

Trenco

818 Soundside Rd
Edenton, NC 27932

Re: A-CP

Chesapeake 623A:Lot8 NeillsCreek

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Builders FirstSource (Apex,NC).

Pages or sheets covered by this seal: I76725313 thru I76725330

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

North Carolina COA: C-0844

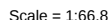


October 1,2025

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.

Builders FirstSource (Apex, NC), Apex, NC - 27523, Run: 8.83 E Jun 26 2025 Print: 8.830 E Jun 26 2025 MiTek Industries, Inc. Wed Oct 01 10:27:10 Page: 1
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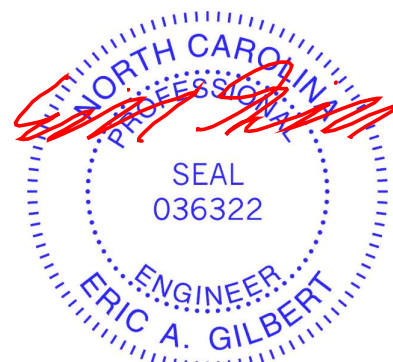
LUMBER		5) All plates are 2x4 () MT20 unless otherwise indicated.
TOP CHORD	2x4 SP No.2	6) Gable studs spaced at 2'-0" oc.
BOT CHORD	2x4 SP No.2	7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
OTHERS	2x4 SP No.3	8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-6" tall by 2'-0" wide will fit between the bottom chord and any other members.
BRACING		9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 25, 26, 27, 28, 30, 31, 32, 33, 34, 22, 21, 20, 19, 18, 35.
TOP CHORD	Structural wood sheathing directly applied or 10'-0" oc purlins, except 2'-0" oc purlins (10'-0" max.): 7-11.	10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
BOT CHORD	Rigid ceiling directly applied or 6'-0" oc bracing.	
REACTIONS		LOAD CASE(S) Standard
	All bearings 30-11-0. except 35=0-3-8	
	(lb) - Max Horiz 34=82 (LC 12)	
	Max Uplift All uplift 100 (lb) or less at joint(s) 18, 19, 20, 21, 22, 25, 26, 27, 28, 30, 31, 32, 33, 34, 35	
	Max Grav All reactions 250 (lb) or less at joint (s) 19, 20, 21, 22, 24, 25, 26, 27, 28, 30, 31, 32, 33, 34, 35 except 18=277 (LC 26)	
FORCES		
	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust)
 Vasd=91mph; TCDF=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-0-0 to 3-3-3, Exterior(2N) 3-3-3 to 12-4-1, Corner(3R) 12-4-1 to 15-7-4, Exterior(2N) 15-7-4 to 20-3-15, Corner(3R) 20-3-15 to 23-7-2, Exterior(2N) 23-7-2 to 32-8-0 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 .1
- 4) Provide adequate drainage to prevent water ponding.

- 5) All plates are 2x4 (||) MT20 unless otherwise indicated.
- 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 100 lb uplift at joint (s) 25, 26, 27, 28, 30, 31, 32, 33, 34, 22, 21, 20, 19, 18, 35.
- 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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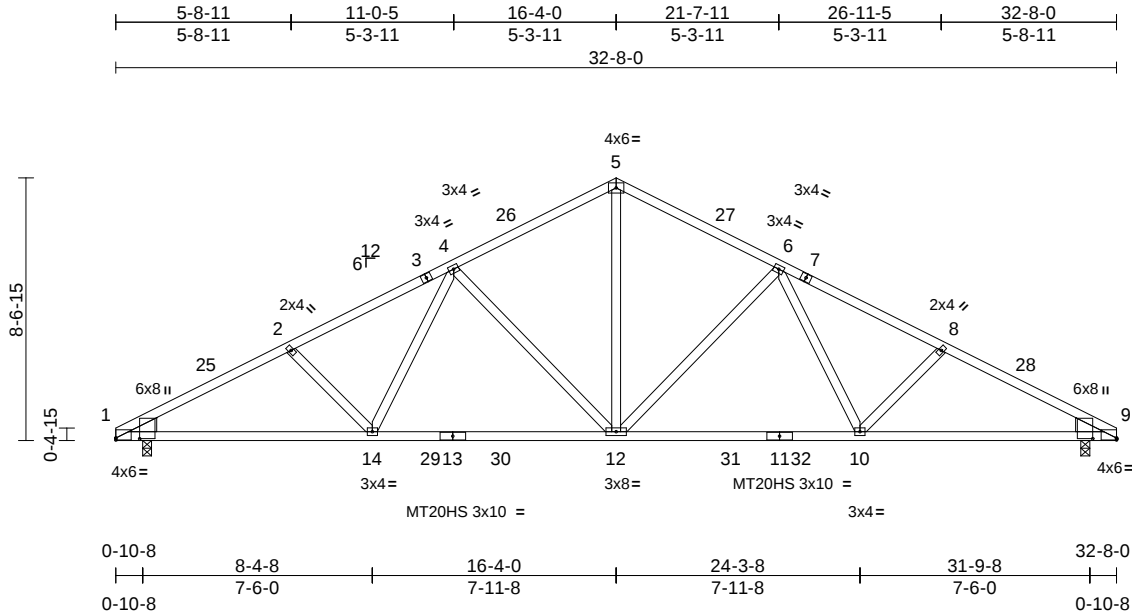
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Chesapeake 623A:Lot8 NeillsCreek	
A-CP	A02	Common	2	1	Job Reference (optional)	I76725314

Builders FirstSource (Apex, NC), Apex, NC - 27523,

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Page: 1



Scale = 1:75.2

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

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	0.98	Vert(LL)	-0.24	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.44	10-12	>900	240	MT20HS	187/143
BCLL	0.0*	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.09	9	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS		Wind(LL)	0.09	12-14	>999	240	Weight: 170 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.1 *Except* 13-11:2x4 SP No.2
WEBS 2x4 SP No.3
WEDGE Left: 2x6 SP No.2
Right: 2x6 SP No.2

BRACING

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

REACTIONS (size) 1=0-3-8, 9=0-3-8
Max Horiz 1=109 (LC 12)
Max Uplift 1=-45 (LC 12), 9=-45 (LC 13)
Max Grav 1=1423 (LC 2), 9=1423 (LC 2)

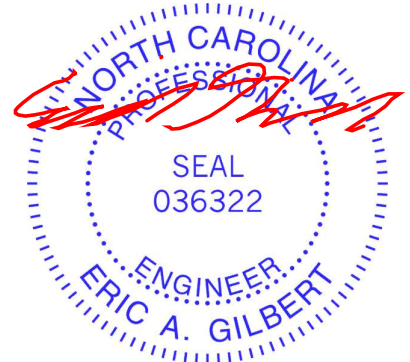
FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-2155/91, 2-4=-2024/91, 4-5=-1531/129, 5-6=-1531/129, 6-8=-2024/91, 8-9=-2155/91
BOT CHORD 1-14=-131/1838, 12-14=-51/1654, 10-12=0/1654, 9-10=-33/1838
WEBS 5-12=-19/1085, 6-12=-521/141, 6-10=0/329, 8-10=-157/116, 4-12=-521/141, 4-14=0/329, 2-14=-157/116

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-3-3, Interior (1) 3-3-3 to 16-4-0, Exterior(2R) 16-4-0 to 19-7-3, Interior (1) 19-7-3 to 32-8-0 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) All plates are MT20 plates unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 5) * This truss has been designed for a live load of 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) 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 9.

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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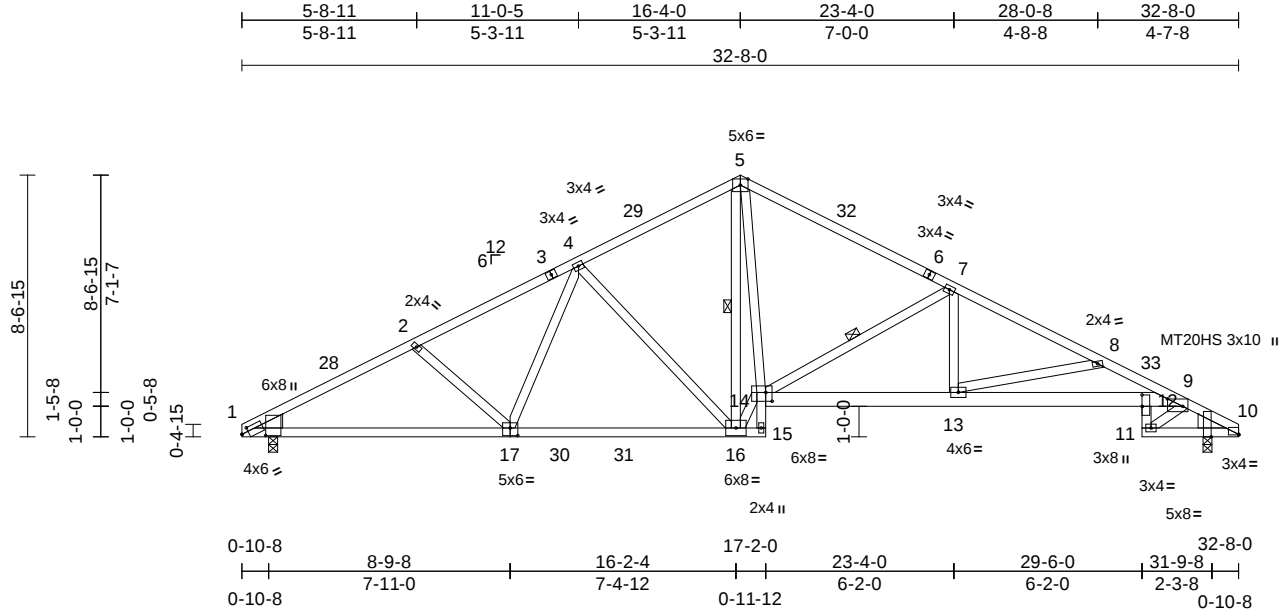
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Chesapeake 623A:Lot8 NeillsCreek	176725315
A-CP	A02T	Roof Special	7	1	Job Reference (optional)	

Builders FirstSource (Apex, NC), Apex, NC - 27523,

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Plate Offsets (X, Y): [1:0-2-10,0-1-9], [1:0-0-8,0-9-5], [9:0-6-0,0-2-15], [10:Edge,0-0-4], [10:0-1-0,Edge], [12:0-4-8,Edge], [14:0-2-8,0-3-8], [17:0-3-0,0-3-0]

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	0.91	Vert(LL)	-0.21	16-17	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.38	12-13	>999	240	MT20HS	187/143
BCLL	0.0*	Rep Stress Incr	YES	WB	0.77	Horz(CT)	0.23	10	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS		Wind(LL)	0.10	12-13	>999	240	Weight: 198 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP 2400F 2.0E or 2x4 SP DSS or 2x4 SP SS *Except* 15-14,12-11:2x4 SP No.3, 14-9:2x6 SP 2400F 2.0E or 2x6 SP DSS, 11-10:2x4 SP No.2
WEBS 2x4 SP No.3
WEDGE Left: 2x6 SP No.2
Right: 2x6 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-1-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

WEBS 1 Row at midpt 7-14, 5-16

REACTIONS (size) 1=0-3-8, 10=0-3-8
Max Horiz 1=109 (LC 12)
Max Uplift 1=-45 (LC 12), 10=-45 (LC 13)
Max Grav 1=1410 (LC 2), 10=1414 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-2122/95, 2-4=-1980/88, 4-5=-1520/131, 5-7=-1737/120, 7-8=-2696/75, 8-9=-3093/116, 9-10=-1476/59

BOT CHORD 1-16=-134/1814, 15-16=-5/185, 14-15=-293/0, 13-14=0/2372, 12-13=-49/2809, 9-12=-48/2665, 11-12=-8/929, 10-11=-18/1007

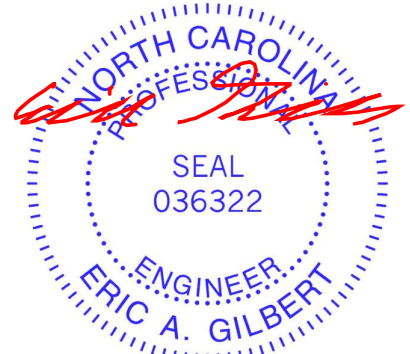
WEBS 2-17=-169/117, 4-17=0/314, 4-16=-519/135, 7-14=-1035/125, 7-13=0/630, 5-16=-677/0, 5-14=0/1738, 14-16=0/1863, 9-11=-1237/24, 8-13=-461/107

NOTES

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

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-2-2, Interior (1) 3-2-2 to 16-4-0, Exterior(2R) 16-4-0 to 19-6-2, Interior (1) 19-6-2 to 32-8-0 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
- All plates are MT20 plates 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 45 lb uplift at joint 1 and 45 lb uplift at joint 10.

LOAD CASE(S) Standard



October 1,2025

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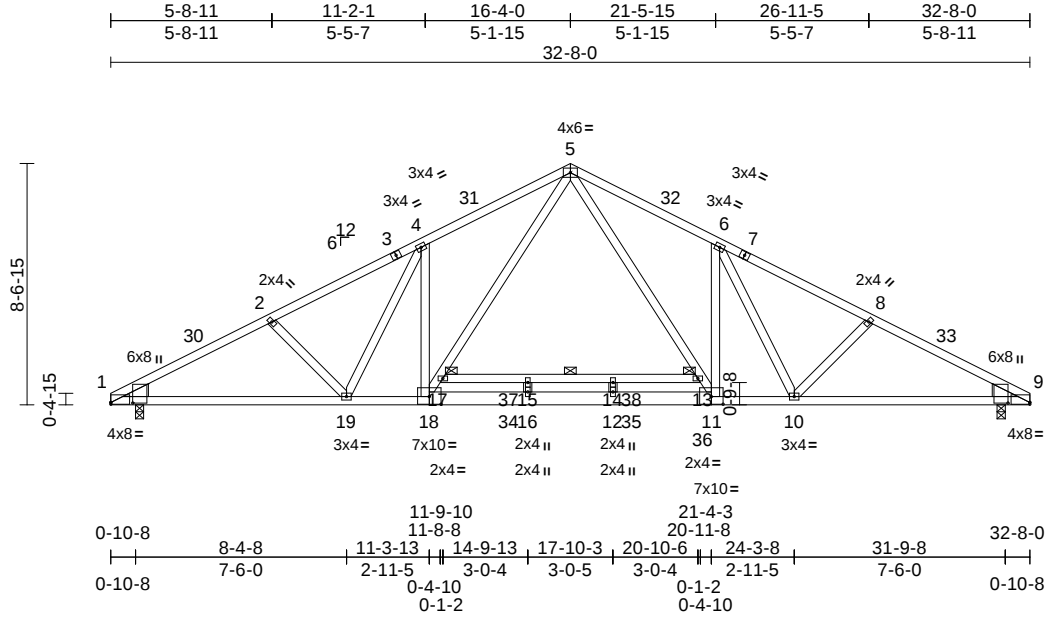
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Chesapeake 623A:Lot8 NeillsCreek
A-CP	A03	Common	2	1	176725316
Job Reference (optional)					

Builders FirstSource (Apex, NC), Apex, NC - 27523,

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Plate Offsets (X, Y): [1:Edge,0-0-12], [1:0-0-4,0-9-5], [9:Edge,0-0-12], [9:0-0-4,0-9-5], [11:0-5-0,0-3-4], [18:0-5-0,0-3-4]

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	1.00	Vert(LL)	-0.32	14-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.58	14-15	>674	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.09	9	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS		Wind(LL)	0.08	17	>999	240	Weight: 204 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP 2400F 2.0E or 2x4 SP DSS or 2x4 SP
SS *Except* 17-13:2x4 SP No.2, 18-11:2x6
SP 2400F 2.0E or 2x6 SP DSS
WEBS 2x4 SP No.3
WEDGE Left: 2x6 SP No.2
Right: 2x6 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc
bracing, Except:
6-0-0 oc bracing: 15-17,14-15,13-14.

REACTIONS (size) 1=0-3-8, 9=0-3-8
Max Horiz 1=-109 (LC 13)
Max Grav 1=1619 (LC 2), 9=1619 (LC 2)

FORCES

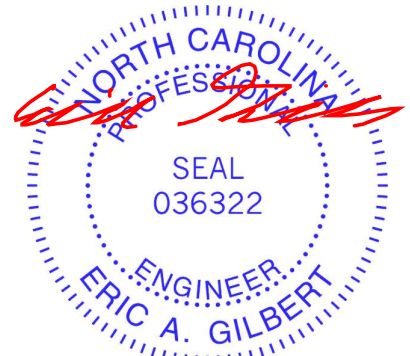
(lb) - Maximum Compression/Maximum
Tension
TOP CHORD 1-2=-2483/14, 2-4=-2349/0, 4-5=-2401/45,
5-6=-2401/45, 6-8=-2349/0, 8-9=-2483/14
BOT CHORD 1-19=-107/2132, 16-19=0/2095,
12-16=0/1727, 10-12=0/2095, 9-10=-8/2132,
15-17=-224/0, 14-15=-224/0, 13-14=-224/0
WEBS 6-10=-145/57, 8-10=-170/125, 4-19=-99/57,
2-19=-170/124, 17-18=-74/949,
5-17=-46/1117, 5-13=-46/1117,
11-13=-74/949, 4-18=-414/201,
6-11=-414/202, 15-16=-137/0, 12-14=-137/0

NOTES

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

- Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat.
II; Exp B; Enclosed; MWFRS (envelope) exterior zone
and C-C Exterior(2E) 0-0-0 to 3-3-3, Interior (1) 3-3-3 to
16-4-0, Exterior(2R) 16-4-0 to 19-7-3, Interior (1) 19-7-3
to 32-8-0 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.

LOAD CASE(S) Standard



October 1, 2025

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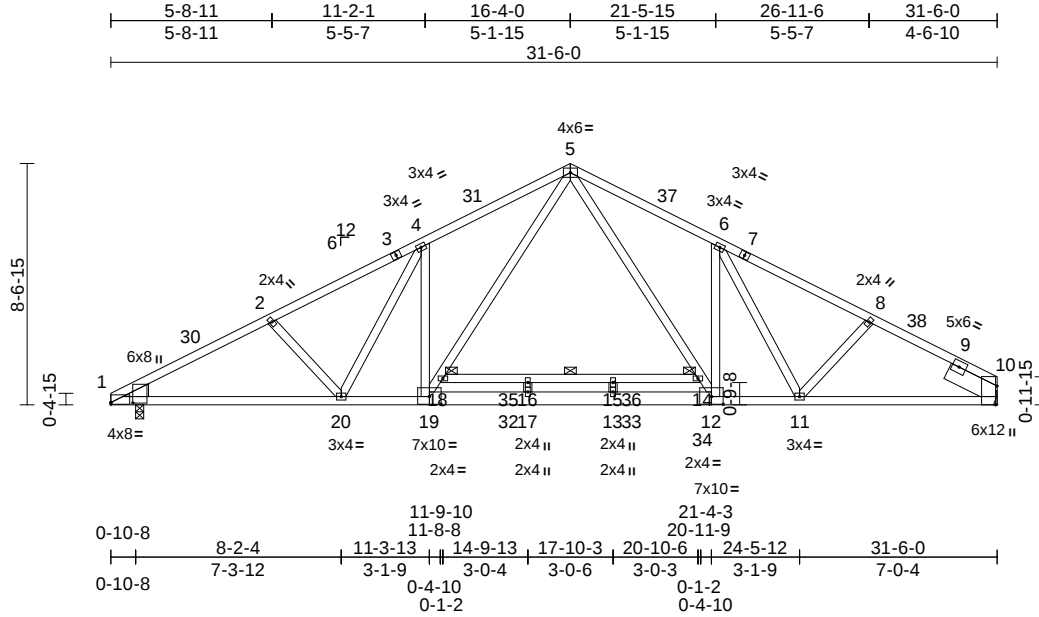
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Chesapeake 623A:Lot8 NeillsCreek	176725317
A-CP	A04	Common	4	1	Job Reference (optional)	

Builders FirstSource (Apex, NC), Apex, NC - 27523,

Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 10:50:02
ID: SUY1GAGixzw3zU5Hzycsv1yk4iy-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:81.9

Plate Offsets (X, Y): [1:Edge,0-0-12], [1:0-0-4,0-9-5], [10:0-8-0,Edge], [12:0-5-0,0-3-4], [19:0-5-0,0-3-4]

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	0.98	Vert(LL)	-0.31	15-16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.56	15-16	>679	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.10	10	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS		Wind(LL)	0.08	18	>999	240	Weight: 204 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 7-10:2x4 SP No.1
BOT CHORD 2x4 SP 2400F 2.0E or 2x4 SP DSS or 2x4 SP
SS *Except* 18-14:2x4 SP No.2, 19-12:2x6
SP 2400F 2.0E or 2x6 SP DSS
WEBS 2x4 SP No.3
WEDGE Left: 2x6 SP No.2
SLIDER Right 2x8 SP 2400F 2.0E or DSS -- 1-11-12

BRACING

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc
bracing, Except:
6-0-0 oc bracing: 16-18,15-16,14-15.

REACTIONS

(size) 1=0-3-8, 10= Mechanical
Max Horiz 1=119 (LC 12)
Max Grav 1=1605 (LC 2), 10=1533 (LC 2)

FORCES

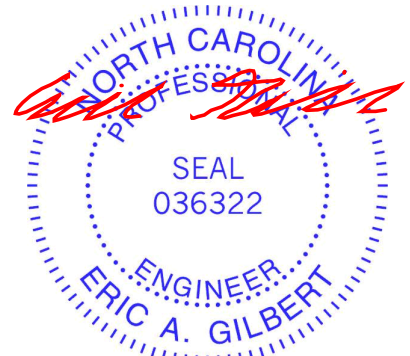
(lb) - Maximum Compression/Maximum
Tension
TOP CHORD 1-2=-2457/14, 2-4=-2326/0, 4-5=-2373/47,
5-6=-2346/45, 6-8=-2266/0, 8-10=-2345/0
BOT CHORD 1-20=-116/2110, 17-20=0/2070,
13-17=0/1697, 11-13=0/2045,
10-11=-21/1998, 16-18=-220/0,
15-16=-220/0, 14-15=-220/0
WEBS 2-20=-170/124, 4-20=-91/67, 6-11=-169/29,
8-11=-99/120, 4-19=-418/201,
6-12=-401/204, 5-14=-45/1075,
12-14=-74/909, 18-19=-74/951,
5-18=-46/1118, 16-17=-137/0, 13-15=-136/0

NOTES

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

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat.
II; Exp B; Enclosed; MWFRS (envelope) exterior zone
and C-C Exterior(2E) 0-0-0 to 3-1-13, Interior (1) 3-1-13
to 16-4-0, Exterior(2R) 16-4-0 to 19-5-13, Interior (1)
19-5-13 to 31-6-0 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, with BCDL = 10.0psf.
- 5) Refer to girder(s) for truss to truss connections.

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.sbcacompnents.com)

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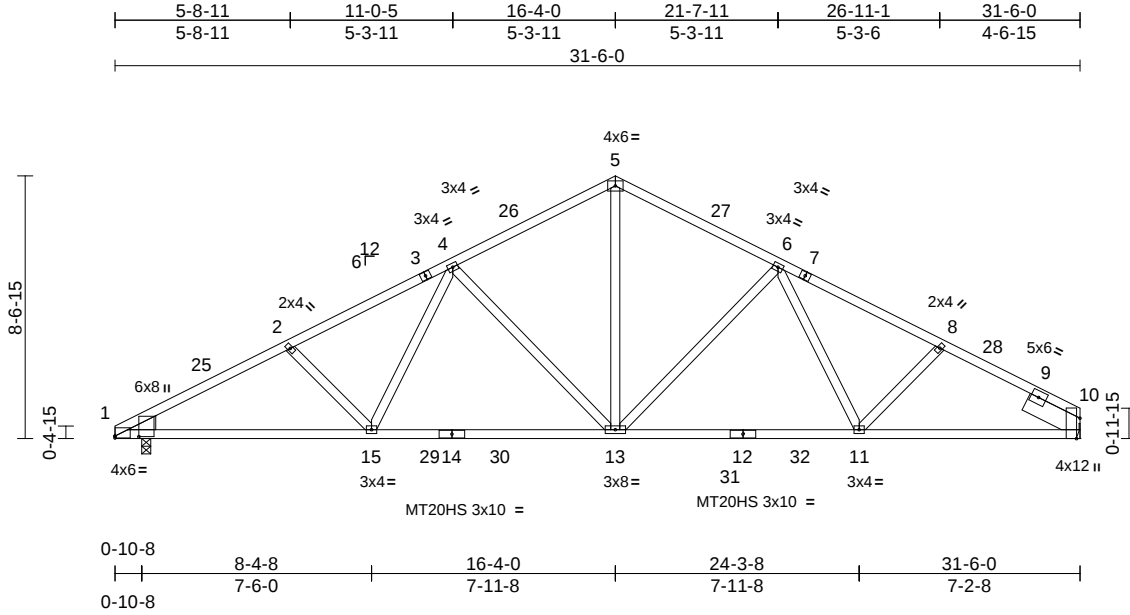
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Chesapeake 623A:Lot8 NeillsCreek	176725318
A-CP	A05	Common	5	1	Job Reference (optional)	

Builders FirstSource (Apex, NC), Apex, NC - 27523,

Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 10:50:03
ID:LryhvjxiZnUUAsSjBYig4Eyk4pq-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWwCDoi7J4zJC?f

Page: 1



Scale = 1:75.2

Plate Offsets (X, Y): [1:Edge,0-0-12], [1:0-0-4,0-9-5], [10:0-8-0,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	0.97	Vert(LL)	-0.23	13-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.96	Vert(CT)	-0.42	13-15	>904	240	MT20HS	187/143
BCLL	0.0*	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.10	10	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS		Wind(LL)	0.09	13-15	>999	240	Weight: 171 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2 *Except* 7-10:2x4 SP No.1
BOT CHORD	2x4 SP No.1 *Except* 14-12:2x4 SP No.2
WEBS	2x4 SP No.3
WEDGE	Left: 2x6 SP No.2
SLIDER	Right 2x8 SP 2400F 2.0E or DSS -- 1-11-12

BRACING

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

REACTIONS	(size)	1=0-3-8, 10= Mechanical
	Max Horiz	1=119 (LC 12)
	Max Uplift	1=-45 (LC 12), 10=-38 (LC 13)
	Max Grav	1=1411 (LC 2), 10=1335 (LC 2)

FORCES

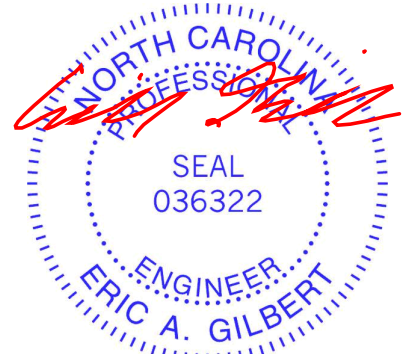
	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-2134/91, 2-4=-2003/88, 4-5=-1506/127, 5-6=-1506/128, 6-8=-1951/92, 8-10=-2031/86
BOT CHORD	1-15=-140/1820, 13-15=-61/1633, 11-13=0/1613, 10-11=-54/1720
WEBS	2-15=-158/116, 4-15=0/332, 4-13=-522/141, 5-13=-18/1063, 6-13=-497/140, 6-11=0/282, 8-11=-92/110

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-1-13, Interior (1) 3-1-13 to 16-4-0, Exterior(2R) 16-4-0 to 19-5-13, Interior (1) 19-5-13 to 31-6-0 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
- All plates are MT20 plates 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 38 lb uplift at joint 10 and 45 lb uplift at joint 1.

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.sbcacompnents.com)

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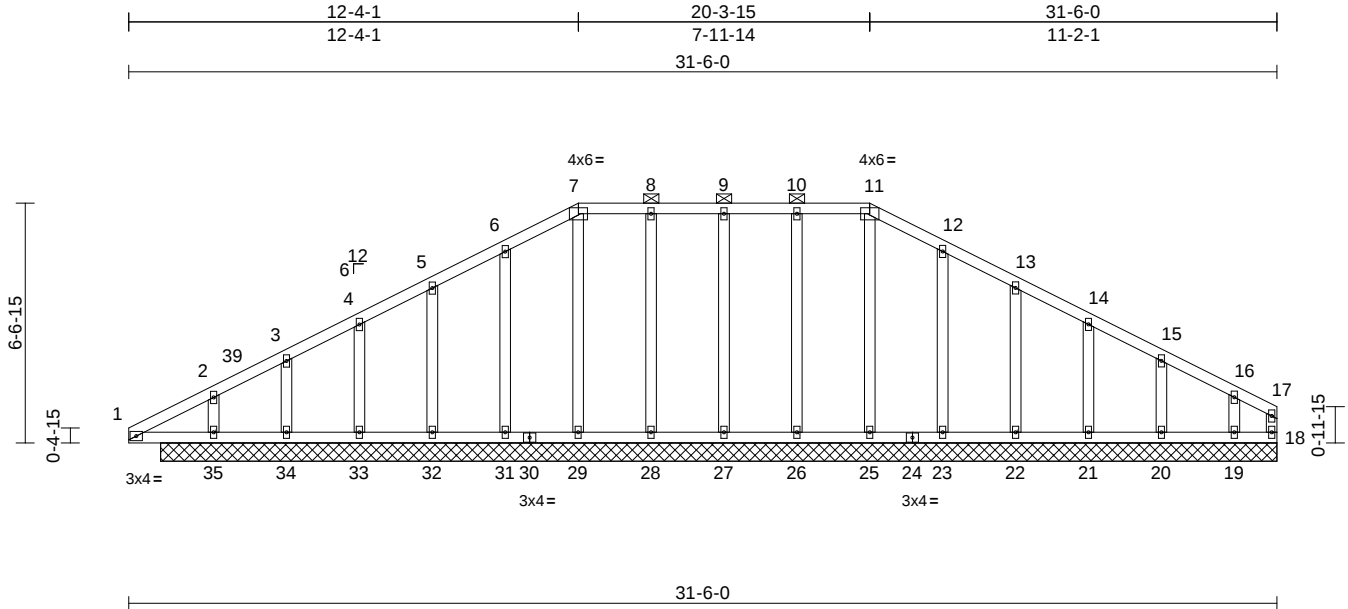
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Chesapeake 623A:Lot8 NeillsCreek
A-CP	A06G	Hip Supported Gable	1	1	Job Reference (optional)
					I76725319

Builders FirstSource (Apex, NC), Apex, NC - 27523,

Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 10:50:03
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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	0.16	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.11	Horiz(TL)	0.00	18	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS							
										Weight: 189 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 10-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 7-11.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size)
18=30-7-8, 19=30-7-8, 20=30-7-8, 21=30-7-8, 22=30-7-8, 23=30-7-8, 25=30-7-8, 26=30-7-8, 27=30-7-8, 28=30-7-8, 29=30-7-8, 31=30-7-8, 32=30-7-8, 33=30-7-8, 34=30-7-8, 35=30-7-8
Max Horiz 35=83 (LC 16)
Max Uplift 18=103 (LC 20), 19=72 (LC 13), 20=25 (LC 13), 21=30 (LC 13), 22=29 (LC 13), 23=31 (LC 13), 26=15 (LC 9), 27=14 (LC 9), 28=15 (LC 8), 31=31 (LC 12), 32=31 (LC 12), 33=22 (LC 12), 34=58 (LC 12)
Max Grav 18=67 (LC 13), 19=210 (LC 1), 20=161 (LC 26), 21=161 (LC 1), 22=158 (LC 26), 23=168 (LC 1), 25=186 (LC 1), 26=171 (LC 25), 27=157 (LC 26), 28=169 (LC 26), 29=186 (LC 25), 31=169 (LC 25), 32=153 (LC 25), 33=179 (LC 1), 34=88 (LC 19), 35=286 (LC 1)

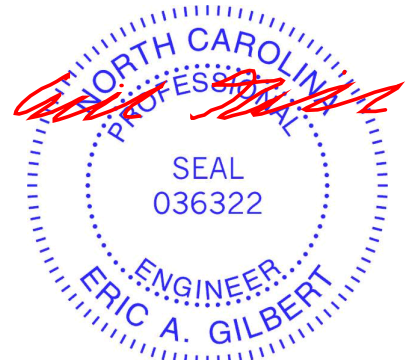
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-45/128, 2-3=-14/103, 3-4=0/120, 4-5=-8/125, 5-6=-25/137, 6-7=-45/176, 7-8=-43/169, 8-9=-43/169, 9-10=-43/169, 10-11=-43/169, 11-12=-45/176, 12-13=-26/149, 13-14=-8/141, 14-15=0/134, 15-16=-31/126, 16-17=-67/130, 17-18=-41/66
BOT CHORD 1-35=-80/67, 34-35=-98/51, 33-34=-98/51, 32-33=-98/51, 31-32=-98/51, 29-31=-98/51, 28-29=-98/51, 27-28=-98/51, 26-27=-98/51, 25-26=-98/51, 23-25=-98/51, 22-23=-98/51, 21-22=-98/51, 20-21=-98/51, 19-20=-98/51, 18-19=-98/51
WEBS 11-25=-146/0, 10-26=-131/42, 9-27=-117/46, 8-28=-129/42, 7-29=-146/0, 6-31=-128/63, 5-32=-116/62, 4-33=-128/61, 3-34=-87/66, 2-35=-177/101, 12-23=-128/62, 13-22=-118/62, 14-21=-120/61, 15-20=-122/81, 16-19=-136/101

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-0-0 to 3-1-13, Exterior(2N) 3-1-13 to 12-4-1, Corner(3R) 12-4-1 to 15-5-14, Exterior(2N) 15-5-14 to 20-3-15, Corner(3R) 20-3-15 to 23-5-12, Exterior(2N) 23-5-12 to 31-4-4 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) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 (||) MT20 unless otherwise indicated.
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 103 lb uplift at joint 18, 15 lb uplift at joint 26, 14 lb uplift at joint 27, 15 lb uplift at joint 28, 31 lb uplift at joint 31, 31 lb uplift at joint 32, 22 lb uplift at joint 33, 58 lb uplift at joint 34, 31 lb uplift at joint 23, 29 lb uplift at joint 22, 30 lb uplift at joint 21, 25 lb uplift at joint 20 and 72 lb uplift at joint 19.
10) Non Standard bearing condition. Review required.
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

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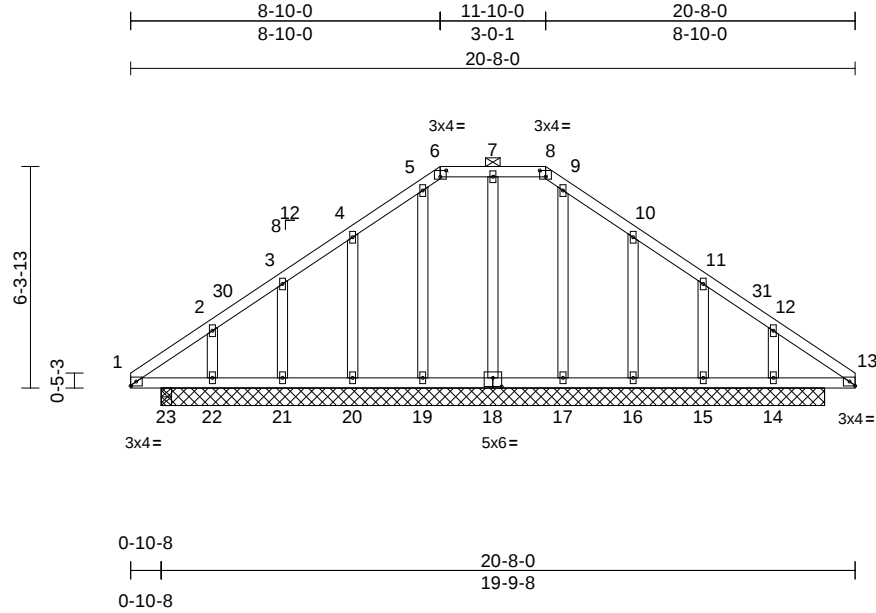
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Chesapeake 623A:Lot8 NeillsCreek
A-CP	B01G	Hip Supported Gable	1	1	176725320
					Job Reference (optional)

Builders FirstSource (Apex, NC), Apex, NC - 27523,

Run: 8.83 E Jun 26 2025 Print: 8.830 E Jun 26 2025 MiTek Industries, Inc. Wed Oct 01 10:33:08
ID:6D5Qz5nkY4MMgYywhjnoOByk4bq-SSN43r_JH3sHg7JdGIEvKKyEIQyHrxuIVGPU44yXzi9

Page: 1



Scale = 1:65.7

Plate Offsets (X, Y): [6:0-2-0,0-2-3], [8:0-2-0,0-2-3], [18:0-3-0,0-3-0]

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	0.13	Vert(LL)	0.00	14-15	>999	360	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	0.00	14-15	>999	240	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	14	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS		Wind(LL)	0.00	22-23	>999	240	Weight: 117 lb FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
OTHERS	2x4 SP No.3

BRACING

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

REACTIONS

All bearings 18-11-0. except 23=0-3-8	
(lb) - Max Horiz 22=117 (LC 9)	
Max Uplift All uplift 100 (lb) or less at joint(s) 14, 15, 16, 18, 19, 20, 21, 22, 23	
Max Grav All reactions 250 (lb) or less at joint (s) 15, 16, 17, 18, 19, 20, 21, 22, 23 except 14=259 (LC 26)	

FORCES

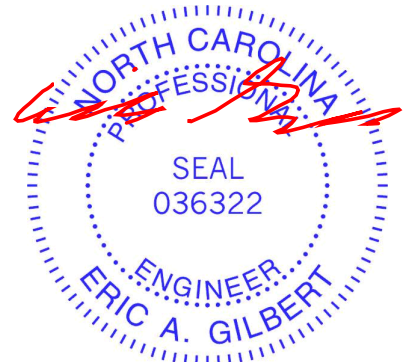
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
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NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; 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 8-10-0, Corner(3E) 8-10-0 to 11-10-0, Corner(3R) 11-10-0 to 14-10-0, Exterior(2N) 14-10-0 to 20-8-0 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.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 (II) MT20 unless otherwise indicated.

- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 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 100 lb uplift at joint (s) 18, 19, 20, 21, 22, 16, 15, 14, 23.
- 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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818 Soundside Road
Edenton, NC 27932

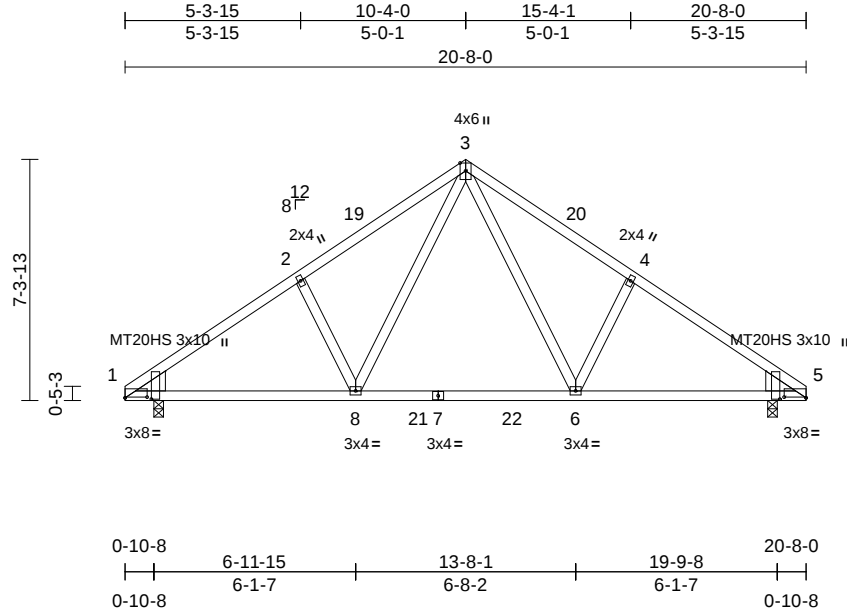
Job	Truss	Truss Type	Qty	Ply	Chesapeake 623A:Lot8 NeillsCreek
A-CP	B02	Common	1	1	Job Reference (optional)
					176725321

Builders FirstSource (Apex, NC), Apex, NC - 27523,

Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 10:50:03

Page: 1

ID: iAT8Th9BFbGyuJqu?kr39jyk4bL-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:69.9	Plate Offsets (X, Y): [1:0-8-0,0-0-4], [1:0-0-7,0-9-9], [5:0-8-0,0-0-4], [5:0-0-7,0-9-9]
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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	0.53	Vert(LL)	-0.13	6-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.23	6-8	>999	240	MT20HS	187/143
BCLL	0.0*	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS		Wind(LL)	0.04	6-8	>999	240	Weight: 107 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
WEDGE Left: 2x8 SP 2400F 2.0E or DSS
Right: 2x8 SP 2400F 2.0E or DSS

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-11-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

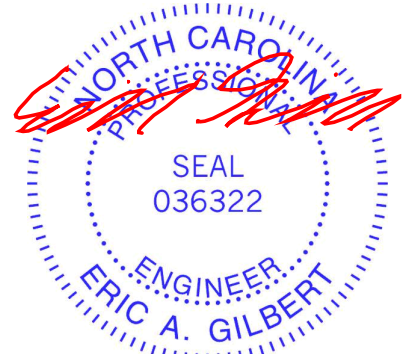
REACTIONS (size) 1=0-3-8, 5=0-3-8
Max Horiz 1=136 (LC 9)
Max Uplift 1=-22 (LC 12), 5=-22 (LC 13)
Max Grav 1=932 (LC 19), 5=932 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1040/56, 2-3=-955/103, 3-4=-955/104, 4-5=-1040/56
BOT CHORD 1-8=-97/880, 6-8=0/610, 5-6=-12/790
WEBS 3-6=-62/436, 4-6=-205/145, 3-8=-62/436, 2-8=-205/145

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; 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 10-4-0, Exterior(2R) 10-4-0 to 13-4-0, Interior (1) 13-4-0 to 20-8-0 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) All plates are MT20 plates unless otherwise indicated.
4) 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 22 lb uplift at joint 1 and 22 lb uplift at joint 5.

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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ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Chesapeake 623A:Lot8 NeillsCreek
A-CP	B03GR	Common Girder	1	2	Job Reference (optional)

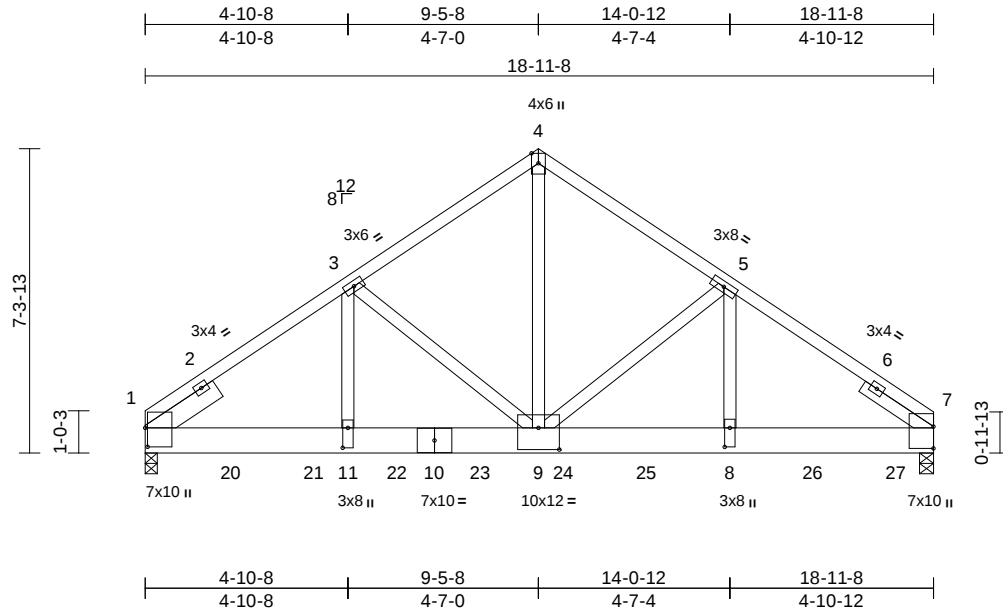
I76725322

Builders FirstSource (Apex, NC), Apex, NC - 27523,

Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 10:50:04

Page: 1

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Scale = 1:55.4

Plate Offsets (X, Y): [1:0-5-7,0-0-11], [8:0-5-8,0-1-8], [9:0-6-0,0-6-4], [11:0-5-12,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.87	Vert(LL)	-0.11	8-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.20	8-9	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.82	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS		Wind(LL)	0.04	9-11	>999	240	Weight: 273 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x8 SP 2400F 2.0E or 2x8 SP DSS
WEBS	2x4 SP No.3 *Except* 9-4:2x4 SP No.2
SLIDER	Left 2x6 SP No.2 -- 1-11-12, Right 2x4 SP No.3 -- 1-11-12

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-11-12 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size)	1=0-3-8, 7=0-4-0
Max Horiz	1=-125 (LC 25)
Max Grav	1=6380 (LC 2), 7=7576 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-3=-8148/0, 3-4=-6323/0, 4-5=-6324/0, 5-7=-8673/0
-----------	--

BOT CHORD	1-11=0/6685, 9-11=0/6685, 8-9=0/7128, 7-8=0/7128
-----------	--

WEBS	3-11=-190/2136, 3-9=-1896/305, 4-9=0/6665, 5-9=-2461/0, 5-8=0/2769
------	--

NOTES

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 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=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 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.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1315 lb down and 50 lb up at 2-0-12, 1315 lb down and 50 lb up at 4-0-12, 1315 lb down and 50 lb up at 6-0-12, 1315 lb down and 50 lb up at 8-0-12, 1315 lb down and 50 lb up at 10-0-12, 1513 lb down at 12-0-12, 1513 lb down at 14-0-12, and 1513 lb down at 16-0-12, and 1514 lb down at 18-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-60, 4-7=-60, 12-16=-20
Concentrated Loads (lb)
Vert: 8=-1299 (F), 20=-1204 (F), 21=-1204 (F), 22=-1204 (F), 23=-1204 (F), 24=-1204 (F), 25=-1299 (F), 26=-1299 (F), 27=-1300 (F)



October 1, 2025

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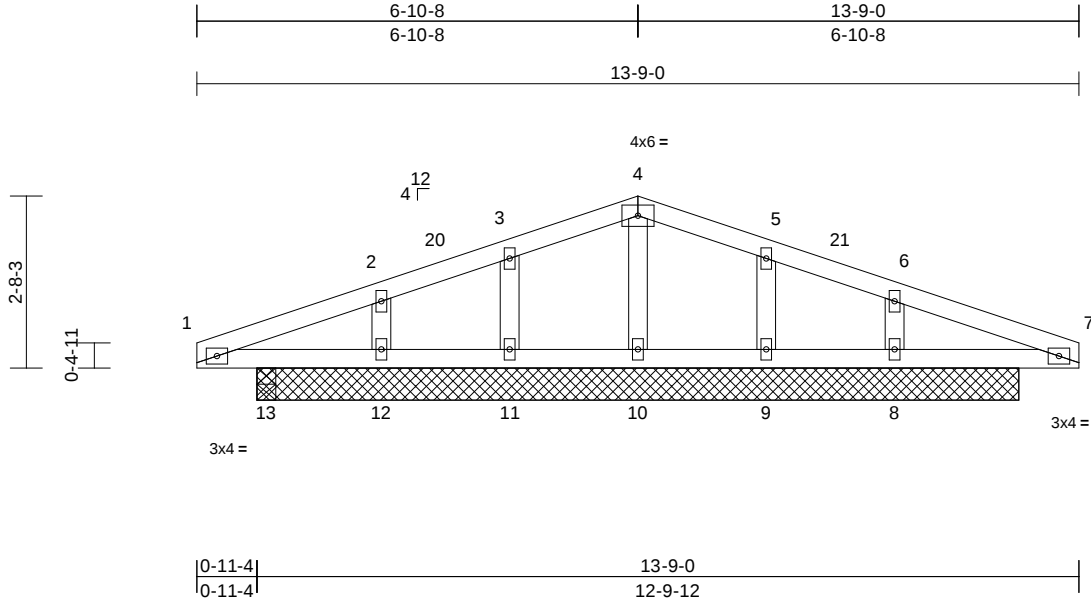
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Chesapeake 623A:Lot8 NeillsCreek
A-CP	CP01G	Common Supported Gable	1	1	Job Reference (optional)
					I76725323

Builders FirstSource (Apex, NC), Apex, NC - 27523,

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Page: 1



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	0.00	8-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	0.00	8-9	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS		Wind(LL)	0.00	8-9	>999	240	Weight: 52 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

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

All bearings 11-10-8. except 13=0-3-8
(lb) - Max Horiz 12=30 (LC 12)
Max Uplift All uplift 100 (lb) or less at joint(s)
8, 9, 10, 11, 12, 13
Max Grav All reactions 250 (lb) or less at joint
(s) 9, 11, 12, 13 except 8=310 (LC 26), 10=297 (LC 1)

FORCES

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

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-0-0 to 2-10-8, Exterior(2N) 2-10-8 to 6-10-8, Corner(3R) 6-10-8 to 9-10-8, Exterior(2N) 9-10-8 to 13-9-0 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 (II) MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- * This truss has been designed for a live load of 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 100 lb uplift at joint (s) 10, 11, 12, 9, 8, 13.

LOAD CASE(S) Standard



October 1, 2025

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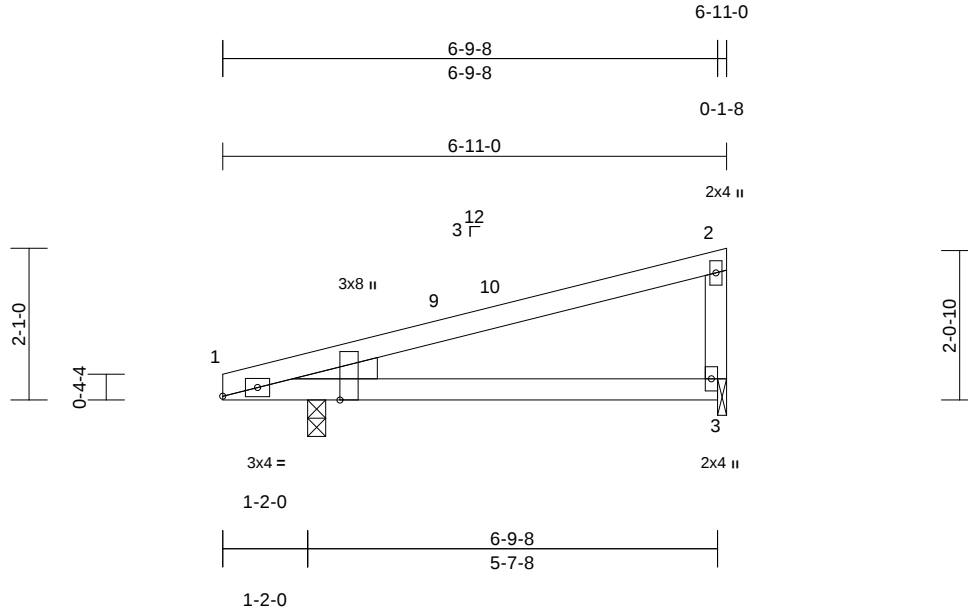
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Chesapeake 623A:Lot8 NeillsCreek
A-CP	M01	Monopitch	3	1	Job Reference (optional)
					I76725324

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Page: 1



Scale = 1:31.6

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.43	Vert(LL)	-0.04	3-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.10	3-8	>847	240		
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		Wind(LL)	0.05	3-8	>999	240	Weight: 25 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
WEDGE Left: 2x4 SP No.3

- 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 19 lb uplift at joint 1 and 27 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=0-3-0, 3=0-1-8
Max Horiz 1=52 (LC 8)
Max Uplift 1=-19 (LC 8), 3=-27 (LC 8)
Max Grav 1=327 (LC 1), 3=215 (LC 1)

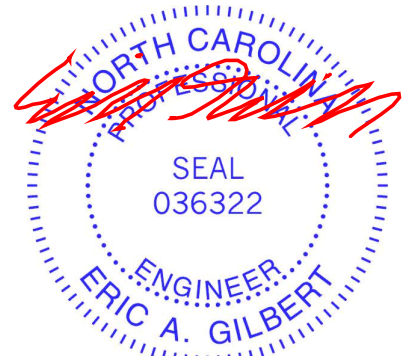
FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-52/28
BOT CHORD 1-3=-82/62
WEBS 2-3=-142/108

NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; 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 6-9-4 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) 3 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.



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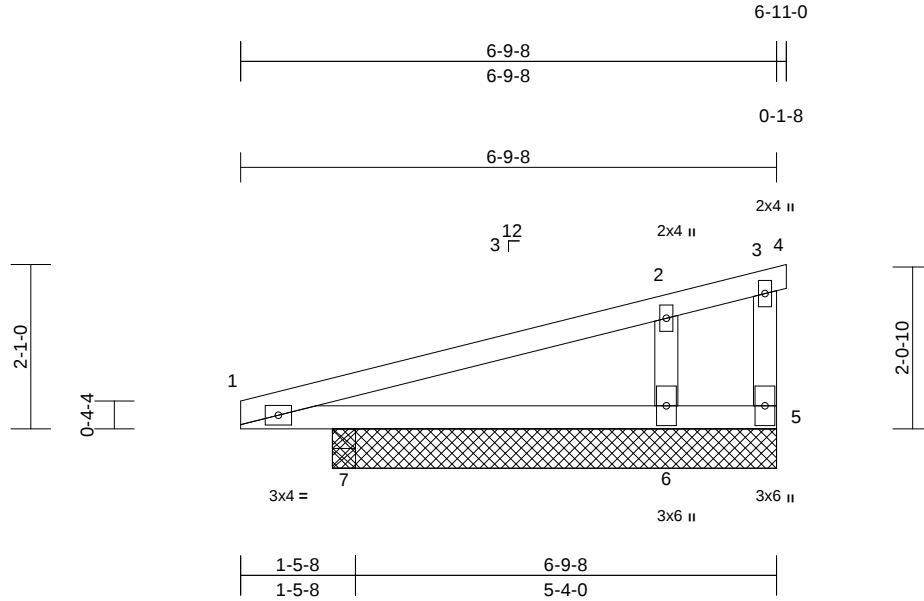
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Chesapeake 623A:Lot8 NeillsCreek	176725325
A-CP	M01G	Monopitch Supported Gable	2	1	Job Reference (optional)	

Builders FirstSource (Apex, NC), Apex, NC - 27523,

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Page: 1



Scale = 1:29.2

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	0.14	Vert(LL)	0.00	6-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.01	6-7	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MP		Wind(LL)	0.01	6-7	>999	240	Weight: 25 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.1
BOT CHORD	2x4 SP 2400F 2.0E or 2x4 SP DSS or 2x4 SP SS
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3

BRACING

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

REACTIONS	(lb/size)	5=-28/5-7-8, 6=306/5-7-8, 7=259/0-3-8
	Max Horiz	6=56 (LC 11)
	Max Uplift	5=-28 (LC 1), 6=-64 (LC 9), 7=-37 (LC 8)
	Max Grav	5=10 (LC 9), 6=306 (LC 1), 7=259 (LC 1)

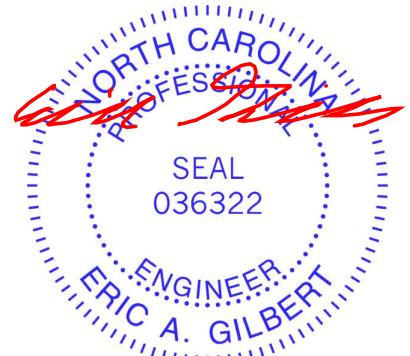
FORCES	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS	2-6=-232/261

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; 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 6-11-0 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 28 lb uplift at joint 5, 64 lb uplift at joint 6 and 37 lb uplift at joint 7.

LOAD CASE(S) Standard



October 1, 2025

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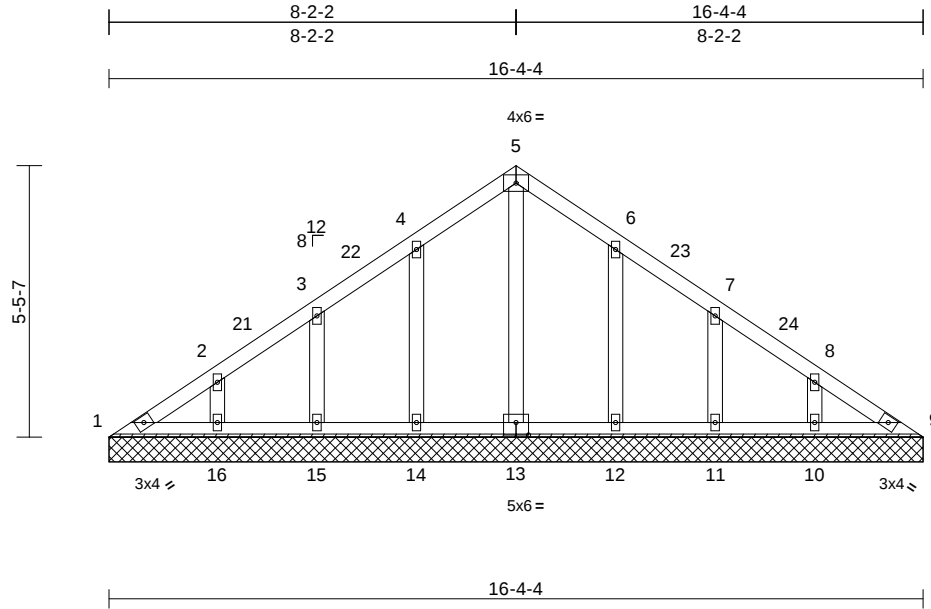
Job	Truss	Truss Type	Qty	Ply	Chesapeake 623A:Lot8 NeillsCreek
A-CP	V01	Valley	1	1	Job Reference (optional)

I76725326

Builders FirstSource (Apex, NC), Apex, NC - 27523,

Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 10:50:05
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Page: 1



Scale = 1:46.3

Plate Offsets (X, Y): [13:0-3-0,0-3-0]

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	0.09	Vert(LL)	n/a	-	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(TL)	n/a	-	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	9	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS						Weight: 79 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.3
 BOT CHORD 2x4 SP No.3
 OTHERS 2x4 SP No.3

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=16-4-4, 9=16-4-4, 10=16-4-4,
 11=16-4-4, 12=16-4-4, 13=16-4-4,
 14=16-4-4, 15=16-4-4, 16=16-4-4
 Max Horiz 1=-104 (LC 8)
 Max Uplift 1=-11 (LC 8), 10=-31 (LC 13),
 11=-44 (LC 13), 12=-42 (LC 13),
 14=-43 (LC 12), 15=-43 (LC 12),
 16=-34 (LC 12)
 Max Grav 1=84 (LC 20), 9=70 (LC 1), 10=190
 (LC 1), 11=156 (LC 20), 12=174
 (LC 20), 13=158 (LC 22), 14=175
 (LC 19), 15=155 (LC 19), 16=190
 (LC 19)

FORCES

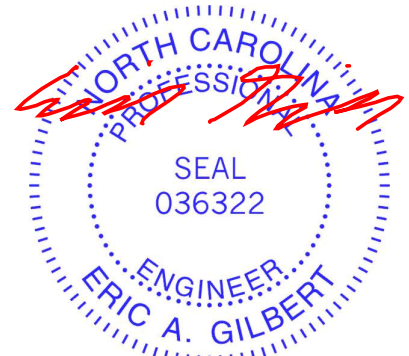
(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=-111/92, 2-3=-72/73, 3-4=-60/73,
 4-5=-62/99, 5-6=-62/91, 6-7=-33/49,
 7-8=-43/43, 8-9=-82/58
 BOT CHORD 1-16=-41/90, 15-16=-41/73, 14-15=-41/73,
 12-14=-41/73, 11-12=-41/73, 10-11=-41/73,
 9-10=-41/73
 WEBS 5-13=-119/1, 4-14=-133/67, 3-15=-121/67,
 2-16=-128/55, 6-12=-132/66, 7-11=-121/68,
 8-10=-127/54

NOTES

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

- Wind: ASCE 7-16; Vult=115mph (3-second gust)
 Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=32ft; 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 8-2-2, Exterior(2R) 8-2-2 to 11-2-2, Interior (1) 11-2-2 to 16-4-4 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 (||) MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 11 lb uplift at joint 1, 43 lb uplift at joint 14, 43 lb uplift at joint 15, 34 lb uplift at joint 16, 42 lb uplift at joint 12, 44 lb uplift at joint 11 and 31 lb uplift at joint 10.

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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 Edenton, NC 27932

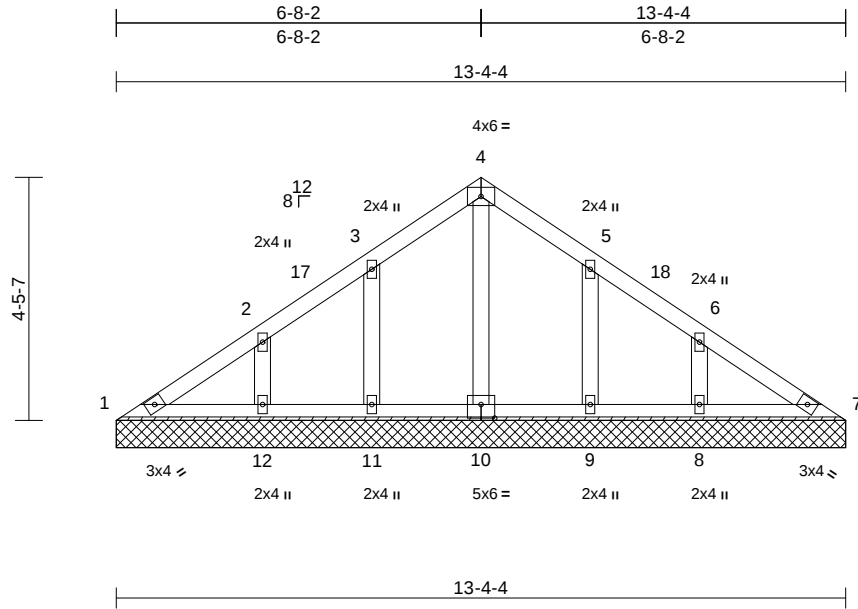
Job	Truss	Truss Type	Qty	Ply	Chesapeake 623A:Lot8 NeillsCreek
A-CP	V02	Valley	1	1	Job Reference (optional)

I76725327

Builders FirstSource (Apex, NC), Apex, NC - 27523,

Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 10:50:05
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Page: 1



Scale = 1:42.2

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

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	0.13	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	7	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS							
Weight: 59 lb FT = 20%											

LUMBER

TOP CHORD 2x4 SP No.3
 BOT CHORD 2x4 SP No.3
 OTHERS 2x4 SP No.3

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=13-4-4, 7=13-4-4, 8=13-4-4, 9=13-4-4, 10=13-4-4, 11=13-4-4, 12=13-4-4
 Max Horiz 1=-84 (LC 8)
 Max Uplift 1=-2 (LC 13), 8=-44 (LC 13), 9=-43 (LC 13), 11=-43 (LC 12), 12=-46 (LC 12)
 Max Grav 1=82 (LC 20), 7=79 (LC 26), 8=217 (LC 20), 9=155 (LC 20), 10=185 (LC 1), 11=155 (LC 19), 12=219 (LC 19)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-106/103, 2-3=-38/78, 3-4=-35/83, 4-5=-35/77, 5-6=-15/57, 6-7=-92/78
 BOT CHORD 1-12=-50/95, 11-12=-50/59, 9-11=-50/59, 8-9=-50/59, 7-8=-50/72
 WEBS 4-10=-139/0, 3-11=-127/71, 2-12=-143/64, 5-9=-126/71, 6-8=-143/64

NOTES

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

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; 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 6-8-2, Exterior(2R) 6-8-2 to 9-8-2, Interior (1) 9-8-2 to 13-4-4 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 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 2 lb uplift at joint 1, 43 lb uplift at joint 11, 46 lb uplift at joint 12, 43 lb uplift at joint 9 and 44 lb uplift at joint 8.

LOAD CASE(S) Standard



October 1, 2025

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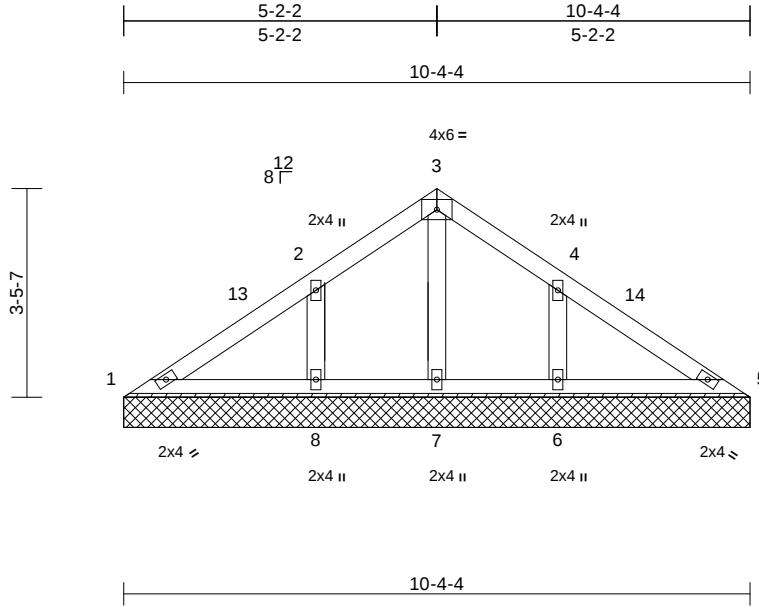
Job	Truss	Truss Type	Qty	Ply	Chesapeake 623A:Lot8 NeillsCreek
A-CP	V03	Valley	1	1	Job Reference (optional)

I76725328

Builders FirstSource (Apex, NC), Apex, NC - 27523,

Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 10:50:05
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Page: 1



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS							Weight: 41 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.3
BOT CHORD	2x4 SP No.3
OTHERS	2x4 SP No.3

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=10-4-4, 5=10-4-4, 6=10-4-4, 7=10-4-4, 8=10-4-4
	Max Horiz	1=-65 (LC 8)
	Max Uplift	6=-59 (LC 13), 8=-61 (LC 12)
	Max Grav	1=78 (LC 25), 5=78 (LC 26), 6=261 (LC 20), 7=174 (LC 1), 8=263 (LC 19)

FORCES

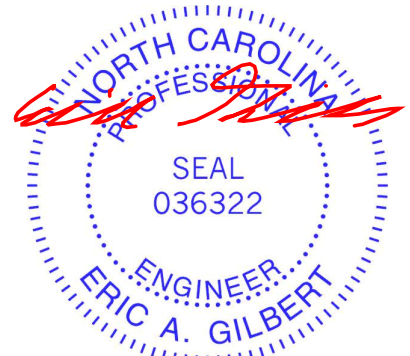
	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-86/140, 2-3=0/98, 3-4=0/98, 4-5=-86/126
BOT CHORD	1-8=-80/80, 7-8=-80/59, 6-7=-80/59, 5-6=-80/68
WEBS	3-7=-167/0, 2-8=-175/95, 4-6=-174/95

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 3-2-2, Interior (1) 3-2-2 to 5-2-2, Exterior(2R) 5-2-2 to 8-2-2, Interior (1) 8-2-2 to 10-4-4 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 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 61 lb uplift at joint 8 and 59 lb uplift at joint 6.

LOAD CASE(S) Standard



October 1, 2025

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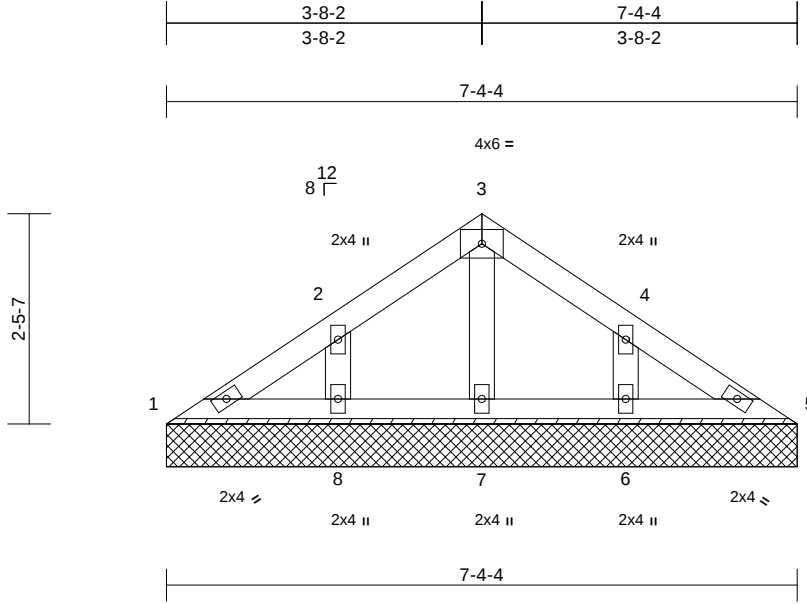
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Chesapeake 623A:Lot8 NeillsCreek
A-CP	V04	Valley	1	1	Job Reference (optional)
					I76725329

Builders FirstSource (Apex, NC), Apex, NC - 27523,

Run: 8.83 S Sep 3 2025 Print: 8.830 S Sep 3 2025 MiTek Industries, Inc. Tue Sep 30 10:50:06
ID:LryhvjxiZnUUASjBYig4EyK4pq-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDol7J4zJC?f

Page: 1



Scale = 1:26.9

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	0.08	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	n/a	-	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	5	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS						Weight: 28 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.3
BOT CHORD 2x4 SP No.3
OTHERS 2x4 SP No.3

BRACING

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

REACTIONS (size) 1=7-4-4, 5=7-4-4, 6=7-4-4, 7=7-4-4, 8=7-4-4
Max Horiz 1=-45 (LC 8)
Max Uplift 1=-2 (LC 13), 6=-38 (LC 13), 8=-39 (LC 12)
Max Grav 1=60 (LC 25), 5=60 (LC 26), 6=175 (LC 20), 7=125 (LC 1), 8=176 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-64/63, 2-3=-24/51, 3-4=-22/47, 4-5=-60/50

BOT CHORD 1-8=-34/57, 7-8=-34/39, 6-7=-34/39, 5-6=-34/45

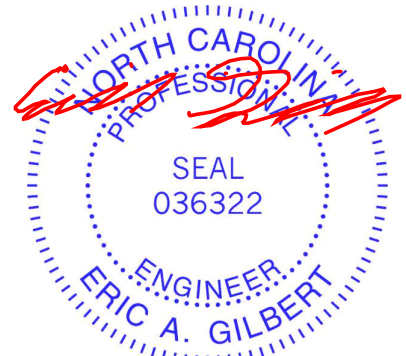
WEBS 2-8=-119/81, 4-6=-118/81, 3-7=-104/2

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=32ft; 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 3-8-2, Exterior(2R) 3-8-2 to 6-4-11, Interior (1) 6-4-11 to 7-4-4 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 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 2 lb uplift at joint 1, 39 lb uplift at joint 8 and 38 lb uplift at joint 6.

LOAD CASE(S) Standard



October 1, 2025

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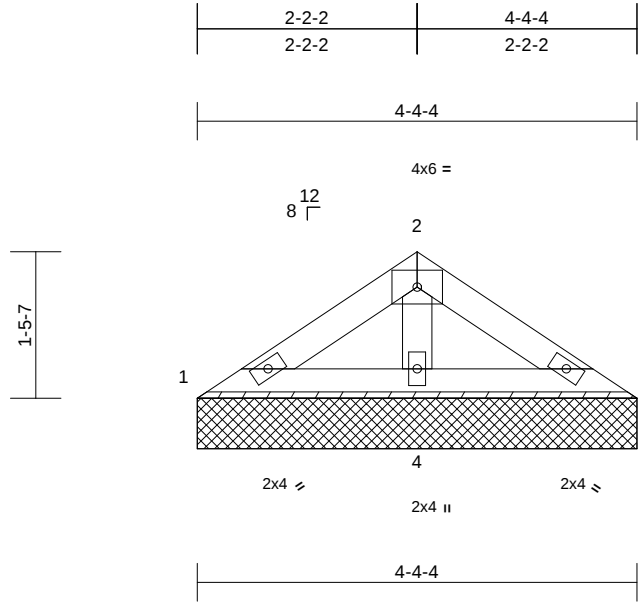
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Chesapeake 623A:Lot8 NeillsCreek
A-CP	V05	Valley	1	1	Job Reference (optional)
					I76725330

Builders FirstSource (Apex, NC), Apex, NC - 27523,

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Page: 1



Scale = 1:22.8

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
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MP							Weight: 14 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.3
BOT CHORD 2x4 SP No.3
OTHERS 2x4 SP No.3

BRACING

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

REACTIONS

(size) 1=4-4-4, 3=4-4-4, 4=4-4-4
Max Horiz 1=-25 (LC 8)
Max Uplift 1=-2 (LC 12), 3=-7 (LC 13), 4=-5 (LC 12)
Max Grav 1=58 (LC 25), 3=58 (LC 26), 4=250 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

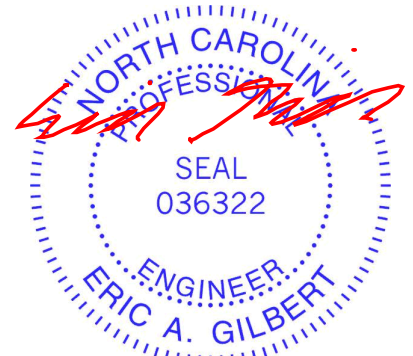
TOP CHORD 1-2=-54/78, 2-3=-54/78
BOT CHORD 1-4=-61/50, 3-4=-61/50
WEBS 2-4=-145/51

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 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 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 2 lb uplift at joint 1, 7 lb uplift at joint 3 and 5 lb uplift at joint 4.

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.

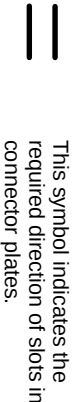
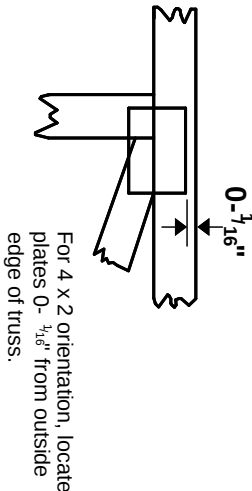
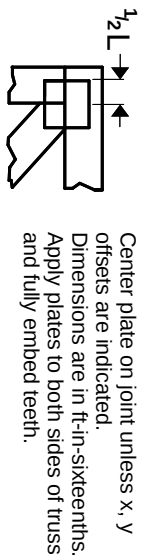
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Symbols

PLATE LOCATION AND ORIENTATION



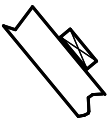
* Plate location details available in MITek software or upon request.

PLATE SIZE

4 X 4

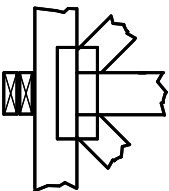
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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.

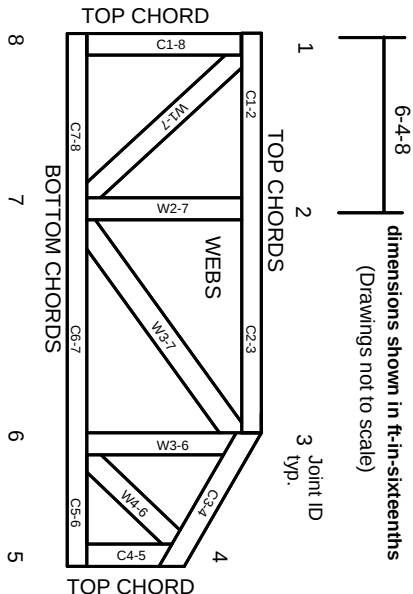
BEARING



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/TPI 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/TPI 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/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 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/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.

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