ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 3465255
KEVIN MCCUE

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

Pages or sheets covered by this seal: I57779369 thru I57779397

My license renewal date for the state of North Carolina is December 31, 2023.

North Carolina COA: C-0844

April 14,2023

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	KEVIN MCCUE
3465255	A1	Piggyback Base	4	1	I57779369
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

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Page: 1

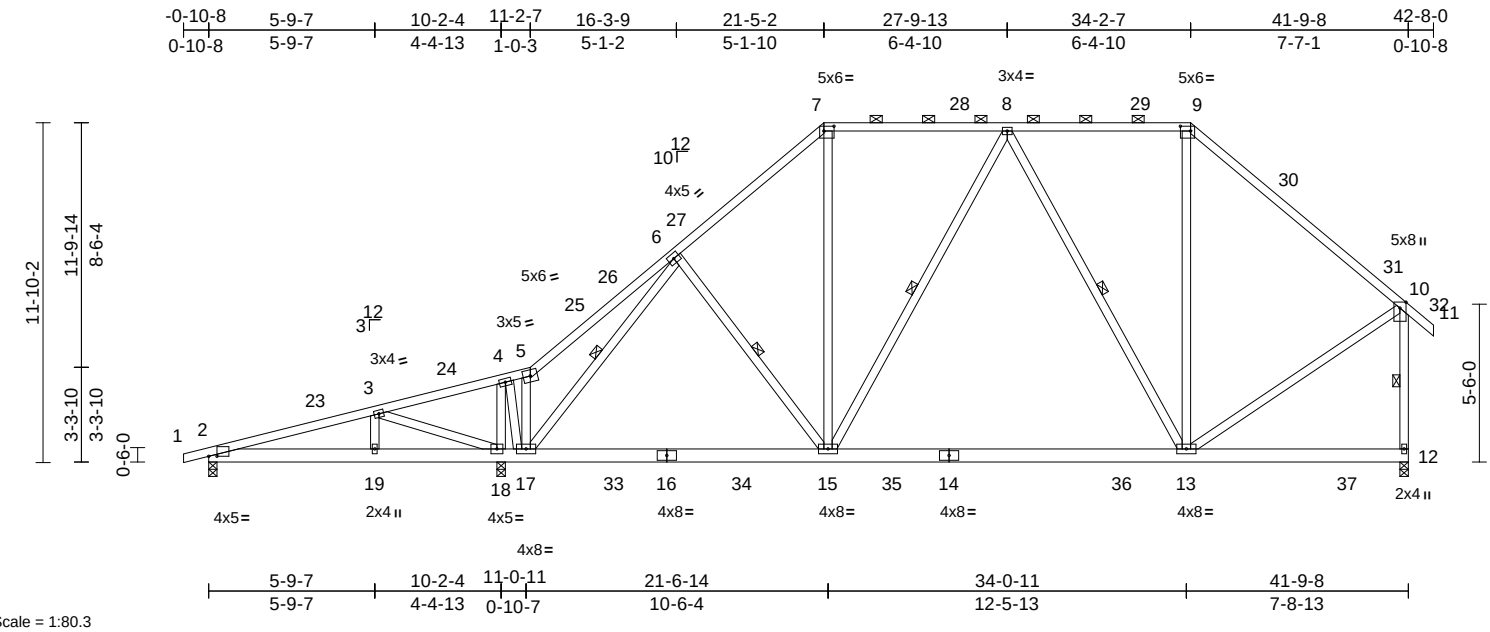

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Plate Offsets (X, Y): [2:0-3-7,0-0-1], [7:0-4-4,0-2-0], [9:0-4-4,0-2-0]

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	0.92	Vert(LL)	-0.25	13-15	>999	240	MT20	244/190
Snow (Pf)	15.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.39	13-15	>964	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.02	12	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 307 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 12-10:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 17-18.
WEBS 1 Row at midpt 6-17, 6-15, 10-12, 8-15, 8-13

REACTIONS (size) 2=0-3-8, 12=0-3-8, 18=0-3-8
Max Horiz 2=230 (LC 12)
Max Uplift 2=-62 (LC 8), 18=-55 (LC 12)
Max Grav 2=394 (LC 54), 12=1349 (LC 3), 18=1759 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-530/90, 3-4=-107/201, 4-5=-317/0, 5-6=-430/42, 6-7=-1214/59, 7-8=-865/89, 8-9=-694/99, 9-10=-1024/41, 10-11=0/44, 10-12=-1274/1
BOT CHORD 2-19=-145/484, 18-19=-145/484, 17-18=-162/85, 15-17=-80/891, 13-15=-47/896, 12-13=-24/53
WEBS 5-17=-287/45, 6-17=-1016/43, 6-15=-146/198, 7-15=0/464, 9-13=0/316, 10-13=0/810, 8-15=-204/203, 8-13=-470/137, 3-19=0/189, 3-18=-684/87, 4-18=-1462/0, 4-17=0/1229

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=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber 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 2.00 times flat roof load of 10.0 psf on overhangs non-concurrent with other live loads.
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 1-00-00 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 62 lb uplift at joint 2 and 55 lb uplift at joint 18.
10) 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.
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

April 14,2023

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

Job	Truss	Truss Type	Qty	Ply	KEVIN MCCUE
3465255	A1A	Piggyback Base	9	1	I57779370 Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Apr 14 07:42:25 ID:eZgXa1caAR66yVRq1MUhT7zVkfH-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

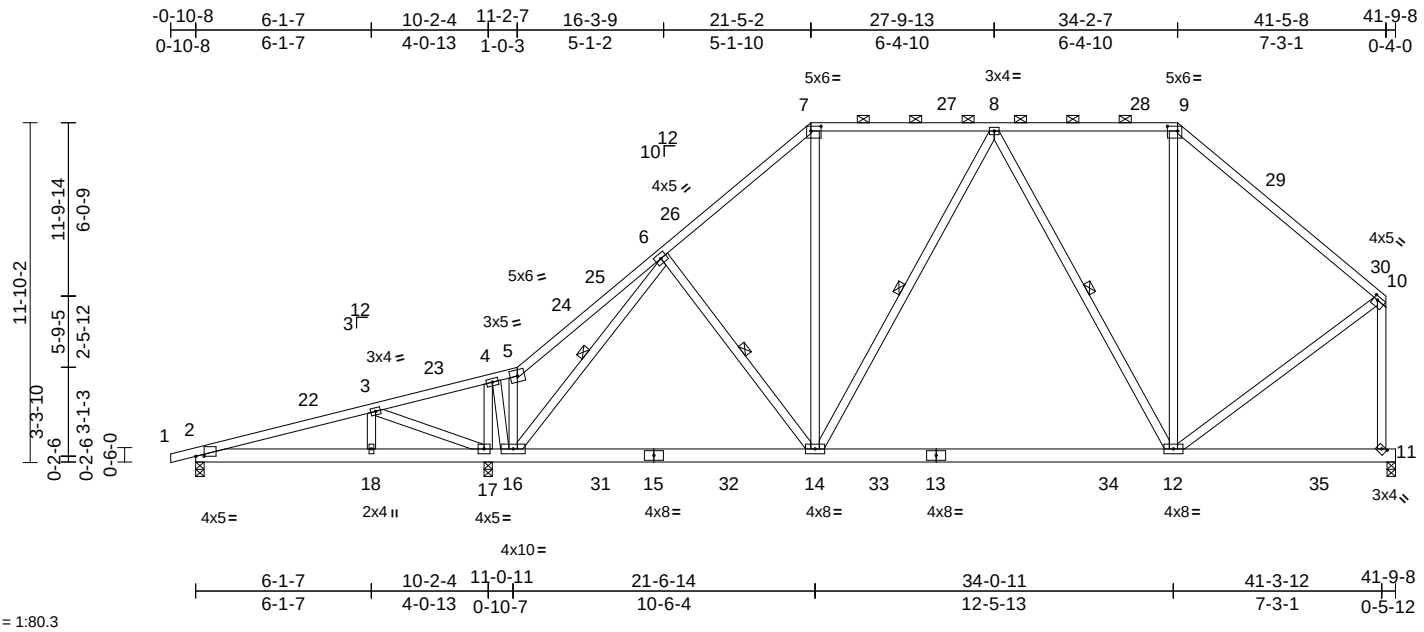

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Plate Offsets (X, Y): [2:0-3-7,0-0-1], [7:0-4-4,0-2-0], [9:0-4-4,0-2-0], [10:0-1-12,0-1-8], [11:0-2-0,0-1-4]

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	0.89	Vert(LL)	-0.25	12-14	>999	240	MT20	244/190
Snow (Pf)	15.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.39	12-14	>962	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.02	11	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 305 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 11-10:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 16-17.
WEBS 1 Row at midpt 6-16, 6-14, 8-14, 8-12

REACTIONS (size) 2=0-3-8, 11=0-3-8, 17=0-3-8
Max Horiz 2=246 (LC 12)
Max Uplift 2=-61 (LC 8), 17=-55 (LC 12)
Max Grav 2=397 (LC 54), 11=1293 (LC 3), 17=1744 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-511/85, 3-4=-110/194, 4-5=-321/0, 5-6=-431/30, 6-7=-1200/56, 7-8=-855/86, 8-9=-670/90, 9-10=-982/29, 10-11=-1222/0
BOT CHORD 2-18=-153/463, 17-18=-153/463, 16-17=-156/75, 14-16=-87/876, 12-14=-53/879, 11-12=-16/34
WEBS 3-18=0/198, 3-17=-671/87, 5-16=-292/51, 6-16=-994/45, 6-14=-150/194, 7-14=0/456, 9-12=0/299, 10-12=0/815, 8-14=-190/213, 8-12=-484/137, 4-17=-1441/0, 4-16=0/1242

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=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber 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 2.00 times flat roof load of 10.0 psf on overhangs non-concurrent with other live loads.
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 1-00-00 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 61 lb uplift at joint 2 and 55 lb uplift at joint 17.
10) 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.
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

April 14,2023

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

Job	Truss	Truss Type	Qty	Ply	KEVIN MCCUE
3465255	A1B	Piggyback Base	4	1	I57779371 Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

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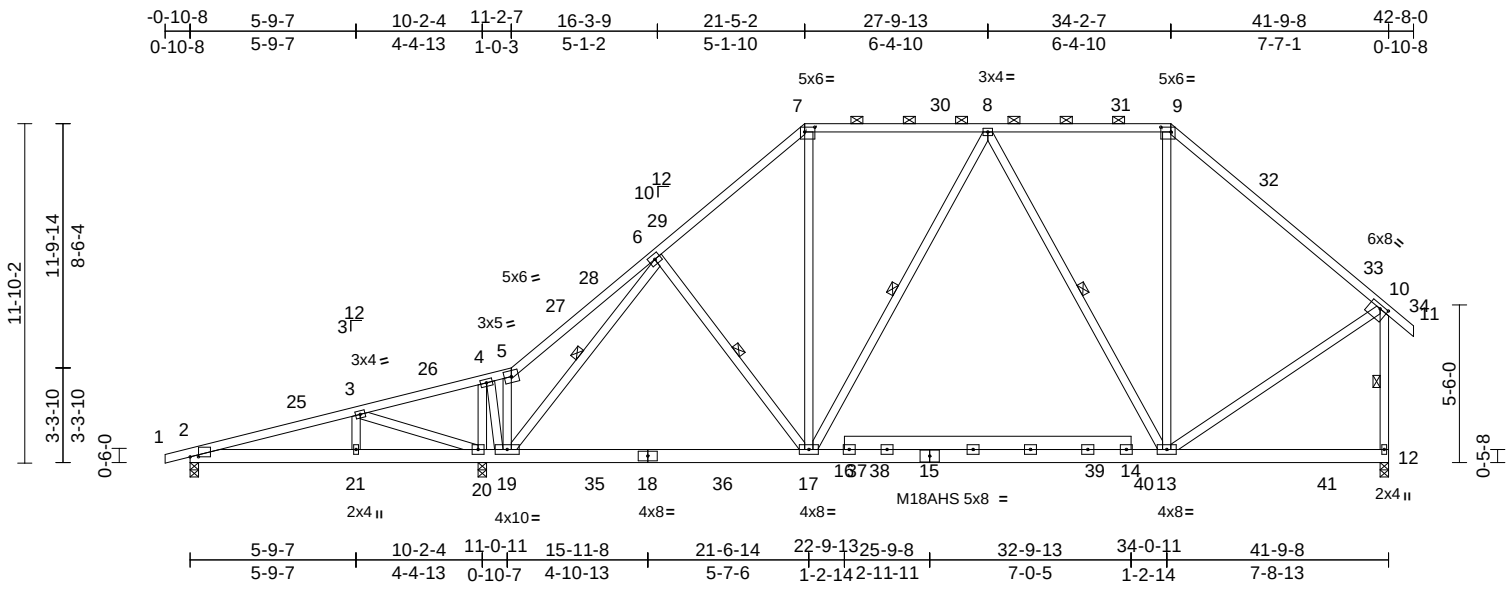

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Plate Offsets (X, Y): [2:0-3-7,0-0-1], [7:0-4-4,0-2-0], [9:0-4-4,0-2-0], [10:0-3-4,0-1-8]

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	0.67	Vert(LL)	-0.09	13-17	>999	240	MT20	244/190
Snow (Pf)	15.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.23	13-17	>999	180	M18AHS	186/179
TCDL	10.0	Rep Stress Incr	NO	WB	0.51	Horz(CT)	0.03	12	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 330 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.1 *Except* 9-11:2x4 SP 2400F 2.0E
BOT CHORD 2x6 SP DSS *Except* 16-14:2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 12-10:2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-2-12 oc purlins, except end verticals, and 2-0-0 oc purlins (5-9-13 max.): 7-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 19-20.
WEBS 1 Row at midpt 6-19, 6-17, 10-12, 8-17, 8-13

REACTIONS (size) 2=0-3-8, 12=0-3-8, 20=0-3-8
Max Horiz 2=230 (LC 12)
Max Uplift 2=-61 (LC 8)
Max Grav 2=402 (LC 2), 12=1515 (LC 3), 20=1874 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-546/90, 3-4=-104/160, 4-5=-350/0, 5-6=-475/5, 6-7=-1372/0, 7-8=-988/0, 8-9=-801/0, 9-10=-1161/0, 10-11=0/44, 10-12=-1435/0
BOT CHORD 2-21=-155/500, 20-21=-155/500, 19-20=-137/97, 17-19=0/997, 13-17=0/1011, 12-13=-23/48
WEBS 3-21=0/171, 3-20=-643/97, 5-19=-310/33, 6-19=-1129/0, 6-17=-120/226, 7-17=0/565, 9-13=0/404, 10-13=0/939, 8-17=-187/219, 8-13=-485/125, 4-20=-1473/0, 4-19=0/1239

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=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber 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 2.00 times flat roof load of 10.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) All plates are 4x5 MT20 unless otherwise indicated.
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 1-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 61 lb uplift at joint 2.
12) 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.
13) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
15) 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=-40, 5-7=-40, 7-9=-50, 9-10=-40, 10-11=-40, 22-37=-20, 37-40=-50 (F=-30), 12-40=-20

April 14,2023

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	KEVIN MCCUE
3465255	A1E	Piggyback Base	1	1	I57779372 Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

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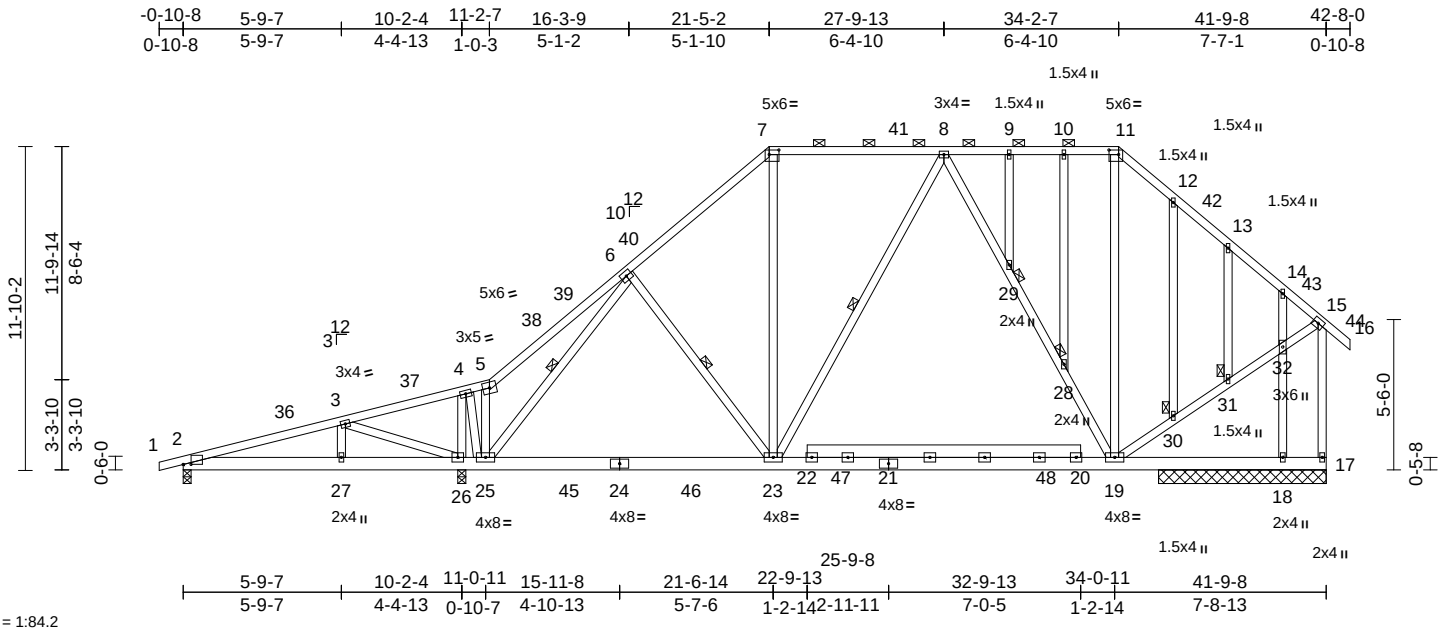

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Plate Offsets (X, Y): [2:0-3-7,0-0-1], [7:0-4-4,0-2-0], [11:0-4-4,0-2-0]

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)	-0.09	19-23	>999	240	MT20	244/190
Snow (Pf)	15.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.15	19-23	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.02	18	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 377 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1 *Except* 11-16:2x4 SP 2400F 2.0E
BOT CHORD 2x6 SP DSS *Except* 22-20:2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 17-15:2x4 SP No.2
OTHERS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-8-3 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-11.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 6-23, 8-23, 6-25
JOINTS 1 Brace at Jt(s): 28, 29, 30, 31

REACTIONS (size) 2=0-3-8, 17=6-1-8, 18=6-1-8, 26=0-3-8
Max Horiz 2=230 (LC 12)
Max Uplift 2=-61 (LC 8), 17=-45 (LC 9), 18=-175 (LC 13), 26=-50 (LC 12)
Max Grav 2=401 (LC 54), 17=899 (LC 44), 18=673 (LC 37), 26=1726 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-544/89, 3-4=-98/170, 4-5=-318/0, 5-6=-431/31, 6-7=-1165/62, 7-8=-828/90, 8-9=-633/84, 9-10=-633/84, 10-11=-633/84, 11-12=-794/55, 12-13=-853/23, 13-14=-887/1, 14-15=-798/35, 15-16=0/44, 15-17=-899/39
BOT CHORD 2-27=-154/497, 26-27=-154/497, 25-26=-148/89, 23-25=-91/867, 19-23=-67/853, 18-19=-4/0, 17-18=-4/0
WEBS 3-27=0/176, 4-26=-1405/0, 5-25=-290/48, 7-23=0/437, 6-23=-163/187, 11-19=0/281, 8-23=-176/233, 8-29=-487/121, 28-29=-471/115, 19-28=-506/128, 3-26=-651/90, 4-25=0/1172, 19-30=-12/783, 30-31=-3/763, 31-32=0/787, 15-32=-14/746, 6-25=-957/39, 10-28=-40/20, 9-29=-7/18, 12-30=-19/46, 13-31=-84/40, 14-32=-363/153, 18-32=-543/221

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=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber 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 2.00 times flat roof load of 10.0 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are 4x5 MT20 unless otherwise indicated.
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 1-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 45 lb uplift at joint 17, 61 lb uplift at joint 2, 50 lb uplift at joint 26 and 175 lb uplift at joint 18.
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

April 14,2023

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	KEVIN MCCUE
3465255	A1G	Piggyback Base Girder	1	1	I57779373 Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Apr 14 07:42:30
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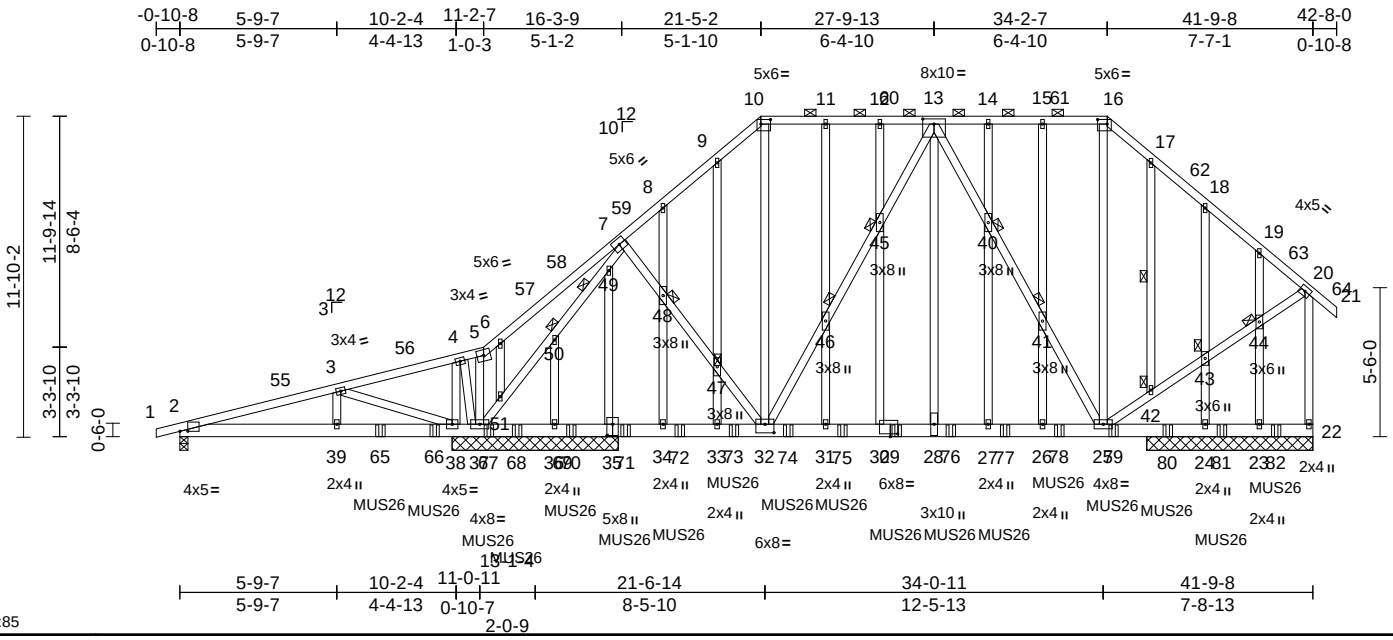

Scale = 1:85

Plate Offsets (X, Y): [2:0-3-7,0-0-1], [10:0-4-4,0-2-0], [13:0-5-0,0-2-4], [16:0-4-4,0-2-0], [29:0-3-4,0-1-4], [32:0-4-0,0-3-12], [35:0-5-0,0-2-8]

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	0.75	Vert(LL)	-0.07	26-27	>999	240	MT20	244/190
Snow (Pf)	15.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.13	26-27	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.83	Horz(CT)	0.03	24	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 466 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 22-20:2x4 SP No.2
OTHERS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-3-2 oc purlins, except end verticals, and 2-0-0 oc purlins (5-9-6 max.): 10-16.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 37-38,24-25,23-24,22-23.
WEBS 1 Row at midpt 7-50, 17-42
JOINTS 1 Brace at Jt(s): 40, 41, 42, 43, 44, 45, 46, 47, 48, 50

REACTIONS (size) 2=0-3-8, 22=6-1-8, 23=6-1-8, 24=6-1-8, 35=6-1-8, 36=6-1-8, 37=6-1-8, 38=6-1-8
Max Horiz 2=230 (LC 60)
Max Uplift 2=-64 (LC 8), 22=-192 (LC 9), 23=-67 (LC 13), 24=-200 (LC 13), 35=-255 (LC 12), 36=-44 (LC 8), 37=-199 (LC 12), 38=-193 (LC 8)
Max Grav 2=454 (LC 54), 22=1702 (LC 2), 23=429 (LC 55), 24=1080 (LC 2), 35=1964 (LC 2), 36=451 (LC 55), 37=976 (LC 2), 38=1821 (LC 54)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/13, 2-3=-828/105, 3-4=-166/430, 4-5=-151/331, 5-6=-157/421, 6-7=-113/518, 7-8=-1358/168, 8-9=-1354/194, 9-10=-1287/230, 10-11=-1003/200, 11-12=-1003/200, 12-13=-1003/200, 13-14=-987/197, 14-15=-987/197, 15-16=-987/197, 16-17=-1270/221, 17-18=-1357/189, 18-19=-1296/188, 19-20=-1307/190, 20-21=0/44, 20-22=-1569/188
BOT CHORD 2-39=-148/771, 38-39=-148/771, 37-38=-371/106, 36-37=-127/429, 34-36=-127/429, 33-34=-123/406, 32-33=-123/406, 31-32=-205/1315, 30-31=-205/1315, 28-30=-205/1315, 27-28=-205/1315, 26-27=-205/1315, 25-26=-205/1315, 24-25=-3/1, 23-24=-3/1, 22-23=-3/1
WEBS 5-37=-45/198, 10-32=-114/584, 16-25=-95/607, 7-48=-126/971, 47-48=-130/1018, 32-47=-135/1016, 32-46=-698/153, 45-46=-694/151, 13-45=-704/154, 13-40=-716/143, 40-41=-703/140, 25-41=-712/142, 3-39=0/415, 4-38=-407/73, 3-38=-1226/148, 4-37=0/178, 25-42=-174/1217, 42-43=-161/1208, 43-44=-166/1172, 20-44=-162/1175, 37-51=-1273/164, 50-51=-1186/116, 49-50=-1169/129, 7-49=-2208/249, 13-28=-103/821, 14-40=0/83, 27-40=-16/74, 15-41=-124/53, 26-41=-111/54, 17-42=-23/58, 18-43=-262/114, 24-43=-337/139, 19-44=-128/60, 23-44=-115/49, 12-45=0/84, 30-45=-10/82, 11-46=-128/53, 31-46=-121/51, 9-47=-74/89, 33-47=-62/80, 8-48=-104/35, 34-48=-153/39, 35-49=-1187/142, 36-50=-14/50, 6-51=-113/61

NOTES

April 14,2023

Continued on page 2

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

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=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber 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 2.00 times flat roof load of 10.0 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are 1.5x4 MT20 unless otherwise indicated.
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 1-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 199 lb uplift at joint 37, 192 lb uplift at joint 22, 64 lb uplift at joint 2, 193 lb uplift at joint 38, 200 lb uplift at joint 24, 67 lb uplift at joint 23, 255 lb uplift at joint 35 and 44 lb uplift at joint 36.
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.
15) Use Simpson Strong-Tie MUS26 (6-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 7-4-12 from the left end to 40-5-4 to connect truss(es) to front face of bottom chord.
16) WARNING: The following hangers are manually applied but fail due to geometric considerations: MUS26 on front face at 7-4-12 from the left end, MUS26 on front face at 9-4-12 from the left end, MUS26 on front face at 11-4-12 from the left end, MUS26 on front face at 12-5-4 from the left end, MUS26 on front face at 14-5-4 from the left end, MUS26 on front face at 16-5-4 from the left end, MUS26 on front face at 18-5-4 from the left end, MUS26 on front face at 20-5-4 from the left end, MUS26 on front face at 22-5-4 from the left end, MUS26 on front face at 24-5-4 from the left end, MUS26 on front face at 26-5-4 from the left end, MUS26 on front face at 28-5-4 from the left end, MUS26 on front face at 30-5-4 from the left end, MUS26 on front face at 32-5-4 from the left end, MUS26 on front face at 34-5-4 from the left end, MUS26 on front face at 36-5-4 from the left end, MUS26 on front face at 38-5-4 from the left end, MUS26 on front face at 40-5-4 from the left end.
17) 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=-40, 5-10=-40, 10-16=-50, 16-20=-40, 20-21=-40, 22-52=-20
   Concentrated Loads (lb)
   Vert: 29=-167 (F), 65=-353 (F), 66=-375 (F), 67=-346 (F), 68=-346 (F), 70=-346 (F), 71=-167 (F), 72=-167 (F), 73=-167 (F), 74=-167 (F), 75=-167 (F), 76=-167 (F), 77=-167 (F), 78=-167 (F), 79=-167 (F), 80=-346 (F), 81=-375 (F), 82=-353 (F)

Job	Truss	Truss Type	Qty	Ply	KEVIN MCCUE
3465255	B1E	Piggyback Base	5	1	I57779374 Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Apr 14 07:42:33 Page: 1
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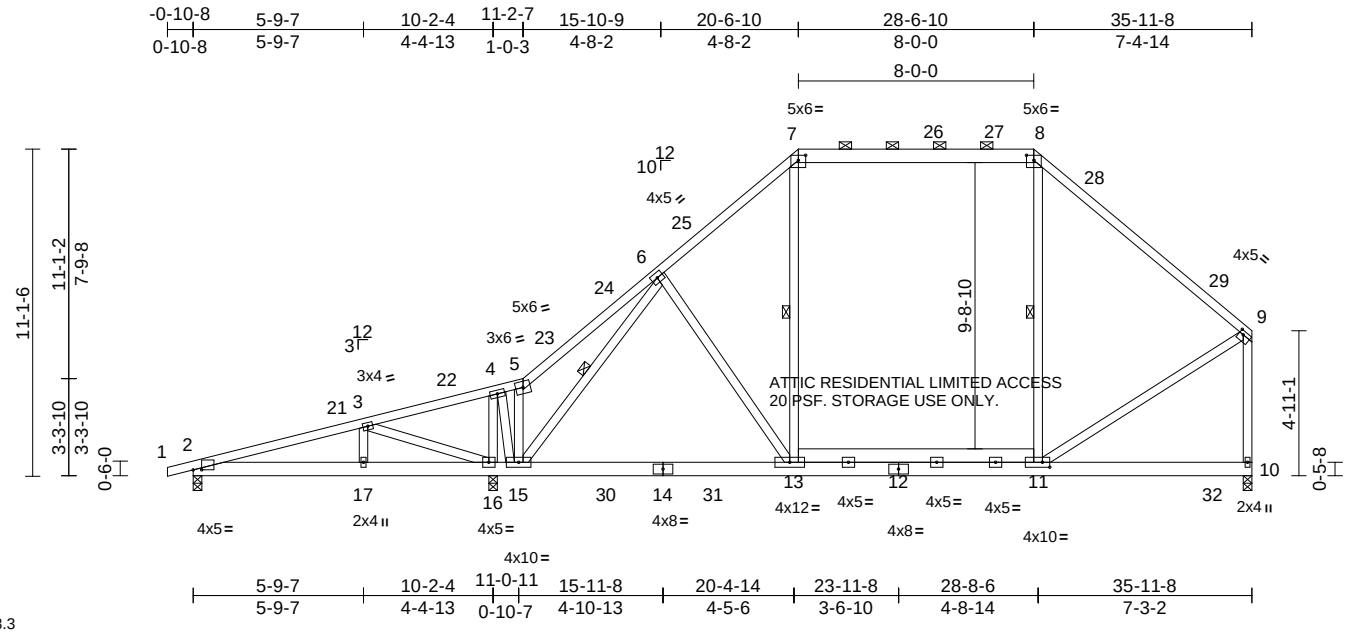

Scale = 1:78.3

Plate Offsets (X, Y): [2:0-3-7,0-0-1], [7:0-3-0,0-2-1], [8:0-3-0,0-2-1], [9:0-1-12,0-1-8], [11:0-3-0,0-2-0]

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	0.82	Vert(LL)	-0.16	13-15	>999	240	MT20	244/190
Snow (Pf)	15.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.25	13-15	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.59	Horz(CT)	0.01	10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 264 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1 *Except* 7-8:2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 10-9:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-8.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 6-15, 7-13, 8-11

REACTIONS (size) 2=0-3-8, 10=0-3-8, 16=0-3-8
Max Horiz 2=221 (LC 12)
Max Uplift 2=-157 (LC 8), 10=-3 (LC 13), 16=-119 (LC 12)
Max Grav 2=289 (LC 2), 10=1020 (LC 45), 16=1787 (LC 56)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-357/686, 3-4=-316/1001, 4-5=-296/511, 5-6=-351/714, 6-7=-796/119, 7-8=-544/110, 8-9=-816/50, 9-10=-971/18
BOT CHORD 2-17=-578/275, 16-17=-578/275, 15-16=-845/138, 13-15=-21/484, 11-13=0/544, 10-11=-21/40
WEBS 5-15=-118/202, 6-15=-1470/211, 6-13=-33/266, 7-13=-40/309, 8-11=-107/156, 9-11=0/624, 3-17=0/203, 3-16=-745/96, 4-16=-1650/75, 4-15=-28/1500

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=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber 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 2.00 times flat roof load of 10.0 psf on overhangs non-concurrent with other live loads.
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 1-00-00 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 157 lb uplift at joint 2, 3 lb uplift at joint 10 and 119 lb uplift at joint 16.
10) 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.
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

April 14,2023

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

Job	Truss	Truss Type	Qty	Ply	KEVIN MCCUE
3465255	CJ1	Jack-Open	2	1	I57779375 Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Apr 14 07:42:34 Page: 1
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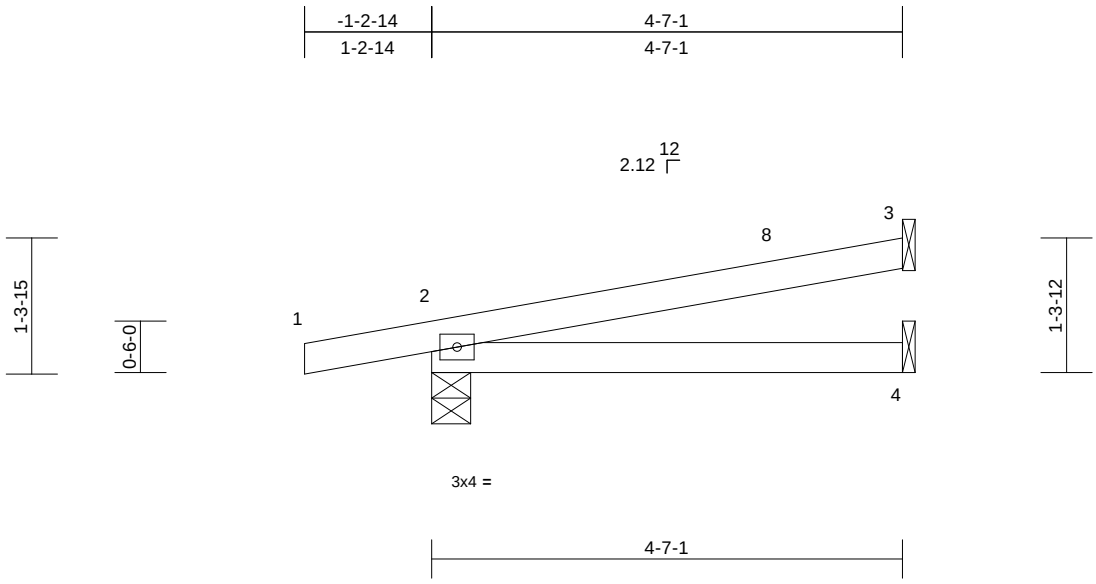

Scale = 1:22.5

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	0.21	Vert(LL)	-0.01	4-7	>999	240	MT20	244/190
Snow (Pf)	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.03	4-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 16 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-7-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-4-9, 3= Mechanical, 4= Mechanical
Max Horiz 2=33 (LC 8)
Max Uplift 2=-50 (LC 8), 3=-31 (LC 12)
Max Grav 2=265 (LC 2), 3=116 (LC 2), 4=82 (LC 7)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-53/51
BOT CHORD 2-4=-36/25

NOTES
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber 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 2.00 times flat roof load of 10.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 1-00-00 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 3 and 50 lb uplift at joint 2.
9) 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

April 14,2023

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

Job	Truss	Truss Type	Qty	Ply	KEVIN MCCUE
3465255	E1	Common	1	1	I57779376 Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

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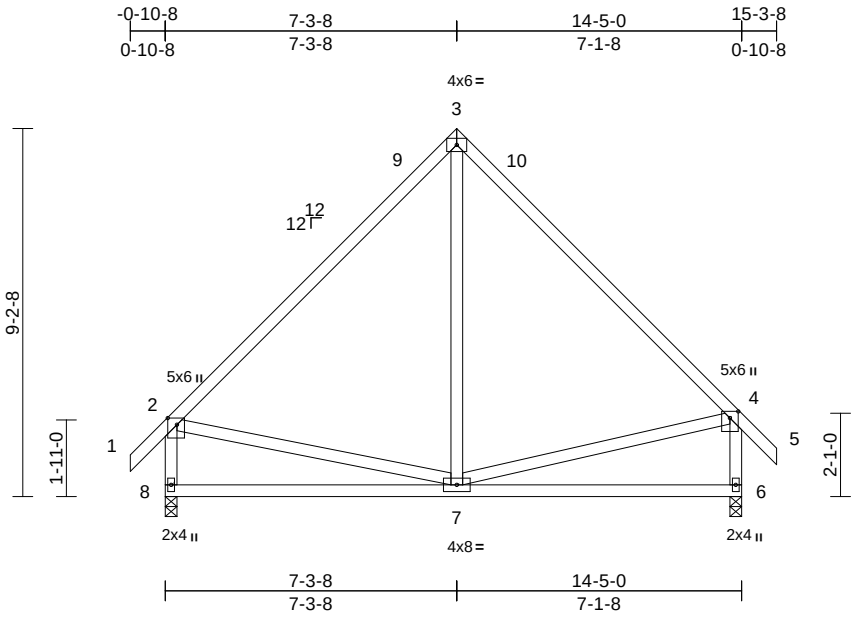

Scale = 1:57.6

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

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	0.52	Vert(LL)	-0.05	7-8	>999	240	MT20	244/190
Snow (Pf)	10.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.10	7-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 94 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3 *Except* 8-2,6-4:2x4 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) 6=0-3-8, 8=0-3-8
Max Horiz 8=-157 (LC 10)
Max Uplift 6=-12 (LC 12), 8=-10 (LC 13)
Max Grav 6=626 (LC 2), 8=626 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/43, 2-3=-514/90, 3-4=-509/90, 4-5=0/43, 2-8=-562/46, 4-6=-564/46
BOT CHORD 7-8=-207/290, 6-7=-83/145
WEBS 3-7=0/263, 2-7=-70/242, 4-7=-50/226

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=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber 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 2.00 times flat roof load of 10.0 psf on overhangs non-concurrent with other live loads.
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 1-00-00 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 10 lb uplift at joint 8 and 12 lb uplift at joint 6.
9) 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

April 14,2023

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

Job	Truss	Truss Type	Qty	Ply	KEVIN MCCUE
3465255	E1E	Common Supported Gable	1	1	I57779377 Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

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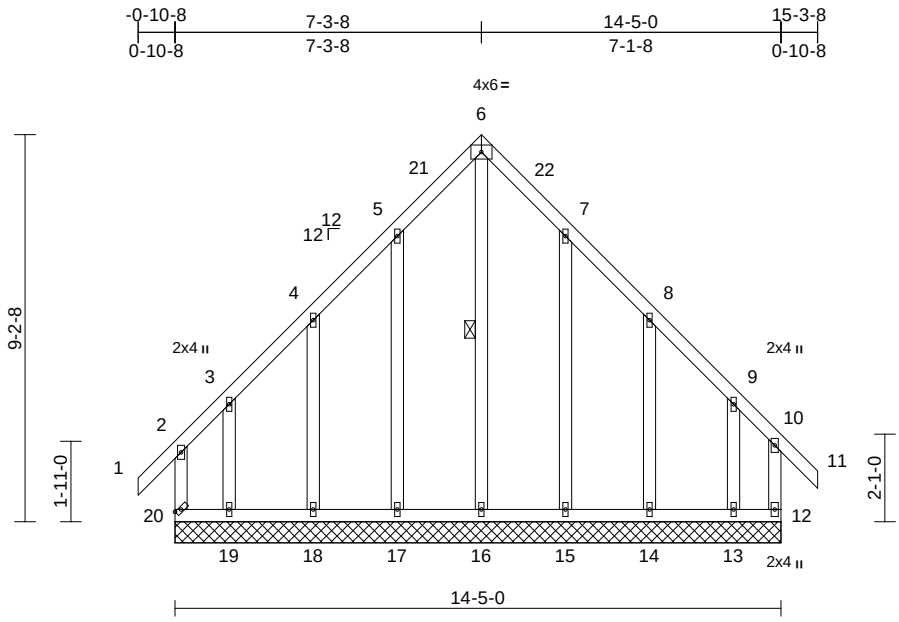

Scale = 1:54.8

Plate Offsets (X, Y): [20:0-1-12,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	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	12	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 115 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.1
BOT CHORD	2x4 SP No.1
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.3

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 6-16

REACTIONS (size) 12=14-5-0, 13=14-5-0, 14=14-5-0, 15=14-5-0, 16=14-5-0, 17=14-5-0, 18=14-5-0, 19=14-5-0, 20=14-5-0
Max Horiz 20=-157 (LC 10)
Max Uplift 12=-185 (LC 9), 13=-181 (LC 13), 14=-70 (LC 13), 15=-66 (LC 13), 17=-68 (LC 12), 18=-66 (LC 12), 19=-188 (LC 12), 20=-192 (LC 8)
Max Grav 12=228 (LC 26), 13=250 (LC 11), 14=198 (LC 27), 15=246 (LC 27), 16=318 (LC 29), 17=248 (LC 26), 18=194 (LC 26), 19=257 (LC 10), 20=242 (LC 27)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	2-20=-176/133, 1-2=0/43, 2-3=-155/163, 3-4=-87/131, 4-5=-74/187, 5-6=-57/226, 6-7=-45/212, 7-8=-58/172, 8-9=-68/118, 9-10=-132/144, 10-11=0/43, 10-12=-162/122
BOT CHORD	19-20=-70/70, 18-19=-70/70, 17-18=-70/70, 16-17=-70/70, 15-16=-70/70, 14-15=-70/70, 13-14=-70/70, 12-13=-70/70
WEBS	6-16=-266/0, 5-17=-142/89, 4-18=-132/100, 3-19=-149/136, 7-15=-140/87, 8-14=-134/103, 9-13=-140/128

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=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber 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 2.00 times flat roof load of 10.0 psf on overhangs non-concurrent with other live loads.
7) All plates are 1.5x4 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 1-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 192 lb uplift at joint 20, 185 lb uplift at joint 12, 68 lb uplift at joint 17, 66 lb uplift at joint 18, 188 lb uplift at joint 19, 66 lb uplift at joint 15, 70 lb uplift at joint 14 and 181 lb uplift at joint 13.
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

April 14,2023

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

Job	Truss	Truss Type	Qty	Ply	KEVIN MCCUE
3465255	G1	Piggyback Base	9	1	I57779378
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Apr 14 07:42:35
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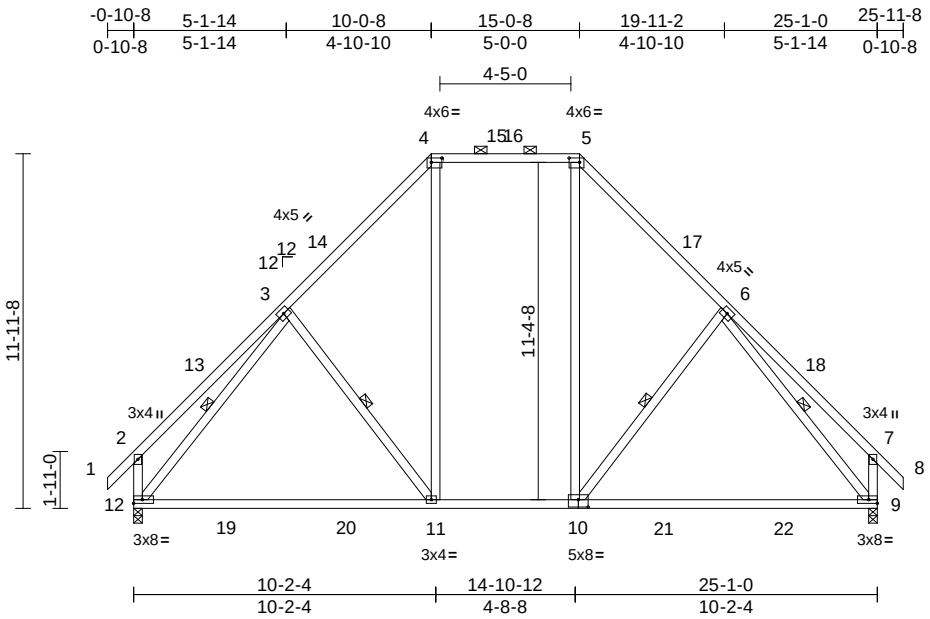


Scale = 1:77.7

Plate Offsets (X, Y): [4:0-4-4,0-1-12], [5:0-4-4,0-1-12], [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	0.44	Vert(LL)	-0.40	11-12	>745	240	MT20	244/190
Snow (Pf)	15.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.66	11-12	>454	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.02	9	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 177 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3 *Except* 12-2,9-7:2x4 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.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-11, 6-10, 3-12, 6-9

REACTIONS (size) 9=0-3-8, 12=0-3-8
Max Horiz 12=-212 (LC 10)
Max Grav 9=1128 (LC 41), 12=1128 (LC 41)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/43, 2-3=-342/144, 3-4=-972/120, 4-5=-594/116, 5-6=-976/120, 6-7=-338/145, 7-8=0/43, 2-12=-372/136, 7-9=-370/137
BOT CHORD 11-12=-80/771, 9-11=0/669
WEBS 3-11=-219/227, 4-11=-34/402, 5-10=-36/403, 6-10=-218/228, 3-12=-916/21, 6-9=-922/19

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=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber 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 2.00 times flat roof load of 10.0 psf on overhangs non-concurrent with other live loads.
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 1-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) 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.
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

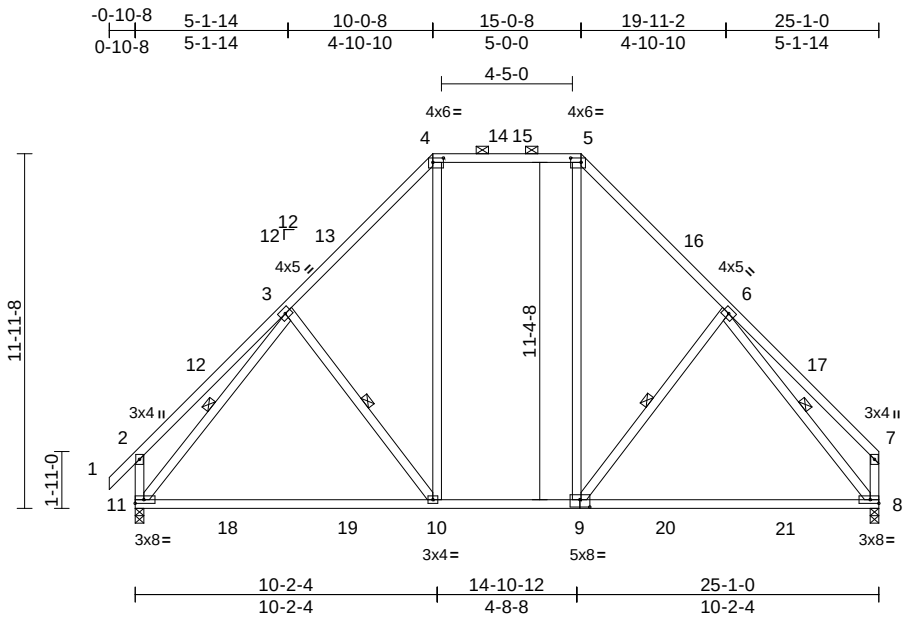
April 14,2023

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

Job	Truss	Truss Type	Qty	Ply	KEVIN MCCUE
3465255	G1A	Piggyback Base	5	1	I57779379
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Apr 14 07:42:36
ID:0DYFDNRBbp_MEgAo?ItYKizVX0i-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:77.7

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

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	0.44	Vert(LL)	-0.40	10-11	>744	240	MT20	244/190
Snow (Pf)	15.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.66	10-11	>454	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.02	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 175 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3 *Except* 11-2,8-7:2x4 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.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-10, 6-9, 3-11, 6-8

REACTIONS (size) 8=0-3-8, 11=0-3-8
Max Horiz 11=206 (LC 9)
Max Grav 8=1092 (LC 41), 11=1129 (LC 41)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/43, 2-3=-341/144, 3-4=-973/119, 4-5=-595/115, 5-6=-978/119, 6-7=-310/105, 2-11=-372/136, 7-8=-288/91
BOT CHORD 10-11=-88/762, 8-10=-3/667
WEBS 3-10=-219/228, 4-10=-33/403, 5-9=-35/407, 6-9=-222/227, 3-11=-916/19, 6-8=-939/41

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=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber 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 2.00 times flat roof load of 10.0 psf on overhangs non-concurrent with other live loads.
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 1-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) 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.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

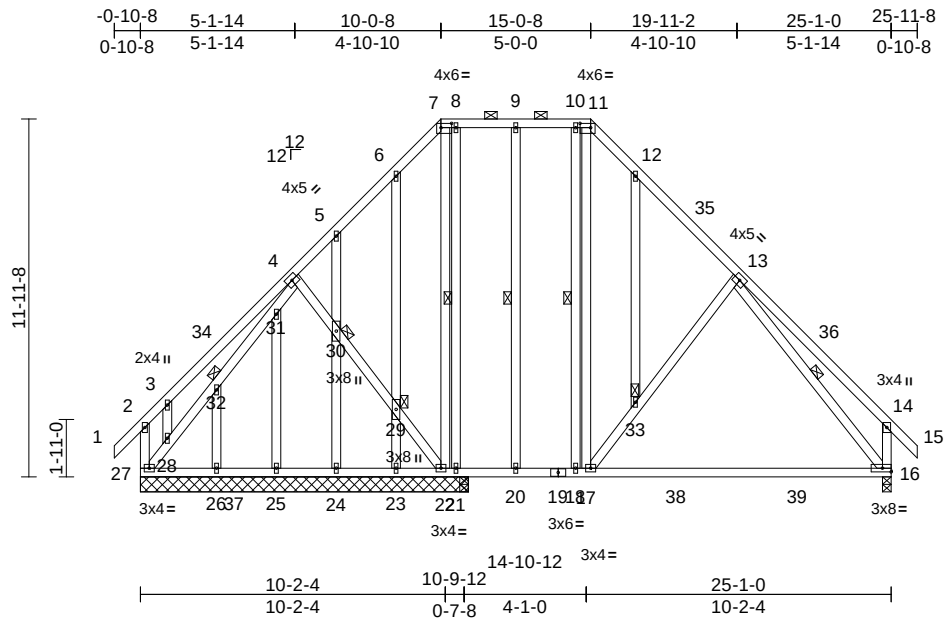
LOAD CASE(S) Standard

April 14,2023

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

Job	Truss	Truss Type	Qty	Ply	KEVIN MCCUE
3465255	G1E	Piggyback Base Structural Gable	1	1	I57779380
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001, Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Apr 14 07:42:37 Page: 1
ID:bhAsMPveEPYXFT2065_w4bzVkk3-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:77

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

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	0.38	Vert(LL)	-0.29	16-17	>596	240	MT20	244/190
Snow (Pf)	15.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.54	16-17	>322	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.02	16	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 280 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.3

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.): 7-11.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 13-16, 9-20, 8-21, 10-18
JOINTS 1 Brace at Jt(s): 29, 30, 32, 33

REACTIONS (size) 16=0-3-8, 21=10-11-8, 22=10-11-8, 23=10-11-8, 24=10-11-8, 25=10-11-8, 26=10-11-8, 27=10-11-8
Max Horiz 27=-212 (LC 10)
Max Uplift 16=-42 (LC 13), 21=-124 (LC 8), 22=-1023 (LC 44), 23=-74 (LC 12), 26=-23 (LC 12), 27=-60 (LC 13)
Max Grav 16=1206 (LC 45), 21=602 (LC 34), 22=199 (LC 8), 23=152 (LC 43), 24=205 (LC 41), 25=564 (LC 45), 26=121 (LC 26), 27=766 (LC 27)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/43, 2-3=-92/48, 3-4=-156/163, 4-5=-1024/146, 5-6=-1024/178, 6-7=-963/214, 7-8=-669/165, 8-9=-669/165, 9-10=-669/165, 10-11=-669/165, 11-12=-916/169, 12-13=-1037/133, 13-14=-327/146, 14-15=0/43, 2-27=-154/50, 14-16=-365/142
BOT CHORD 26-27=-13/526, 25-26=-13/526, 24-25=-13/526, 23-24=-13/526, 22-23=-13/526, 21-22=0/621, 20-21=0/621, 18-20=0/621, 17-18=0/621, 16-17=0/688
WEBS 4-30=-65/351, 29-30=-67/375, 22-29=-67/368, 7-22=-104/449, 11-17=0/463, 17-33=-215/212, 13-33=-162/190, 27-28=-806/41, 28-32=-766/61, 31-32=-801/49, 4-31=-1194/66, 13-16=-920/0, 3-28=-128/114, 9-20=-152/18, 8-21=-75/161, 6-29=-120/94, 23-29=-113/97, 5-30=-125/35, 24-30=-146/18, 25-31=-455/21, 26-32=-71/46, 10-18=-113/102, 12-33=-68/28

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=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber 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 2.00 times flat roof load of 10.0 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are 1.5x4 MT20 unless otherwise indicated.
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 1-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1023 lb uplift at joint 22, 60 lb uplift at joint 27, 42 lb uplift at joint 16, 124 lb uplift at joint 21, 74 lb uplift at joint 23 and 23 lb uplift at joint 26.
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.
15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 14,2023

Continued on page 2

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

16) This truss has large uplift reaction(s) from gravity load case(s). Proper connection is required to secure truss against upward movement at the bearings. Building designer must provide for uplift reactions indicated.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	KEVIN MCCUE
3465255	G1G-3	Piggyback Base	1	3	I57779381
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Apr 14 07:42:38
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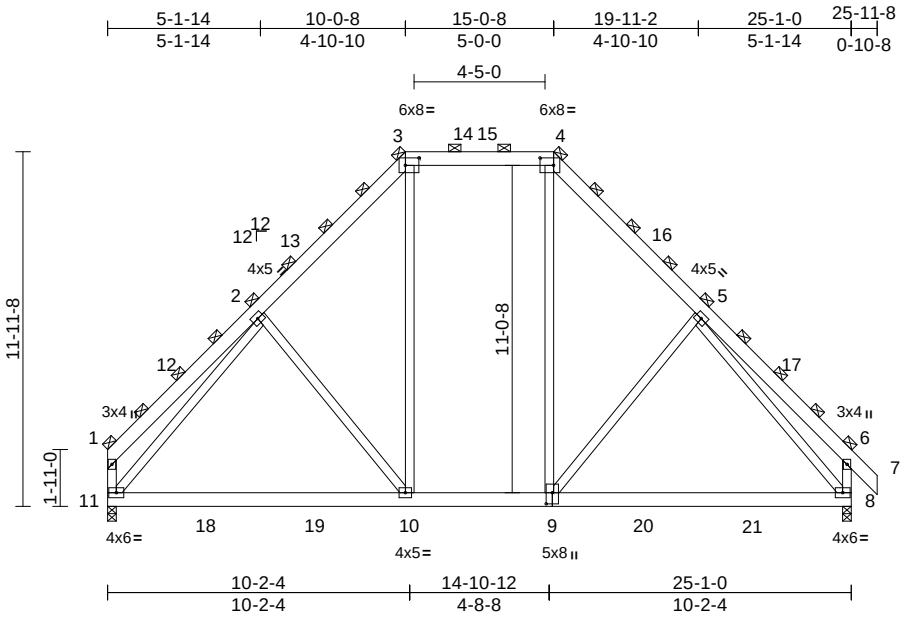


Scale = 1:77.7

Plate Offsets (X, Y): [3:0-5-8,0-3-0], [4:0-5-8,0-3-0], [9:0-4-8,0-2-8]

Loading	(psf)	Spacing	6-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	-0.12	10-11	>999	240	MT20	244/190
Snow (Pf)	15.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.21	10-11	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.02	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 670 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 11-1,8-6:2x4 SP No.2

BRACING
TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals
(Switched from sheeted: Spacing > 2-0-0).
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 8=0-3-8, 11=0-3-8
Max Horiz 11=-619 (LC 8)
Max Grav 8=3354 (LC 41), 11=3240 (LC 41)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-948/276, 2-3=-2939/348, 3-4=-1795/341, 4-5=-2948/347, 5-6=-1007/375, 6-7=0/130, 1-11=-881/240, 6-8=-1107/357
BOT CHORD 10-11=-236/2355, 8-10=0/2036
WEBS 2-10=-683/675, 3-10=-87/1211, 4-9=-95/1207, 5-9=-666/684, 2-11=-2747/116, 5-8=-2703/57

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, 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=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
5) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber 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 2.00 times flat roof load of 10.0 psf on overhangs non-concurrent with other live loads.
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 1-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
11) 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

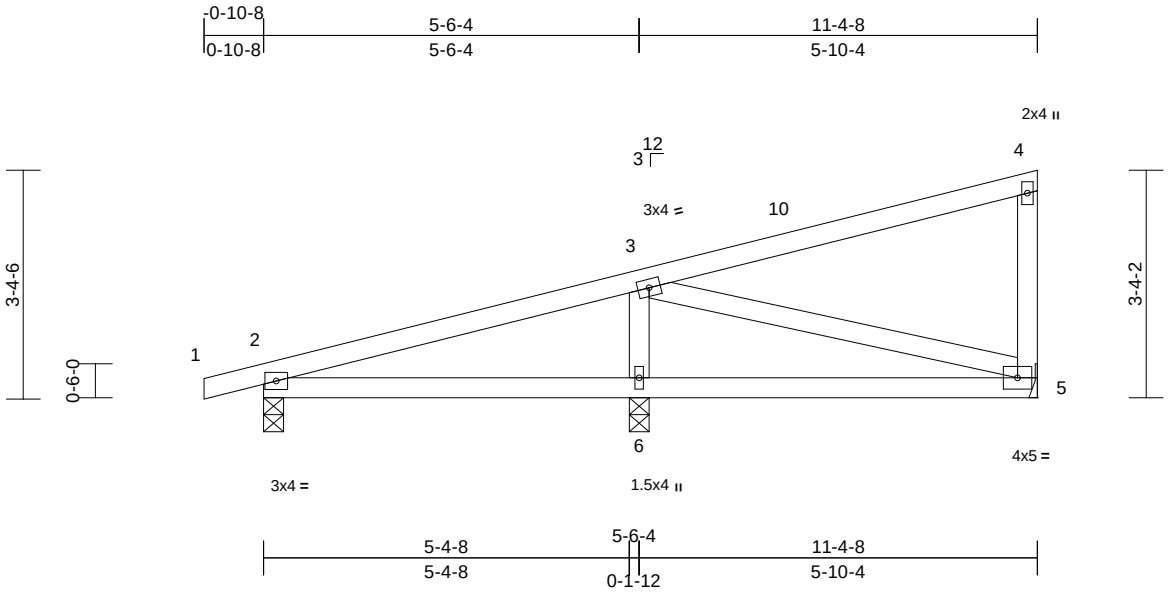
April 14,2023

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

Job	Truss	Truss Type	Qty	Ply	KEVIN MCCUE
3465255	J2	Jack-Closed	10	1	I57779382
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Apr 14 07:42:38 ID:akKihp9h0lS04k1lAf0UwczVkJv-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:33.9

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)	-0.02	5-6	>999	240	MT20	244/190
Snow (Pf)	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.04	5-6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 50 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3

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

REACTIONS (size) 2=0-3-8, 5= Mechanical, 6=0-3-8
Max Horiz 2=94 (LC 8)
Max Uplift 2=-30 (LC 8), 5=-29 (LC 12), 6=-37 (LC 8)
Max Grav 2=268 (LC 2), 5=220 (LC 2), 6=463 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-182/7, 3-4=-73/10, 4-5=-139/48
BOT CHORD 2-6=-60/148, 5-6=-41/148
WEBS 3-6=-320/107, 3-5=-128/40

NOTES
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber 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 2.00 times flat roof load of 10.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 1-00-00 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 5, 30 lb uplift at joint 2 and 37 lb uplift at joint 6.
9) 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

April 14,2023

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

Job	Truss	Truss Type	Qty	Ply	KEVIN MCCUE
3465255	J2A	Jack-Closed	4	1	I57779383 Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Apr 14 07:42:38
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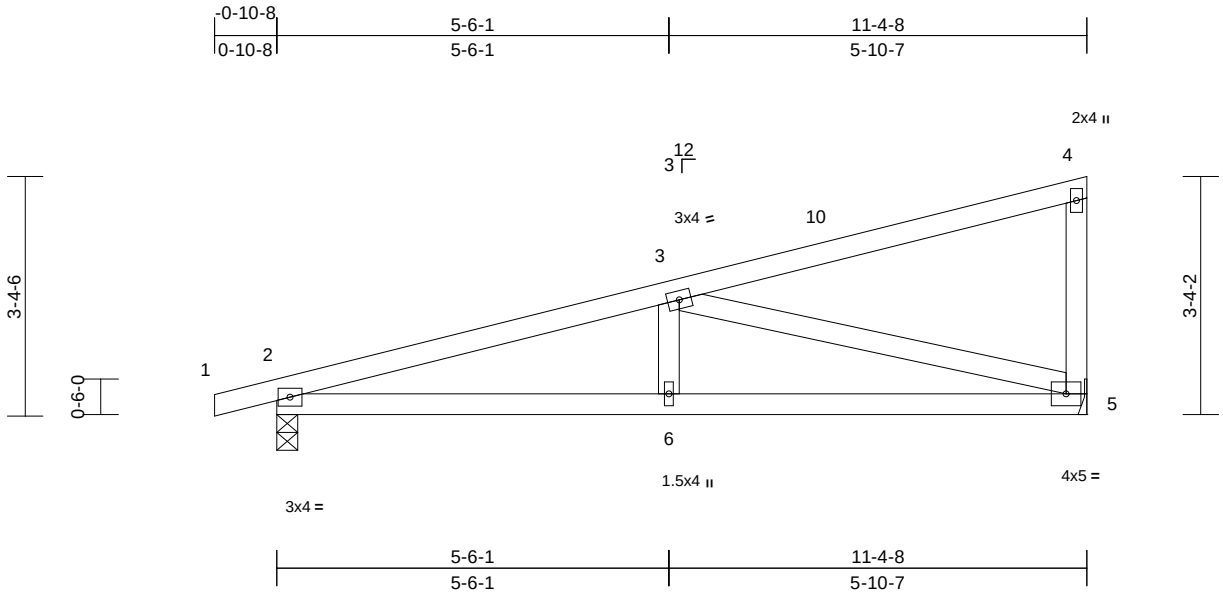

Scale = 1:32.4

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	-0.03	5-6	>999	240	MT20	244/190
Snow (Pf)	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.07	5-6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.01	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 50 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3

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

REACTIONS (size) 2=0-3-8, 5= Mechanical
Max Horiz 2=94 (LC 8)
Max Uplift 2=-49 (LC 8), 5=-47 (LC 12)
Max Grav 2=504 (LC 2), 5=447 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-973/45, 3-4=-79/4, 4-5=-147/49
BOT CHORD 2-6=-100/911, 5-6=-100/911
WEBS 3-6=0/235, 3-5=-911/101

NOTES
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber 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 2.00 times flat roof load of 10.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 1-00-00 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 47 lb uplift at joint 5 and 49 lb uplift at joint 2.
9) 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

April 14,2023

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

Job	Truss	Truss Type	Qty	Ply	KEVIN MCCUE
3465255	J2B	Half Hip	1	1	I57779384
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Apr 14 07:42:39
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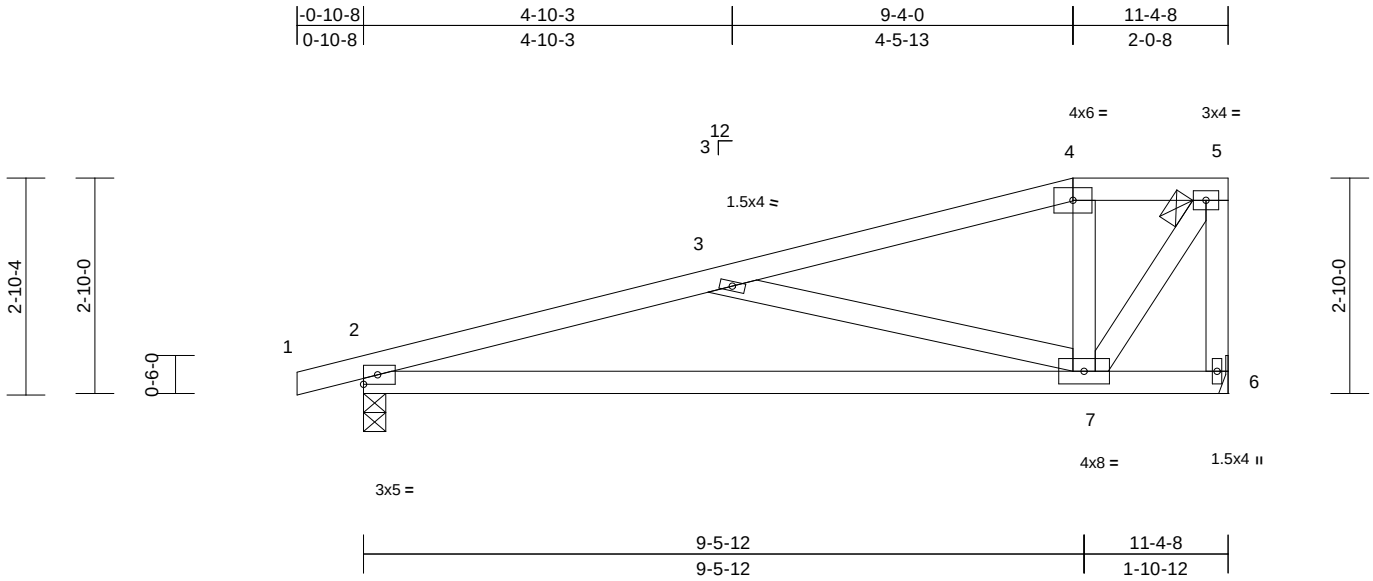

Scale = 1:30.3

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	-0.12	7-10	>999	240	MT20	244/190
Snow (Pf)	15.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.25	7-10	>532	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 54 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3

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.): 4-5.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 6= Mechanical
Max Horiz 2=80 (LC 8)
Max Uplift 2=-52 (LC 8), 6=-43 (LC 8)
Max Grav 2=510 (LC 32), 6=447 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-970/105, 3-4=-370/0, 4-5=-310/0, 5-6=-505/0
BOT CHORD 2-7=-144/916, 6-7=-6/0
WEBS 3-7=-631/147, 4-7=-133/78, 5-7=0/566

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=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber 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 2.00 times flat roof load of 10.0 psf on overhangs non-concurrent with other live loads.
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 1-00-00 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 43 lb uplift at joint 6 and 52 lb uplift at joint 2.
11) 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.
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

April 14,2023

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

Job	Truss	Truss Type	Qty	Ply	KEVIN MCCUE
3465255	J2G	Half Hip Girder	2	1	I57779385 Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

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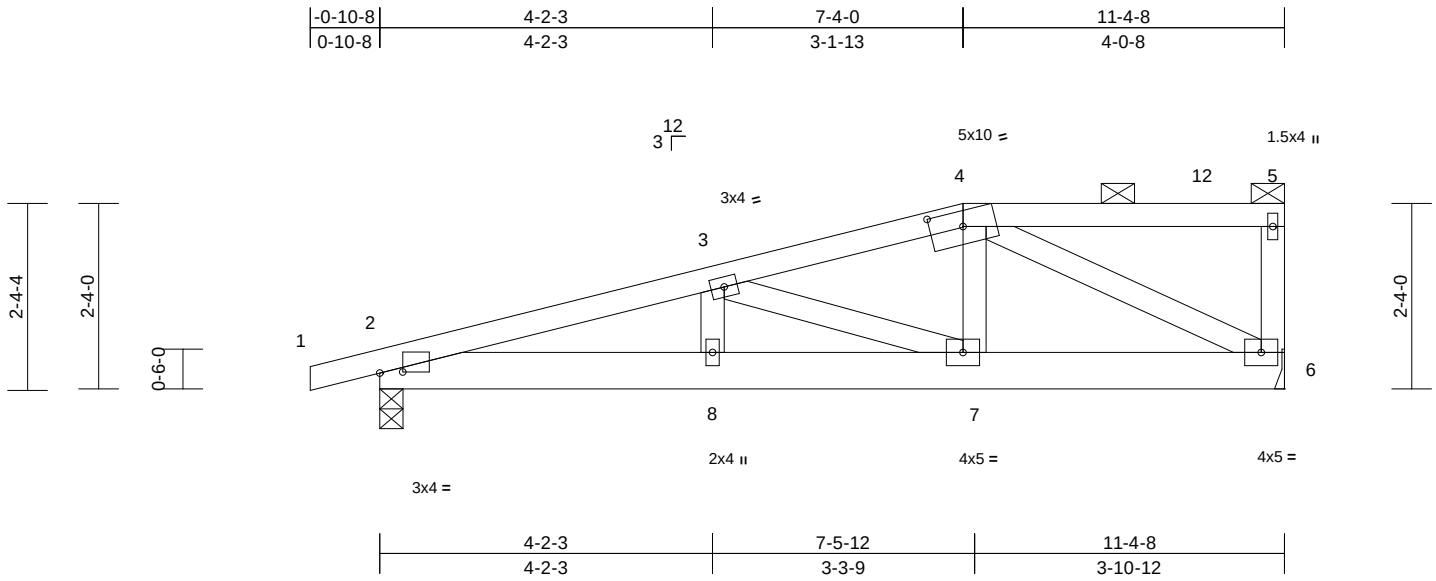
Page: 1



Scale = 1:29

Plate Offsets (X, Y): [2:0-3-7,0-0-3], [4:0-5-0,0-2-6]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	-0.02	7-8	>999	240	MT20	244/190
Snow (Pf)	15.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.04	7-8	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.23	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 61 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.1 *Except* 4-5:2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

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.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 6= Mechanical
Max Horiz 2=64 (LC 8)
Max Uplift 2=-56 (LC 8), 6=-39 (LC 8)
Max Grav 2=504 (LC 2), 6=447 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-1041/68, 3-4=-629/46, 4-5=-31/6, 5-6=-122/35
BOT CHORD 2-8=-97/989, 7-8=-97/989, 6-7=-50/605
WEBS 3-8=0/119, 3-7=-455/59, 4-7=0/266, 4-6=-642/50

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=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber 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 2.00 times flat roof load of 10.0 psf on overhangs non-concurrent with other live loads.
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 1-00-00 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 56 lb uplift at joint 2 and 39 lb uplift at joint 6.
11) 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.
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

April 14,2023

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

Job	Truss	Truss Type	Qty	Ply	KEVIN MCCUE
3465255	J3	Jack-Partial	4	1	I57779386
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Apr 14 07:42:40 Page: 1
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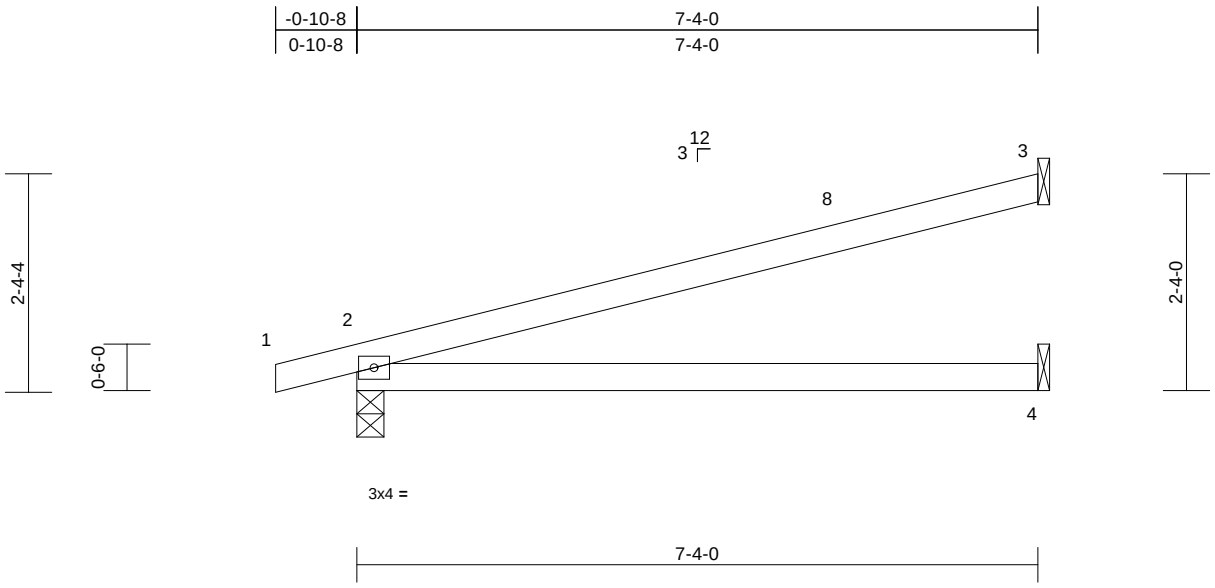

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.10	4-7	>886	240	MT20	244/190
Snow (Pf)	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.24	4-7	>358	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.03	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 24 lb	FT = 20%

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

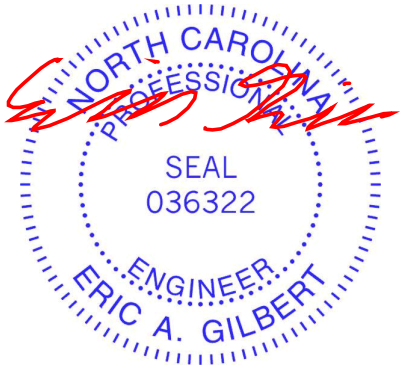
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 3= Mechanical, 4= Mechanical
Max Horiz 2=64 (LC 8)
Max Uplift 2=-40 (LC 8), 3=-57 (LC 12)
Max Grav 2=346 (LC 2), 3=195 (LC 2), 4=135 (LC 7)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-98/52
BOT CHORD 2-4=-68/103

NOTES
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber 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 2.00 times flat roof load of 10.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 1-00-00 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 57 lb uplift at joint 3 and 40 lb uplift at joint 2.
9) 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



April 14,2023

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

Job	Truss	Truss Type	Qty	Ply	KEVIN MCCUE
3465255	J3A	Half Hip	2	1	I57779387
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

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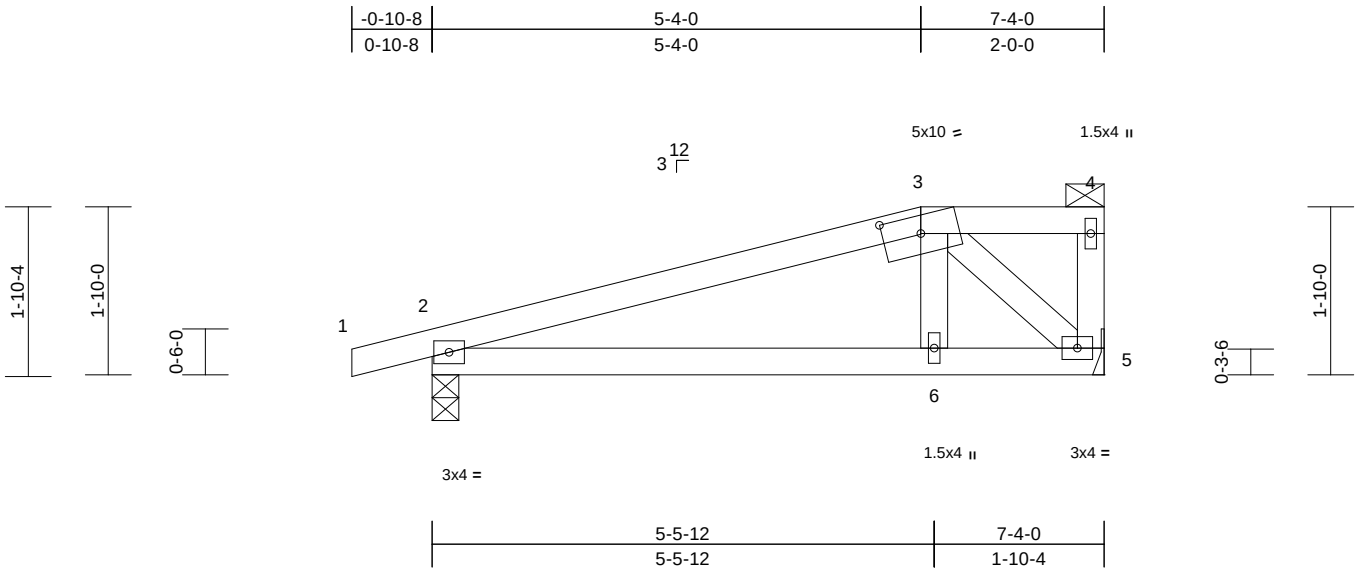

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Plate Offsets (X, Y): [3:0-5-0,0-2-6]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.02	6-9	>999	240	MT20	244/190
Snow (Pf)	15.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.04	6-9	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 30 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 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) 2=0-3-8, 5= Mechanical
Max Horiz 2=49 (LC 8)
Max Uplift 2=-44 (LC 8), 5=-26 (LC 8)
Max Grav 2=343 (LC 2), 5=284 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-347/9, 3-4=0/0, 4-5=-57/17
BOT CHORD 2-6=-43/297, 5-6=-16/311
WEBS 3-6=0/211, 3-5=-405/20

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=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber 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 2.00 times flat roof load of 10.0 psf on overhangs non-concurrent with other live loads.
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 1-00-00 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 44 lb uplift at joint 2 and 26 lb uplift at joint 5.
11) 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.
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

April 14,2023

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

Job	Truss	Truss Type	Qty	Ply	KEVIN MCCUE
3465255	J3B	Half Hip	1	1	I57779388
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

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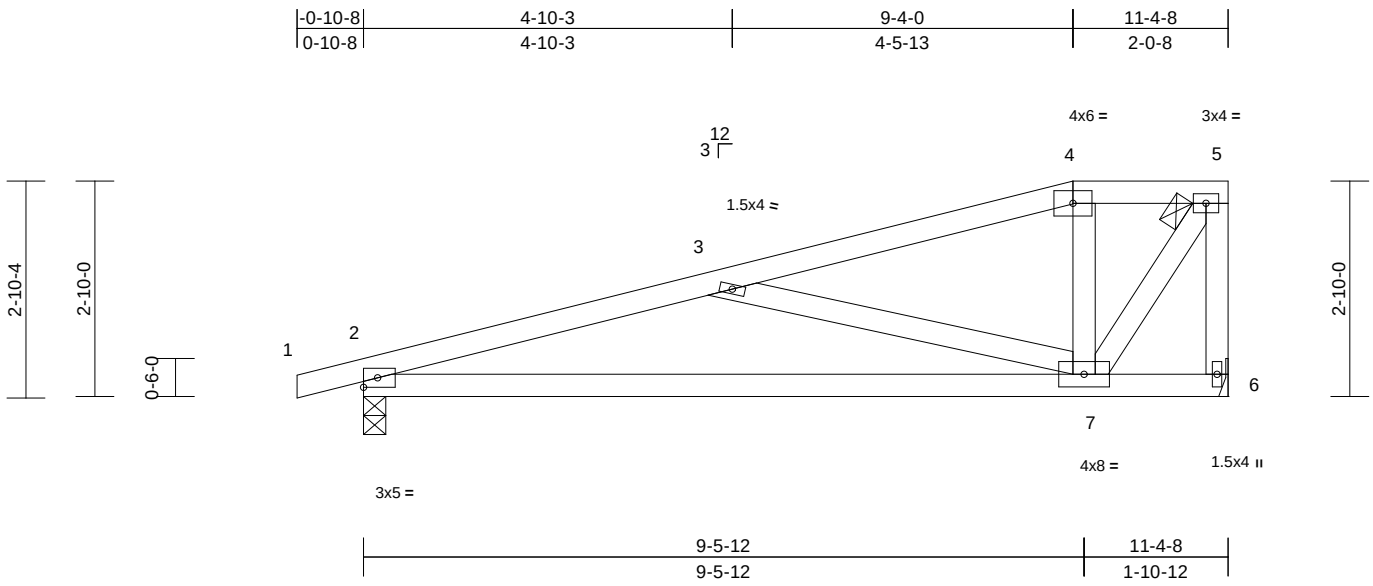

Scale = 1:30.3

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	-0.12	7-10	>999	240	MT20	244/190
Snow (Pf)	15.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.25	7-10	>532	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 54 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3

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.): 4-5.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 6= Mechanical
Max Horiz 2=80 (LC 8)
Max Uplift 2=-52 (LC 8), 6=-43 (LC 8)
Max Grav 2=510 (LC 32), 6=447 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-970/105, 3-4=-370/0, 4-5=-310/0, 5-6=-505/0
BOT CHORD 2-7=-144/916, 6-7=-6/0
WEBS 3-7=-631/147, 4-7=-133/78, 5-7=0/566

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=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber 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 2.00 times flat roof load of 10.0 psf on overhangs non-concurrent with other live loads.
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 1-00-00 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 43 lb uplift at joint 6 and 52 lb uplift at joint 2.
11) 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.
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

April 14,2023

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

Job	Truss	Truss Type	Qty	Ply	KEVIN MCCUE
3465255	J3G	Half Hip Girder	2	1	I57779389
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

Run: 8.63 E Dec 29 2022 Print: 8.630 E Dec 29 2022 MiTek Industries, Inc. Fri Apr 14 08:04:42
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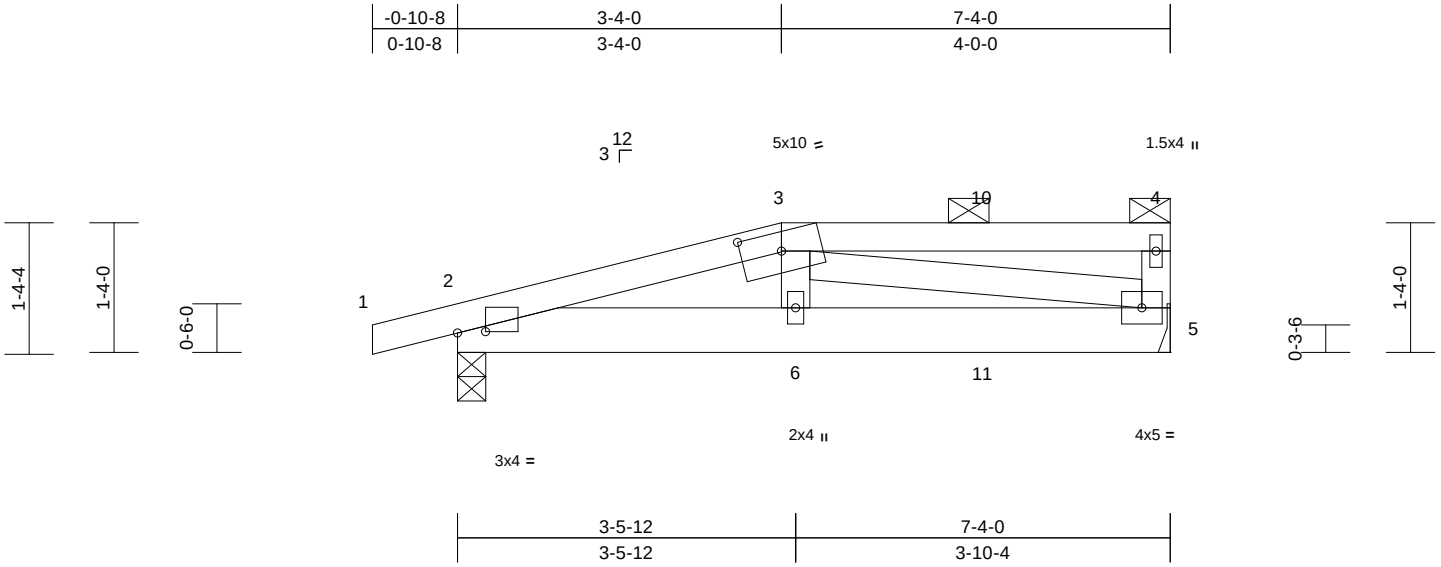

Scale = 1:23.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.01	6	>999	240	MT20	244/190
Snow (Pf)	15.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.02	6	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.23	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 37 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1 *Except* 3-4:2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 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 (lb/size) 2=305/0-3-8, 5=294/ Mechanical
Max Horiz 2=34 (LC 8)
Max Uplift 2=-45 (LC 8), 5=-20 (LC 8)
Max Grav 2=408 (LC 2), 5=365 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-731/17, 3-10=0/0, 4-10=0/0, 4-5=-128/38
BOT CHORD 2-6=-22/692, 6-11=-13/707, 5-11=-13/707
WEBS 3-6=0/178, 3-5=-729/13

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=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
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 2.00 times flat roof load of 10.0 psf on overhangs non-concurrent with other live loads.
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 1-00-00 wide will fit between the bottom chord and any other members.
9) Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi.
10) Refer to girder(s) for truss to truss connections.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 20 lb uplift at joint 5 and 45 lb uplift at joint 2.
12) 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.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 102 lb down and 43 lb up at 3-4-0, and 32 lb down and 19 lb up at 5-4-12 on top chord, and 47 lb down at 3-4-0, and 20 lb down at 5-4-12 on bottom chord. The design/ selection of such connection device(s) is the responsibility of others.
15) 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: 1-3=-40, 3-4=-50, 5-7=-20
Concentrated Loads (lb)
Vert: 3=-31 (B), 6=-37 (B), 10=-11 (B), 11=-16 (B)

April 14,2023

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

Job	Truss	Truss Type	Qty	Ply	KEVIN MCCUE
3465255	J4	Jack-Open	4	1	I57779390 Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

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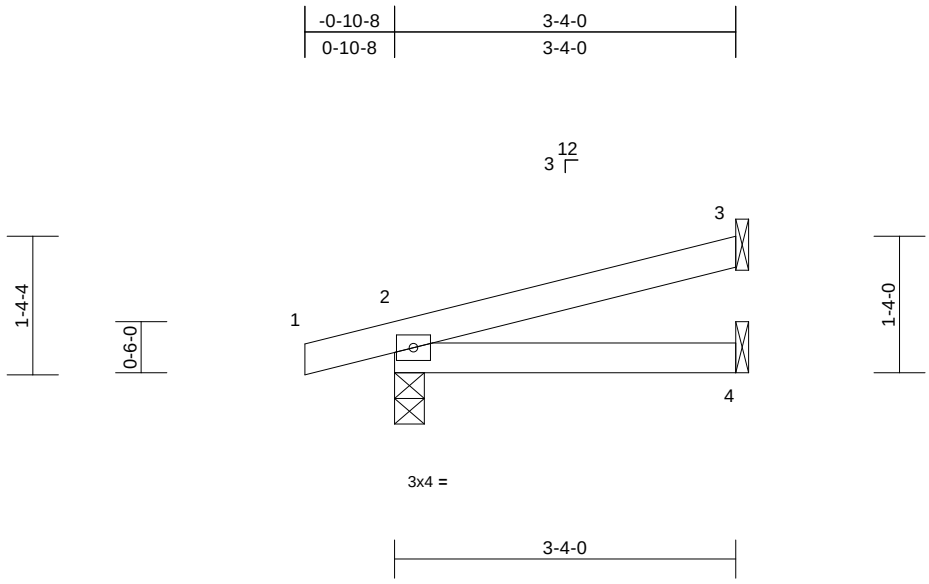

Scale = 1:22.5

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	0.10	Vert(LL)	0.00	4-7	>999	240	MT20	244/190
Snow (Pf)	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.01	4-7	>999	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: 12 lb	FT = 20%

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

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

REACTIONS (size) 2=0-3-8, 3= Mechanical, 4= Mechanical
Max Horiz 2=34 (LC 8)
Max Uplift 2=-33 (LC 8), 3=-24 (LC 12)
Max Grav 2=190 (LC 2), 3=84 (LC 2), 4=59 (LC 7)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-33/27
BOT CHORD 2-4=-18/16

NOTES
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber 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 2.00 times flat roof load of 10.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 1-00-00 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 3 and 33 lb uplift at joint 2.
9) 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

April 14,2023

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

Job	Truss	Truss Type	Qty	Ply	KEVIN MCCUE
3465255	M1	Roof Special	5	1	I57779391
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

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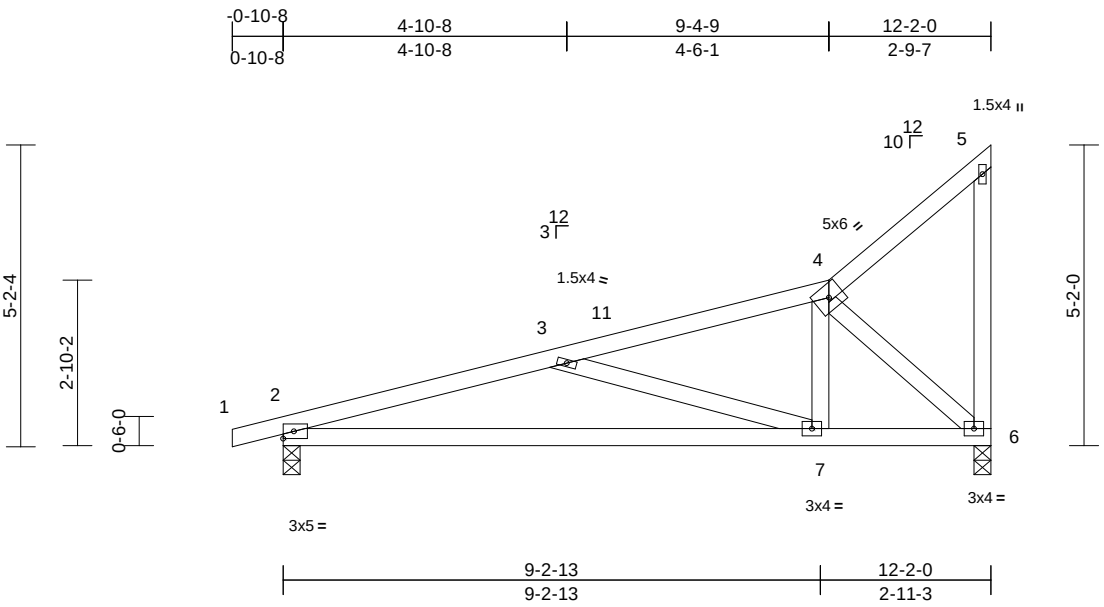

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	-0.12	7-10	>999	240	MT20	244/190
Snow (Pf)	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.24	7-10	>612	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 61 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-11-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 6=0-3-8
Max Horiz 2=142 (LC 12)
Max Uplift 2=-47 (LC 8), 6=-65 (LC 12)
Max Grav 2=535 (LC 2), 6=479 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-1070/88, 3-4=-511/0, 4-5=-69/38, 5-6=-74/42
BOT CHORD 2-7=-155/1012, 6-7=-15/441
WEBS 3-7=-575/149, 4-7=0/402, 4-6=-613/18

NOTES
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber 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 2.00 times flat roof load of 10.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 1-00-00 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 47 lb uplift at joint 2 and 65 lb uplift at joint 6.
8) 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

April 14,2023

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

Job	Truss	Truss Type	Qty	Ply	KEVIN MCCUE
3465255	M2	Monopitch	18	1	I57779392
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

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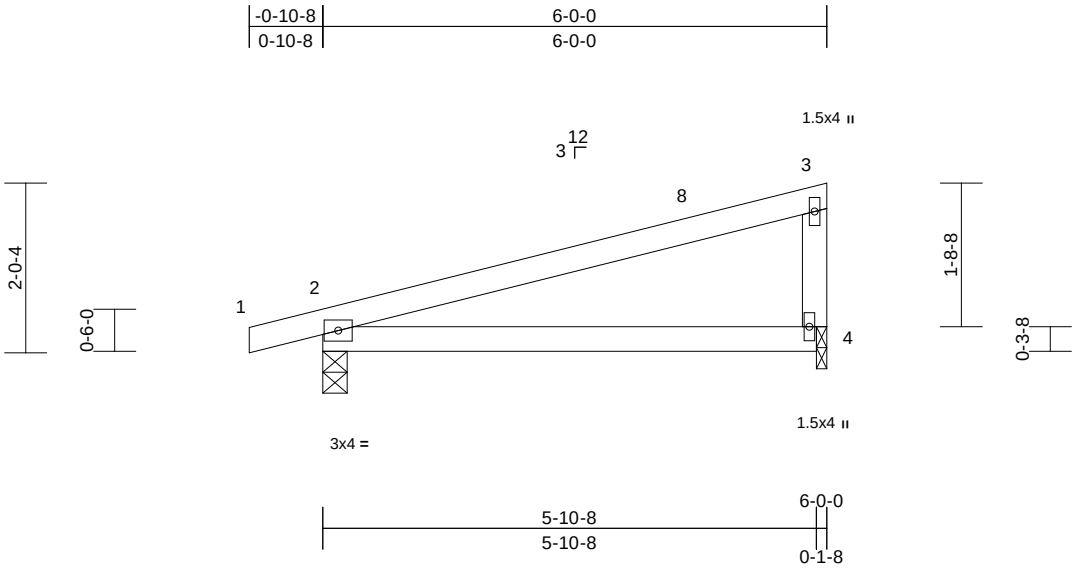

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.04	4-7	>999	240	MT20	244/190
Snow (Pf)	10.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.10	4-7	>693	180		
TCDL	10.0	Rep Stress Incr	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: 21 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3

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

REACTIONS (size) 2=0-3-8, 4=0-1-8
Max Horiz 2=53 (LC 8)
Max Uplift 2=-38 (LC 8), 4=-25 (LC 12)
Max Grav 2=291 (LC 2), 4=230 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-3=-69/35, 3-4=-156/46
BOT CHORD 2-4=-48/69

NOTES
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber 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 2.00 times flat roof load of 10.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 1-00-00 wide will fit between the bottom chord and any other members.
7) 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.
8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 38 lb uplift at joint 2 and 25 lb uplift at joint 4.
10) 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

April 14,2023

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

Job	Truss	Truss Type	Qty	Ply	KEVIN MCCUE
3465255	PB1	Piggyback	5	1	I57779393 Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

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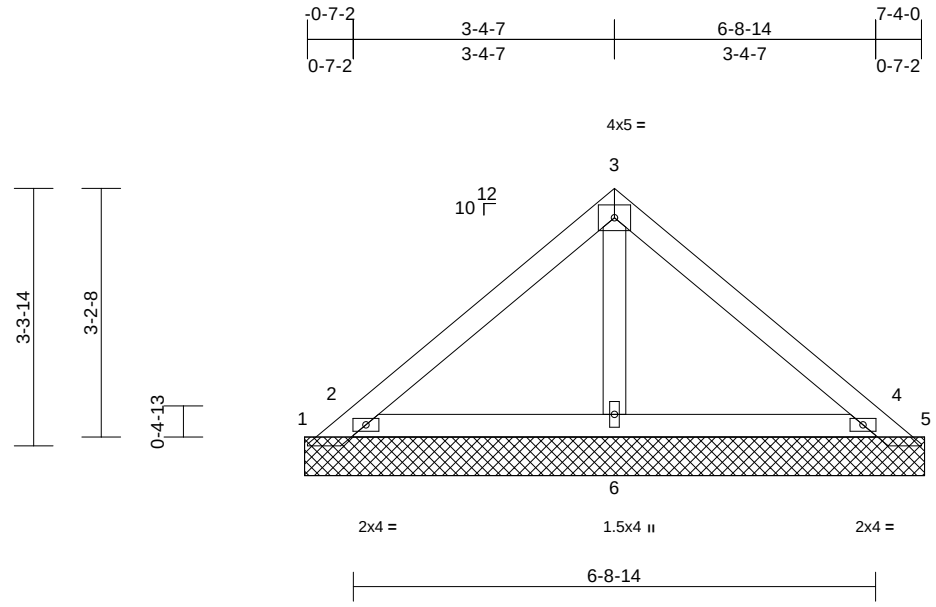

Scale = 1:29.7

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	10.0	Lumber DOL	1.15	BC	0.06	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	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.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.3

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

REACTIONS (size) 1=8-0-0, 2=8-0-0, 4=8-0-0, 5=8-0-0, 6=8-0-0, 7=8-0-0, 10=8-0-0
Max Horiz 1=-60 (LC 8)
Max Uplift 1=-249 (LC 26), 2=-137 (LC 12), 4=-121 (LC 13), 5=-214 (LC 27), 7=-137 (LC 12), 10=-121 (LC 13)
Max Grav 1=120 (LC 12), 2=453 (LC 26), 4=418 (LC 27), 5=92 (LC 13), 6=176 (LC 2), 7=453 (LC 26), 10=418 (LC 27)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-107/213, 2-3=-118/100, 3-4=-118/89, 4-5=-58/156
BOT CHORD 2-6=-59/53, 4-6=-67/53
WEBS 3-6=-86/0

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=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber 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) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 1-00-00 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 137 lb uplift at joint 2, 121 lb uplift at joint 4, 249 lb uplift at joint 1, 214 lb uplift at joint 5, 137 lb uplift at joint 2 and 121 lb uplift at joint 4.
11) 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.
12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

April 14,2023

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

Job	Truss	Truss Type	Qty	Ply	KEVIN MCCUE
3465255	PB2	Piggyback	15	1	I57779394
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Apr 14 07:42:43 Page: 1
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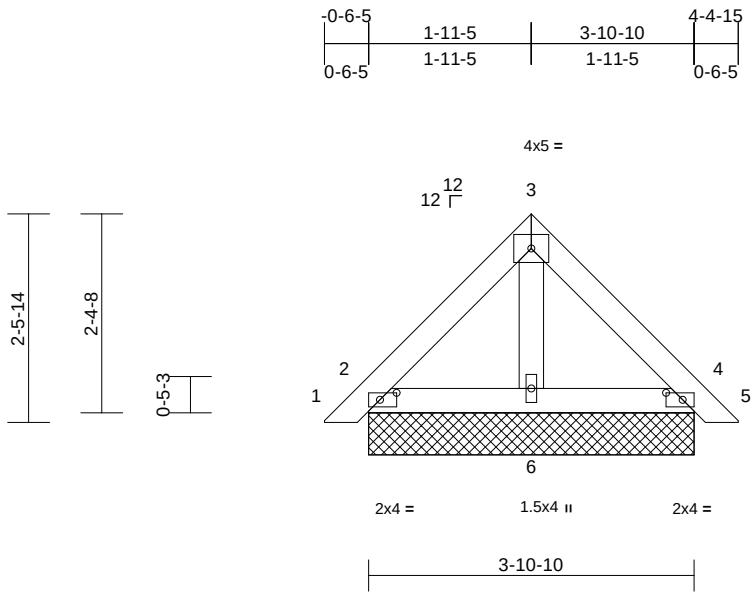


Scale = 1:27.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	4	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.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.3

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

REACTIONS (size) 2=3-10-10, 4=3-10-10, 6=3-10-10, 7=3-10-10, 10=3-10-10
Max Horiz 2=-44 (LC 10), 7=-44 (LC 10)
Max Uplift 2=-8 (LC 13), 4=-12 (LC 13), 7=-8 (LC 13), 10=-12 (LC 13)
Max Grav 2=116 (LC 2), 4=116 (LC 2), 6=118 (LC 2), 7=116 (LC 2), 10=116 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/14, 2-3=-75/33, 3-4=-75/27, 4-5=0/14
BOT CHORD 2-6=-14/41, 4-6=-8/41
WEBS 3-6=-40/0

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=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber 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 2.00 times flat roof load of 10.0 psf on overhangs non-concurrent with other live loads.
7) Gable requires continuous bottom chord bearing.
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 1-00-00 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 8 lb uplift at joint 2, 12 lb uplift at joint 4, 8 lb uplift at joint 2 and 12 lb uplift at joint 4.
12) 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.
13) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

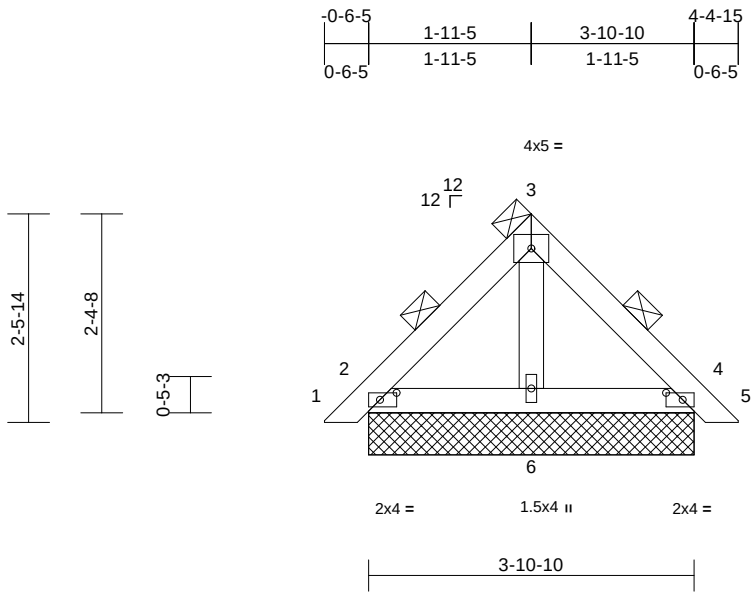
April 14,2023

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

Job	Truss	Truss Type	Qty	Ply	KEVIN MCCUE
3465255	PB2A	Piggyback	1	3	I57779395
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Apr 14 07:42:43 ID:Ra0NApBGW83DAaL8Wn7OyjzR2Ti-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:27.5

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

Loading	(psf)	Spacing	6-0-0	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
Snow (Pf)	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 56 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.3

BRACING
TOP CHORD 2-0-0 oc purlins (Switched from sheeted: Spacing > 2-0-0).
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=3-10-10, 4=3-10-10, 6=3-10-10, 7=3-10-10, 10=3-10-10
Max Horiz 2=132 (LC 11), 7=132 (LC 11)
Max Uplift 2=-28 (LC 13), 4=-40 (LC 13), 7=-28 (LC 13), 10=-40 (LC 13)
Max Grav 2=347 (LC 2), 4=347 (LC 2), 6=357 (LC 2), 7=347 (LC 2), 10=347 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/42, 2-3=-221/103, 3-4=-219/85, 4-5=0/42
BOT CHORD 2-6=-56/137, 4-6=-26/119
WEBS 3-6=-130/0

NOTES
1) 3-ply truss to be connected together as follows:
Top chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected with 10d (0.131"x3") nails 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=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
5) 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.
6) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
7) Unbalanced snow loads have been considered for this design.
8) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 10.0 psf on overhangs non-concurrent with other live loads.
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 1-00-00 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 28 lb uplift at joint 2, 40 lb uplift at joint 4, 28 lb uplift at joint 2 and 40 lb uplift at joint 4.
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.
15) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

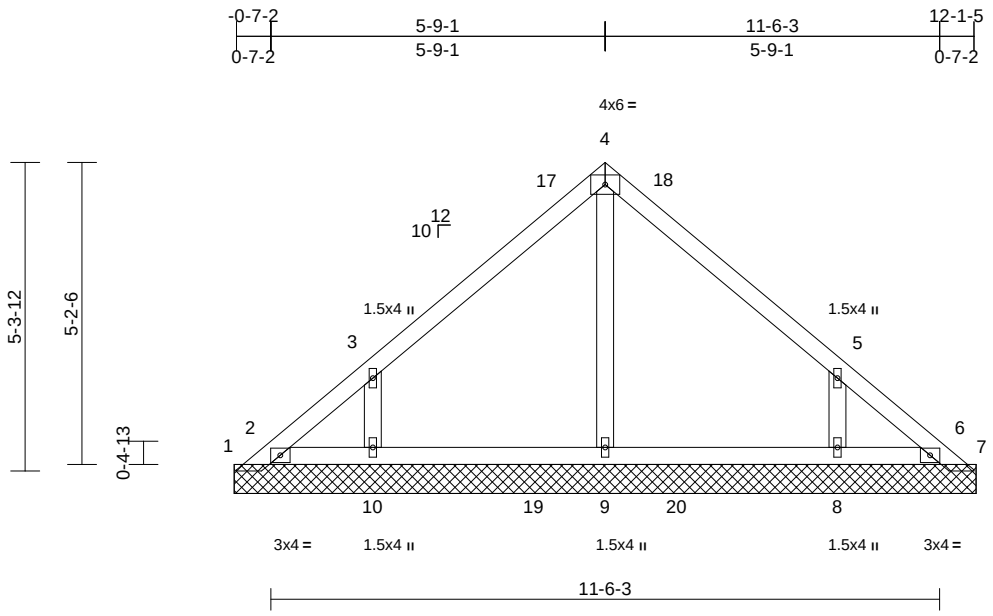
April 14,2023

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

Job	Truss	Truss Type	Qty	Ply	KEVIN MCCUE
3465255	PB3	Piggyback	17	1	I57779396
					Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Apr 14 07:42:44 ID:691DJMyrAy2JgASmXMMNn8zVl3y-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:39.7

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	10.0	Lumber DOL	1.15	BC	0.09	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	7	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 52 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.3

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

REACTIONS (size) 1=12-9-5, 2=12-9-5, 6=12-9-5, 7=12-9-5, 8=12-9-5, 9=12-9-5, 10=12-9-5, 11=12-9-5, 14=12-9-5
Max Horiz 1=-99 (LC 10)
Max Uplift 1=-54 (LC 8), 6=-26 (LC 11), 7=-13 (LC 13), 8=-114 (LC 13), 10=-114 (LC 12), 14=-26 (LC 11)
Max Grav 1=87 (LC 27), 2=58 (LC 13), 6=69 (LC 13), 7=52 (LC 27), 8=319 (LC 27), 9=295 (LC 26), 10=319 (LC 26), 11=58 (LC 13), 14=69 (LC 13)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-127/117, 2-3=-102/82, 3-4=-141/81, 4-5=-139/63, 5-6=-84/54, 6-7=-31/15
BOT CHORD 2-10=-26/75, 9-10=-26/75, 8-9=-26/75, 6-8=-26/75
WEBS 4-9=-152/0, 3-10=-252/158, 5-8=-252/158

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=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber 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) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 1-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint 6, 54 lb uplift at joint 1, 13 lb uplift at joint 7, 114 lb uplift at joint 10, 114 lb uplift at joint 8 and 26 lb uplift at joint 6.
11) 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.
12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

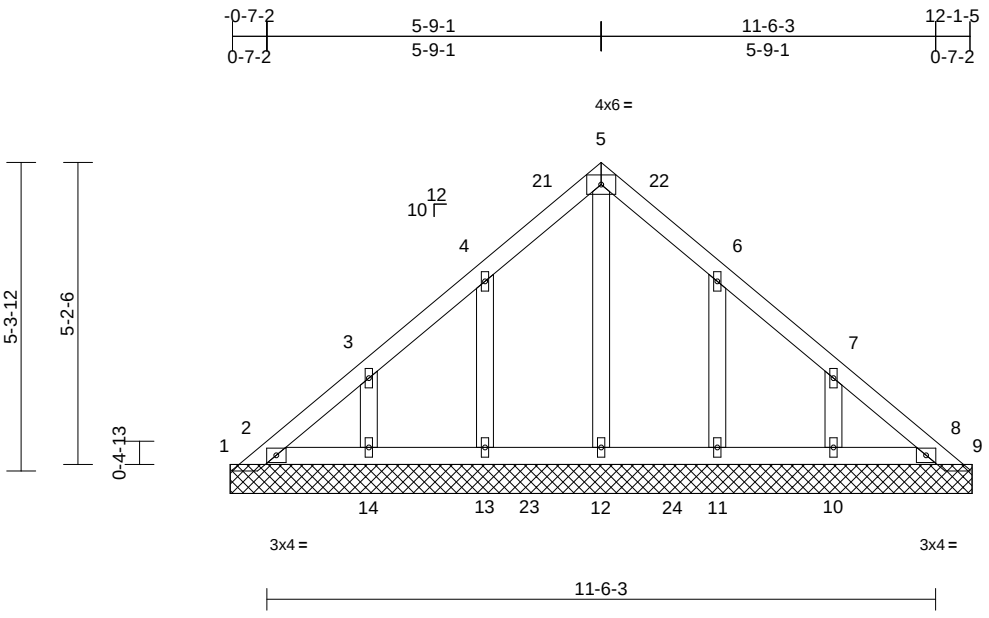
April 14,2023

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

Job	Truss	Truss Type	Qty	Ply	KEVIN MCCUE
3465255	PB3E	Piggyback	2	1	I57779397 Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Apr 14 07:42:45 Page: 1
ID:mTllqS5NLeYc60M3EtZCHgzVl3m-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:39.7

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 61 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.3

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

REACTIONS (size) 1=12-9-5, 2=12-9-5, 8=12-9-5, 9=12-9-5, 10=12-9-5, 11=12-9-5, 12=12-9-5, 13=12-9-5, 14=12-9-5, 15=12-9-5, 18=12-9-5
Max Horiz 1=-99 (LC 8)
Max Uplift 1=-88 (LC 10), 2=-8 (LC 9), 9=-22 (LC 27), 10=-56 (LC 13), 11=-57 (LC 13), 13=-57 (LC 12), 14=-55 (LC 12), 15=-8 (LC 9)
Max Grav 1=77 (LC 9), 2=161 (LC 26), 8=132 (LC 2), 9=14 (LC 13), 10=161 (LC 27), 11=185 (LC 27), 12=184 (LC 29), 13=186 (LC 26), 14=161 (LC 26), 15=161 (LC 26), 18=132 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-124/144, 2-3=-92/69, 3-4=-90/51, 4-5=-78/79, 5-6=-70/67, 6-7=-68/24, 7-8=-74/42, 8-9=-8/32
BOT CHORD 2-14=-34/85, 13-14=-34/85, 12-13=-34/85, 11-12=-34/85, 10-11=-34/85, 8-10=-34/85
WEBS 5-12=-86/0, 4-13=-138/83, 3-14=-118/72, 6-11=-137/82, 7-10=-118/73

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=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pf=10.0 psf (flat roof snow: Lumber 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) All plates are 1.5x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
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 1-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 8 lb uplift at joint 2, 88 lb uplift at joint 1, 22 lb uplift at joint 9, 57 lb uplift at joint 13, 55 lb uplift at joint 14, 57 lb uplift at joint 11, 56 lb uplift at joint 10 and 8 lb uplift at joint 2.
12) 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.
13) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

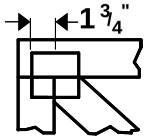
LOAD CASE(S) Standard

April 14,2023

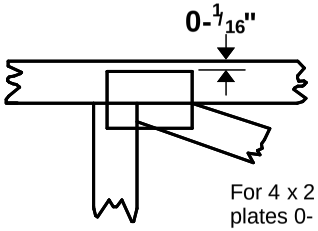
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

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.

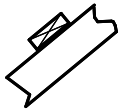
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

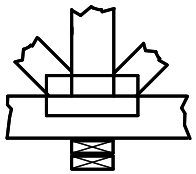
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

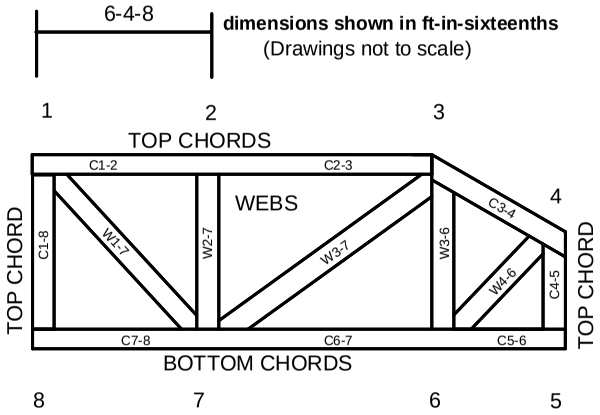


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & 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-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

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. 5/19/2020

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.