ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: P05802-31170
993 Serenity

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: I77453383 thru I77453418

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

North Carolina COA: C-0844

October 30,2025

Gilbert, Eric

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

Job	Truss	Truss Type	Qty	Ply	993 Serenity	
P05802-31170	A01E	Common Supported Gable	1	1	Job Reference (optional)	I77453383

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. Thu Oct 30 15:40:13 Page: 1
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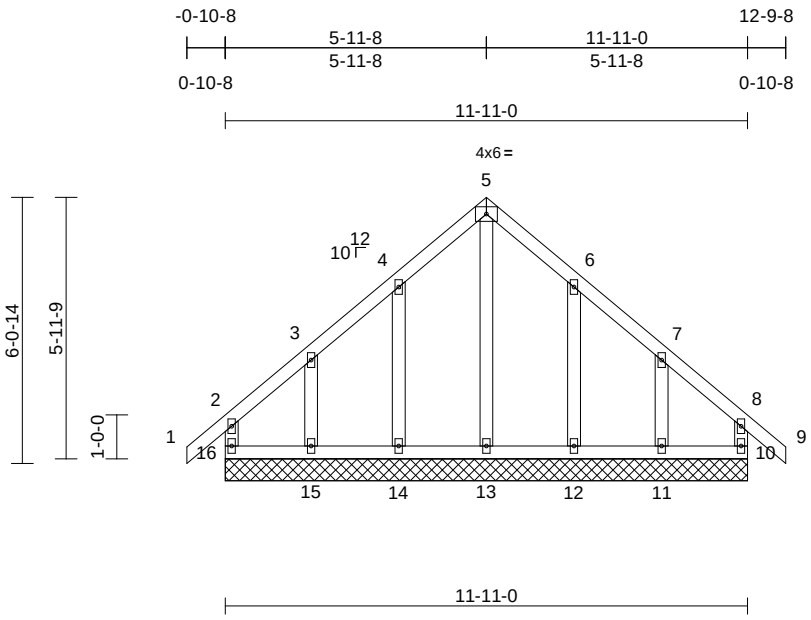

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	NO	WB	0.08	Horz(CT)	0.00	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 72 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 6-0-0 oc bracing.

REACTIONS (size) 10=11-11-0, 11=11-11-0, 12=11-11-0, 13=11-11-0, 14=11-11-0, 15=11-11-0, 16=11-11-0
Max Horiz 16=132 (LC 13)
Max Uplift 10=-36 (LC 11), 11=-99 (LC 15), 12=-65 (LC 15), 14=-63 (LC 14), 15=-97 (LC 14), 16=-48 (LC 10)
Max Grav 10=158 (LC 26), 11=209 (LC 27), 12=195 (LC 27), 13=192 (LC 29), 14=185 (LC 26), 15=189 (LC 26), 16=156 (LC 27)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	2-16=-127/64, 1-2=0/39, 2-3=-86/80, 3-4=-80/95, 4-5=-134/157, 5-6=-134/157, 6-7=-80/94, 7-8=-74/67, 8-9=0/39, 8-10=-122/62
BOT CHORD	15-16=-61/67, 14-15=-61/67, 13-14=-61/67, 12-13=-61/67, 11-12=-61/67, 10-11=-61/67
WEBS	5-13=-154/69, 4-14=-136/77, 3-15=-129/93, 6-12=-136/77, 7-11=-129/91

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -0-10-8 to 1-11-8, Exterior (2) 1-11-8 to 5-11-8, Corner (3) 5-11-8 to 8-11-8, Exterior (2) 8-11-8 to 12-9-8 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) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
7) All plates are 2x4 (||) MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
10) Gable studs spaced at 2-0-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * 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.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 48 lb uplift at joint 16, 36 lb uplift at joint 10, 63 lb uplift at joint 14, 97 lb uplift at joint 15, 65 lb uplift at joint 12 and 99 lb uplift at joint 11.
14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 1-2=-51, 2-5=-51, 5-8=-51, 8-9=-51
   Trapezoidal Loads (lb/ft)
   Vert: 16=-20-to-15=-22 (F=-2), 15=-22 (F=-2)-to-14=-25 (F=-5), 14=-25 (F=-5)-to-13=-28 (F=-8), 13=-28 (F=-8)-to-12=-30 (F=-10), 12=-30 (F=-10)-to-11=-33 (F=-13), 11=-33 (F=-13)-to-10=-35 (F=-15)

October 30,2025

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

Job	Truss	Truss Type	Qty	Ply	993 Serenity
P05802-31170	A02SE	Common Structural Gable	1	1	I77453384 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. Thu Oct 30 15:40:15 Page: 1
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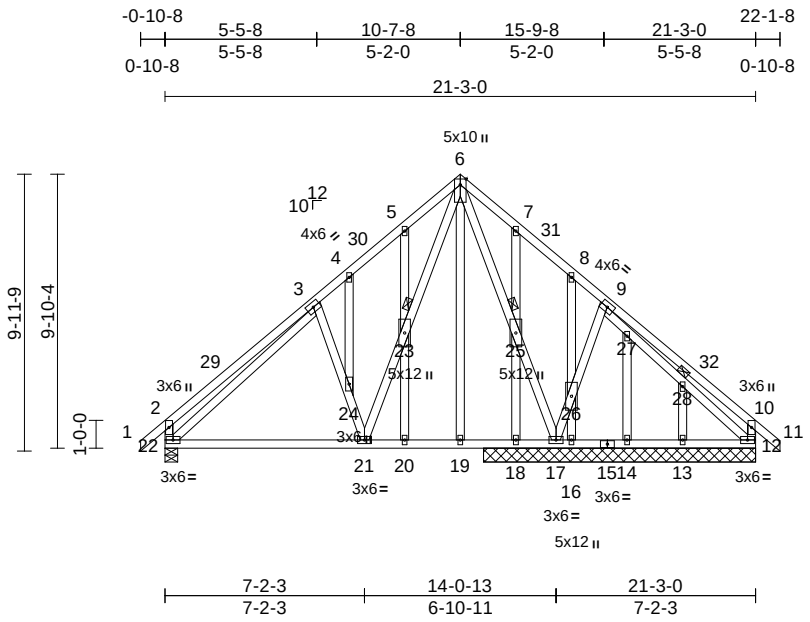

Scale = 1:82.9

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	0.27	Vert(LL)	-0.06	21-22	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.13	21-22	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.01	12	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 204 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.
JOINTS 1 Brace at Jt(s): 23, 25, 28

REACTIONS (size) 12=9-9-8, 13=9-9-8, 14=9-9-8, 16=9-9-8, 17=9-9-8, 18=9-9-8, 22=0-5-8
Max Horiz 22=-205 (LC 12)
Max Uplift 12=-71 (LC 15), 14=-1 (LC 11), 16=-3 (LC 11), 17=-117 (LC 14), 18=-50 (LC 15), 22=-66 (LC 14)
Max Grav 12=345 (LC 2), 13=127 (LC 5), 14=101 (LC 5), 16=81 (LC 5), 17=601 (LC 2), 18=209 (LC 31), 22=642 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/39, 2-3=-367/184, 3-4=-485/133, 4-5=-455/160, 5-6=-500/212, 6-7=-195/173, 7-8=-144/127, 8-9=-167/112, 9-10=-265/186, 10-11=0/39, 2-22=-390/166, 10-12=-322/166
BOT CHORD 21-22=-89/460, 20-21=-42/225, 19-20=-42/225, 18-19=-42/227, 17-18=-42/227, 16-17=-2/118, 14-16=-2/118, 13-14=-2/118, 12-13=-2/118
WEBS 6-25=-409/34, 17-25=-450/37, 17-26=-300/227, 9-26=-260/195, 21-23=-161/459, 6-23=-182/500, 3-24=-213/154, 21-24=-240/176, 3-22=-296/20, 9-27=-159/114, 27-28=-128/99, 12-28=-125/94, 6-19=-21/76, 5-23=-113/57, 20-23=-70/35, 4-24=-29/23, 7-25=-155/65, 18-25=-127/76, 8-26=-2/8, 16-26=-35/51, 14-27=-41/20, 13-28=-4/7

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 10-5-2, Exterior (2) 10-5-2 to 13-5-2, Interior (1) 13-5-2 to 22-1-8 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) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
7) All plates are 2x4 (||) MT20 unless otherwise indicated.
8) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 117 lb uplift at joint 17, 66 lb uplift at joint 22, 71 lb uplift at joint 12, 50 lb uplift at joint 18, 3 lb uplift at joint 16 and 1 lb uplift at joint 14.
13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-51, 2-6=-51, 6-10=-51, 10-11=-51
Trapezoidal Loads (lb/ft)

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Continued on page 2

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Edenton, NC 27932

Vert: 22=-20-to-21=-25 (F=-5), 21=-25 (F=-5)-to-20=-26 (F=-6), 20=-26 (F=-6)-to-19=-28 (F=-7), 19=-28 (F=-7)-to-18=-29 (F=-9), 18=-29 (F=-9)-to-17=-30 (F=-10), 17=-30 (F=-10)-to-16=-30 (F=-10), 16=-30 (F=-10)-to-15=-31 (F=-11), 15=-31 (F=-11)-to-14=-32 (F=-12), 14=-32 (F=-12)-to-13=-33 (F=-13), 13=-33 (F=-13)-to-12=-35 (F=-15)

Job	Truss	Truss Type	Qty	Ply	993 Serenity	
P05802-31170	A03	Common	5	1	Job Reference (optional)	I77453385

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

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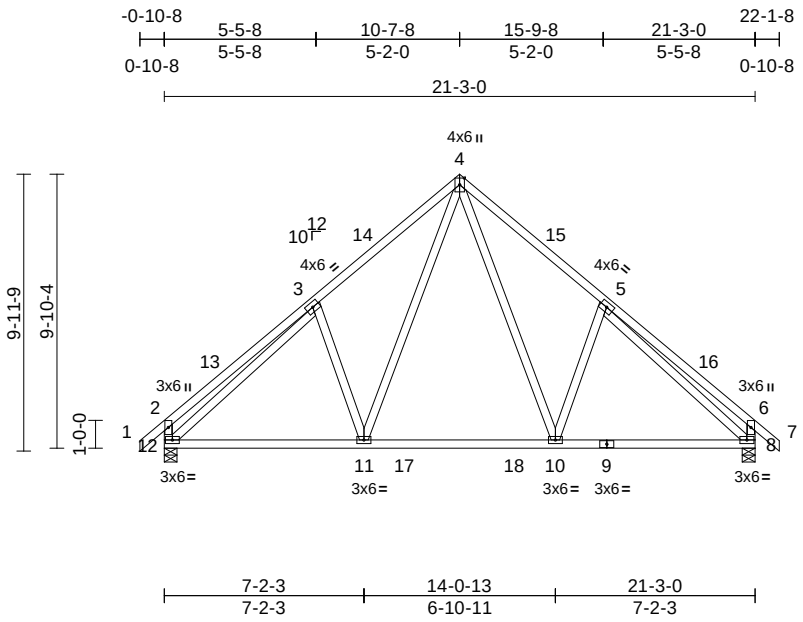

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	-0.12	10-11	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.16	10-11	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.67	Horz(CT)	0.02	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 144 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-10-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 8=0-5-8, 12=0-5-8
Max Horiz 12=208 (LC 13)
Max Uplift 8=-81 (LC 15), 12=-81 (LC 14)
Max Grav 8=900 (LC 2), 12=900 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/39, 2-3=-345/163, 3-4=-881/208, 4-5=-881/208, 5-6=-345/162, 6-7=0/39, 2-12=-367/148, 6-8=-367/148
BOT CHORD 11-12=-95/771, 10-11=0/532, 8-10=-14/680
WEBS 4-10=-146/462, 5-10=-237/193, 4-11=-146/461, 3-11=-237/193, 3-12=-739/11, 5-8=-738/11

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 10-7-8, Exterior (2) 10-7-8 to 13-7-8, Interior (1) 13-7-8 to 22-1-8 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) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
5) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 81 lb uplift at joint 12 and 81 lb uplift at joint 8.

LOAD CASE(S) Standard

October 30,2025

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

Job	Truss	Truss Type	Qty	Ply	993 Serenity
P05802-31170	A04	Common	3	1	I77453386
					Job Reference (optional)

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

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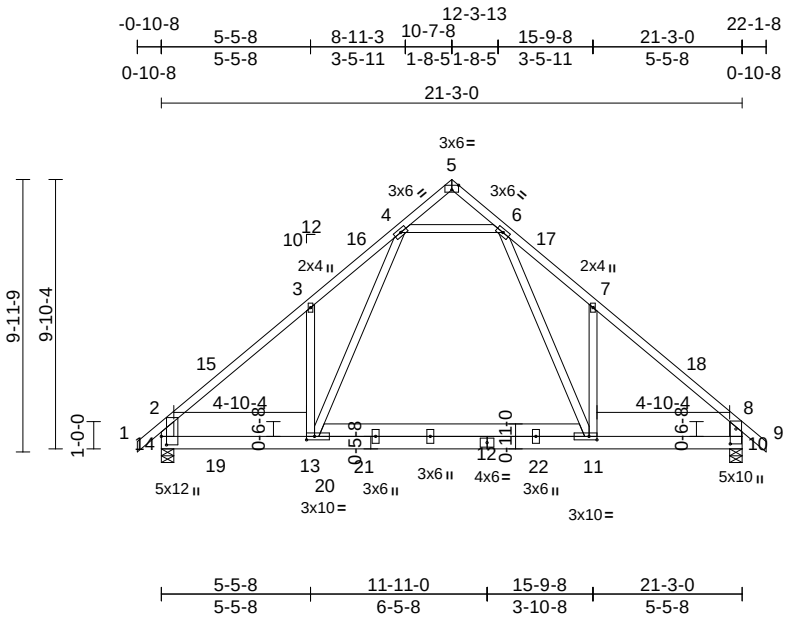

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.09	11-13	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.17	11-13	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.21	Horz(CT)	0.02	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 164 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.2 *Except* 14-2,10-8:2x6 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-0-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 10=0-5-8, 14=0-5-8
Max Horiz 14=-207 (LC 12)
Max Uplift 10=-63 (LC 15)
Max Grav 10=918 (LC 27), 14=982 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/42, 2-3=-1072/64, 3-4=-1021/168, 4-5=-112/57, 5-6=-126/42, 6-7=-978/212, 7-8=-1043/96, 8-9=0/42, 2-14=-829/97, 8-10=-811/114
BOT CHORD 13-14=-20/818, 11-13=0/611, 10-11=0/737
WEBS 7-11=-268/235, 3-13=-288/214, 4-6=-511/134, 6-11=-166/476, 4-13=-101/541

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 10-7-8, Exterior (2) 10-7-8 to 13-7-8, Interior (1) 13-7-8 to 22-1-8 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) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
5) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
6) 100.0lb AC unit load placed on the bottom chord, 4-0-0 from left end, supported at two points, 4-0-0 apart.
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, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 63 lb uplift at joint 10.

LOAD CASE(S) Standard

October 30,2025

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	993 Serenity	
P05802-31170	A05	Common	1	1	Job Reference (optional)	I77453387

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

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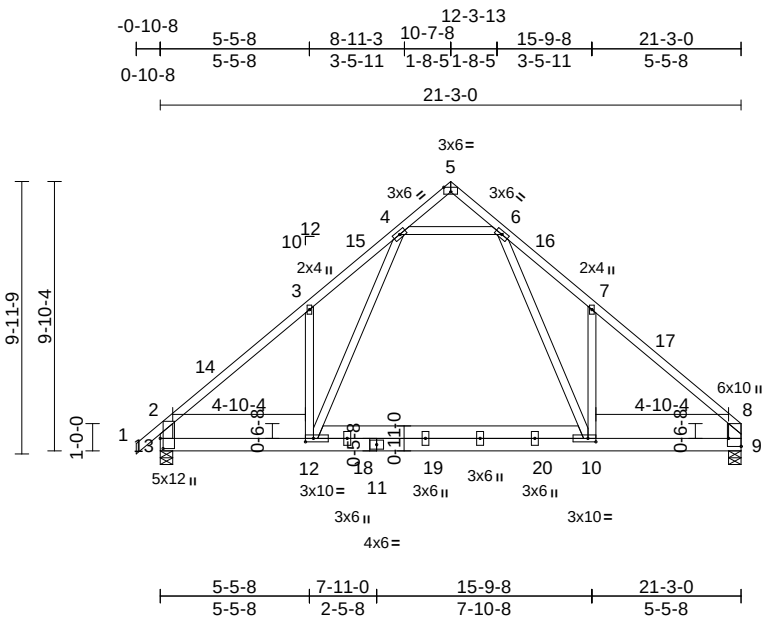

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Plate Offsets (X, Y): [5:0-3-0,Edge], [8:Edge,0-5-8], [10:0-3-8,0-1-8], [12:0-3-8,0-1-8], [13:0-4-8,0-1-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.09	10-12	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.20	10-12	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.02	9	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 163 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.2 *Except* 13-2,9-8:2x6 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-11-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 9=0-5-8, 13=0-5-8
Max Horiz 13=201 (LC 13)
Max Uplift 9=-9 (LC 15), 13=-38 (LC 14)
Max Grav 9=898 (LC 27), 13=947 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/42, 2-3=-1082/59, 3-4=-1022/175, 4-5=-123/48, 5-6=-119/54, 6-7=-1046/159, 7-8=-1082/45, 2-13=-837/90, 8-9=-771/49
BOT CHORD 12-13=-29/815, 10-12=0/617, 9-10=0/770
WEBS 3-12=-273/233, 7-10=-308/230, 4-12=-132/520, 4-6=-521/120, 6-10=-107/551

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 10-7-8, Exterior (2) 10-7-8 to 13-7-8, Interior (1) 13-7-8 to 21-0-4 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) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
5) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
6) 100.0lb AC unit load placed on the bottom chord, 12-0-0 from left end, supported at two points, 4-0-0 apart.
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, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 38 lb uplift at joint 13 and 9 lb uplift at joint 9.

LOAD CASE(S) Standard

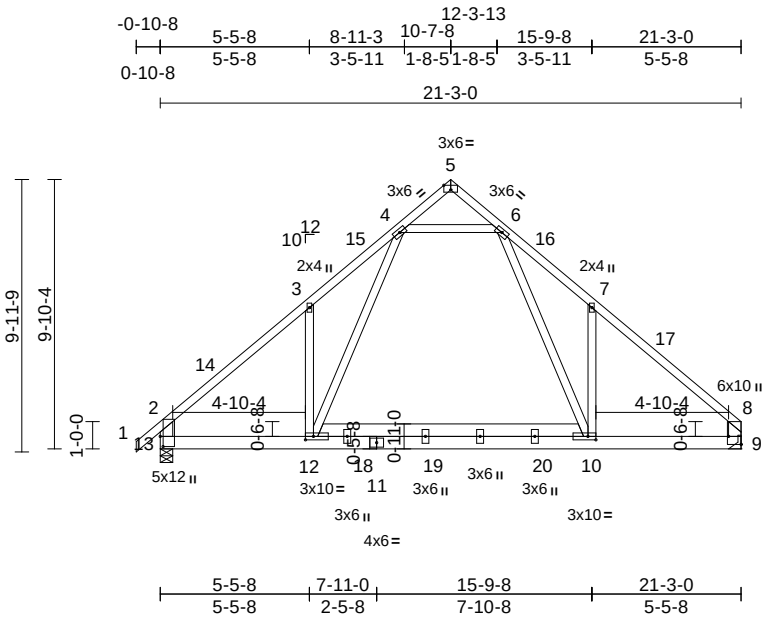
October 30,2025

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

Job	Truss	Truss Type	Qty	Ply	993 Serenity	
P05802-31170	A06	Common	2	1	Job Reference (optional)	I77453388

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. Thu Oct 30 15:40:16 Page: 1
ID:Qf_HI?kXrjcbzm6Zqt_f15zxXRT-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:84.3

Plate Offsets (X, Y): [5:0-3-0,Edge], [8:Edge,0-5-8], [10:0-3-8,0-1-8], [12:0-3-8,0-1-8], [13:0-4-8,0-1-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.09	10-12	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.20	10-12	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.02	9	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 163 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.2 *Except* 13-2,9-8:2x6 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-11-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 9= Mechanical, 13=0-5-8
Max Horiz 13=201 (LC 13)
Max Uplift 9=-9 (LC 15), 13=-38 (LC 14)
Max Grav 9=898 (LC 27), 13=947 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/42, 2-3=-1082/59, 3-4=-1022/175, 4-5=-123/48, 5-6=-119/54, 6-7=-1046/159, 7-8=-1082/45, 2-13=-837/90, 8-9=-771/49
BOT CHORD 12-13=-29/815, 10-12=0/617, 9-10=0/770
WEBS 3-12=-273/233, 7-10=-308/230, 4-12=-132/520, 4-6=-521/120, 6-10=-107/551

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 10-7-8, Exterior (2) 10-7-8 to 13-7-8, Interior (1) 13-7-8 to 21-0-4 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) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
5) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
6) 100.0lb AC unit load placed on the bottom chord, 12-0-0 from left end, supported at two points, 4-0-0 apart.
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, with BCDL = 10.0psf.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 38 lb uplift at joint 13 and 9 lb uplift at joint 9.

LOAD CASE(S) Standard

October 30,2025

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

Job	Truss	Truss Type	Qty	Ply	993 Serenity	
P05802-31170	A07	Hip	1	1	Job Reference (optional)	I77453389

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. Thu Oct 30 15:40:17 Page: 1
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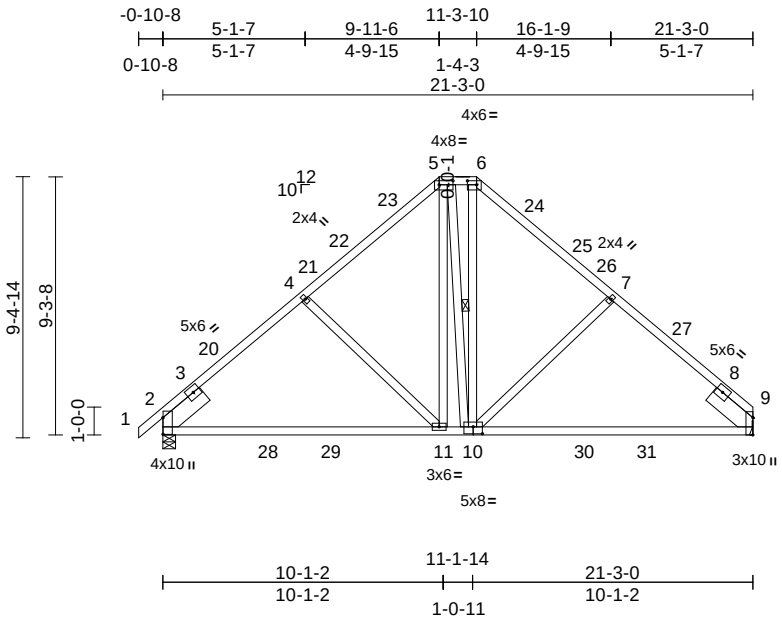

Scale = 1:83

Plate Offsets (X, Y): [2:0-7-3,0-0-1], [5:0-6-0,0-1-12], [6:0-4-0,0-1-12], [9:0-7-7,Edge], [10:0-4-0,0-3-0]

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	0.52	Vert(LL)	-0.15	11-18	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.30	11-18	>842	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.04	9	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 145 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
SLIDER Left 2x8 SP DSS -- 1-11-0, Right 2x8 SP DSS -- 1-11-0

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-5-7 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-10

REACTIONS (size) 2=0-5-8, 9= Mechanical
Max Horiz 2=171 (LC 15)
Max Uplift 2=-78 (LC 16), 9=-66 (LC 17)
Max Grav 2=1201 (LC 39), 9=1155 (LC 39)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/34, 2-4=-1363/145, 4-5=-1078/170, 5-6=-705/164, 6-7=-1081/173, 7-9=-1366/148
BOT CHORD 2-11=-166/955, 9-11=-80/957
WEBS 4-11=-366/163, 5-11=-89/378, 6-10=-76/373, 7-10=-365/163, 5-10=-109/129

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 9-11-6, Exterior (2) 9-11-6 to 15-6-8, Interior (1) 15-6-8 to 21-3-0 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) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
7) Provide adequate drainage to prevent water ponding.
8) 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, with BCDL = 10.0psf.
10) Refer to girder(s) for truss to truss connections.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 66 lb uplift at joint 9 and 78 lb uplift at joint 2.
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 30,2025

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

Job	Truss	Truss Type	Qty	Ply	993 Serenity	
P05802-31170	A08	Hip	1	1	Job Reference (optional)	I77453390

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. Thu Oct 30 15:40:17
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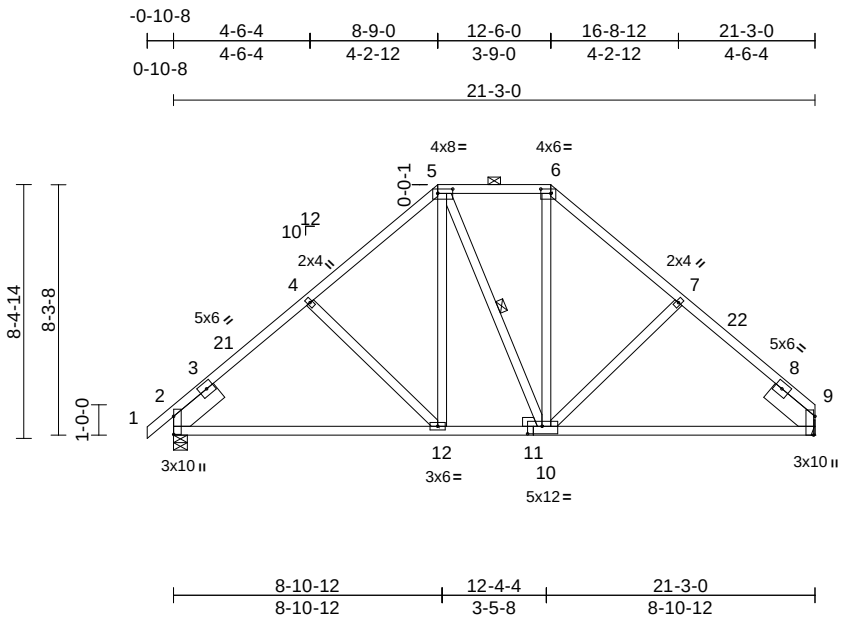

Scale = 1:76.3

Plate Offsets (X, Y): [2:0-7-3,0-0-1], [5:0-6-0,0-1-12], [6:0-4-0,0-1-12], [9:0-7-7,Edge], [11:0-5-12,0-3-0]

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	0.28	Vert(LL)	-0.10	12-19	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.21	12-19	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.03	9	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 139 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.3
SLIDER	Left 2x8 SP DSS -- 1-11-0, Right 2x8 SP DSS -- 1-11-0

BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-6-5 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 5-10

REACTIONS (size) 2=0-5-8, 9= Mechanical
Max Horiz 2=151 (LC 11)
Max Uplift 2=-75 (LC 14), 9=-63 (LC 15)
Max Grav 2=904 (LC 2), 9=849 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/34, 2-4=-957/151, 4-5=-812/175, 5-6=-561/167, 6-7=-814/178, 7-9=-959/154
BOT CHORD	2-12=-145/680, 10-12=-35/560, 9-10=-76/684
WEBS	4-12=-208/143, 5-12=-69/285, 6-10=-49/286, 7-10=-211/143, 5-10=-83/87

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 8-9-0, Exterior (2) 8-9-0 to 16-10-0, Interior (1) 16-10-0 to 21-3-0 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) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
5) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
6) Provide adequate drainage to prevent water ponding.
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) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 63 lb uplift at joint 9 and 75 lb uplift at joint 2.
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 30,2025

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

Job	Truss	Truss Type	Qty	Ply	993 Serenity	
P05802-31170	A09	Hip	1	1	Job Reference (optional)	I77453391

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. Thu Oct 30 15:40:17 Page: 1
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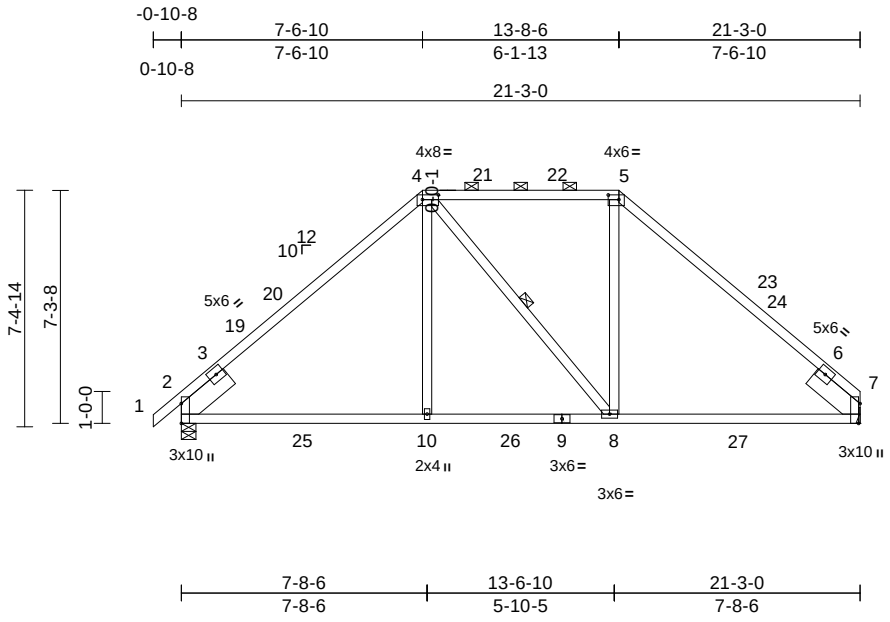

Scale = 1:72.1

Plate Offsets (X, Y): [2:0-7-7,Edge], [4:0-6-0,0-1-12], [5:0-4-0,0-1-12], [7:0-7-7,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	0.12	8-13	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.15	8-13	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	-0.05	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 117 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
SLIDER Left 2x8 SP DSS -- 1-11-0, Right 2x8 SP DSS -- 1-11-0

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-7-1 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-8

REACTIONS (size) 2=0-5-8, 7= Mechanical
Max Horiz 2=132 (LC 13)
Max Uplift 2=-70 (LC 14), 7=-58 (LC 15)
Max Grav 2=950 (LC 3), 7=893 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/34, 2-4=-1011/155, 4-5=-687/173, 5-7=-994/157
BOT CHORD 2-10=-222/709, 8-10=-68/716, 7-8=-144/681
WEBS 4-10=-1/328, 5-8=-11/296, 4-8=-98/103

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 7-6-10, Exterior (2) 7-6-10 to 11-9-8, Interior (1) 11-9-8 to 13-8-6, Exterior (2) 13-8-6 to 17-11-5, Interior (1) 17-11-5 to 21-3-0 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) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
5) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
6) Provide adequate drainage to prevent water ponding.
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, with BCDL = 10.0psf.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 58 lb uplift at joint 7 and 70 lb uplift at joint 2.
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 30,2025

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

Job	Truss	Truss Type	Qty	Ply	993 Serenity	
P05802-31170	A10	Hip	1	1	Job Reference (optional)	I77453392

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

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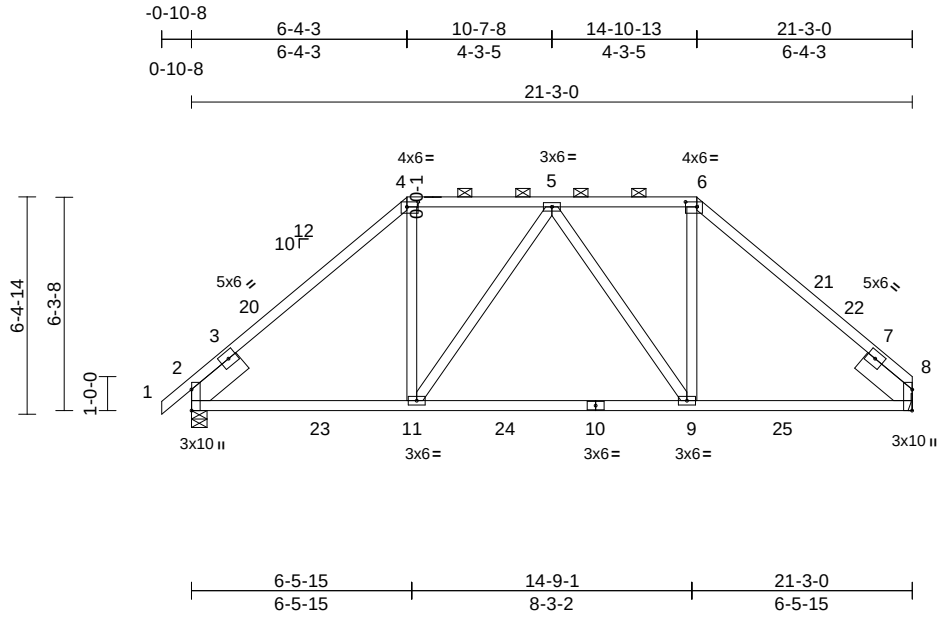

Scale = 1:67.9

Plate Offsets (X, Y): [2:0-7-7,Edge], [4:0-4-0,0-1-12], [6:0-4-0,0-1-12], [8:0-7-7,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.12	9-11	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.23	9-11	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.04	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 121 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
SLIDER	Left 2x8 SP DSS -- 1-11-0, Right 2x8 SP DSS -- 1-11-0

BRACING

TOP CHORD	Structural wood sheathing directly applied or 4-8-9 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-6.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-5-8, 8= Mechanical
Max Horiz 2=113 (LC 13)
Max Uplift 2=-63 (LC 14), 8=-51 (LC 15)
Max Grav 2=909 (LC 3), 8=863 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/34, 2-4=-1003/150, 4-5=-701/163, 5-6=-703/162, 6-8=-1004/152
BOT CHORD	2-11=-160/692, 9-11=-82/781, 8-9=-105/694
WEBS	4-11=-27/400, 5-11=-235/112, 5-9=-232/112, 6-9=-27/399

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 6-4-3, Exterior (2) 6-4-3 to 10-7-8, Interior (1) 10-7-8 to 14-10-13, Exterior (2) 14-10-13 to 19-1-11, Interior (1) 19-1-11 to 21-3-0 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) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
5) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
6) Provide adequate drainage to prevent water ponding.
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, with BCDL = 10.0psf.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 51 lb uplift at joint 8 and 63 lb uplift at joint 2.
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 30,2025

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

Job	Truss	Truss Type	Qty	Ply	993 Serenity	
P05802-31170	A11	Half Hip	1	1	Job Reference (optional)	I77453393

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. Thu Oct 30 15:40:18
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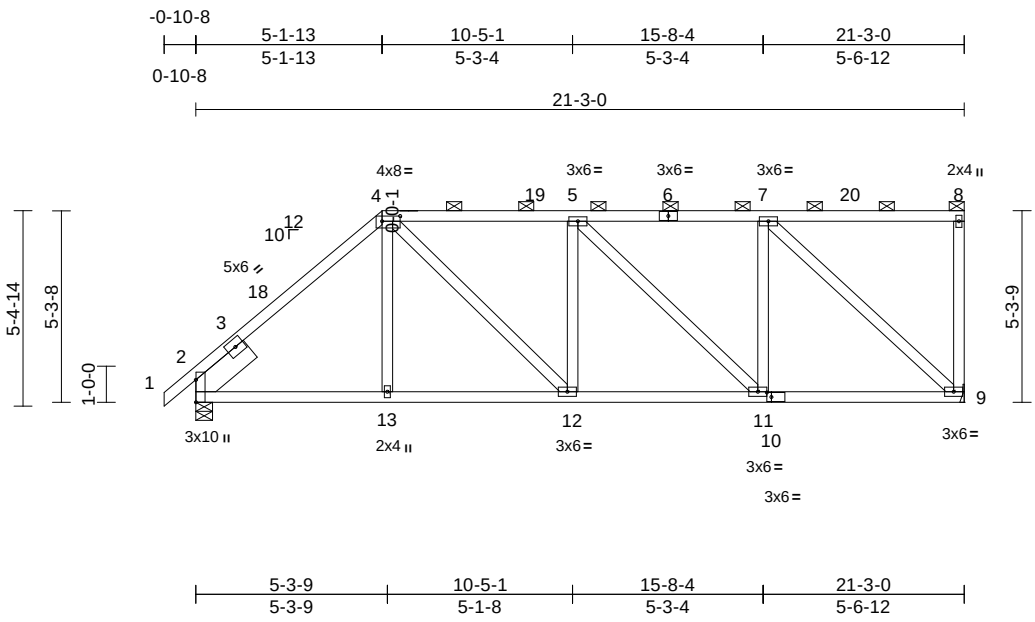

Scale = 1:63.7

Plate Offsets (X, Y): [2:0-7-7,Edge], [4:0-6-0,0-1-12], [10:0-1-8,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	-0.04	12-13	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.08	12-13	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.89	Horz(CT)	0.03	9	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 132 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
SLIDER Left 2x8 SP DSS -- 1-11-0

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-2-5 oc purlins, except end verticals, and 2-0-0 oc purlins (5-7-6 max.): 4-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-5-8, 9= Mechanical
Max Horiz 2=150 (LC 14)
Max Uplift 2=-61 (LC 11), 9=-131 (LC 11)
Max Grav 2=898 (LC 2), 9=845 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/34, 2-4=-963/127, 4-5=-926/146, 5-7=-720/112, 7-8=-14/2, 8-9=-143/43
BOT CHORD 2-13=-188/665, 12-13=-133/668, 11-12=-146/926, 9-11=-112/720
WEBS 7-9=-961/150, 5-12=-166/95, 7-11=-6/377, 4-13=-1/180, 4-12=-103/407, 5-11=-285/59

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 5-1-13, Exterior (2) 5-1-13 to 9-4-11, Interior (1) 9-4-11 to 21-1-4 zone; cantilever left and right exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
5) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
6) Provide adequate drainage to prevent water ponding.
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) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 131 lb uplift at joint 9 and 61 lb uplift at joint 2.
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 30,2025

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

Job	Truss	Truss Type	Qty	Ply	993 Serenity	
P05802-31170	A12	Half Hip	1	1	Job Reference (optional)	I77453394

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. Thu Oct 30 15:40:18 Page: 1

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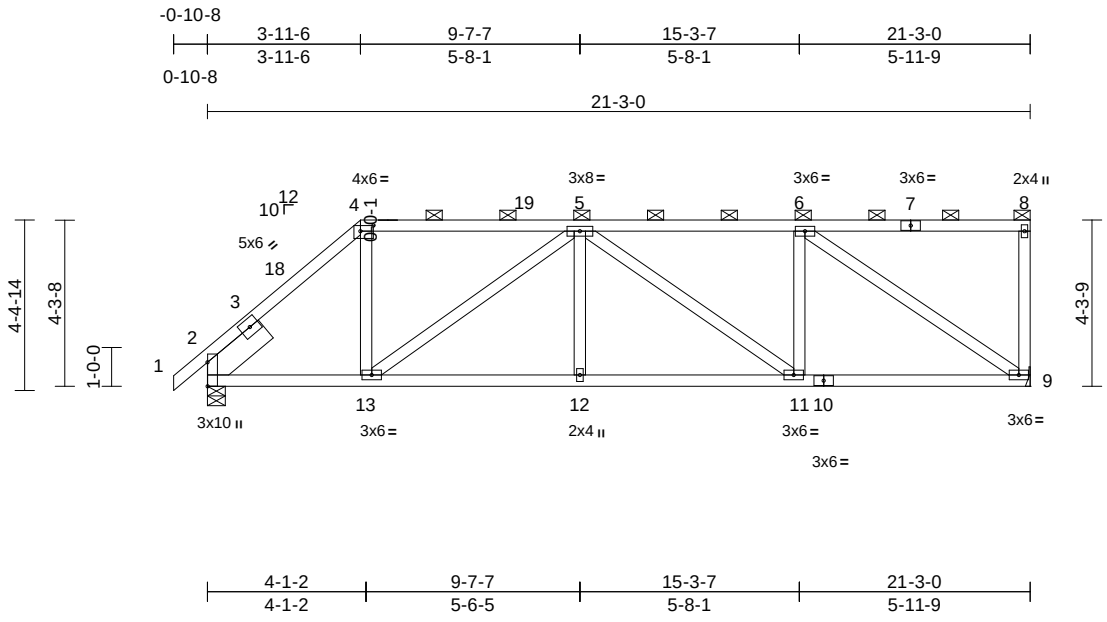

Scale = 1:59.5

Plate Offsets (X, Y): [2:0-7-7,Edge], [4:0-4-0,0-1-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	-0.04	12-13	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.10	12-13	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.96	Horz(CT)	0.03	9	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 124 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
SLIDER	Left 2x8 SP DSS -- 1-11-0

BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-3-6 oc purlins, except end verticals, and 2-0-0 oc purlins (5-8-5 max.): 4-8.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-5-8, 9= Mechanical
Max Horiz 2=120 (LC 14)
Max Uplift 2=-77 (LC 11), 9=-131 (LC 11)
Max Grav 2=898 (LC 2), 9=848 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/34, 2-4=-972/132, 4-5=-697/127, 5-6=-949/147, 6-8=-23/4, 8-9=-156/46
BOT CHORD	2-13=-144/683, 12-13=-183/1159, 11-12=-183/1159, 9-11=-147/949
WEBS	6-9=-1124/174, 5-12=0/231, 6-11=0/358, 4-13=-23/397, 5-13=-601/120, 5-11=-261/54

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 3-11-6, Exterior (2) 3-11-6 to 8-2-5, Interior (1) 8-2-5 to 21-1-4 zone; cantilever left and right exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
5) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
6) Provide adequate drainage to prevent water ponding.
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) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 131 lb uplift at joint 9 and 77 lb uplift at joint 2.
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 30,2025

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

Job	Truss	Truss Type	Qty	Ply	993 Serenity	
P05802-31170	A13	Half Hip	1	1	Job Reference (optional)	I77453395

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. Thu Oct 30 15:40:19
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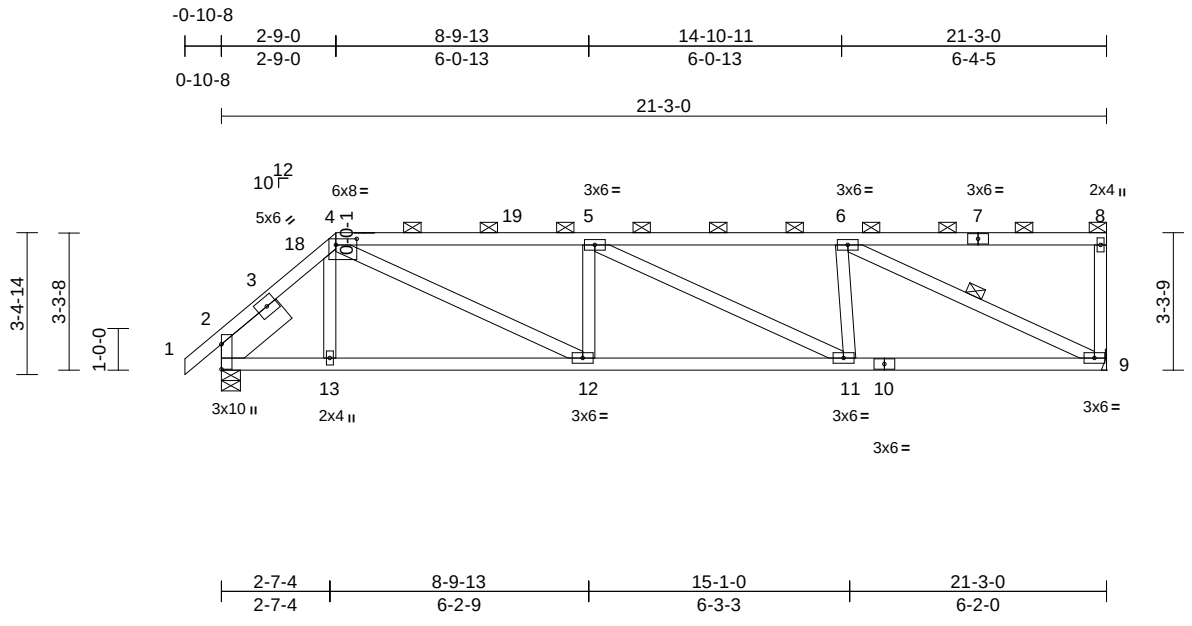

Scale = 1:55.3

Plate Offsets (X, Y): [2:0-7-3,0-0-1], [4:0-6-0,0-1-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	-0.06	11-12	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.14	11-12	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.04	9	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 118 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
SLIDER	Left 2x8 SP DSS -- 1-11-0

BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-4-10 oc purlins, except end verticals, and 2-0-0 oc purlins (3-11-11 max.): 4-8.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 6-9

REACTIONS (size) 2=0-5-8, 9= Mechanical
Max Horiz 2=90 (LC 14)
Max Uplift 2=-93 (LC 11), 9=-130 (LC 11)
Max Grav 2=898 (LC 2), 9=850 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/34, 2-4=-970/131, 4-5=-1533/239, 5-6=-1313/204, 6-8=-40/6, 8-9=-170/50
BOT CHORD	2-13=-119/687, 12-13=-120/686, 11-12=-239/1533, 9-11=-203/1329
WEBS	6-9=-1432/218, 4-13=0/145, 4-12=-161/952, 5-12=-287/108, 5-11=-245/49, 6-11=0/342

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 2-9-0, Exterior (2) 2-9-0 to 6-11-15, Interior (1) 6-11-15 to 21-1-4 zone; cantilever left and right exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
5) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
6) Provide adequate drainage to prevent water ponding.
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) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 130 lb uplift at joint 9 and 93 lb uplift at joint 2.
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 30,2025

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

Job	Truss	Truss Type	Qty	Ply	993 Serenity	
P05802-31170	A14G	Half Hip Girder	1	2	Job Reference (optional)	I77453396

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. Thu Oct 30 15:40:19 Page: 1

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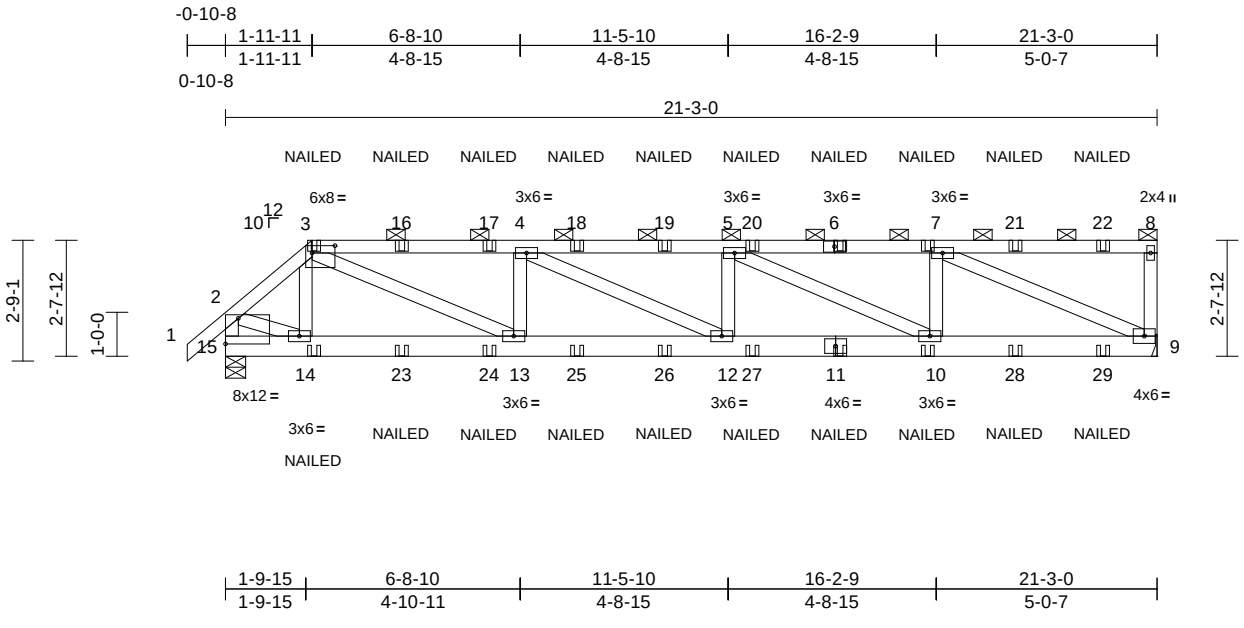


Scale = 1:52.6

Plate Offsets (X, Y): [3:0-6-4,0-2-0], [15:Edge,0-7-0]

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	0.21	Vert(LL)	-0.05	12-13	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.11	12-13	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.25	Horz(CT)	0.02	9	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 260 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 14-15.

REACTIONS (size) 9= Mechanical, 15=0-5-8
Max Horiz 15=62 (LC 10)
Max Uplift 9=-290 (LC 7), 15=-257 (LC 7)
Max Grav 9=1199 (LC 2), 15=1235 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/39, 2-3=-1223/289, 3-4=-2439/599, 4-5=-2799/681, 5-7=-2053/497, 7-8=-60/17, 8-9=-180/66, 2-15=-1248/261
BOT CHORD 14-15=-65/41, 13-14=-238/926, 12-13=-599/2439, 10-12=-681/2799, 9-10=-497/2053
WEBS 2-14=-227/967, 7-9=-2198/530, 4-13=-585/198, 5-12=-13/117, 5-10=-826/204, 7-10=-64/538, 4-12=-98/400, 3-14=-206/90, 3-13=-408/1680

NOTES
1) 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: 2x6 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) 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.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
8) Provide adequate drainage to prevent water ponding.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * 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.
11) Refer to girder(s) for truss to truss connections.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 290 lb uplift at joint 9 and 257 lb uplift at joint 15.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-51, 2-3=-51, 3-8=-61, 9-15=-20
Concentrated Loads (lb)
Vert: 6=-30 (B), 11=-25 (B), 14=-35 (B), 7=-30 (B), 10=-25 (B), 3=-38 (B), 16=-30 (B), 17=-30 (B), 18=-30 (B), 19=-30 (B), 20=-30 (B), 21=-30 (B), 22=-30 (B), 23=-25 (B), 24=-25 (B), 25=-25 (B), 26=-25 (B), 27=-25 (B), 28=-25 (B), 29=-25 (B)

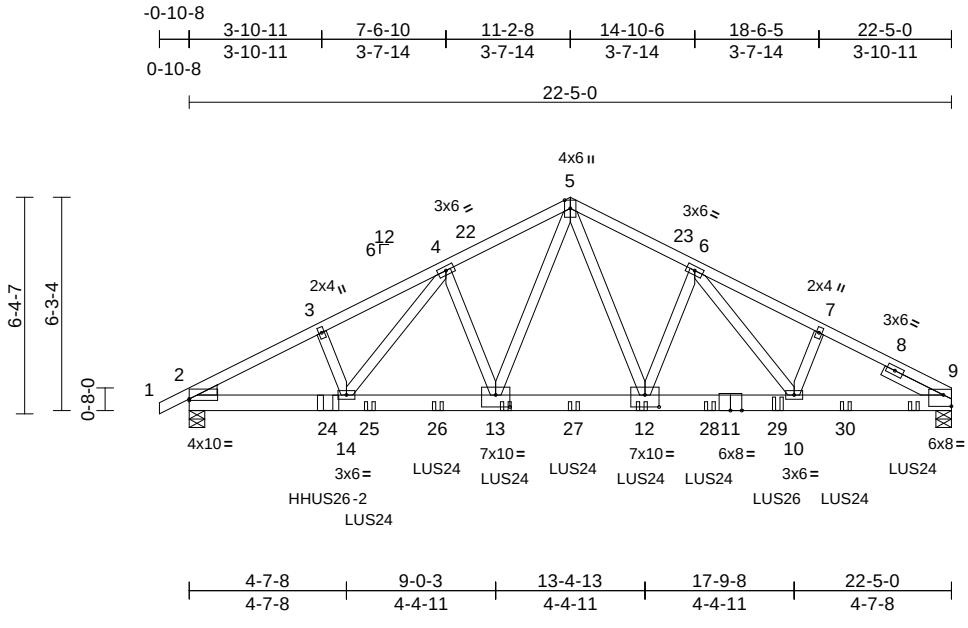
October 30,2025

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

Job	Truss	Truss Type	Qty	Ply	993 Serenity	
P05802-31170	B01G	Common Girder	1	**2**	Job Reference (optional)	I77453397

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. Thu Oct 30 15:40:20 Page: 1

ID:Ma9usJA6Mn8UIJsUxRd6UhzxXQv-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:67.8

Plate Offsets (X, Y): [2:Edge,0-0-9], [9:Edge,0-4-0], [12:0-5-0,0-4-4], [13:0-5-0,0-4-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.92	Vert(LL)	-0.14	13-14	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.27	13-14	>971	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.43	Horz(CT)	0.05	9	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 289 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x6 SP DSS
WEBS	2x4 SP No.2
WEDGE	Left: 2x4 SP No.3
SLIDER	Right 2x4 SP No.2 -- 1-11-0

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-7-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-5-8, 9=0-5-8
Max Horiz 2=87 (LC 12)
Max Uplift 2=-713 (LC 12), 9=-476 (LC 13)
Max Grav 2=4881 (LC 2), 9=5645 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/23, 2-3=-8867/1286, 3-4=-8757/1314, 4-5=-7223/959, 5-6=-7090/825, 6-7=-8253/846, 7-9=-8342/821
BOT CHORD	2-14=-1178/7816, 13-14=-888/6786, 12-13=-566/5202, 10-12=-644/6603, 9-10=-682/7315
WEBS	5-12=-269/3128, 6-12=-993/133, 6-10=-64/1493, 7-10=-37/297, 5-13=-611/3469, 4-13=-1118/318, 4-14=-464/1804, 3-14=-30/166

NOTES

1) 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: 2x6 - 2 rows staggered at 0-8-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) 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.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; 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
5) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
6) Unbalanced snow loads have been considered for this design.
7) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
8) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * 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.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 476 lb uplift at joint 9 and 713 lb uplift at joint 2.
12) Use Simpson Strong-Tie HHUS26-2 (14-10d Girder, 4-10d Truss) or equivalent at 4-1-0 from the left end to connect truss(es) to front face of bottom chord.
13) Use Simpson Strong-Tie LUS24 (4-SD9112 Girder, 2-SD9212 Truss, Single Ply Girder) or equivalent spaced at 4-0-0 oc max. starting at 5-3-12 from the left end to 21-3-12 to connect truss(es) to front face of bottom chord.
14) Use Simpson Strong-Tie LUS26 (4-SD9112 Girder, 4-SD9212 Truss, Single Ply Girder) or equivalent at 17-3-12 from the left end to connect truss(es) to front face of bottom chord.
15) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-5=-51, 5-9=-51, 15-19=-20
Concentrated Loads (lb)
Vert: 12=-762 (F), 13=-825 (F), 17=-772 (F), 24=-1112 (F), 25=-830 (F), 26=-828 (F), 27=-774 (F), 28=-750 (F), 29=-1135 (F), 30=-771 (F)

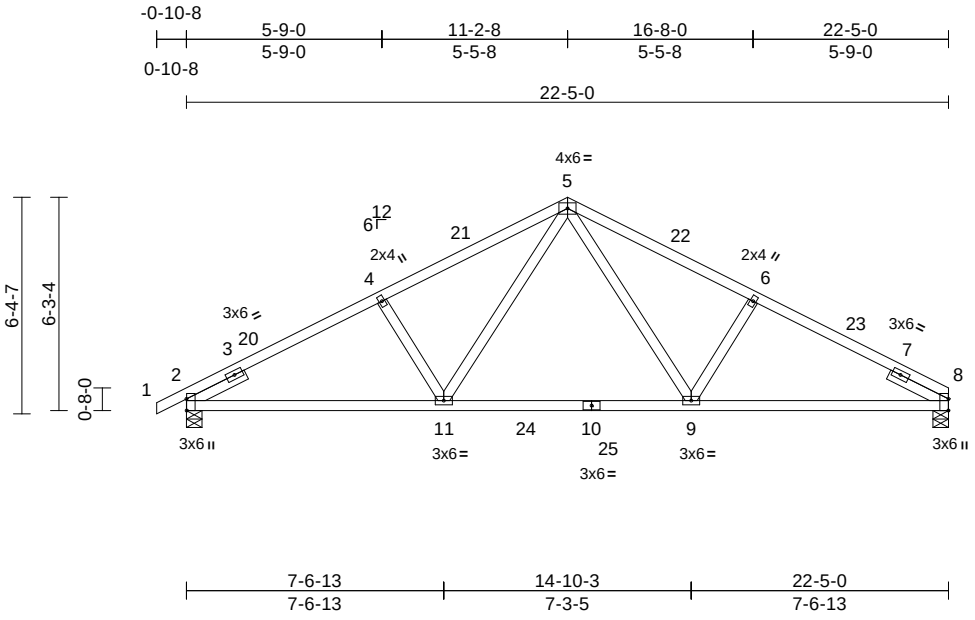
October 30,2025

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

Job	Truss	Truss Type	Qty	Ply	993 Serenity	
P05802-31170	B02	Common	3	1	Job Reference (optional)	I77453398

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. Thu Oct 30 15:40:20 Page: 1

ID:XulmTdh1nU6AV9oob1vjtFzxXRX-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:67.8

Plate Offsets (X, Y): [2:0-4-1,Edge], [8:0-4-1,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	0.45	Vert(LL)	-0.12	9-11	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.21	9-11	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.04	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 108 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
SLIDER	Left 2x4 SP No.2 -- 1-11-0, Right 2x4 SP No.2 -- 1-11-0

BRACING

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

REACTIONS (size) 2=0-5-8, 8=0-5-8
Max Horiz 2=85 (LC 16)
Max Uplift 2=-103 (LC 16), 8=-90 (LC 17)
Max Grav 2=950 (LC 2), 8=896 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/23, 2-4=-1412/170, 4-5=-1280/193, 5-6=-1284/200, 6-8=-1416/178
BOT CHORD	2-11=-157/1217, 9-11=-41/847, 8-9=-100/1222
WEBS	5-9=-91/471, 6-9=-298/137, 5-11=-90/465, 4-11=-295/137

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 11-2-8, Exterior (2) 11-2-8 to 14-2-8, Interior (1) 14-2-8 to 22-5-0 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) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
7) 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, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 90 lb uplift at joint 8 and 103 lb uplift at joint 2.

LOAD CASE(S) Standard

October 30,2025

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

Job	Truss	Truss Type	Qty	Ply	993 Serenity	
P05802-31170	B03	Roof Special	2	1	Job Reference (optional)	I77453399

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. Thu Oct 30 15:40:20 Page: 1
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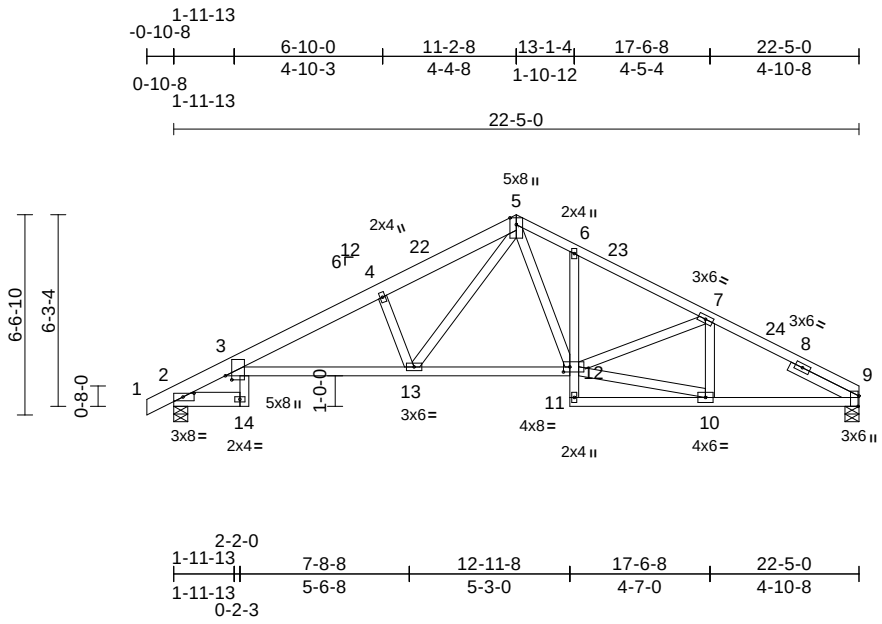

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Plate Offsets (X, Y): [2:0-4-6,0-1-8], [3:0-1-10,0-2-8], [9:0-4-1,Edge], [12:0-2-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.19	3-13	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.40	3-13	>668	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.22	9	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 135 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP DSS *Except* 5-9:2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 2-14:2x6 SP No.2
WEBS 2x4 SP No.2
SLIDER Right 2x4 SP No.2 -- 2-6-0

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-6-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS (size) 2=0-5-8, 9=0-5-8
Max Horiz 2=87 (LC 16)
Max Uplift 2=-101 (LC 16), 9=-90 (LC 17)
Max Grav 2=958 (LC 2), 9=896 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/23, 2-3=-391/95, 3-4=-1898/199, 4-5=-1837/240, 5-6=-1410/215, 6-7=-1429/181, 7-9=-1428/173
BOT CHORD 2-14=-97/255, 3-13=-198/1782, 12-13=-43/1007, 11-12=0/88, 6-12=-230/84, 10-11=-4/72, 9-10=-101/1244
WEBS 4-13=-679/177, 5-13=-161/931, 5-12=-119/615, 7-12=-92/91, 7-10=-199/48, 10-12=-100/1201, 3-14=-33/271

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-10-8 to 1-10-9, Interior (1) 1-10-9 to 11-2-8, Exterior (2) 11-2-8 to 14-2-8, Interior (1) 14-2-8 to 22-5-0 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) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
7) 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 90 lb uplift at joint 9 and 101 lb uplift at joint 2.

LOAD CASE(S) Standard

October 30,2025

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

Job	Truss	Truss Type	Qty	Ply	993 Serenity	
P05802-31170	B03A	Roof Special	3	1	Job Reference (optional)	I77453400

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. Thu Oct 30 15:40:20 Page: 1
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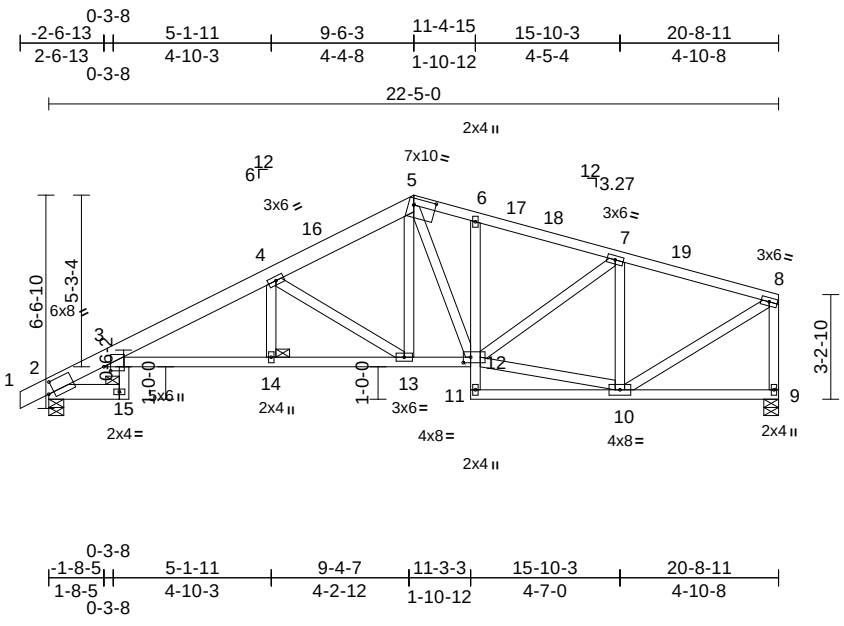

Scale = 1:70.8

Plate Offsets (X, Y): [2:0-2-1,0-4-0], [3:0-1-8,0-2-8], [5:0-8-0,0-2-8], [12:0-2-12,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.20	3-14	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.40	3-14	>679	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.20	9	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 151 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP DSS *Except* 5-8:2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 3-12:2x4 SP No.1
WEBS 2x4 SP No.2 *Except* 9-8:2x4 SP No.3, 2-15:2x6 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-7-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 14, 15

REACTIONS (size) 2=0-5-8, 9=0-5-8
Max Horiz 2=91 (LC 20)
Max Uplift 2=-113 (LC 16), 9=-102 (LC 13)
Max Grav 2=904 (LC 2), 9=892 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/21, 2-3=-378/68, 3-4=-1896/218, 4-5=-1249/173, 5-6=-1148/185, 6-7=-1164/169, 7-8=-867/123, 8-9=-849/121
BOT CHORD 3-14=-267/1771, 13-14=-267/1771, 12-13=-136/999, 11-12=0/81, 6-12=-214/66, 10-11=-3/67, 9-10=-27/39
WEBS 4-13=-896/186, 5-13=-73/527, 5-12=-78/292, 7-12=-37/324, 8-10=-102/933, 7-10=-575/115, 10-12=-116/776, 4-14=0/212, 2-15=0/0, 3-15=0/0

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-10-8 to 1-10-9, Interior (1) 1-10-9 to 11-2-8, Exterior (2) 11-2-8 to 14-2-8, Interior (1) 14-2-8 to 22-3-4 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) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
7) 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 102 lb uplift at joint 9 and 113 lb uplift at joint 2.

LOAD CASE(S) Standard

October 30,2025

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

Job	Truss	Truss Type	Qty	Ply	993 Serenity	
P05802-31170	B03B	Roof Special	2	1	Job Reference (optional)	I77453401

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. Thu Oct 30 15:40:21 Page: 1

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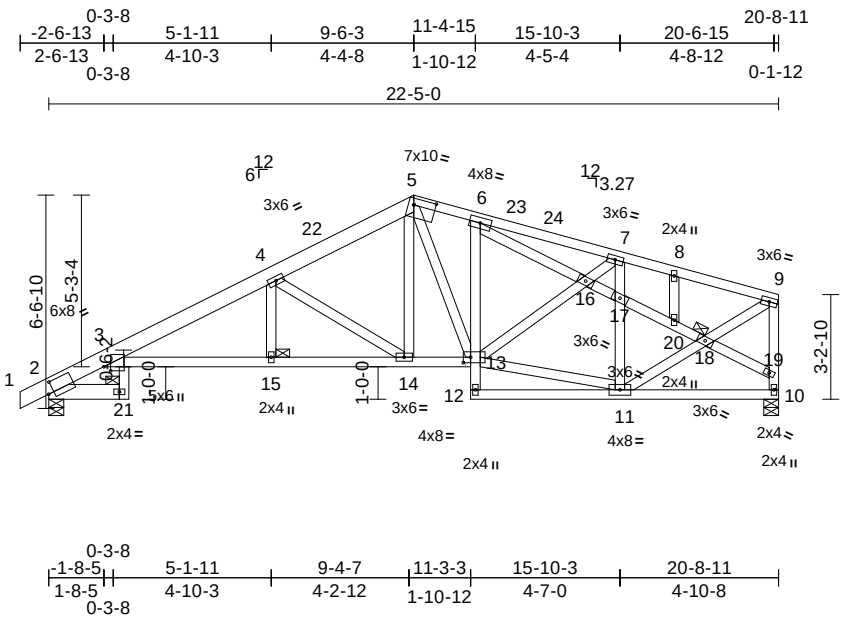

Scale = 1:70.8

Plate Offsets (X, Y): [2:0-2-1,0-4-0], [3:0-1-8,0-2-8], [5:0-8-0,0-2-8], [13:0-2-12,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.20	3-15	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.39	3-15	>682	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.20	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 167 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SP DSS *Except* 5-9:2x4 SP No.2
BOT CHORD	2x4 SP No.2 *Except* 3-13:2x4 SP No.1
WEBS	2x4 SP No.2 *Except* 2-21:2x6 SP No.2
OTHERS	2x4 SP No.2

BRACING

TOP CHORD	Structural wood sheathing directly applied or 4-7-7 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS	1 Brace at Jt(s): 15, 18, 21

REACTIONS (size) 2=0-5-8, 10=0-5-8
Max Horiz 2=91 (LC 20)
Max Uplift 2=-113 (LC 16), 10=-102 (LC 13)
Max Grav 2=904 (LC 2), 10=892 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/21, 2-3=-378/68, 3-4=-1896/212, 4-5=-1248/171, 5-6=-1153/184, 6-7=-925/156, 7-8=-682/105, 8-9=-709/91, 10-19=-841/112, 9-19=-710/108
BOT CHORD	3-15=-270/1772, 14-15=-270/1771, 13-14=-138/999, 12-13=0/83, 6-13=-168/72, 11-12=-3/69, 10-11=-28/232
WEBS	4-14=-897/186, 5-14=-73/527, 5-13=-81/301, 13-16=-50/250, 7-16=-49/263, 11-18=-88/748, 9-18=-105/817, 11-17=-504/106, 7-17=-452/94, 11-13=-108/838, 4-15=0/212, 6-16=-268/59, 16-17=-262/60, 17-20=-207/53, 18-20=-247/61, 18-19=-295/68, 8-20=-90/31, 2-21=0/0, 3-21=0/0

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-10-8 to 1-10-9, Interior (1) 1-10-9 to 11-2-8, Exterior (2) 11-2-8 to 14-2-8, Interior (1) 14-2-8 to 22-3-4 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) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * 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.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 102 lb uplift at joint 10 and 113 lb uplift at joint 2.

LOAD CASE(S) Standard

October 30,2025

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

Job	Truss	Truss Type	Qty	Ply	993 Serenity	
P05802-31170	B04E	Common Supported Gable	1	1	Job Reference (optional)	I77453402

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. Thu Oct 30 15:40:21 Page: 1
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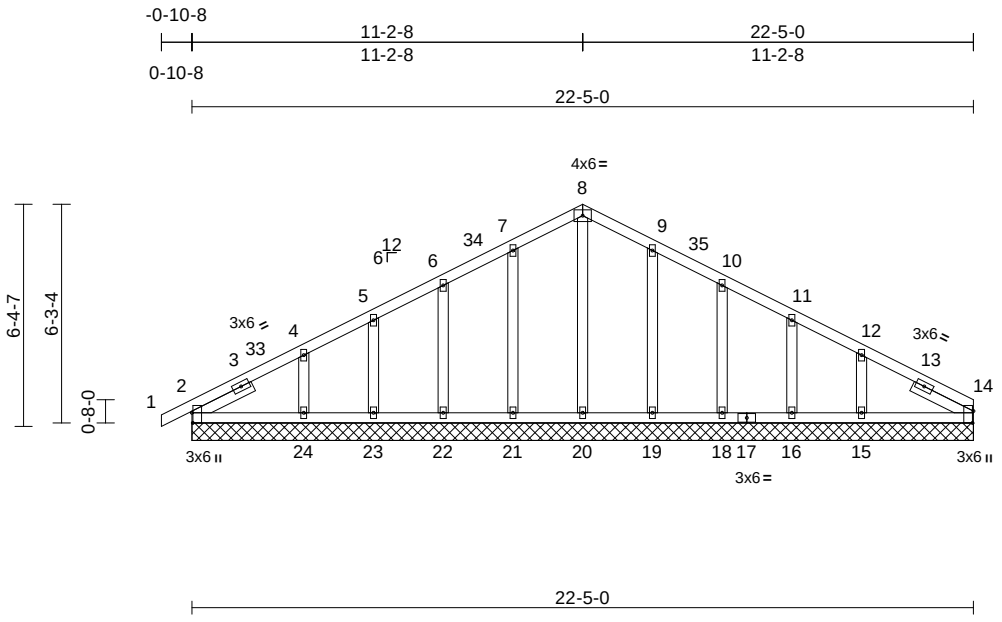

Scale = 1:66.1

22-5-0

Plate Offsets (X, Y): [2:0-3-8,Edge], [14:0-4-1,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	0.12	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	NO	WB	0.06	Horz(CT)	0.00	14	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 125 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
OTHERS	2x4 SP No.2
SLIDER	Left 2x4 SP No.2 -- 1-11-0, Right 2x4 SP No.2 -- 1-11-0

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) 2=22-5-0, 14=22-5-0, 15=22-5-0, 16=22-5-0, 18=22-5-0, 19=22-5-0, 20=22-5-0, 21=22-5-0, 22=22-5-0, 23=22-5-0, 24=22-5-0
Max Horiz 2=85 (LC 20)
Max Uplift 2=-16 (LC 17), 14=-2 (LC 16), 15=-83 (LC 17), 16=-29 (LC 17), 18=-48 (LC 17), 19=-42 (LC 17), 21=-42 (LC 16), 22=-45 (LC 16), 23=-26 (LC 16), 24=-80 (LC 16)
Max Grav 2=201 (LC 2), 14=160 (LC 2), 15=302 (LC 35), 16=146 (LC 2), 18=192 (LC 2), 19=201 (LC 24), 20=138 (LC 33), 21=191 (LC 23), 22=177 (LC 2), 23=140 (LC 2), 24=246 (LC 34)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/23, 2-4=-93/45, 4-5=-93/72, 5-6=-83/102, 6-7=-84/142, 7-8=-90/177, 8-9=-90/182, 9-10=-84/147, 10-11=-83/107, 11-12=-92/79, 12-14=-146/66
BOT CHORD	2-24=0/73, 23-24=0/73, 22-23=0/73, 21-22=0/73, 20-21=0/73, 19-20=0/73, 18-19=0/73, 16-18=0/73, 15-16=0/73, 14-15=0/73
WEBS	8-20=-91/12, 7-21=-140/102, 6-22=-123/65, 5-23=-104/50, 4-24=-168/102, 9-19=-145/105, 10-18=-124/68, 11-16=-99/47, 12-15=-183/137

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -0-10-8 to 2-1-8, Exterior (2) 2-1-8 to 11-2-8, Corner (3) 11-2-8 to 14-2-8, Exterior (2) 14-2-8 to 22-5-0 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/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
8) All plates are 2x4 (||) MT20 unless otherwise indicated.
9) Gable requires continuous bottom chord bearing.
10) Gable studs spaced at 2-0-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * 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.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 16 lb uplift at joint 2, 2 lb uplift at joint 14, 42 lb uplift at joint 21, 45 lb uplift at joint 22, 26 lb uplift at joint 23, 80 lb uplift at joint 24, 42 lb uplift at joint 19, 48 lb uplift at joint 18, 29 lb uplift at joint 16, 83 lb uplift at joint 15, 16 lb uplift at joint 2 and 2 lb uplift at joint 14.
14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-8=-51, 8-14=-51
Trapezoidal Loads (lb/ft)

October 30,2025

Continued on page 2

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818 Soundside Road
Edenton, NC 27932

Vert: 25=-20-to-27=-20 (F=0), 27=-20 (F=0)-to-24=-22 (F=-2), 24=-22 (F=-2)-to-23=-23 (F=-3), 23=-23 (F=-3)-to-22=-25 (F=-5), 22=-25 (F=-5)-to-21=-26 (F=-6), 21=-26 (F=-6)-to-20=-27 (F=-7), 20=-27 (F=-7)-to-19=-29 (F=-9), 19=-29 (F=-9)-to-18=-30 (F=-10), 18=-30 (F=-10)-to-17=-31 (F=-11), 17=-31 (F=-11)-to-16=-32 (F=-12), 16=-32 (F=-12)-to-15=-33 (F=-13), 15=-33 (F=-13)-to-31=-35 (F=-15), 31=-35 (F=-15)-to-29=-35 (F=-15)

Job	Truss	Truss Type	Qty	Ply	993 Serenity	
P05802-31170	G1	Monopitch Supported Gable	1	1	Job Reference (optional)	I77453403

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. Thu Oct 30 15:40:22 Page: 1
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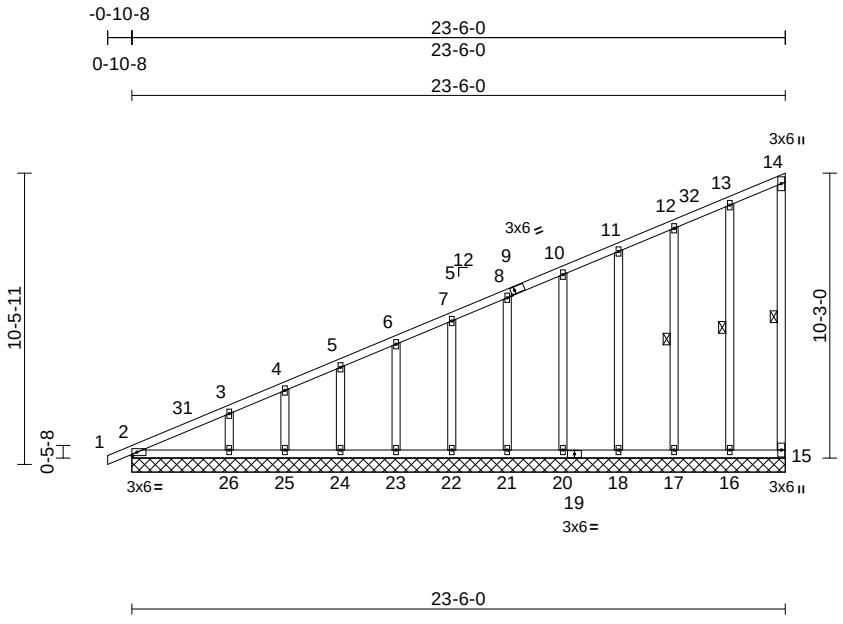

Scale = 1:82.9

Plate Offsets (X, Y): [9:0-1-11,0-1-8]

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	0.50	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	15	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 165 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 14-15, 13-16, 12-17

REACTIONS (size) 2=23-6-0, 15=23-6-0, 16=23-6-0, 17=23-6-0, 18=23-6-0, 20=23-6-0, 21=23-6-0, 22=23-6-0, 23=23-6-0, 24=23-6-0, 25=23-6-0, 26=23-6-0
Max Horiz 2=324 (LC 15)
Max Uplift 15=-33 (LC 13), 16=-42 (LC 16), 17=-30 (LC 16), 18=-38 (LC 16), 20=-34 (LC 16), 21=-35 (LC 16), 22=-35 (LC 16), 23=-34 (LC 16), 24=-39 (LC 16), 25=-17 (LC 16), 26=-79 (LC 16)
Max Grav 2=201 (LC 31), 15=77 (LC 23), 16=211 (LC 23), 17=205 (LC 23), 18=172 (LC 23), 20=160 (LC 2), 21=160 (LC 2), 22=161 (LC 2), 23=157 (LC 2), 24=171 (LC 2), 25=116 (LC 2), 26=272 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/20, 2-3=-437/230, 3-4=-386/200, 4-5=-363/197, 5-6=-331/185, 6-7=-301/175, 7-8=-271/164, 8-10=-241/154, 10-11=-211/143, 11-12=-181/132, 12-13=-151/126, 13-14=-101/106, 14-15=-62/48
BOT CHORD	2-26=-190/136, 25-26=-114/136, 24-25=-114/136, 23-24=-114/136, 22-23=-114/136, 21-22=-114/136, 20-21=-114/136, 18-20=-114/136, 17-18=-114/136, 16-17=-114/136, 15-16=-114/136
WEBS	13-16=-169/152, 12-17=-165/71, 11-18=-132/54, 10-20=-120/55, 8-21=-120/54, 7-22=-120/55, 6-23=-119/53, 5-24=-126/59, 4-25=-95/38, 3-26=-188/103

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -0-10-8 to 2-1-8, Exterior (2) 2-1-8 to 23-4-4 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) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
8) All plates are 2x4 (||) MT20 unless otherwise indicated.
9) Gable requires continuous bottom chord bearing.
10) Gable studs spaced at 2-0-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * 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.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 33 lb uplift at joint 15, 42 lb uplift at joint 16, 30 lb uplift at joint 17, 38 lb uplift at joint 18, 34 lb uplift at joint 20, 35 lb uplift at joint 21, 35 lb uplift at joint 22, 34 lb uplift at joint 23, 39 lb uplift at joint 24, 17 lb uplift at joint 25 and 79 lb uplift at joint 26.

LOAD CASE(S) Standard

October 30,2025

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

Job	Truss	Truss Type	Qty	Ply	993 Serenity	
P05802-31170	G2	Monopitch	6	1	Job Reference (optional)	I77453404

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. Thu Oct 30 15:40:22 Page: 1
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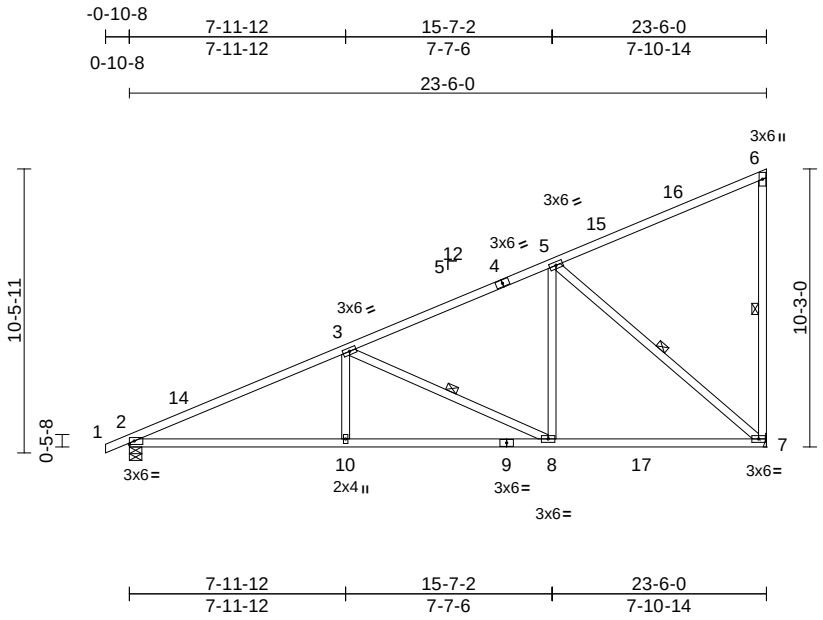

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.98	Vert(LL)	-0.11	7-8	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.22	7-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.05	7	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 130 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, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-7, 3-8, 5-7

REACTIONS (size) 2=0-5-8, 7= Mechanical
Max Horiz 2=324 (LC 15)
Max Uplift 2=-123 (LC 16), 7=-175 (LC 16)
Max Grav 2=988 (LC 2), 7=980 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/20, 2-3=-1732/203, 3-5=-946/139, 5-6=-190/115, 6-7=-266/100
BOT CHORD 2-10=-276/1523, 8-10=-276/1523, 7-8=-178/795
WEBS 3-10=0/314, 3-8=-800/184, 5-8=-33/584, 5-7=-1031/227

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 23-4-4 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) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
7) 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, with BCDL = 10.0psf.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 123 lb uplift at joint 2 and 175 lb uplift at joint 7.

LOAD CASE(S) Standard

October 30,2025

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

Job	Truss	Truss Type	Qty	Ply	993 Serenity	
P05802-31170	G3	Piggyback Base	5	1	Job Reference (optional)	I77453405

84 Lumber-2383 (Dunn, NC), Dunn, NC - 28334, Run: 8.83 E Sep 17 2025 Print: 8.830 E Sep 17 2025 MiTek Industries, Inc. Thu Oct 30 16:02:28 Page: 1

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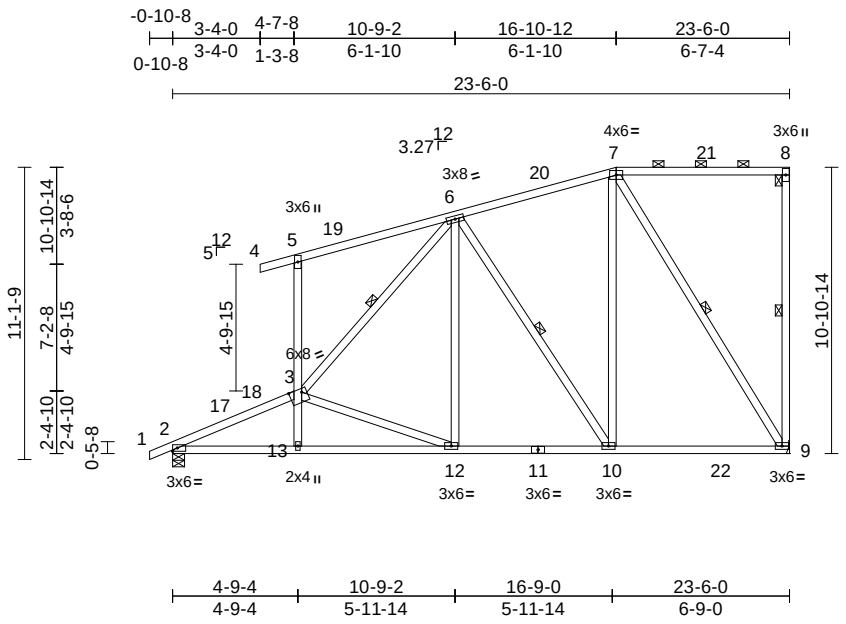

Scale = 1:87.8

Plate Offsets (X, Y): [3:0-5-12,0-1-10]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.10	12-13	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.19	12-13	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.05	9	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 184 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 3-6-10 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-13, 7-8. Except:
6-0-0 oc bracing: 3-5
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 8-9, 3-6, 6-10, 7-9

REACTIONS (lb/size) 2=941/0-5-8, 9=894/ Mechanical
Max Horiz 2=332 (LC 15)
Max Uplift 2=-164 (LC 12), 9=-156 (LC 13)
Max Grav 2=1089 (LC 40), 9=972 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/21, 2-17=-2308/506, 17-18=-2276/517, 3-18=-2264/522, 3-13=0/192, 3-5=-342/196, 4-5=0/33, 5-19=-96/105, 6-19=-81/122, 6-20=-573/157, 7-20=-514/166, 7-21=-128/137, 8-21=-128/137, 8-9=-243/67
BOT CHORD 2-13=-331/2098, 12-13=-342/2090, 11-12=-247/746, 10-11=-247/746, 10-22=-171/473, 9-22=-171/473
WEBS 3-6=-1097/176, 3-12=-1423/346, 6-12=-74/617, 6-10=-506/149, 7-10=-98/632, 7-9=-898/179

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 4-9-4, Exterior (2) 3-4-0 to 6-4-0, Interior (1) 6-4-0 to 23-4-4 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) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
7) Provide adequate drainage to prevent water ponding.
8) 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, with BCDL = 10.0psf.
10) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
11) Refer to girder(s) for truss to truss connections.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 156 lb uplift at joint 9 and 164 lb uplift at joint 2.
13) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
14) 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 30,2025

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

Job	Truss	Truss Type	Qty	Ply	993 Serenity	
P05802-31170	J01	Jack-Open Girder	1	1	Job Reference (optional)	I77453406

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. Thu Oct 30 15:40:22 Page: 1
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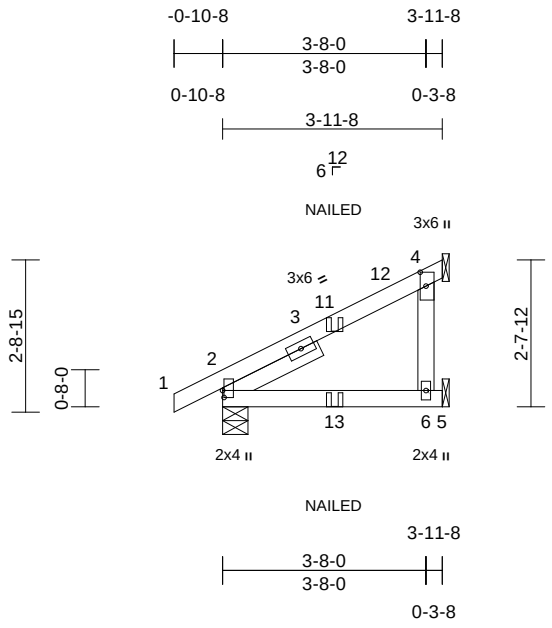

Scale = 1:41.5

Plate Offsets (X, Y): [2:0-1-8,0-0-5], [4:0-3-0,0-1-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	0.01	6-9	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.02	6-9	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 20 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
SLIDER	Left 2x4 SP No.2 -- 1-11-0

BRACING

TOP CHORD	Structural wood sheathing directly applied or 3-11-8 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-5-8, 4= Mechanical, 6= Mechanical
Max Horiz 2=67 (LC 32)
Max Uplift 2=-19 (LC 12), 4=-41 (LC 12), 6=-2 (LC 12)
Max Grav 2=206 (LC 2), 4=95 (LC 2), 6=77 (LC 7)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/23, 2-4=-134/35
BOT CHORD	2-6=-57/62, 5-6=0/0
WEBS	4-6=0/0

NOTES

1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; 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
2) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
5) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint 2, 41 lb uplift at joint 4 and 2 lb uplift at joint 6.
10) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
11) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-51, 5-7=-20
Concentrated Loads (lb)
Vert: 11=-26 (F), 13=-3 (F)

October 30,2025

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

Job	Truss	Truss Type	Qty	Ply	993 Serenity
P05802-31170	J02	Jack-Open	1	1	I77453407 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. Thu Oct 30 15:40:23
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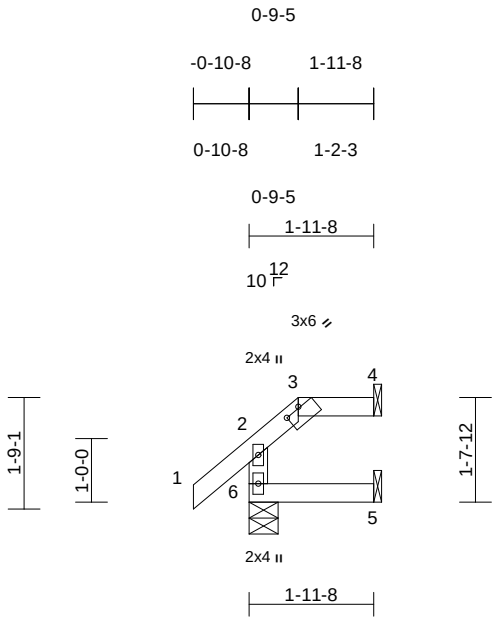

Scale = 1:36.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	0.00	5-6	>999	240	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	5-6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 9 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 1-11-8 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 5= Mechanical, 6=0-5-8
Max Horiz 6=33 (LC 13)
Max Uplift 4=-18 (LC 13), 5=-2 (LC 13), 6=-11 (LC 16)
Max Grav 4=71 (LC 35), 5=33 (LC 7), 6=209 (LC 36)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-6=-183/64, 1-2=0/64, 2-3=-56/9, 3-4=0/0
BOT CHORD 5-6=0/0

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-10-8 to 1-11-6 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) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=20.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
7) Provide adequate drainage to prevent water ponding.
8) 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) Refer to girder(s) for truss to truss connections.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 11 lb uplift at joint 6, 18 lb uplift at joint 4 and 2 lb uplift at joint 5.
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 30,2025

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

Job	Truss	Truss Type	Qty	Ply	993 Serenity	
P05802-31170	J03	Jack-Open	9	1	Job Reference (optional)	I77453408

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

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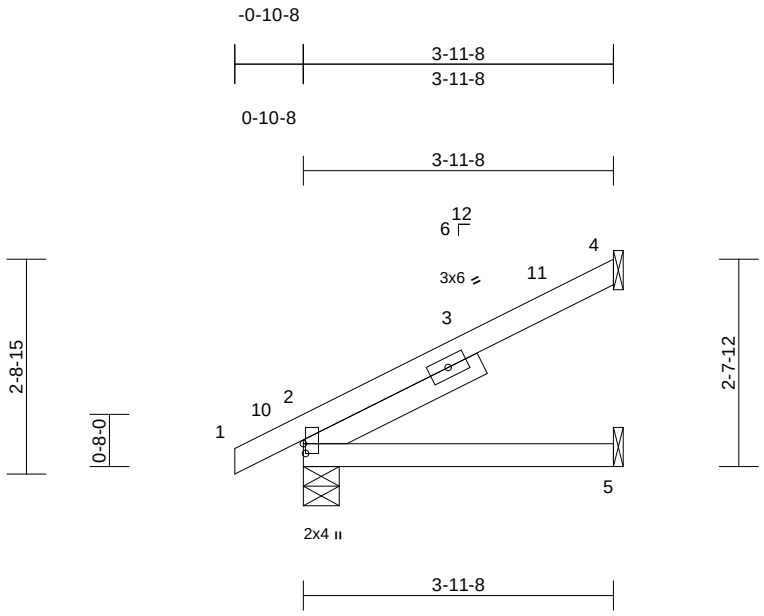

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Plate Offsets (X, Y): [2:0-1-8,0-0-5]

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	0.22	Vert(LL)	0.01	5-8	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.02	5-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 18 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 2-6-0

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-11-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-5-8, 4= Mechanical, 5= Mechanical
Max Horiz 2=70 (LC 16)
Max Uplift 2=-17 (LC 16), 4=-43 (LC 16)
Max Grav 2=214 (LC 2), 4=103 (LC 2), 5=67 (LC 7)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/23, 2-4=-175/54
BOT CHORD 2-5=-102/58

NOTES
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 3-10-12 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
2) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
5) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 43 lb uplift at joint 4 and 17 lb uplift at joint 2.

LOAD CASE(S) Standard

October 30,2025

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

Job	Truss	Truss Type	Qty	Ply	993 Serenity	
P05802-31170	P01E	Monopitch Supported Gable	1	1	Job Reference (optional)	I77453409

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. Thu Oct 30 15:40:23 Page: 1
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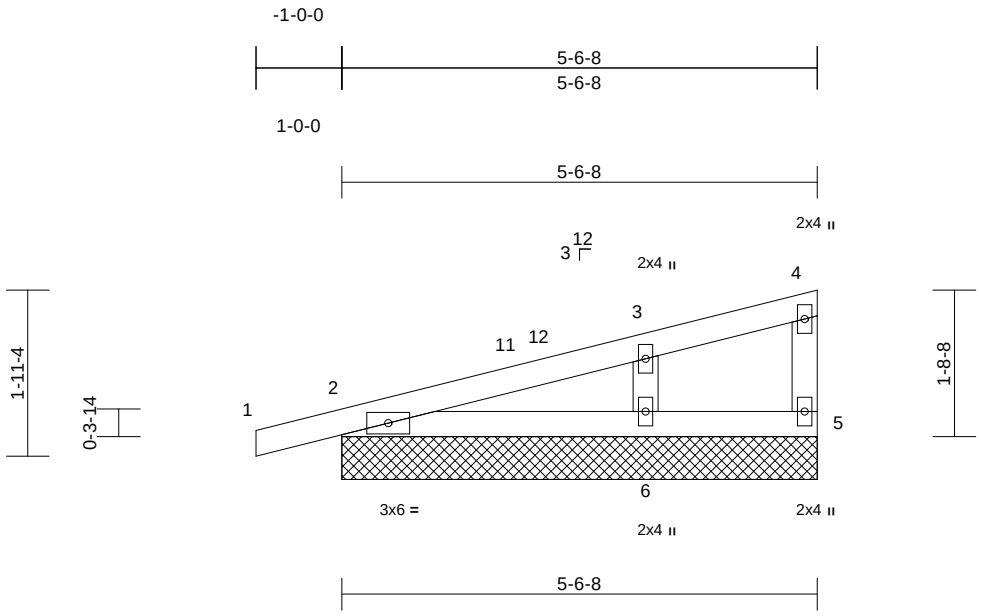

Scale = 1:26.9

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	0.28	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	NO	WB	0.03	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 21 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 5-6-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=5-6-8, 5=5-6-8, 6=5-6-8
Max Horiz 2=51 (LC 12)
Max Uplift 2=-45 (LC 12), 5=-1 (LC 12), 6=-43 (LC 16)
Max Grav 2=197 (LC 2), 5=148 (LC 7), 6=351 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/15, 2-3=-68/34, 3-4=-24/1, 4-5=-15/34
BOT CHORD 2-6=-26/57, 5-6=0/0
WEBS 3-6=-238/160

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -1-0-0 to 2-0-0, Exterior (2) 2-0-0 to 5-4-12 zone; cantilever left and right exposed ; end vertical left exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
8) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 45 lb uplift at joint 2, 1 lb uplift at joint 5, 43 lb uplift at joint 6 and 45 lb uplift at joint 2.
13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-51
Trapezoidal Loads (lb/ft)
Vert: 7=-20-to-9=-23 (F=-3), 9=-23 (F=-3)-to-10=-35 (F=-15), 10=35 (F=15)-to-6=30 (F=10), 6=-30 (F=-10)-to-5=-35 (F=-15)

October 30,2025

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

Job	Truss	Truss Type	Qty	Ply	993 Serenity
P05802-31170	P02	Monopitch	5	1	I77453410
					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. Thu Oct 30 15:40:23 Page: 1
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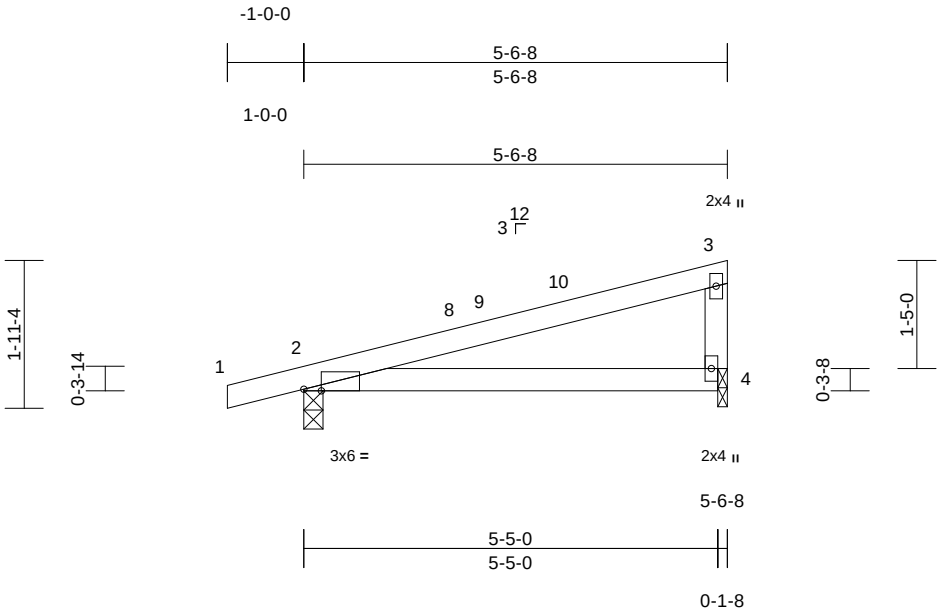

Scale = 1:30.2

Plate Offsets (X, Y): [2:0-2-12,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	0.40	Vert(LL)	0.07	4-7	>943	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.09	4-7	>744	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 20 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-6-8 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=47 (LC 15)
Max Uplift 2=-100 (LC 12), 4=-72 (LC 12)
Max Grav 2=281 (LC 2), 4=210 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/15, 2-3=-137/101, 3-4=-137/93
BOT CHORD 2-4=-120/122

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-0-0 to 2-0-0, Interior (1) 2-0-0 to 5-4-12 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
7) 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) 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.
10) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 2, 4.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint 2 and 72 lb uplift at joint 4.

LOAD CASE(S) Standard

October 30,2025

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

Job	Truss	Truss Type	Qty	Ply	993 Serenity	
P05802-31170	P03	Monopitch	4	1	Job Reference (optional)	I77453411

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

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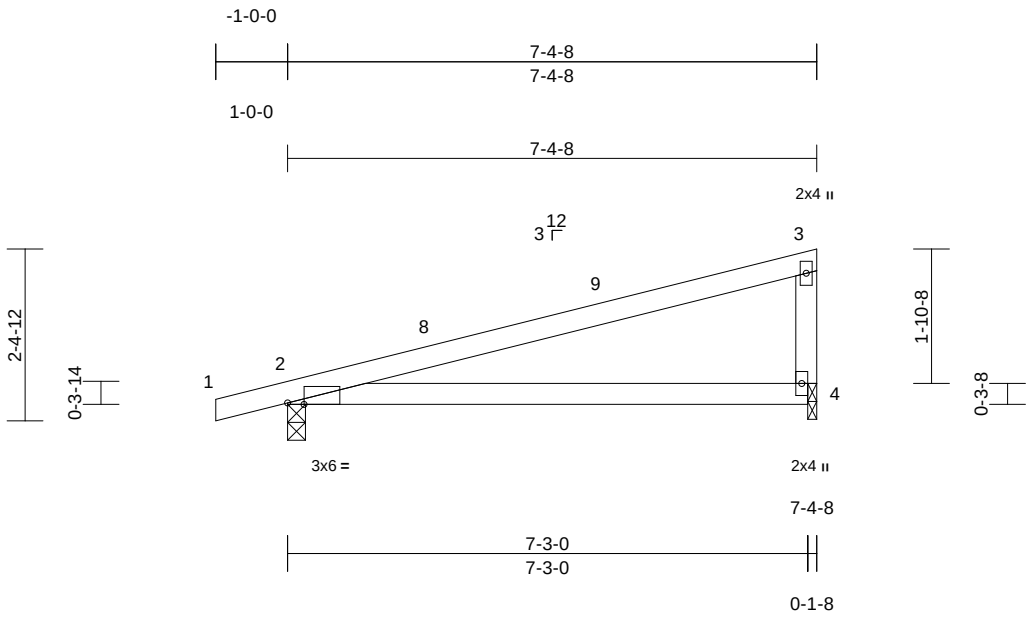


Scale = 1:32.1

Plate Offsets (X, Y): [2:0-2-12,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	0.80	Vert(LL)	0.21	4-7	>412	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.29	4-7	>304	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 26 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 6-0-0 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 12)
Max Uplift 2=-120 (LC 12), 4=-101 (LC 12)
Max Grav 2=353 (LC 2), 4=285 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/15, 2-3=-198/131, 3-4=-188/104
BOT CHORD 2-4=-145/183

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-0-0 to 2-0-0, Interior (1) 2-0-0 to 7-2-12 zone; cantilever left and right exposed ; end vertical left exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
7) 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) 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.
10) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 120 lb uplift at joint 2 and 101 lb uplift at joint 4.

LOAD CASE(S) Standard

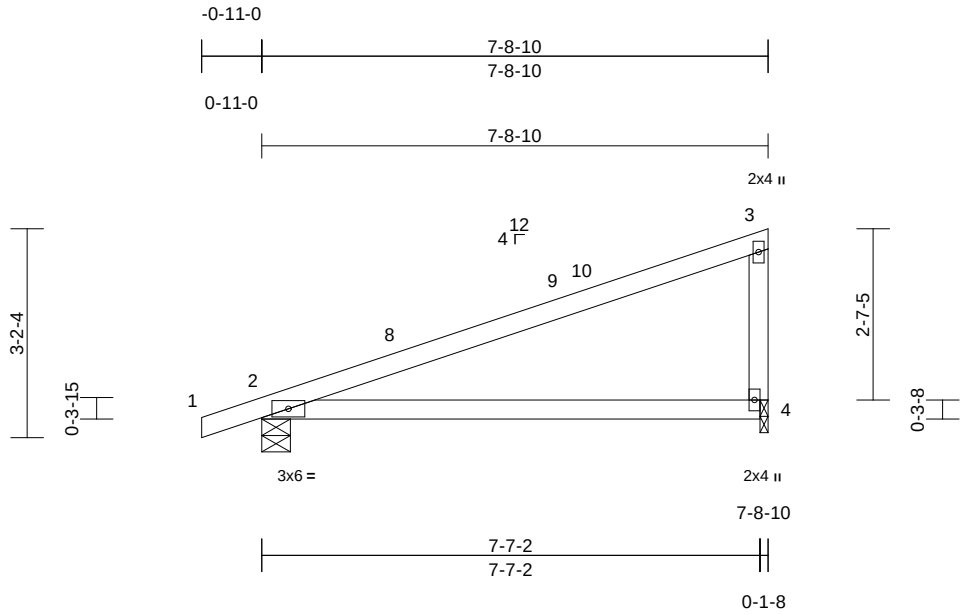
October 30,2025

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

Job	Truss	Truss Type	Qty	Ply	993 Serenity
P05802-31170	P04	Monopitch	9	1	I77453412
					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. Thu Oct 30 15:40:24 Page: 1
ID:VbI0cpydmvQMp3HnFDX?_9zxWX4-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:35.1

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	0.91	Vert(LL)	0.26	4-7	>345	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.34	4-7	>265	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 28 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=0-5-4, 4=0-1-8
Max Horiz 2=89 (LC 12)
Max Uplift 2=-116 (LC 12), 4=-112 (LC 12)
Max Grav 2=361 (LC 2), 4=300 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-150/98, 3-4=-200/112
BOT CHORD 2-4=-119/142

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-11-0 to 2-1-0, Interior (1) 2-1-0 to 7-6-14 zone; cantilever left and right exposed ; end vertical left exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
7) 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) 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.
10) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 116 lb uplift at joint 2 and 112 lb uplift at joint 4.

LOAD CASE(S) Standard

October 30,2025

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

Job	Truss	Truss Type	Qty	Ply	993 Serenity
P05802-31170	P05	Monopitch	1	1	I77453413
					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. Thu Oct 30 15:40:24 Page: 1
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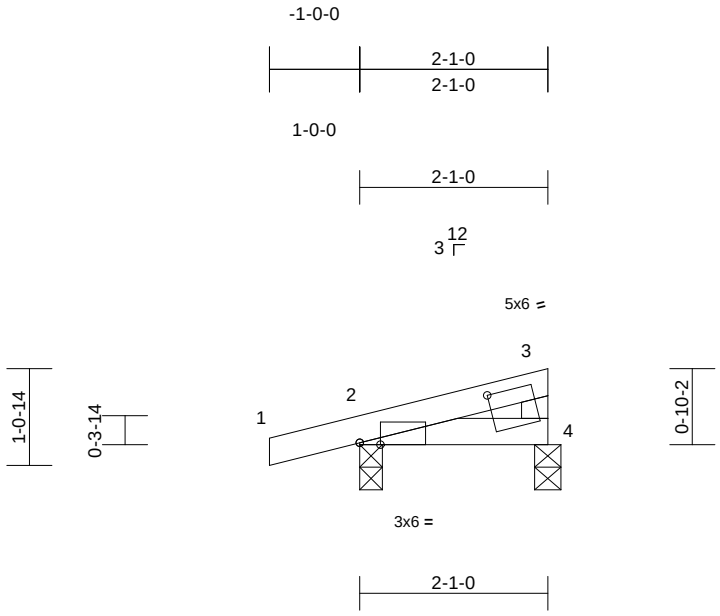

Scale = 1:25.5

Plate Offsets (X, Y): [2:0-2-12,Edge], [3:1-5-15,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	0.00	7	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 8 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 2-1-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-0, 4=0-3-8
Max Horiz 2=20 (LC 15)
Max Uplift 2=-47 (LC 12), 4=-9 (LC 16)
Max Grav 2=153 (LC 2), 4=62 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/15, 2-3=-31/12, 3-4=-37/19
BOT CHORD 2-4=-7/22

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone 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) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
7) 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 at joint(s) 2.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 9 lb uplift at joint 4 and 47 lb uplift at joint 2.

LOAD CASE(S) Standard

October 30,2025

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

Job	Truss	Truss Type	Qty	Ply	993 Serenity	
P05802-31170	P05E	Monopitch Structural Gable	2	1	Job Reference (optional)	I77453414

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. Thu Oct 30 15:40:24

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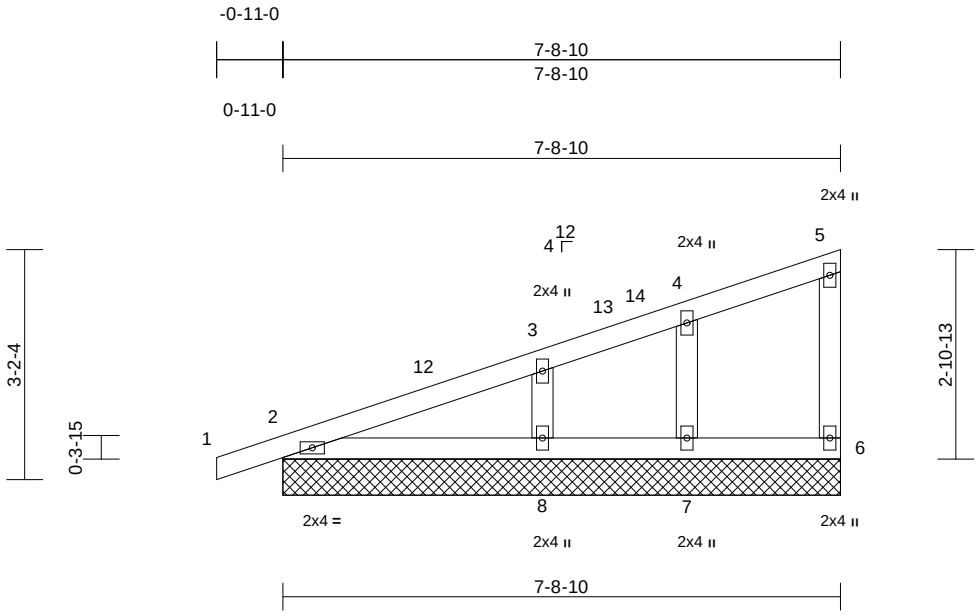


Scale = 1:31.9

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	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 32 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=7-8-10, 6=7-8-10, 7=7-8-10, 8=7-8-10
Max Horiz 2=89 (LC 15)
Max Uplift 2=-35 (LC 12), 6=-10 (LC 13), 7=-32 (LC 12), 8=-56 (LC 16)
Max Grav 2=186 (LC 2), 6=83 (LC 2), 7=162 (LC 23), 8=294 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/17, 2-3=-97/71, 3-4=-71/46, 4-5=-42/37, 5-6=-52/36
BOT CHORD	2-8=-35/48, 7-8=-35/38, 6-7=-35/38
WEBS	4-7=-111/70, 3-8=-185/60

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -0-11-0 to 2-1-0, Interior (1) 2-1-0 to 7-6-14 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) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
8) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 35 lb uplift at joint 2, 10 lb uplift at joint 6, 32 lb uplift at joint 7, 56 lb uplift at joint 8 and 35 lb uplift at joint 2.
13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (lb/ft)
   Vert: 1-5=-51
   Trapezoidal Loads (lb/ft)
   Vert: 9=-20-to-11=-22 (F=-2), 11=-22 (F=-2)-to-8=-27 (F=-7), 8=-27 (F=-7)-to-7=-31 (F=-11), 7=-31 (F=-11)-to-6=-35 (F=-15)

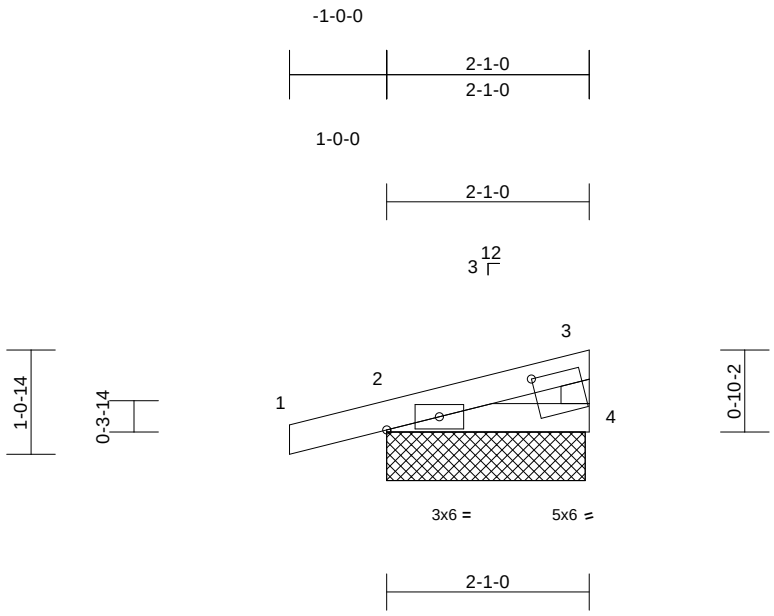
October 30,2025

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

Job	Truss	Truss Type	Qty	Ply	993 Serenity
P05802-31170	P06	Monopitch Supported Gable	1	1	I77453415 Job Reference (optional)

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

Run: 8.83 E Sep 17 2025 Print: 8.830 E Sep 17 2025 MiTek Industries, Inc. Thu Oct 30 16:03:02 ID:FA7XFbeoRJyETZGcuRW_O9yOBN0-S4lkkkYZpBpvQf3pUMvriNKhjHPllcjsnoPCGTyOAbt



Scale = 1:23.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 8 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 2-1-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=132/2-0-8, 4=55/2-0-8
Max Horiz 2=20 (LC 15)
Max Uplift 2=-47 (LC 12), 4=-9 (LC 16)
Max Grav 2=153 (LC 2), 4=62 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/15, 2-3=-31/14, 3-4=-37/31
BOT CHORD 2-4=-8/22

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) 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) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10; Min. flat roof snow load governs.
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * 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.
11) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 47 lb uplift at joint 2, 9 lb uplift at joint 4 and 47 lb uplift at joint 2.
13) Non Standard bearing condition. Review required.
14) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

October 30,2025

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

Job	Truss	Truss Type	Qty	Ply	993 Serenity
P05802-31170	PB01	Piggyback	5	1	I77453416
					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. Thu Oct 30 15:40:24 Page: 1

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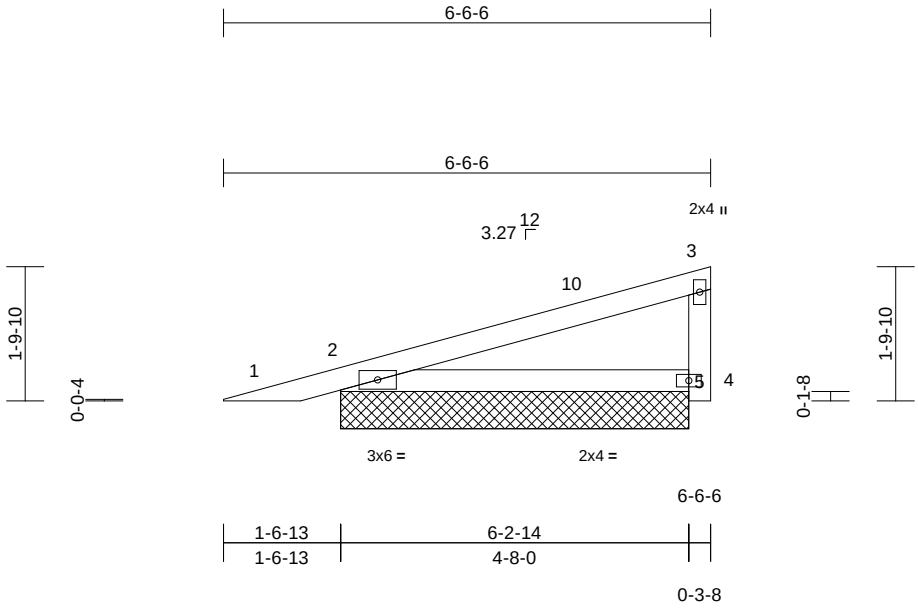

Scale = 1:30.9

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	0.31	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 19 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size) 2=4-8-0, 4=4-8-0, 5=4-8-0
Max Horiz 2=53 (LC 15)
Max Uplift 2=-60 (LC 12), 4=-31 (LC 16)
Max Grav 2=263 (LC 2), 4=186 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-103/33, 4-5=0/0, 3-4=-121/71
BOT CHORD 2-4=-43/88

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) 0-7-2 to 4-10-0, Exterior (2) 4-10-0 to 6-5-8 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) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
8) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 4-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 60 lb uplift at joint 2, 31 lb uplift at joint 4 and 60 lb uplift at joint 2.
13) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

October 30,2025

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

Job	Truss	Truss Type	Qty	Ply	993 Serenity	
P05802-31170	V03	Valley	1	1	Job Reference (optional)	I77453417

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. Thu Oct 30 15:40:25 Page: 1
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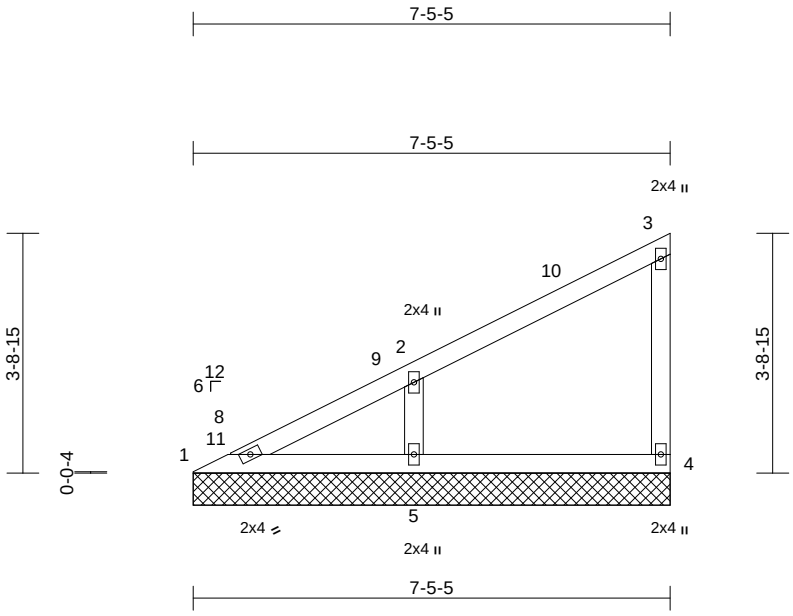

Scale = 1:36

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.13	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 29 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) 1=7-5-5, 4=7-5-5, 5=7-5-5
Max Horiz 1=103 (LC 15)
Max Uplift 4=-19 (LC 13), 5=-82 (LC 16)
Max Grav 1=79 (LC 30), 4=120 (LC 2), 5=361 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-162/107, 2-3=-88/63, 3-4=-92/81
BOT CHORD 1-5=-51/119, 4-5=-46/50
WEBS 2-5=-260/146

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-7-7 to 3-5-13, Interior (1) 3-5-13 to 7-4-1 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) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 4-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * 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.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint 4 and 82 lb uplift at joint 5.

LOAD CASE(S) Standard

October 30,2025

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	993 Serenity
P05802-31170	V04	Valley	1	1	I77453418
					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. Thu Oct 30 15:40:25 Page: 1
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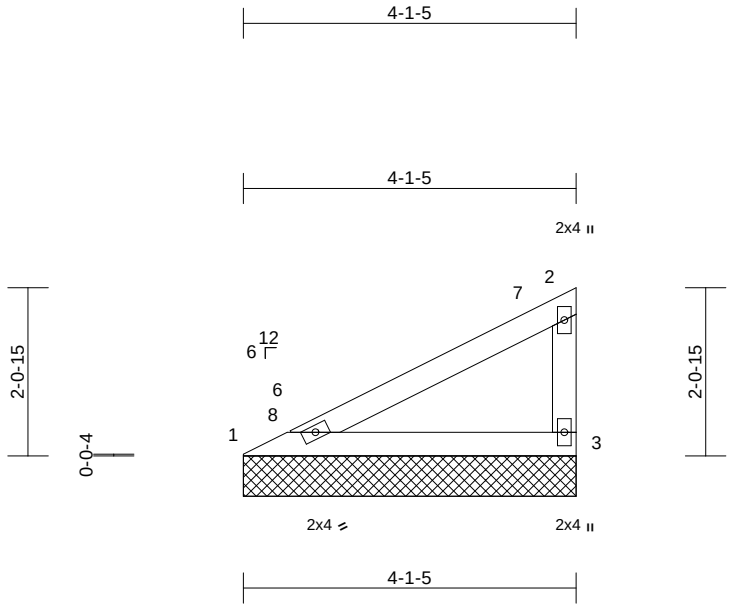

Scale = 1:28.5

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	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.21	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 14 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 4-1-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=4-1-5, 3=4-1-5
Max Horiz 1=52 (LC 15)
Max Uplift 1=-8 (LC 16), 3=-30 (LC 16)
Max Grav 1=127 (LC 2), 3=156 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-234/65, 2-3=-98/71
BOT CHORD 1-3=-118/209

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=3.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-7-7 to 3-7-7, Interior (1) 3-7-7 to 4-0-1 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) TCLL: ASCE 7-10; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lum DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) Building Designer/Project engineer responsible for verifying Rain Load = 5.0 (psf) covers rain loading requirements specific to the use of this truss component.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 4-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * 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.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 3 and 8 lb uplift at joint 1.

LOAD CASE(S) Standard

October 30,2025

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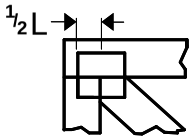
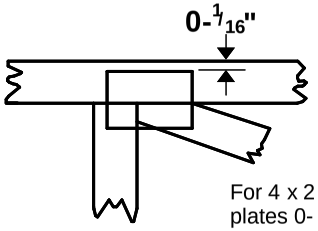
Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

This symbol indicates the required direction of slots in connector plates.

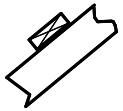
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

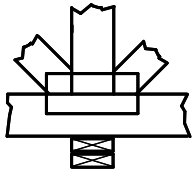
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

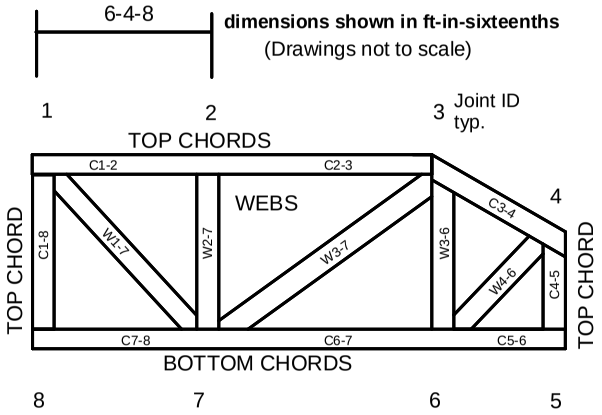


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: 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.

MiTek®

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

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.