ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 250035-B
79 Ducks Landing - Roof

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

Pages or sheets covered by this seal: I75391616 thru I75391638

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

North Carolina COA: C-0844

August 5,2025

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	79 Ducks Landing - Roof	
250035-B	A01GE	COMMON SUPPORTED GAB	1	1	Job Reference (optional)	I75391616

Comtech, Inc, Fayetteville, NC - 28314, Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Mon Aug 04 15:12:18 Page: 1
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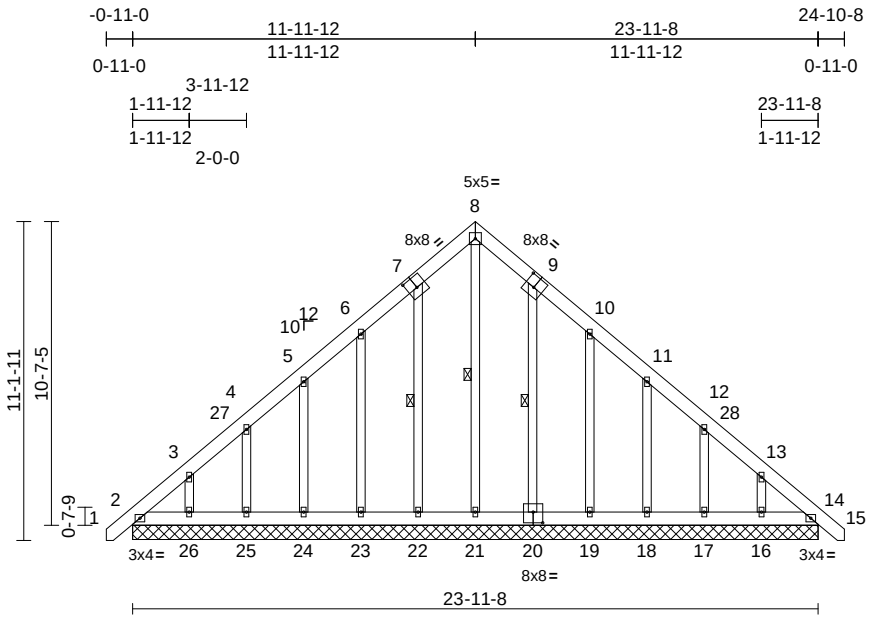

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Plate Offsets (X, Y): [7:0-4-0,0-4-8], [9:0-4-0,0-4-8], [20:0-4-0,0-4-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.01	14	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 219 lb	FT = 25%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 8-21, 7-22, 9-20

REACTIONS (size) 2=23-11-8, 14=23-11-8, 16=23-11-8, 17=23-11-8, 18=23-11-8, 19=23-11-8, 20=23-11-8, 21=23-11-8, 22=23-11-8, 23=23-11-8, 24=23-11-8, 25=23-11-8, 26=23-11-8
Max Horiz 2=-319 (LC 10)
Max Uplift 2=-83 (LC 8), 14=-29 (LC 9), 16=-125 (LC 13), 17=-110 (LC 13), 18=-112 (LC 13), 19=-116 (LC 13), 20=-76 (LC 13), 22=-84 (LC 12), 23=-113 (LC 12), 24=-112 (LC 12), 25=-110 (LC 12), 26=-127 (LC 12)
Max Grav 2=215 (LC 21), 14=186 (LC 22), 16=193 (LC 20), 17=181 (LC 20), 18=184 (LC 20), 19=177 (LC 20), 20=177 (LC 20), 21=214 (LC 13), 22=186 (LC 19), 23=174 (LC 19), 24=184 (LC 19), 25=181 (LC 19), 26=196 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/28, 2-3=-360/235, 3-4=-249/191, 4-5=-181/155, 5-6=-160/136, 6-8=-161/247, 8-10=-161/247, 10-11=-97/78, 11-12=-118/72, 12-13=-193/109, 13-14=-303/150, 14-15=0/28
BOT CHORD 2-26=-125/287, 25-26=-125/287, 24-25=-125/287, 23-24=-125/287, 22-23=-125/287, 21-22=-125/288, 19-21=-125/288, 18-19=-123/286, 17-18=-123/286, 16-17=-123/286, 14-16=-123/286
WEBS 8-21=-204/73, 7-22=-146/108, 6-23=-134/137, 5-24=-143/136, 4-25=-143/136, 3-26=-148/154, 9-20=-137/100, 10-19=-138/140, 11-18=-144/136, 12-17=-143/136, 13-16=-146/154

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-9-9 to 3-7-4, Exterior(2N) 3-7-4 to 11-11-12, Corner(3R) 11-11-12 to 16-4-9, Exterior(2N) 16-4-9 to 24-9-1 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 (||) MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 83 lb uplift at joint 2, 84 lb uplift at joint 22, 113 lb uplift at joint 23, 112 lb uplift at joint 24, 110 lb uplift at joint 25, 127 lb uplift at joint 26, 76 lb uplift at joint 20, 116 lb uplift at joint 19, 112 lb uplift at joint 18, 110 lb uplift at joint 17, 125 lb uplift at joint 16 and 29 lb uplift at joint 14.

LOAD CASE(S) Standard

August 5,2025

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

Job	Truss	Truss Type	Qty	Ply	79 Ducks Landing - Roof	
250035-B	A02	COMMON	4	1	Job Reference (optional)	I75391617

Comtech, Inc, Fayetteville, NC - 28314,

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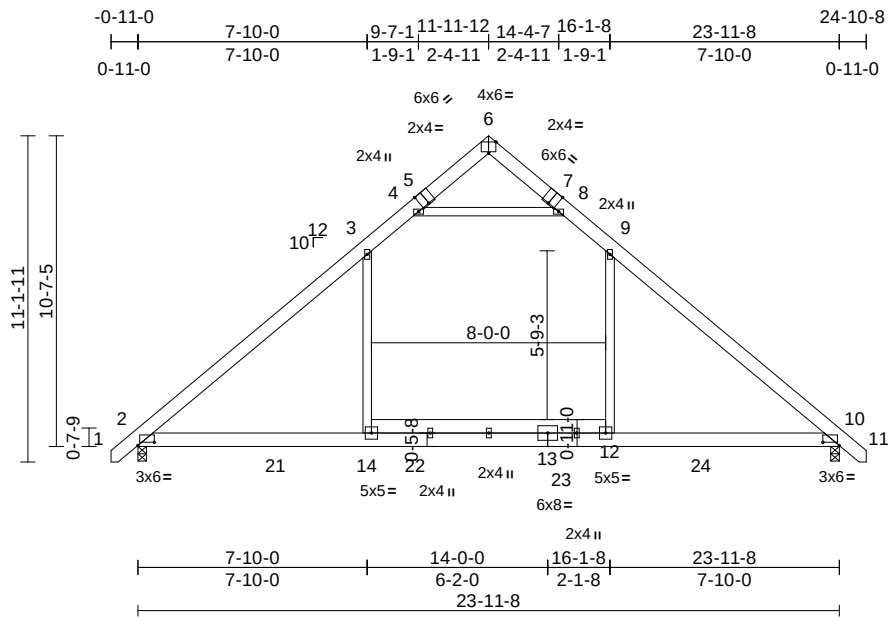

Scale = 1:78.7

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

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	0.56	Vert(LL)	-0.17	12-20	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.23	12-14	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.02	10	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS		Wind(LL)	0.17	14-17	>999	240	Weight: 180 lb	FT = 25%

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

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

REACTIONS (size) 2=0-3-8, 10=0-3-8
Max Horiz 2=-255 (LC 10)
Max Grav 2=1420 (LC 19), 10=1420 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/31, 2-3=-1787/79, 3-4=-1095/204, 4-6=-27/333, 6-8=-27/333, 8-9=-1095/204, 9-10=-1786/79, 10-11=0/31
BOT CHORD 2-14=-1/1286, 12-14=0/1286, 10-12=0/1286
WEBS 9-12=0/759, 3-14=0/759, 4-8=-1598/273

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-9 to 3-7-4, Interior (1) 3-7-4 to 11-11-12, Exterior(2R) 11-11-12 to 16-1-8, Interior (1) 16-1-8 to 24-9-1 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 200.0lb AC unit load placed on the bottom chord, 11-11-12 from left end, supported at two points, 5-0-0 apart.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

August 5,2025

ENGINEERING BY TRENCO
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	79 Ducks Landing - Roof	
250035-B	A03	ROOF SPECIAL	2	1	Job Reference (optional)	I75391618

Comtech, Inc, Fayetteville, NC - 28314, Run: 25.20 E May 15 2025 Print: 25.2.0 E May 15 2025 MiTek Industries, Inc. Tue Aug 05 09:22:10 Page: 1
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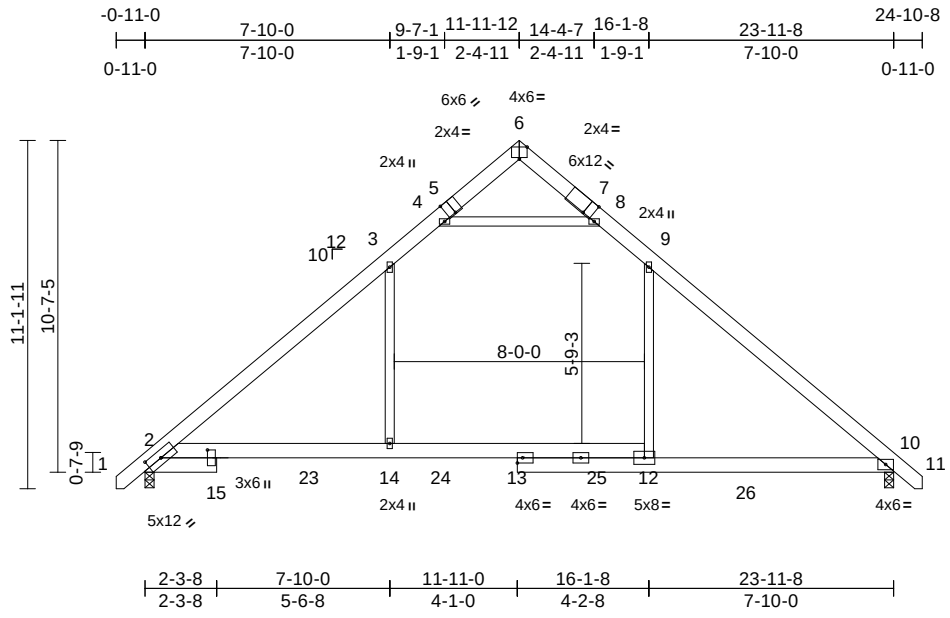

Scale = 1:73.7

Plate Offsets (X, Y): [2:0-5-13,0-2-11], [2:0-3-0,1-5-14], [5:0-3-0,Edge], [6:0-3-0,Edge], [7:0-3-5,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	0.61	Vert(LL)	-0.21	14-19	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.31	14-19	>911	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.09	10	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS		Wind(LL)	0.19	14-19	>999	240	Weight: 175 lb	FT = 25%

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

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

REACTIONS (lb/size) 2=1110/0-3-8, 10=1099/0-3-8
Max Horiz 2=256 (LC 11)
Max Grav 2=1410 (LC 19), 10=1409 (LC 20)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1781/78, 3-4=-1096/203, 4-5=-19/279, 5-6=-15/353, 6-7=-20/325, 7-8=-24/254, 8-9=-1138/199, 9-10=-1834/77
BOT CHORD 2-15=0/1323, 15-23=0/1323, 14-23=0/1323, 14-24=0/1323, 13-24=0/1323, 13-25=0/1315, 12-25=0/1281, 12-26=0/1323, 10-26=0/1323
WEBS 3-14=0/797, 9-12=0/753, 4-8=-1642/263

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-9 to 3-7-4, Interior (1) 3-7-4 to 11-11-12, Exterior(2R) 11-11-12 to 16-1-8, Interior (1) 16-1-8 to 24-9-1 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 200.0lb AC unit load placed on the bottom chord, 11-11-12 from left end, supported at two points, 5-0-0 apart.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

August 5,2025

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	79 Ducks Landing - Roof	
250035-B	A04	ROOF SPECIAL	3	1	Job Reference (optional)	I75391619

Comtech, Inc, Fayetteville, NC - 28314,

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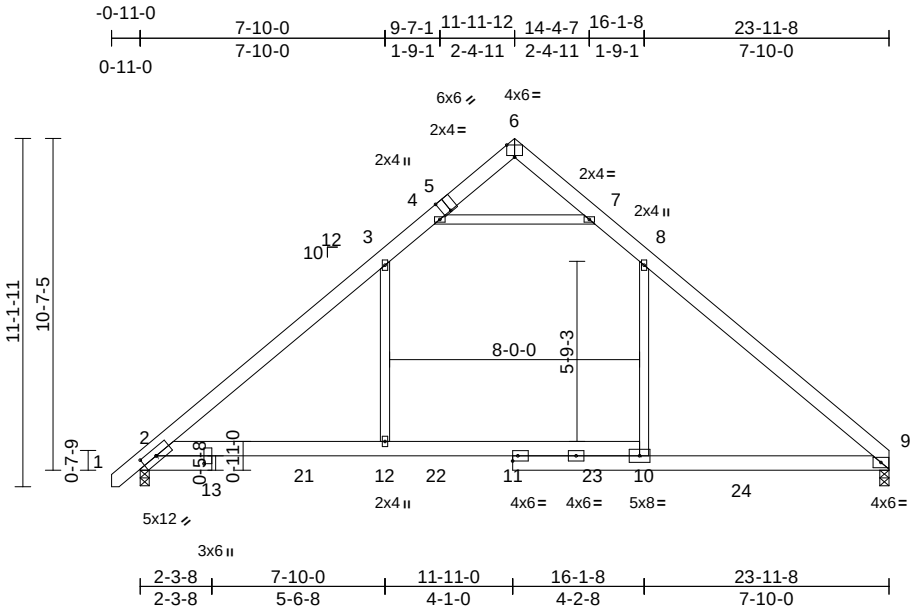

Scale = 1:73.7

Plate Offsets (X, Y): [2:0-5-13,0-2-11], [2:0-3-0,1-6-6], [5:0-3-0,Edge], [6:0-3-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.21	12-20	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.31	12-20	>913	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.09	9	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS		Wind(LL)	0.19	12-20	>999	240	Weight: 172 lb	FT = 25%

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

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

REACTIONS (lb/size) 2=1111/0-3-8, 9=1051/0-3-8
Max Horiz 2=251 (LC 11)
Max Grav 2=1410 (LC 19), 9=1363 (LC 20)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1783/80, 3-4=-1098/204, 4-5=-21/279, 5-6=-17/353, 6-7=-25/327, 7-8=-1138/202, 8-9=-1834/82
BOT CHORD 2-13=0/1316, 13-21=0/1316, 12-21=0/1316, 12-22=0/1316, 11-22=0/1316, 11-23=0/1308, 10-23=0/1273, 10-24=0/1316, 9-24=0/1316
WEBS 3-12=0/798, 8-10=0/753, 4-7=-1643/269

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-9 to 3-7-4, Interior (1) 3-7-4 to 11-11-12, Exterior(2R) 11-11-12 to 16-1-8, Interior (1) 16-1-8 to 23-11-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 200.0lb AC unit load placed on the bottom chord, 11-11-12 from left end, supported at two points, 5-0-0 apart.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

August 5,2025

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	79 Ducks Landing - Roof	
250035-B	A05	COMMON	9	1	Job Reference (optional)	I75391620

Comtech, Inc, Fayetteville, NC - 28314, Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Mon Aug 04 15:12:20 Page: 1

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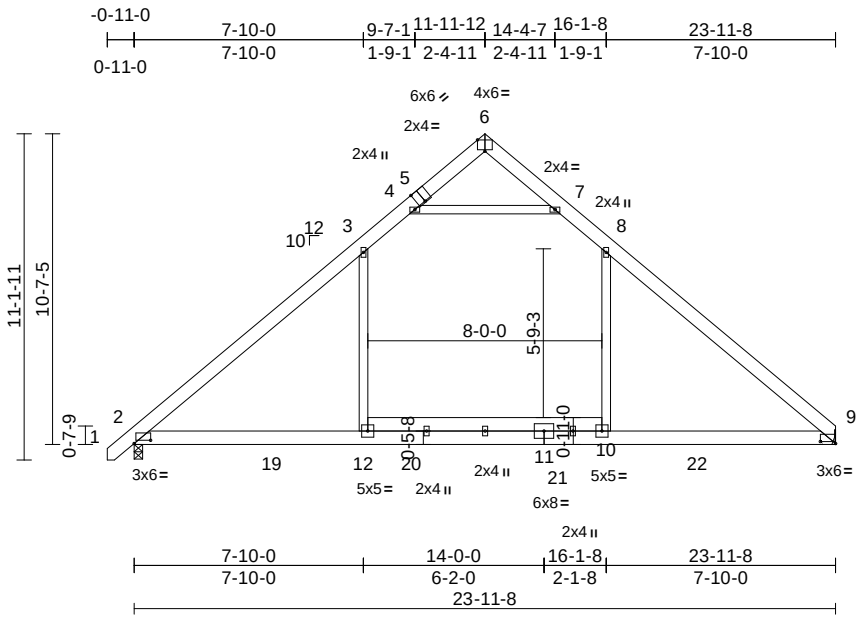

Scale = 1:78.7

Plate Offsets (X, Y): [2:0-6-12,0-1-5], [5:0-3-0,Edge], [6:0-3-0,Edge], [9:0-6-4,0-0-13]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	-0.17	10-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.22	10-15	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.02	9	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS		Wind(LL)	0.17	12-18	>999	240	Weight: 178 lb	FT = 25%

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

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

REACTIONS (size) 2=0-3-8, 9= Mechanical
Max Horiz 2=250 (LC 9)
Max Grav 2=1296 (LC 19), 9=1251 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/31, 2-3=-1581/80, 3-4=-981/205, 4-6=-28/291, 6-7=-28/292, 7-8=-980/206, 8-9=-1579/81
BOT CHORD 2-12=-13/1129, 10-12=0/1129, 9-10=-20/1129
WEBS 8-10=0/571, 3-12=0/571, 4-7=-1395/277

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-9 to 3-7-4, Interior (1) 3-7-4 to 11-11-12, Exterior(2R) 11-11-12 to 16-1-8, Interior (1) 16-1-8 to 23-11-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 200.0lb AC unit load placed on the bottom chord, 11-11-12 from left end, supported at two points, 5-0-0 apart.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Refer to girder(s) for truss to truss connections.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	79 Ducks Landing - Roof	
250035-B	A06GE	COMMON SUPPORTED GAB	1	1	Job Reference (optional)	I75391621

Comtech, Inc, Fayetteville, NC - 28314, Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Mon Aug 04 15:12:20 Page: 1
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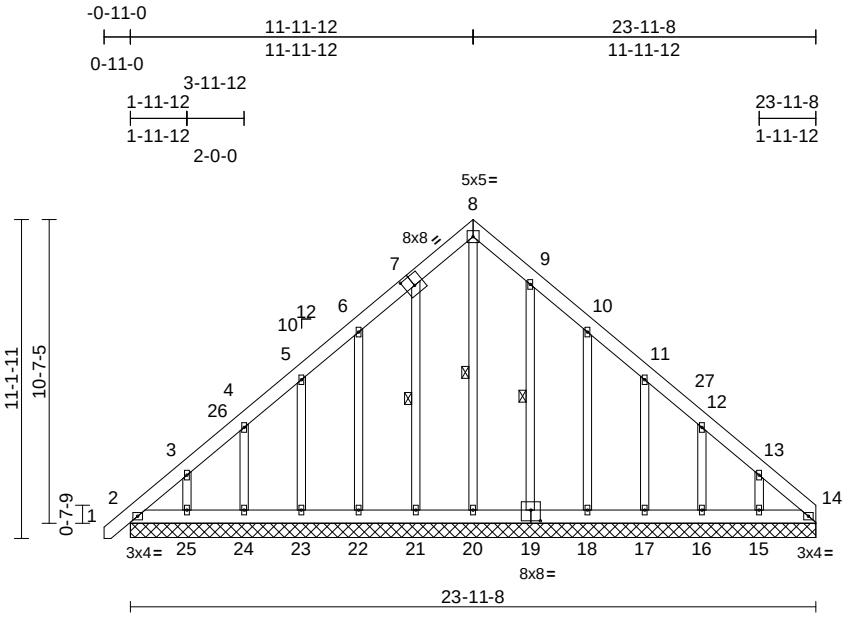


Scale = 1:80.5

Plate Offsets (X, Y): [7:0-4-0,0-4-8], [19:0-4-0,0-4-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.01	14	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 217 lb	FT = 25%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 8-20, 7-21, 9-19

REACTIONS (size) 2=23-11-8, 14=23-11-8, 15=23-11-8, 16=23-11-8, 17=23-11-8, 18=23-11-8, 19=23-11-8, 20=23-11-8, 21=23-11-8, 22=23-11-8, 23=23-11-8, 24=23-11-8, 25=23-11-8
Max Horiz 2=313 (LC 9)
Max Uplift 2=-81 (LC 8), 14=-51 (LC 11), 15=-137 (LC 13), 16=-107 (LC 13), 17=-111 (LC 13), 18=-126 (LC 13), 19=-72 (LC 13), 21=-84 (LC 12), 22=-113 (LC 12), 23=-112 (LC 12), 24=-110 (LC 12), 25=-128 (LC 12)
Max Grav 2=216 (LC 21), 14=191 (LC 13), 15=209 (LC 20), 16=178 (LC 20), 17=184 (LC 20), 18=187 (LC 20), 19=177 (LC 20), 20=210 (LC 13), 21=186 (LC 19), 22=174 (LC 19), 23=184 (LC 19), 24=181 (LC 19), 25=196 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/28, 2-3=-362/232, 3-4=-251/189, 4-5=-179/152, 5-6=-158/134, 6-8=-158/239, 8-9=-155/240, 9-10=-118/169, 10-11=-97/74, 11-12=-118/76, 12-13=-200/112, 13-14=-317/158
BOT CHORD 2-25=-121/269, 24-25=-121/269, 23-24=-121/269, 22-23=-121/269, 21-22=-121/269, 20-21=-120/269, 18-20=-120/269, 17-18=-120/269, 16-17=-120/269, 15-16=-120/269, 14-15=-120/269
WEBS 8-20=-196/73, 7-21=-146/108, 6-22=-135/137, 5-23=-143/136, 4-24=-143/137, 3-25=-148/154, 9-19=-137/96, 10-18=-148/150, 11-17=-143/134, 12-16=-141/141, 13-15=-157/172

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-9-9 to 3-7-4, Exterior(2N) 3-7-4 to 11-11-12, Corner(3R) 11-11-12 to 16-4-9, Exterior(2N) 16-4-9 to 23-11-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 (||) MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 51 lb uplift at joint 14, 81 lb uplift at joint 2, 84 lb uplift at joint 21, 113 lb uplift at joint 22, 112 lb uplift at joint 23, 110 lb uplift at joint 24, 128 lb uplift at joint 25, 72 lb uplift at joint 19, 126 lb uplift at joint 18, 111 lb uplift at joint 17, 107 lb uplift at joint 16 and 137 lb uplift at joint 15.

LOAD CASE(S) Standard

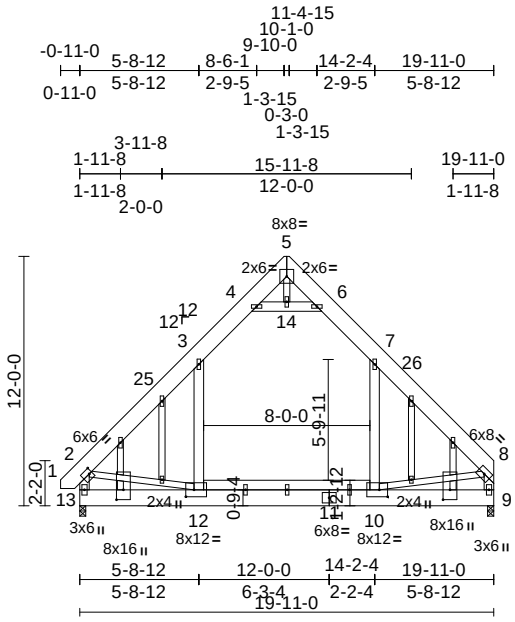
August 5,2025

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

Job	Truss	Truss Type	Qty	Ply	79 Ducks Landing - Roof
250035-B	B01GE	GABLE	1	1	I75391622
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Mon Aug 04 15:12:20 Page: 1

ID:zpIXSSaBurhfCwFgB5VHSpzQ5h5-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:110.8

Plate Offsets (X, Y): [2:0-1-12,0-3-0], [10:0-4-12,0-4-0], [12:0-4-12,0-4-0], [17:0-5-12,0-4-0], [23:0-5-12,0-4-0]

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	0.26	Vert(LL)	-0.05	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.08	10-12	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00	9	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS		Wind(LL)	0.03	10-12	>999	240	Weight: 292 lb	FT = 25%

LUMBER

TOP CHORD 2x10 SP No.1
BOT CHORD 2x10 SP No.1 *Except* 12-10:2x6 SP No.1
WEBS 2x6 SP No.1 *Except* 5-14,12-2,10-8:2x4 SP No.2
OTHERS 2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 9=0-3-8, 13=0-3-8
Max Horiz 13=370 (LC 9)
Max Grav 9=1205 (LC 20), 13=1235 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/34, 2-3=-1354/34, 3-4=-805/154, 4-5=-86/261, 5-6=-85/261, 6-7=-805/155, 7-8=-1350/32, 2-13=-1268/42, 8-9=-1238/19
BOT CHORD 12-13=-357/509, 10-12=0/874, 9-10=-92/231
WEBS 7-10=0/555, 3-12=0/561, 4-14=-1122/260, 6-14=-1122/260, 5-14=0/129, 2-12=-21/713, 8-10=-37/733

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-6-15 to 3-9-13, Interior (1) 3-9-13 to 9-11-8, Exterior(2R) 9-11-8 to 14-2-12, Interior (1) 14-2-12 to 19-8-4 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x6 (||) MT20 unless otherwise indicated.
5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Ceiling dead load (10.0 psf) on member(s). 3-4, 6-7, 4-14, 6-14; Wall dead load (5.0psf) on member(s).7-10, 3-12
10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 10-12
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
12) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

August 5,2025

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

Job	Truss	Truss Type	Qty	Ply	79 Ducks Landing - Roof	
250035-B	B02	Attic	2	1	Job Reference (optional)	I75391623

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Mon Aug 04 15:12:20 Page: 1
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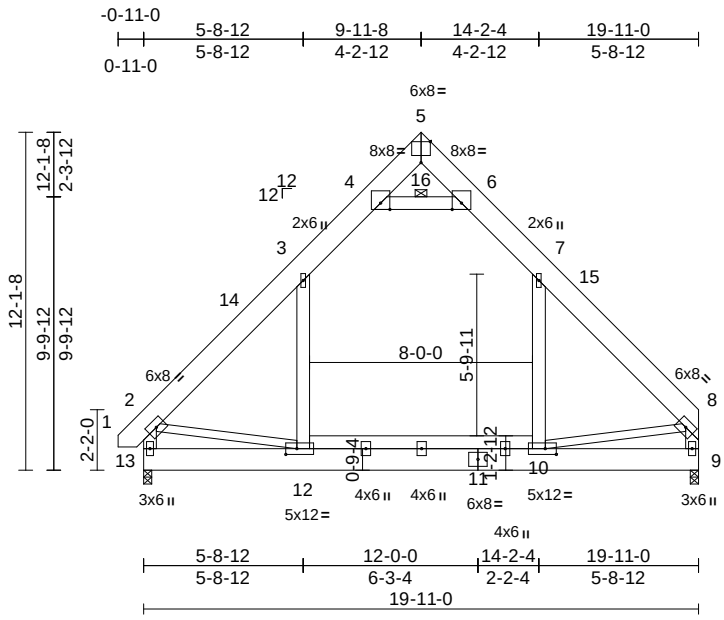

Scale = 1:82.7

Plate Offsets (X, Y): [5:0-4-0,Edge], [10:0-4-12,0-2-8], [12:0-4-12,0-2-8]

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	0.24	Vert(LL)	-0.03	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.06	10-12	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.00	9	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS		Wind(LL)	0.02	12-13	>999	240	Weight: 273 lb	FT = 25%

LUMBER
TOP CHORD 2x10 SP No.1 *Except* 4-6:2x6 SP No.1
BOT CHORD 2x10 SP No.1 *Except* 12-10:2x6 SP No.1
WEBS 2x6 SP No.1 *Except* 12-2,10-8:2x4 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.): 4-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
This truss requires both edges of the bottom chord be sheathed in the room area.

REACTIONS (size) 9=0-3-8, 13=0-3-8
Max Horiz 13=297 (LC 11)
Max Grav 9=1400 (LC 20), 13=1438 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/34, 2-3=-1537/56, 3-4=-1034/213, 4-5=-73/222, 5-6=-72/222, 6-7=-1031/233, 7-8=-1512/65, 2-13=-1436/96, 8-9=-1385/75, 4-6=-1165/293
BOT CHORD 12-13=-279/434, 10-12=0/981, 9-10=-57/198
WEBS 7-10=0/498, 3-12=0/508, 2-12=-1/840, 8-10=0/849

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-6-15 to 3-9-13, Interior (1) 3-9-13 to 9-11-8, Exterior(2E) 8-0-1 to 11-10-15, Exterior(2R) 9-11-8 to 14-2-12, Interior (1) 14-2-12 to 19-8-4 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Ceiling dead load (10.0 psf) on member(s). 3-4, 4-5, 5-6, 6-7, 4-6; Wall dead load (5.0psf) on member(s).7-10, 3-12
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 10-12
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

August 5,2025

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

Job	Truss	Truss Type	Qty	Ply	79 Ducks Landing - Roof	
250035-B	B03	Attic	4	1	Job Reference (optional)	I75391624

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Mon Aug 04 15:12:20 Page: 1
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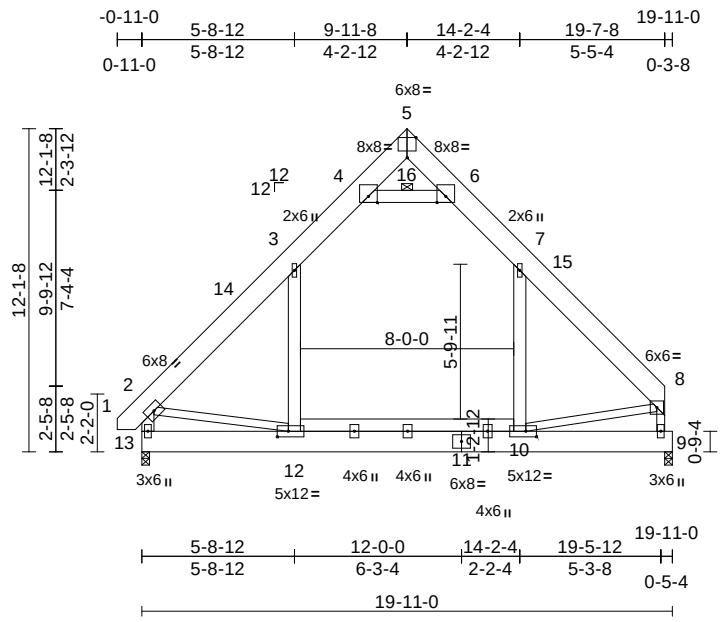

Scale = 1:86.5

Plate Offsets (X, Y): [5:0-4-0,Edge], [10:0-4-12,0-2-8], [12:0-5-0,0-2-8]

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	0.23	Vert(LL)	-0.03	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.06	10-12	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.00	9	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS		Wind(LL)	0.02	12-13	>999	240	Weight: 271 lb	FT = 25%

LUMBER
TOP CHORD 2x10 SP No.1 *Except* 4-6:2x6 SP No.1
BOT CHORD 2x10 SP No.1 *Except* 12-10:2x6 SP No.1
WEBS 2x6 SP No.1 *Except* 9-8,10-8,12-2:2x4 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.): 4-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
This truss requires both edges of the bottom chord be sheathed in the room area.

REACTIONS (size) 9=0-3-8, 13=0-3-8
Max Horiz 13=-278 (LC 10)
Max Grav 9=1402 (LC 20), 13=1422 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/34, 2-3=-1510/50, 3-4=-1016/209, 4-5=-78/219, 5-6=-82/212, 6-7=-1023/233, 7-8=-1467/67, 2-13=-1412/91, 8-9=-1408/69, 4-6=-1133/293
BOT CHORD 12-13=-258/427, 10-12=0/955, 9-10=-14/68
WEBS 3-12=0/500, 7-10=-12/465, 8-10=0/950, 2-12=-4/820

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-6-15 to 3-9-13, Interior (1) 3-9-13 to 9-11-8, Exterior(2E) 8-0-1 to 11-10-15, Exterior(2R) 9-11-8 to 14-2-12, Interior (1) 14-2-12 to 19-5-12 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Ceiling dead load (10.0 psf) on member(s). 3-4, 4-5, 5-6, 6-7, 4-6; Wall dead load (5.0psf) on member(s).3-12, 7-10
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 10-12
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

August 5,2025

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

Job	Truss	Truss Type	Qty	Ply	79 Ducks Landing - Roof	
250035-B	C01GE	GABLE	1	1	Job Reference (optional)	I75391625

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Mon Aug 04 15:12:20 Page: 1
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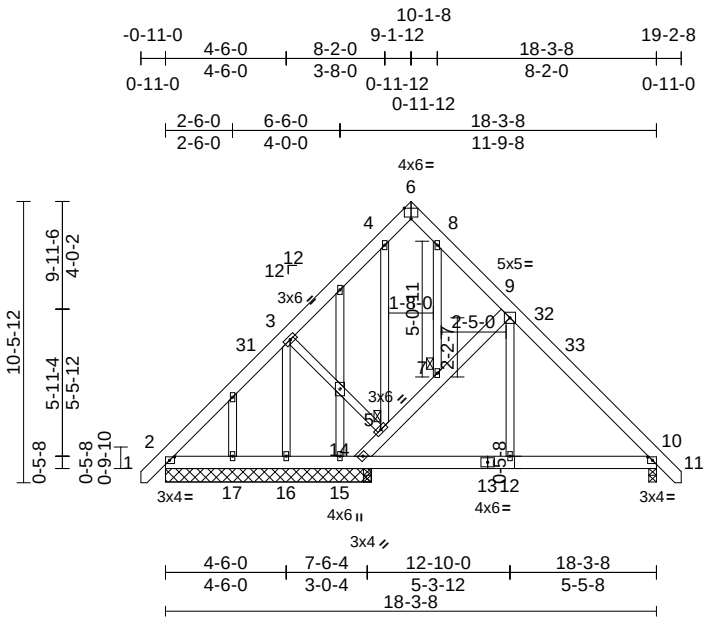

Scale = 1:85.8

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

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	0.09	Vert(LL)	0.01	12-26	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.01	12-26	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.01	10	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS							Weight: 181 lb	FT = 25%

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

BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
JOINTS 1 Brace at Jt(s): 5, 7

REACTIONS (size) 2=7-8-0, 10=0-3-8, 14=7-8-0, 15=7-8-0, 16=7-8-0, 17=7-8-0
Max Horiz 2=-298 (LC 10)
Max Uplift 2=-49 (LC 8), 10=-60 (LC 13), 14=-187 (LC 12), 15=-47 (LC 10), 16=-129 (LC 12), 17=-67 (LC 12)
Max Grav 2=252 (LC 20), 10=514 (LC 1), 14=460 (LC 1), 15=53 (LC 9), 16=320 (LC 19), 17=122 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/34, 2-3=-234/148, 3-4=-170/89, 4-6=-96/103, 6-8=-75/90, 8-9=-159/110, 9-10=-478/62, 10-11=0/34, 5-14=-438/260, 5-7=-390/266, 7-9=-359/268
BOT CHORD 2-17=-215/259, 16-17=-144/256, 15-16=-144/256, 14-15=-144/256, 12-14=-144/284, 10-12=-35/284
WEBS 3-16=-298/181, 3-5=-99/143, 9-12=0/225, 4-5=-156/70, 7-8=-50/28

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-9-10 to 3-7-3, Interior (1) 3-7-3 to 9-1-12, Exterior(2R) 9-1-12 to 13-6-9, Interior (1) 13-6-9 to 19-1-2 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 (||) MT20 unless otherwise indicated.
5) Gable studs spaced at 2-0-0 oc.
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 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 49 lb uplift at joint 2, 60 lb uplift at joint 10, 129 lb uplift at joint 16, 187 lb uplift at joint 14, 47 lb uplift at joint 15, 67 lb uplift at joint 17, 49 lb uplift at joint 2 and 187 lb uplift at joint 14.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

August 5,2025

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

Job	Truss	Truss Type	Qty	Ply	79 Ducks Landing - Roof	
250035-B	C02	COMMON	3	1	Job Reference (optional)	I75391626

Comtech, Inc, Fayetteville, NC - 28314,

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Mon Aug 04 15:12:20 Page: 1
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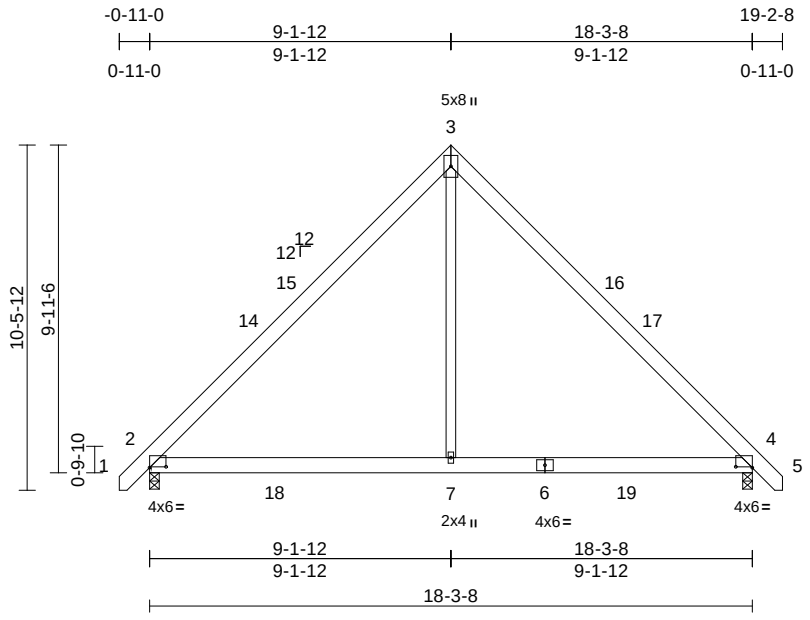

Scale = 1:69.9

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

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	0.29	Vert(LL)	-0.08	7-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.12	7-13	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS		Wind(LL)	0.06	7-10	>999	240	Weight: 124 lb	FT = 25%

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

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

REACTIONS (size) 2=0-3-8, 4=0-3-8
Max Horiz 2=-238 (LC 10)
Max Uplift 2=-34 (LC 12), 4=-34 (LC 13)
Max Grav 2=999 (LC 19), 4=999 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/34, 2-3=-994/223, 3-4=-994/223, 4-5=0/34
BOT CHORD 2-7=-250/676, 4-7=-194/676
WEBS 3-7=0/758

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-10 to 3-7-3, Interior (1) 3-7-3 to 9-1-12, Exterior(2R) 9-1-12 to 13-6-9, Interior (1) 13-6-9 to 19-1-2 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 34 lb uplift at joint 2 and 34 lb uplift at joint 4.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

August 5,2025

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

Job	Truss	Truss Type	Qty	Ply	79 Ducks Landing - Roof	
250035-B	C03-GR	FINK	1	3	Job Reference (optional)	I75391627

Comtech, Inc, Fayetteville, NC - 28314, Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Mon Aug 04 15:12:21 Page: 1
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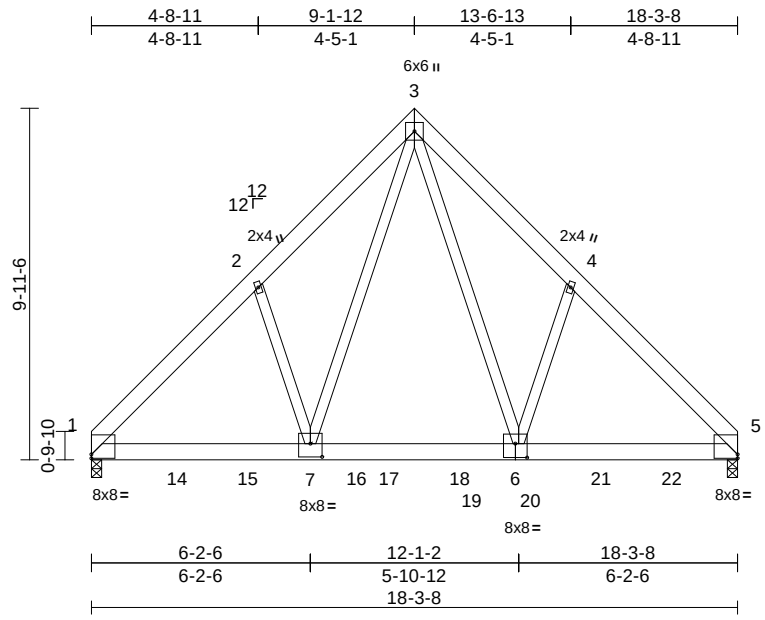

Scale = 1:65.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	-0.06	6-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.11	6-13	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.35	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS		Wind(LL)	-0.01	7-10	>999	240	Weight: 441 lb	FT = 25%

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

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

REACTIONS (size) 1=0-3-8, 5=0-3-8
Max Horiz 1=-219 (LC 6)
Max Grav 1=6753 (LC 16), 5=5844 (LC 15)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-6244/0, 2-3=-6189/0, 3-4=-6137/0, 4-5=-6199/0
BOT CHORD 1-7=0/4514, 5-7=0/4385
WEBS 2-7=-309/204, 3-7=0/4434, 3-6=0/4437, 4-6=-310/201

NOTES
1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-6-0 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 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1228 lb down at 0-5-4, 1216 lb down at 2-5-4, 1216 lb down at 4-5-4, 1216 lb down at 6-5-4, 1187 lb down at 8-5-4, 1196 lb down at 10-5-4, 1216 lb down at 12-5-4, and 1216 lb down at 14-5-4, and 1216 lb down at 16-5-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 8-11=-20, 1-3=-60, 3-5=-60
Concentrated Loads (lb)
Vert: 7=-1038 (B), 10=-1043 (B), 14=-1038 (B), 15=-1038 (B), 17=-1038 (B), 18=-1038 (B), 20=-1038 (B), 21=-1038 (B), 22=-1038 (B)

August 5,2025

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

Job	Truss	Truss Type	Qty	Ply	79 Ducks Landing - Roof	
250035-B	H01GE	COMMON SUPPORTED GAB	1	1	Job Reference (optional)	I75391628

Comtech, Inc, Fayetteville, NC - 28314, Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Mon Aug 04 15:12:21 Page: 1
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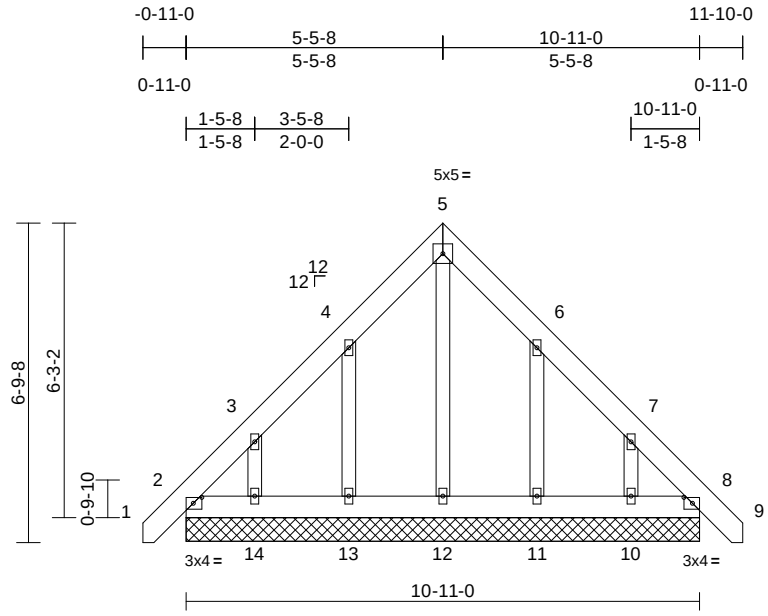

Scale = 1:49

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

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	0.04	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 90 lb	FT = 25%

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

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

REACTIONS (size) 2=10-11-0, 8=10-11-0, 10=10-11-0, 11=10-11-0, 12=10-11-0, 13=10-11-0, 14=10-11-0
Max Horiz 2=188 (LC 11)
Max Uplift 2=-55 (LC 8), 8=-27 (LC 9), 10=-150 (LC 13), 11=-131 (LC 13), 13=-135 (LC 12), 14=-152 (LC 12)
Max Grav 2=169 (LC 20), 8=147 (LC 22), 10=170 (LC 20), 11=198 (LC 20), 12=130 (LC 22), 13=201 (LC 19), 14=172 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/27, 2-3=-241/132, 3-4=-131/84, 4-5=-115/193, 5-6=-115/194, 6-7=-103/48, 7-8=-227/97, 8-9=0/27
BOT CHORD 2-14=-86/267, 13-14=-88/269, 12-13=-89/270, 11-12=-89/270, 10-11=-88/269, 8-10=-86/266
WEBS 5-12=-145/34, 4-13=-161/245, 3-14=-168/280, 6-11=-160/243, 7-10=-169/280

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-9-10 to 3-5-5, Exterior(2N) 3-5-5 to 5-5-8, Corner(3R) 5-5-8 to 9-10-5, Exterior(2N) 9-10-5 to 11-8-10 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 (||) MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 55 lb uplift at joint 2, 27 lb uplift at joint 8, 135 lb uplift at joint 13, 152 lb uplift at joint 14, 131 lb uplift at joint 11 and 150 lb uplift at joint 10.
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 8.

LOAD CASE(S) Standard

August 5,2025

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

Job	Truss	Truss Type	Qty	Ply	79 Ducks Landing - Roof
250035-B	M01GE	Monopitch Structural Gable	1	1	I75391629 Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

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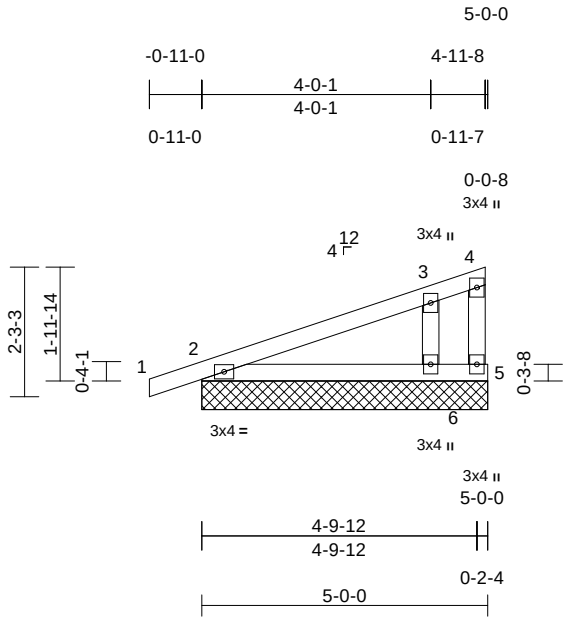

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 21 lb	FT = 25%

LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.2 *Except* 2-5:2x4 SP No.1
WEBS 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-11-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 2=5-0-0, 5=5-0-0, 6=5-0-0
Max Horiz 2=94 (LC 8)
Max Uplift 2=-79 (LC 8), 5=-66 (LC 1), 6=-89 (LC 12)
Max Grav 2=202 (LC 1), 5=9 (LC 12), 6=304 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/15, 2-3=-77/6, 3-4=-21/18, 4-5=-67/40
BOT CHORD 3-6=-206/392, 2-6=-71/45, 5-6=-8/3

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-11-0 to 3-5-13, Exterior(2N) 3-5-13 to 4-9-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 66 lb uplift at joint 5, 89 lb uplift at joint 6 and 79 lb uplift at joint 2.
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.

LOAD CASE(S) Standard

August 5,2025

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

Job	Truss	Truss Type	Qty	Ply	79 Ducks Landing - Roof	
250035-B	M02	Monopitch	5	1	Job Reference (optional)	I75391630

Comtech, Inc, Fayetteville, NC - 28314, Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Mon Aug 04 15:12:21 Page: 1
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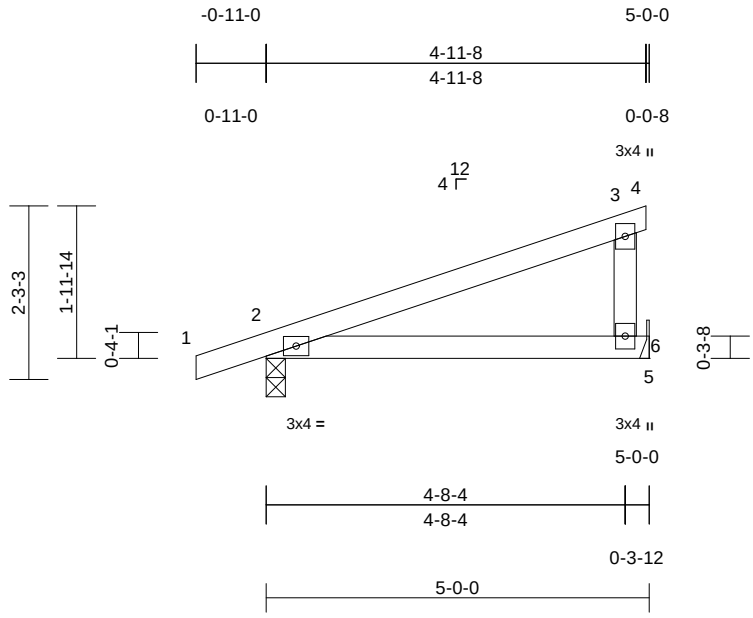

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	0.05	6-9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.04	6-9	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS							Weight: 19 lb	FT = 25%

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

BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=0-3-0, 6= Mechanical
Max Horiz 2=68 (LC 8)
Max Uplift 2=-99 (LC 8), 6=-78 (LC 8)
Max Grav 2=248 (LC 1), 6=194 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-85/56, 3-4=-2/0, 3-6=-127/180
BOT CHORD 2-6=-117/79, 5-6=0/0

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-11-0 to 3-5-13, Interior (1) 3-5-13 to 4-11-8 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 78 lb uplift at joint 6 and 99 lb uplift at joint 2.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

August 5,2025

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

Job	Truss	Truss Type	Qty	Ply	79 Ducks Landing - Roof	
250035-B	M03	Monopitch	4	1	Job Reference (optional)	I75391631

Comtech, Inc, Fayetteville, NC - 28314, Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Mon Aug 04 15:12:21 Page: 1
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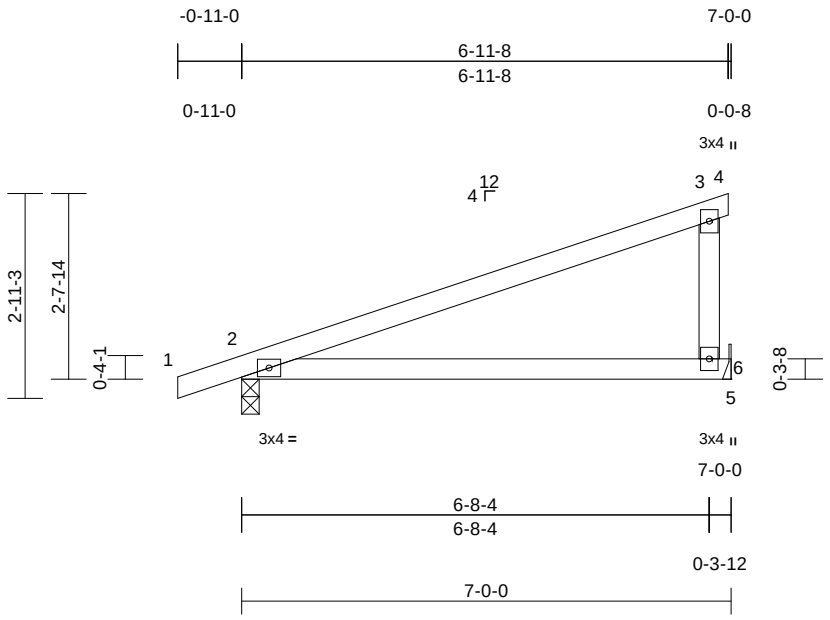

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	0.19	6-9	>421	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.17	6-9	>484	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS							Weight: 26 lb	FT = 25%

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

BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=0-3-0, 6= Mechanical
Max Horiz 2=90 (LC 8)
Max Uplift 2=-126 (LC 8), 6=-114 (LC 8)
Max Grav 2=326 (LC 1), 6=276 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-135/95, 3-4=-2/0, 3-6=-185/256
BOT CHORD 2-6=-188/121, 5-6=0/0

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-11-0 to 3-5-13, Interior (1) 3-5-13 to 6-11-8 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 114 lb uplift at joint 6 and 126 lb uplift at joint 2.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

August 5,2025

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

Job	Truss	Truss Type	Qty	Ply	79 Ducks Landing - Roof	
250035-B	M04GE	MONOPITCH	1	1	Job Reference (optional)	I75391632

Comtech, Inc, Fayetteville, NC - 28314,

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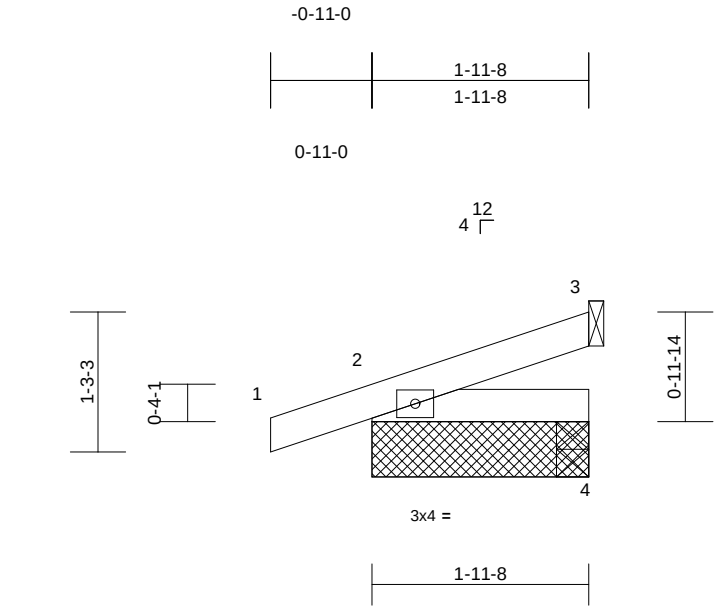

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	0.00	2-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	2-4	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 8 lb	FT = 25%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 1-11-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=1-11-8, 3=1-11-8, 4=0-3-8
Max Horiz 2=49 (LC 8)
Max Uplift 2=-75 (LC 8), 3=-33 (LC 12)
Max Grav 2=146 (LC 1), 3=46 (LC 1), 4=39 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/15, 2-3=-29/18
BOT CHORD 2-4=0/0

NOTES
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 33 lb uplift at joint 3 and 75 lb uplift at joint 2.

LOAD CASE(S) Standard

August 5,2025

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

Job	Truss	Truss Type	Qty	Ply	79 Ducks Landing - Roof	
250035-B	VB1	Valley	1	1	Job Reference (optional)	I75391633

Comtech, Inc, Fayetteville, NC - 28314, Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Mon Aug 04 15:12:21 Page: 1
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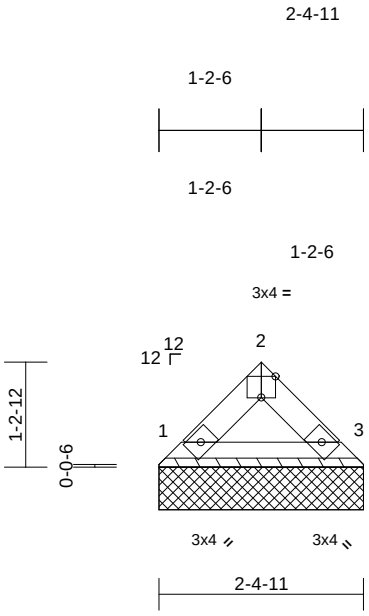

Scale = 1:27

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 7 lb	FT = 25%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-5-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=2-4-11, 3=2-4-11
Max Horiz 1=21 (LC 11)
Max Uplift 1=-2 (LC 12), 3=-2 (LC 12)
Max Grav 1=70 (LC 1), 3=70 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-52/53, 2-3=-52/62
BOT CHORD 1-3=-5/30

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

LOAD CASE(S) Standard

August 5,2025

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

Job	Truss	Truss Type	Qty	Ply	79 Ducks Landing - Roof	
250035-B	VC1	Valley	1	1	Job Reference (optional)	I75391634

Comtech, Inc, Fayetteville, NC - 28314, Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Mon Aug 04 15:12:21 Page: 1
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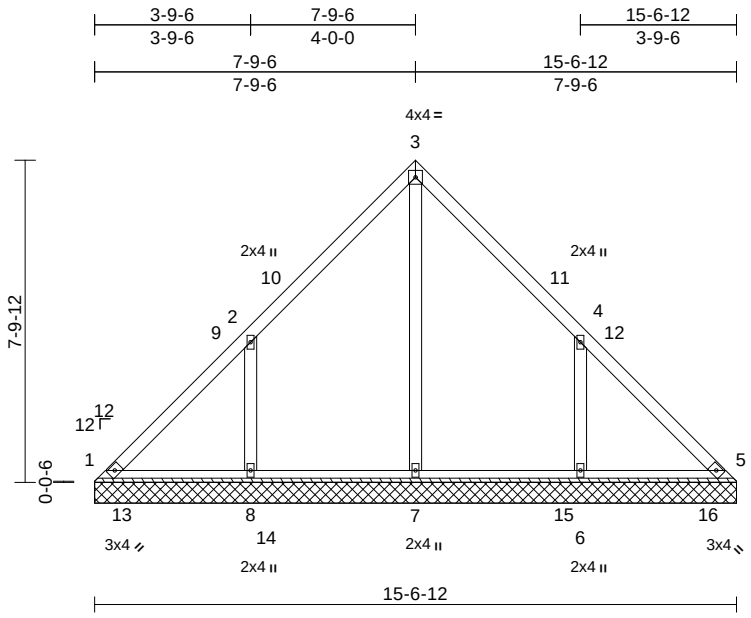

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.13	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 75 lb	FT = 25%

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

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

REACTIONS (size) 1=15-6-12, 5=15-6-12, 6=15-6-12, 7=15-6-12, 8=15-6-12
Max Horiz 1=-179 (LC 8)
Max Uplift 1=-29 (LC 8), 6=-187 (LC 13), 8=-187 (LC 12)
Max Grav 1=189 (LC 20), 5=167 (LC 19), 6=513 (LC 20), 7=408 (LC 22), 8=513 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-175/143, 2-3=-169/172, 3-4=-152/164, 4-5=-151/101
BOT CHORD 1-8=-70/156, 7-8=-70/156, 6-7=-70/156, 5-6=-70/156
WEBS 3-7=-135/0, 2-8=-317/346, 4-6=-317/346

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-4-4 to 4-9-0, Interior (1) 4-9-0 to 7-9-12, Exterior(2R) 7-9-12 to 12-2-9, Interior (1) 12-2-9 to 15-3-5 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 1, 187 lb uplift at joint 8 and 187 lb uplift at joint 6.

LOAD CASE(S) Standard

August 5,2025

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

Job	Truss	Truss Type	Qty	Ply	79 Ducks Landing - Roof	
250035-B	VC2	Valley	1	1	Job Reference (optional)	I75391635

Comtech, Inc, Fayetteville, NC - 28314, Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Mon Aug 04 15:12:21 Page: 1
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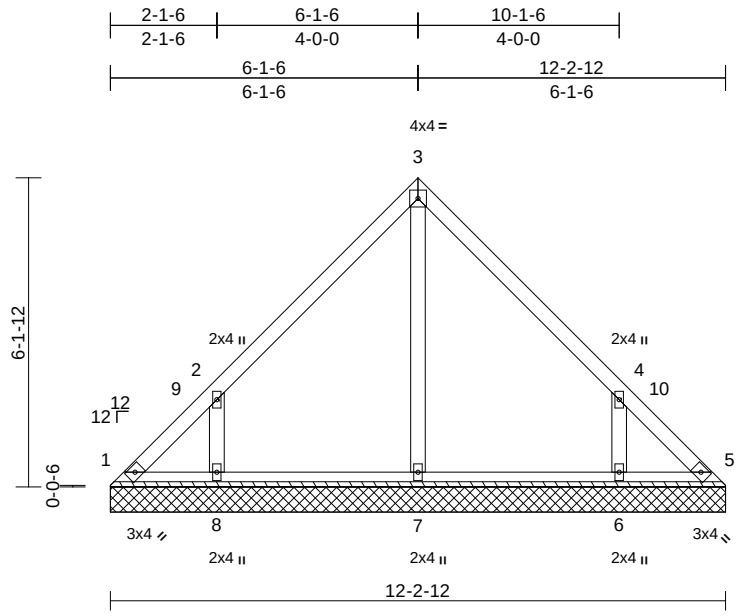

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 56 lb	FT = 25%

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

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

REACTIONS (size) 1=12-2-12, 5=12-2-12, 6=12-2-12, 7=12-2-12, 8=12-2-12
Max Horiz 1=-139 (LC 8)
Max Uplift 1=-57 (LC 10), 5=-34 (LC 11), 6=-160 (LC 13), 8=-160 (LC 12)
Max Grav 1=112 (LC 9), 5=94 (LC 19), 6=339 (LC 20), 7=224 (LC 1), 8=339 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-197/123, 2-3=-165/162, 3-4=-152/151, 4-5=-186/90
BOT CHORD 1-8=-49/131, 7-8=-49/131, 6-7=-49/131, 5-6=-49/131
WEBS 3-7=-138/0, 2-8=-297/386, 4-6=-297/386

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-4-4 to 4-9-0, Interior (1) 4-9-0 to 6-1-12, Exterior(2R) 6-1-12 to 10-6-9, Interior (1) 10-6-9 to 11-11-5 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 57 lb uplift at joint 1, 34 lb uplift at joint 5, 160 lb uplift at joint 8 and 160 lb uplift at joint 6.

LOAD CASE(S) Standard

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

August 5,2025

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

Job	Truss	Truss Type	Qty	Ply	79 Ducks Landing - Roof	I75391636
250035-B	VC3	Valley	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

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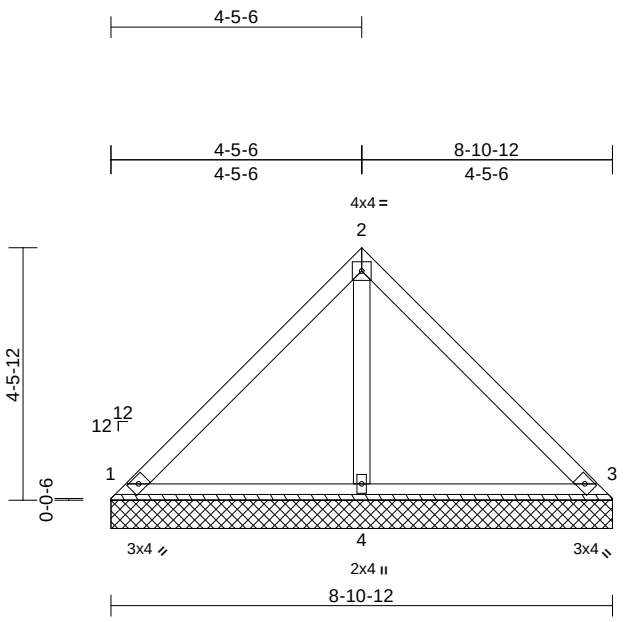

Scale = 1:40.9

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	0.40	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 36 lb	FT = 25%

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

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

REACTIONS (size) 1=8-10-12, 3=8-10-12, 4=8-10-12
Max Horiz 1=-99 (LC 8)
Max Uplift 1=-36 (LC 13), 3=-36 (LC 13)
Max Grav 1=201 (LC 1), 3=201 (LC 1), 4=258 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-151/92, 2-3=-136/117
BOT CHORD 1-4=-28/68, 3-4=-28/68
WEBS 2-4=-155/103

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 1 and 36 lb uplift at joint 3.

LOAD CASE(S) Standard

August 5,2025

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

Job	Truss	Truss Type	Qty	Ply	79 Ducks Landing - Roof
250035-B	VC4	Valley	1	1	I75391637
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Mon Aug 04 15:12:21 Page: 1
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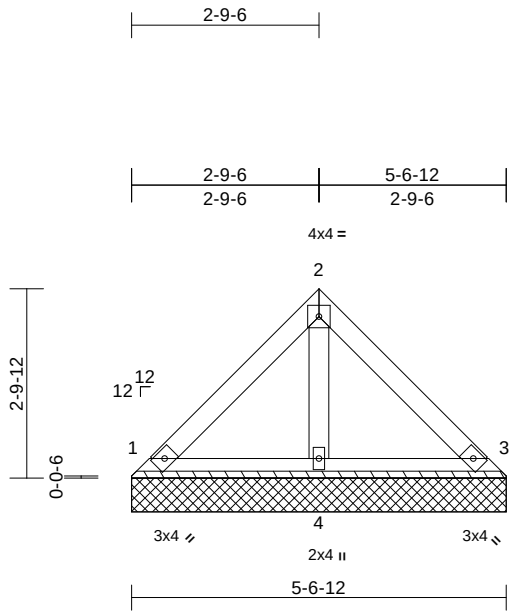

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.01	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 22 lb	FT = 25%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-7-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=5-6-12, 3=5-6-12, 4=5-6-12
Max Horiz 1=-59 (LC 8)
Max Uplift 1=-21 (LC 13), 3=-21 (LC 13)
Max Grav 1=120 (LC 1), 3=120 (LC 1), 4=154 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-90/69, 2-3=-81/87
BOT CHORD 1-4=-17/47, 3-4=-17/47
WEBS 2-4=-92/82

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 21 lb uplift at joint 1 and 21 lb uplift at joint 3.

LOAD CASE(S) Standard

August 5,2025

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

Job	Truss	Truss Type	Qty	Ply	79 Ducks Landing - Roof	
250035-B	VC5	Valley	1	1	Job Reference (optional)	I75391638

Comtech, Inc, Fayetteville, NC - 28314, Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Mon Aug 04 15:12:21 Page: 1
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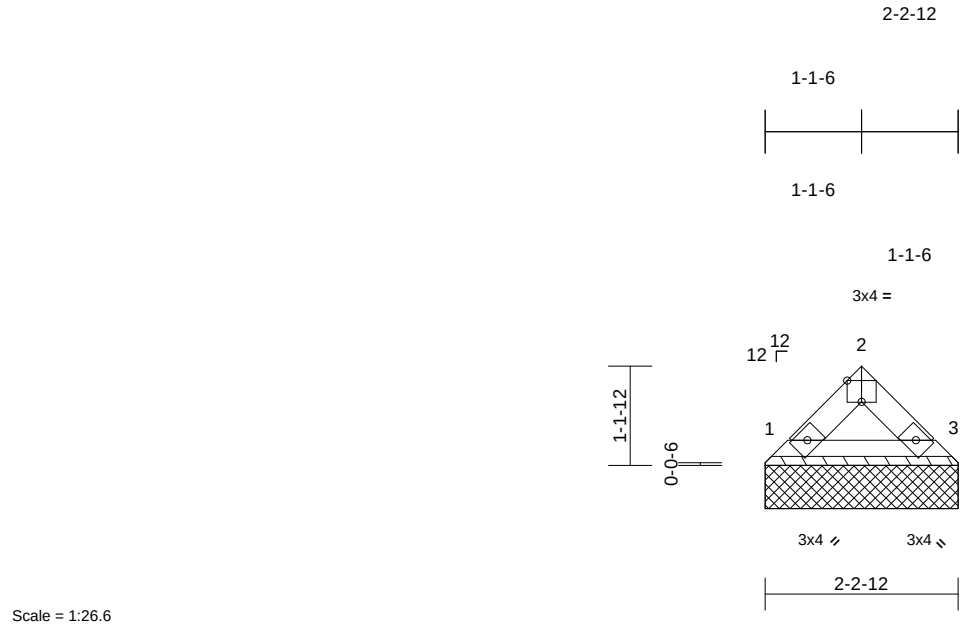


Scale = 1:26.6

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 7 lb	FT = 25%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-3-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=2-2-12, 3=2-2-12
Max Horiz 1=-19 (LC 10)
Max Uplift 1=-2 (LC 12), 3=-2 (LC 13)
Max Grav 1=64 (LC 1), 3=64 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-47/49, 2-3=-47/56
BOT CHORD 1-3=-5/27

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

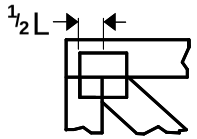
LOAD CASE(S) Standard

August 5,2025

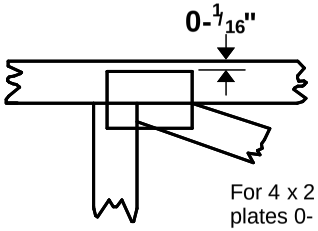
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

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.

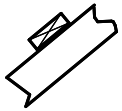
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

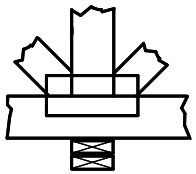
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

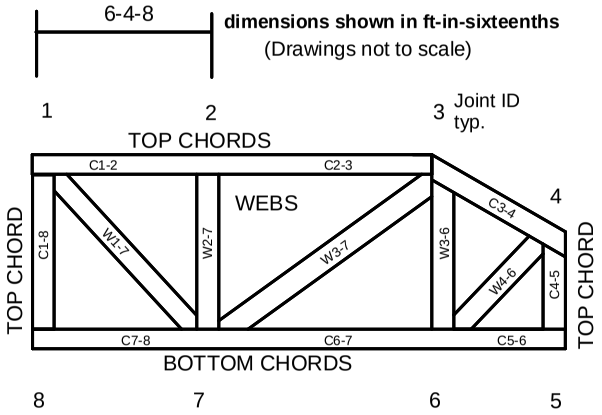


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

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®

ENGINEERING BY TRENCO
A MiTek Affiliate

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.