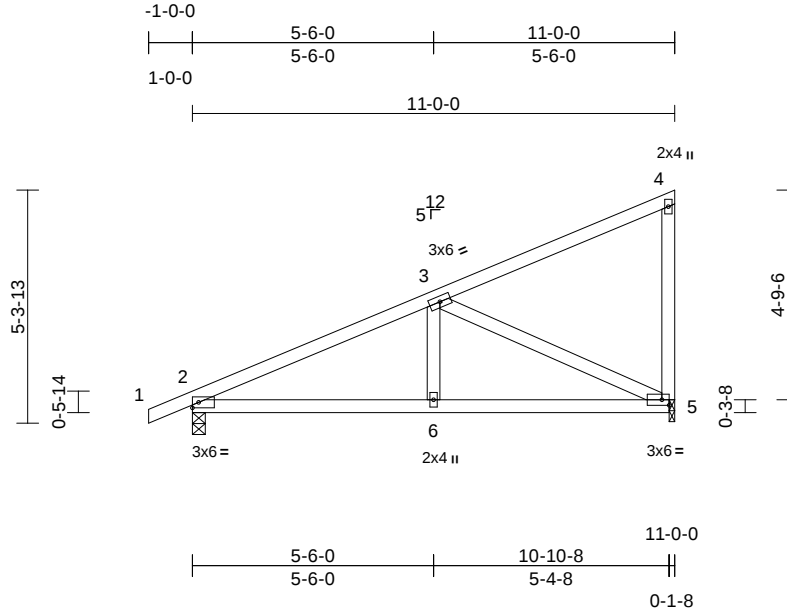
Job	Truss	Truss Type	Qty	Ply	CL 2862 CP 3 CAR	176728395
CL 2862 CP 3 CAR	M1	Monopitch Supported Gable	20	1	Job Reference (optional)	

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

Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 12:18:40

Page: 1

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Scale = 1:52.5												
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	-0.02	5-6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.05	5-6	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS							Weight: 54 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 6'-0" oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10'-0" oc bracing.

REACTIONS

(size) 2=0-3-8, 5=0-1-8
Max Horiz 2=178 (LC 11)
Max Uplift 2=-76 (LC 12), 5=-54 (LC 12)
Max Grav 2=497 (LC 1), 5=431 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/23, 2-3=-661/65, 3-4=-128/97, 4-5=-131/41

BOT CHORD 2-6=-101/561, 5-6=-51/561

WEBS 3-6=0/241, 3-5=-603/111

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) N/A
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-06"-00" tall by 2'-00"-00" wide will fit between the bottom chord and any other members.
- 7) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 76 lb uplift at joint 2 and 54 lb uplift at joint 5.

LOAD CASE(S) Standard



October 1, 2025

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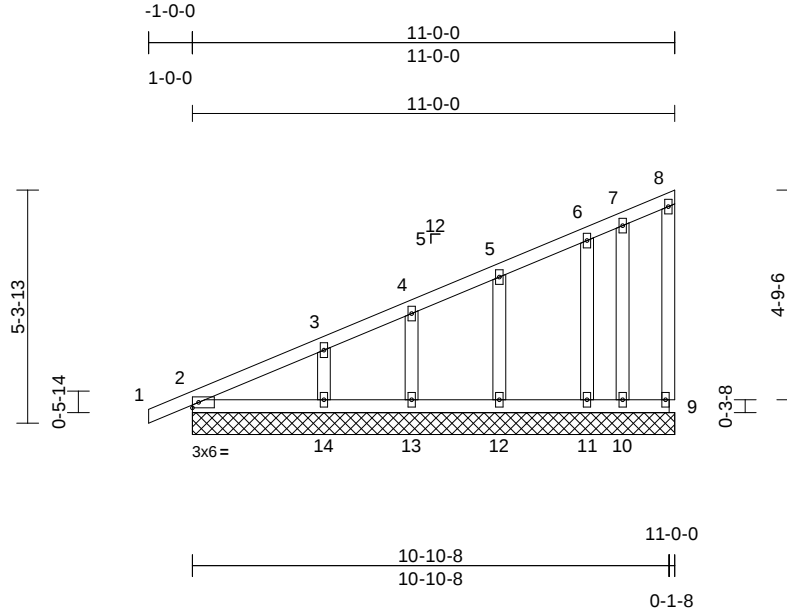
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CL 2862 CP 3 CAR	
CL 2862 CP 3 CAR	M1E	GABLE	2	1	Job Reference (optional)	176728396

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

Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 12:18:41
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Page: 1



Scale = 1:52.5

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.15	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	9	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S						Weight: 63 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size)	2=11-0-0, 9=11-0-0, 10=11-0-0, 11=11-0-0, 12=11-0-0, 13=11-0-0, 14=11-0-0
Max Horiz	2=177 (LC 9)
Max Uplift	2=-18 (LC 12), 9=-20 (LC 9), 10=-23 (LC 12), 11=-13 (LC 12), 12=-32 (LC 12), 13=-27 (LC 12), 14=-39 (LC 12)
Max Grav	2=171 (LC 1), 9=45 (LC 19), 10=64 (LC 1), 11=121 (LC 1), 12=172 (LC 1), 13=135 (LC 1), 14=228 (LC 1)

FORCES

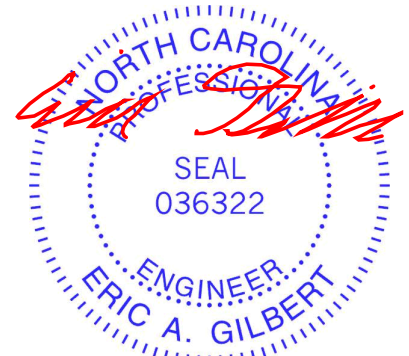
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/13, 2-3=-142/177, 3-4=-109/136, 4-5=-97/124, 5-6=-89/104, 6-7=-88/100, 7-8=-78/84, 8-9=-28/16
BOT CHORD	2-14=-86/94, 13-14=-86/94, 12-13=-86/94, 11-12=-86/94, 10-11=-86/94, 9-10=-86/94
WEBS	7-10=-70/30, 6-11=-90/42, 5-12=-129/57, 4-13=-104/47, 3-14=-165/73

NOTES

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 (||) MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 20 lb uplift at joint 9, 18 lb uplift at joint 2, 23 lb uplift at joint 10, 13 lb uplift at joint 11, 32 lb uplift at joint 12, 27 lb uplift at joint 13 and 39 lb uplift at joint 14.

LOAD CASE(S) Standard



October 1, 2025

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

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TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

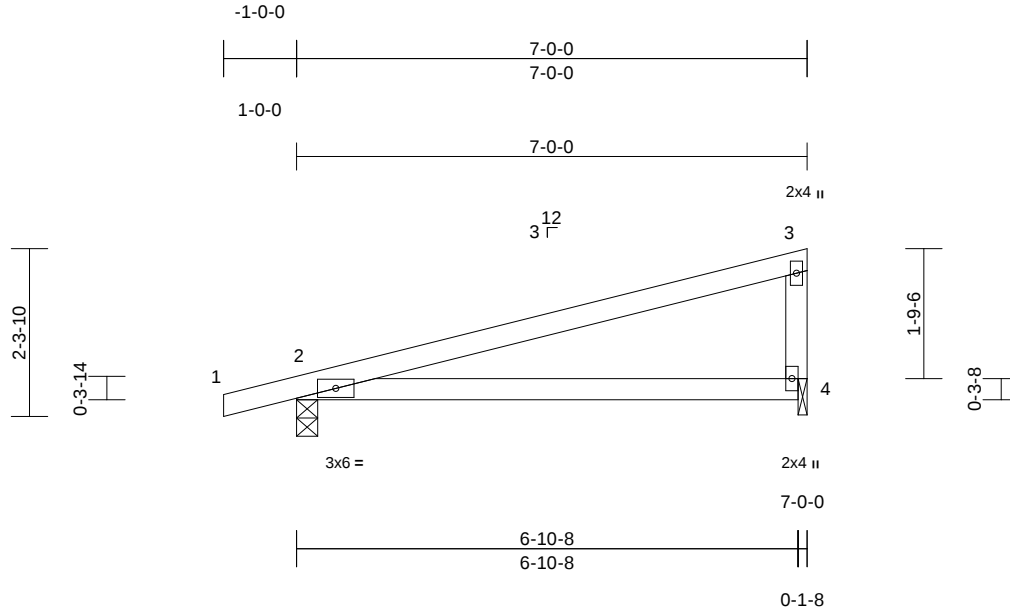
Job	Truss	Truss Type	Qty	Ply	CL 2862 CP 3 CAR	176728397
CL 2862 CP 3 CAR	M2	Monopitch Supported Gable	12	1	Job Reference (optional)	

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

Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 12:18:41

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Scale = 1:31.6

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	0.87	Vert(LL)	-0.12	2-4	>663	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.24	2-4	>331	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 25 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 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 4=0-1-8

Max Horiz 2=64 (LC 11)
Max Uplift 2=-72 (LC 12), 4=-28 (LC 12)
Max Grav 2=343 (LC 1), 4=262 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/13, 2-3=-58/61, 3-4=-195/68
BOT CHORD 2-4=-32/34

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

- Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 72 lb uplift at joint 2 and 28 lb uplift at joint 4.

LOAD CASE(S) Standard



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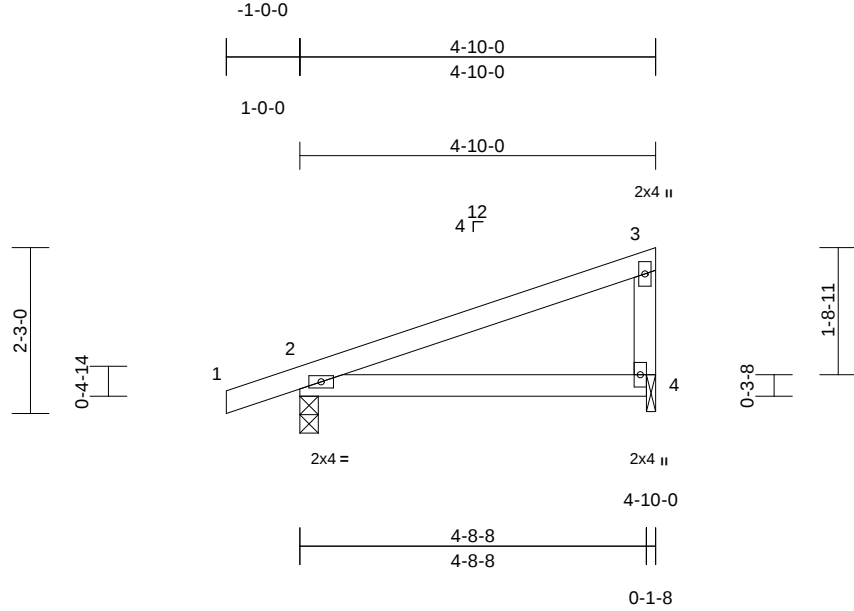
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CL 2862 CP 3 CAR	I76728398
CL 2862 CP 3 CAR	M3	Monopitch	6	1	Job Reference (optional)	

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

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Scale = 1:31.3

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.02	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.05	4-7	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MP							Weight: 18 lb	FT = 20%

LUMBER

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

- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 58 lb uplift at joint 2 and 19 lb uplift at joint 4.

LOAD CASE(S) Standard

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-10-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 2=0-3-0, 4=0-1-8
Max Horiz 2=65 (LC 11)
Max Uplift 2=-58 (LC 12), 4=-19 (LC 12)
Max Grav 2=254 (LC 1), 4=181 (LC 1)

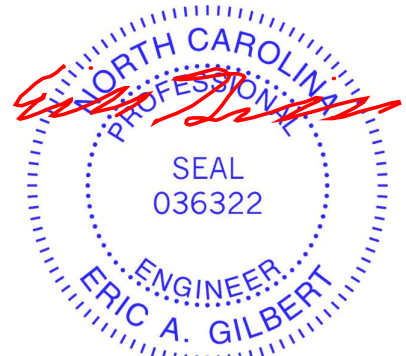
FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/19, 2-3=-61/56, 3-4=-121/34
BOT CHORD 2-4=-30/104

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.



October 1, 2025

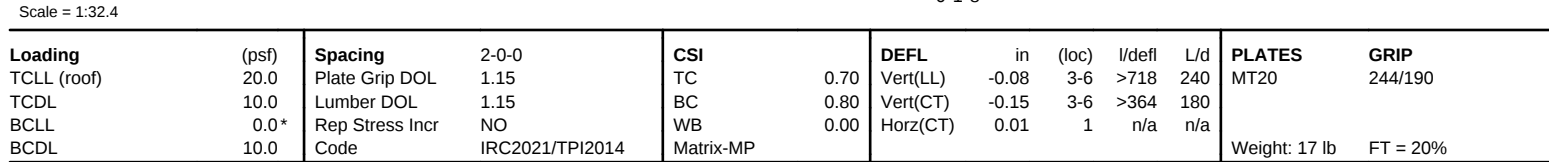
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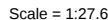
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84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334, Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 12:18:41 Page: 1
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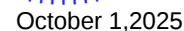
LUMBER	
TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
OTHERS	2x4 SP No.2
BRACING	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
REACTIONS	
(size)	2=4-6-2, 4=4-6-2, 6=4-6-2
Max Horiz	2=-41 (LC 10)
Max Uplift	2=-47 (LC 12), 4=-47 (LC 12)
Max Grav	2=130 (LC 1), 4=130 (LC 1), 6=156 (LC 1)
FORCES	
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/16, 2-3=-62/27, 3-4=-59/27, 4-5=0/16
BOT CHORD	2-6=-9/25, 4-6=-9/25
WEBS	3-6=-101/16

- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 47 lb uplift at joint 2 and 47 lb uplift at joint 4.
- 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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=6.0psf; h=30ft; B=45ft; L=45ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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/TP1.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 4-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.



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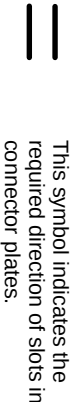
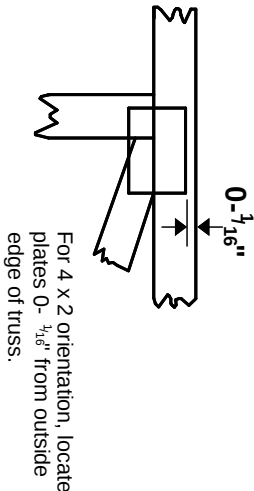
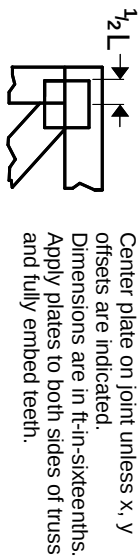
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Symbols

PLATE LOCATION AND ORIENTATION



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

PLATE SIZE

4 X 4

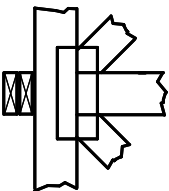
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

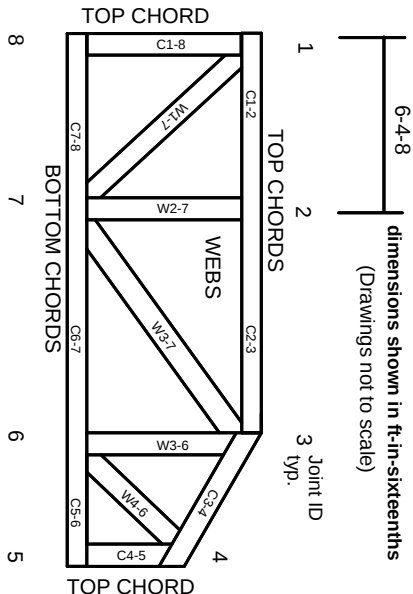


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP1.1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

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

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General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

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