ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: P-7881-1
Yarbrough Front Load Crawl V4-Roof

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

Pages or sheets covered by this seal: I47059117 thru I47059132

My license renewal date for the state of North Carolina is December 31, 2021.

North Carolina COA: C-0844

July 20,2021

Liu, Xuegang

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	Yarbrough Front Load Crawl V4-Roof
P-7881-1	CAP1	Piggyback	2	1	I47059117 Job Reference (optional)

Peak Truss Builders, LLC (Closed), New Hill, NC - 27562, Run: 8.43 S Jun 2 2021 Print: 8.430 S Jun 2 2021 MiTek Industries, Inc. Mon Jul 19 10:31:23 Page: 1
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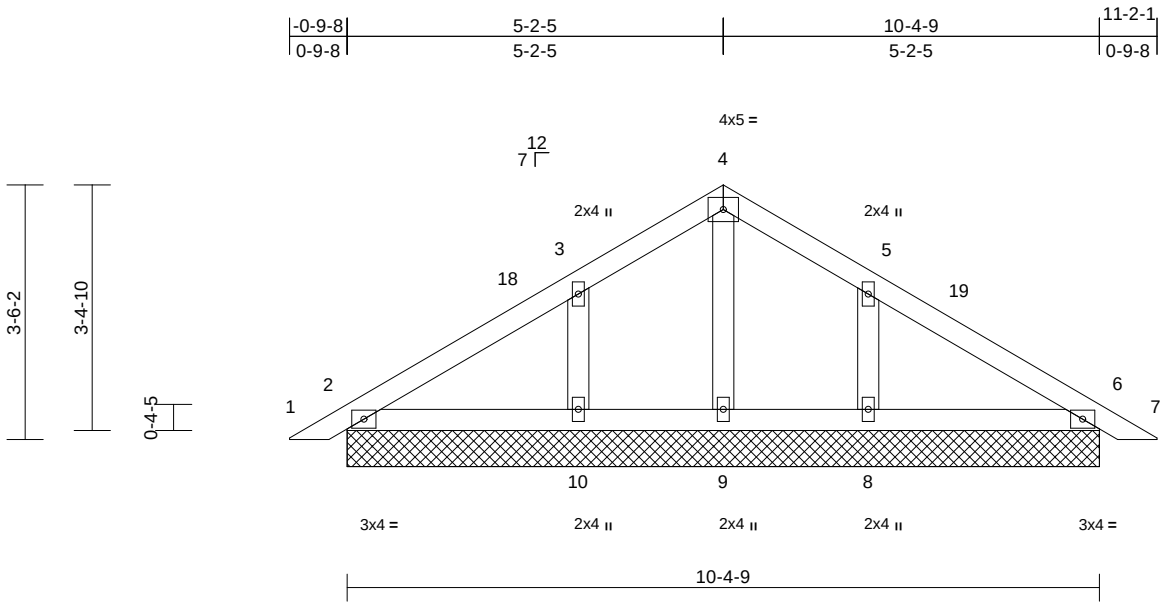

Scale = 1:31.8

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 45 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 (lb/size) 2=152/10-4-9, 6=152/10-4-9, 8=265/10-4-9, 9=61/10-4-9, 10=265/10-4-9, 11=152/10-4-9, 15=152/10-4-9
Max Horiz 2=-60 (LC 9), 11=-60 (LC 9)
Max Uplift 2=-31 (LC 11), 6=-31 (LC 11), 8=-69 (LC 11), 10=-69 (LC 11), 11=-31 (LC 11), 15=-31 (LC 11)
Max Grav 2=152 (LC 1), 6=152 (LC 1), 8=265 (LC 1), 9=62 (LC 16), 10=265 (LC 1), 11=152 (LC 1), 15=152 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-66/45, 3-4=-83/71, 4-5=-82/71, 5-6=-51/31, 6-7=0/16
BOT CHORD 2-10=-18/44, 9-10=-18/44, 8-9=-18/44, 6-8=-18/44
WEBS 4-9=-53/7, 3-10=-180/89, 5-8=-180/89

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=20ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-3-11 to 3-3-11, Interior (1) 3-3-11 to 6-0-4, Exterior (2) 6-0-4 to 9-0-4, Interior (1) 9-0-4 to 11-8-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 2-0-0 oc.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 2, 31 lb uplift at joint 6, 69 lb uplift at joint 10, 69 lb uplift at joint 8, 31 lb uplift at joint 2 and 31 lb uplift at joint 6.
8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

July 20,2021

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818 Soundside Road
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Job	Truss	Truss Type	Qty	Ply	Yarbrough Front Load Crawl V4-Roof
P-7881-1	CAP2	Piggyback	25	1	I47059118 Job Reference (optional)

Peak Truss Builders, LLC (Closed), New Hill, NC - 27562, Run: 8.43 S Jun 2 2021 Print: 8.430 S Jun 2 2021 MiTek Industries, Inc. Mon Jul 19 10:31:25 Page: 1
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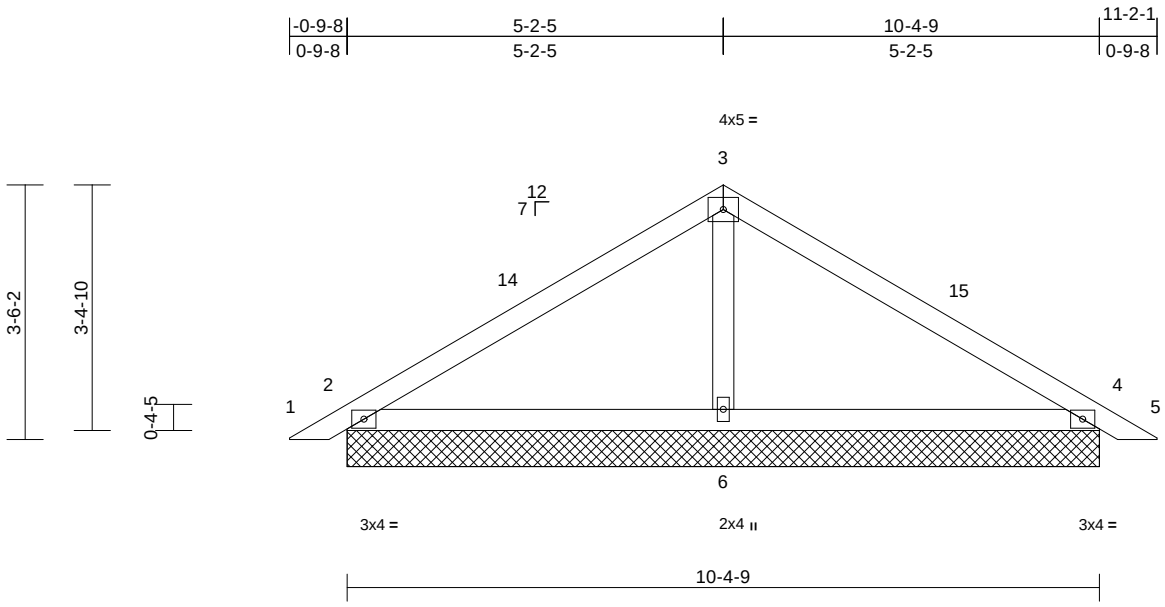

Scale = 1:31.8

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	11	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 40 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 (lb/size) 2=262/10-4-9, 4=262/10-4-9, 6=369/10-4-9, 7=262/10-4-9, 11=262/10-4-9
Max Horiz 2=-60 (LC 9), 7=-60 (LC 9)
Max Uplift 2=-67 (LC 11), 4=-67 (LC 11), 6=-5 (LC 11), 7=-67 (LC 11), 11=-67 (LC 11)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/16, 2-3=-184/78, 3-4=-184/78, 4-5=0/16
BOT CHORD 2-6=-8/104, 4-6=-11/104
WEBS 3-6=-186/37

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=20ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-3-11 to 3-3-11, Interior (1) 3-3-11 to 6-0-4, Exterior (2) 6-0-4 to 9-0-4, Interior (1) 9-0-4 to 11-8-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 67 lb uplift at joint 2, 67 lb uplift at joint 4, 5 lb uplift at joint 6, 67 lb uplift at joint 2 and 67 lb uplift at joint 4.
8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Yarbrough Front Load Crawl V4-Roof
P-7881-1	T1	Piggyback Base	10	1	I47059119 Job Reference (optional)

Peak Truss Builders, LLC (Closed), New Hill, NC - 27562,

Run: 8.43 S Jun 2 2021 Print: 8.430 S Jun 2 2021 MiTek Industries, Inc. Mon Jul 19 10:31:25 Page: 1
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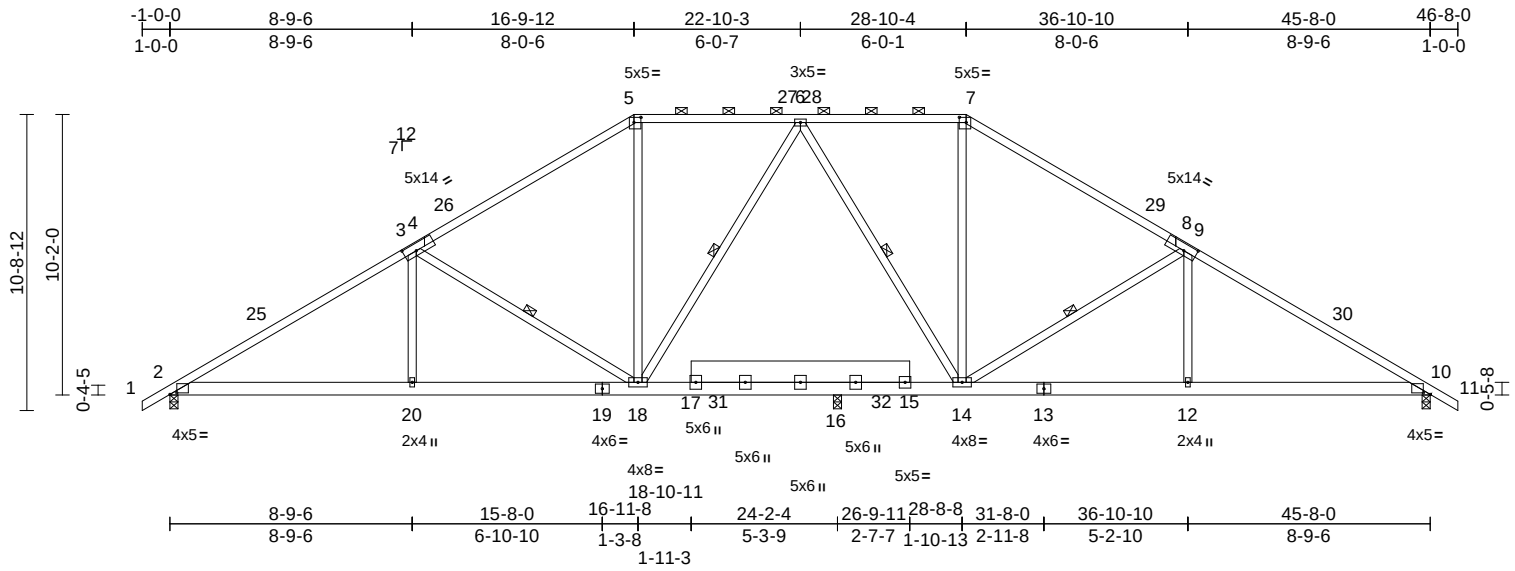

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Plate Offsets (X, Y): [2:0-3-0,0-0-11], [4:0-5-8,0-3-0], [5:0-3-0,0-2-4], [7:0-3-0,0-2-4], [8:0-5-8,0-3-0], [10:0-3-0,0-0-11]

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	0.66	Vert(LL)	-0.11	12-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.24	12-14	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.06	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 320 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.2 *Except* 17-15:2x10 SP No.2
WEBS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-6-4 oc purlins, except 2-0-0 oc purlins (5-10-11 max.): 5-7.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 6-18, 6-14, 9-14, 3-18

REACTIONS (lb/size) 2=1340/0-3-8, 10=1273/0-3-8, 16=1160/0-3-8
Max Horiz 2=-187 (LC 9)
Max Uplift 2=-212 (LC 11), 10=-206 (LC 11), 16=-103 (LC 11)
Max Grav 2=1340 (LC 1), 10=1273 (LC 1), 16=1206 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/30, 2-3=-2112/329, 3-5=-1324/311, 5-6=-1027/319, 6-7=-901/308, 7-9=-1179/299, 9-10=-1986/318, 10-11=0/30
BOT CHORD 2-20=-146/1732, 18-20=-146/1732, 16-18=0/1097, 14-16=-1/1133, 12-14=-137/1623, 10-12=-137/1623
WEBS 5-18=-4/239, 6-18=-276/100, 6-14=-484/86, 7-14=0/184, 9-14=-854/222, 9-12=0/327, 3-18=-835/221, 3-20=0/307

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=46ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -1-0-0 to 3-6-13, Interior (1) 3-6-13 to 16-9-12, Exterior (2) 16-9-12 to 23-3-4, Interior (1) 23-3-4 to 28-10-4, Exterior (2) 28-10-4 to 35-3-12, Interior (1) 35-3-12 to 46-8-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 212 lb uplift at joint 2, 206 lb uplift at joint 10 and 103 lb uplift at joint 16.
6) 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

July 20,2021

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Yarbrough Front Load Crawl V4-Roof
P-7881-1	T1GE	Piggyback Base Supported Gable	1	1	I47059120 Job Reference (optional)

Peak Truss Builders, LLC (Closed), New Hill, NC - 27562, Run: 8.43 S Jun 2 2021 Print: 8.430 S Jun 2 2021 MiTek Industries, Inc. Mon Jul 19 10:31:26 Page: 1
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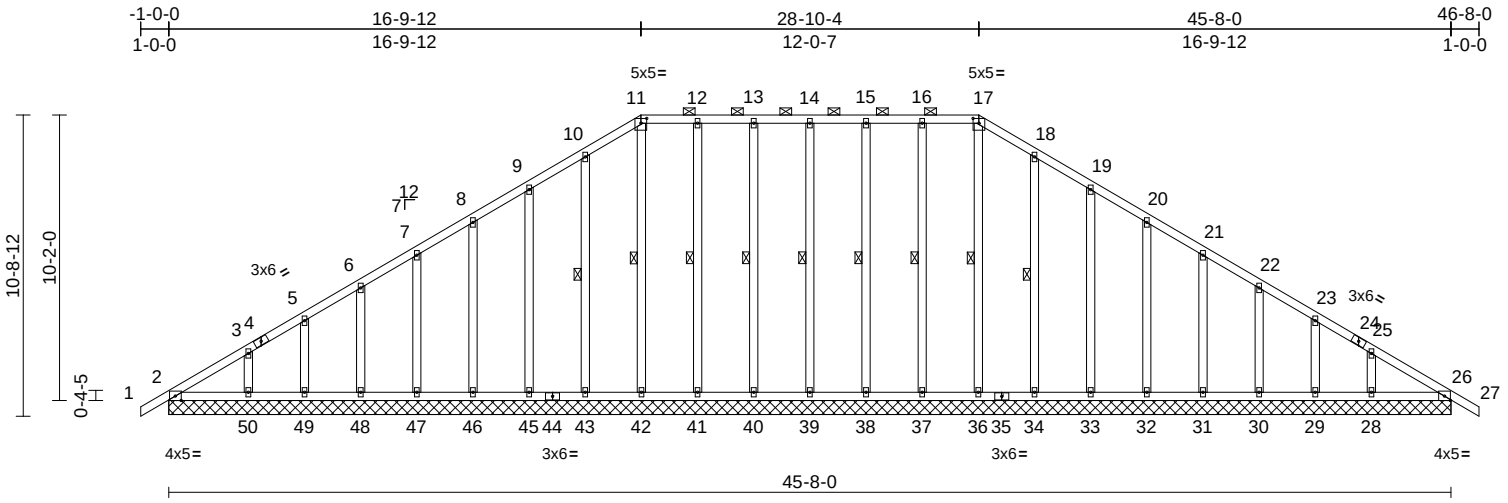

Scale = 1:82.1

Plate Offsets (X, Y): [11:0-2-8,0-2-1], [17:0-2-8,0-2-1]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.01	54	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 351 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, except 2-0-0 oc purlins (6-0-0 max.): 11-17.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 14-39, 13-40, 12-41, 11-42, 10-43, 15-38, 16-37, 17-36, 18-34

REACTIONS (lb/size) 2=175/45-8-0, 26=175/45-8-0, 28=215/45-8-0, 29=142/45-8-0, 30=165/45-8-0, 31=159/45-8-0, 32=160/45-8-0, 33=159/45-8-0, 34=165/45-8-0, 36=142/45-8-0, 37=166/45-8-0, 38=159/45-8-0, 39=160/45-8-0, 40=159/45-8-0, 41=166/45-8-0, 42=142/45-8-0, 43=165/45-8-0, 45=159/45-8-0, 46=160/45-8-0, 47=159/45-8-0, 48=165/45-8-0, 49=142/45-8-0, 50=215/45-8-0, 51=175/45-8-0, 54=175/45-8-0
Max Horiz 2=-187 (LC 9), 51=-187 (LC 9)
Max Uplift 2=-7 (LC 7), 26=-2 (LC 11), 28=-50 (LC 11), 29=-41 (LC 11), 30=-43 (LC 11), 31=-43 (LC 11), 32=-42 (LC 11), 33=-45 (LC 11), 34=-40 (LC 11), 37=-13 (LC 11), 38=-22 (LC 11), 39=-19 (LC 11), 40=-22 (LC 11), 41=-13 (LC 11), 43=-40 (LC 11), 45=-45 (LC 11), 46=-42 (LC 11), 47=-43 (LC 11), 48=-43 (LC 11), 49=-41 (LC 11), 50=-50 (LC 11), 51=-7 (LC 7), 54=-2 (LC 11)
Max Grav 2=182 (LC 20), 26=175 (LC 1), 28=216 (LC 20), 29=142 (LC 1), 30=165 (LC 24), 31=159 (LC 1), 32=160 (LC 24), 33=159 (LC 1), 34=165 (LC 24), 36=143 (LC 24), 37=168 (LC 23), 38=159 (LC 23), 39=160 (LC 1), 40=159 (LC 24), 41=168 (LC 24), 42=148 (LC 19), 43=165 (LC 23), 45=159 (LC 1), 46=160 (LC 23), 47=159 (LC 1), 48=165 (LC 23), 49=142 (LC 1), 50=217 (LC 19), 51=182 (LC 20), 54=175 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/30, 2-3=-145/147, 3-5=-137/124, 5-6=-124/114, 6-7=-112/101, 7-8=-103/99, 8-9=-119/144, 9-10=-155/191, 10-11=-190/236, 11-12=-170/219, 12-13=-170/219, 13-14=-170/219, 14-15=-170/219, 15-16=-170/219, 16-17=-170/219, 17-18=-190/236, 18-19=-155/191, 19-20=-119/144, 20-21=-84/99, 21-22=-50/53, 22-23=-57/31, 23-25=-69/47, 25-26=-102/100, 26-27=0/30
BOT CHORD 2-50=-96/142, 49-50=-96/142, 48-49=-96/142, 47-48=-96/142, 46-47=-96/142, 45-46=-96/142, 43-45=-96/142, 42-43=-96/142, 41-42=-96/141, 40-41=-96/141, 39-40=-96/141, 38-39=-96/141, 37-38=-96/141, 36-37=-96/141, 34-36=-96/142, 33-34=-96/142, 32-33=-96/142, 31-32=-96/142, 30-31=-96/142, 29-30=-96/142, 28-29=-96/142, 26-28=-96/142
WEBS 14-39=-120/43, 13-40=-119/46, 12-41=-128/38, 11-42=-108/14, 10-43=-125/64, 9-45=-119/69, 8-46=-120/66, 7-47=-120/67, 6-48=-122/67, 5-49=-111/64, 3-50=-150/75, 15-38=-119/46, 16-37=-128/38, 17-36=-103/14, 18-34=-125/64, 19-33=-119/69, 20-32=-120/66, 21-31=-120/67, 22-30=-122/67, 23-29=-111/64, 25-28=-150/75

NOTES

July 20,2021

Continued on page 2

ENGINEERING BY TRENCO A MiTek Affiliate
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Edenton, NC 27932

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=46ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner (3) -1-0-0 to 3-6-13, Exterior (2) 3-6-13 to 16-9-12, Corner (3) 16-9-12 to 21-4-9, Exterior (2) 21-4-9 to 28-10-4, Corner (3) 28-10-4 to 33-5-1, Exterior (2) 33-5-1 to 46-8-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 7 lb uplift at joint 2, 2 lb uplift at joint 26, 19 lb uplift at joint 39, 22 lb uplift at joint 40, 13 lb uplift at joint 41, 40 lb uplift at joint 43, 45 lb uplift at joint 45, 42 lb uplift at joint 46, 43 lb uplift at joint 47, 43 lb uplift at joint 48, 41 lb uplift at joint 49, 50 lb uplift at joint 50, 22 lb uplift at joint 38, 13 lb uplift at joint 37, 40 lb uplift at joint 34, 45 lb uplift at joint 33, 42 lb uplift at joint 32, 43 lb uplift at joint 31, 43 lb uplift at joint 30, 41 lb uplift at joint 29, 50 lb uplift at joint 28, 7 lb uplift at joint 2 and 2 lb uplift at joint 26.
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

Job	Truss	Truss Type	Qty	Ply	Yarbrough Front Load Crawl V4-Roof
P-7881-1	T2	Piggyback Base	6	1	I47059121 Job Reference (optional)

Peak Truss Builders, LLC (Closed), New Hill, NC - 27562,

Run: 8.43 S Jun 2 2021 Print: 8.430 S Jun 2 2021 MiTek Industries, Inc. Mon Jul 19 10:31:26

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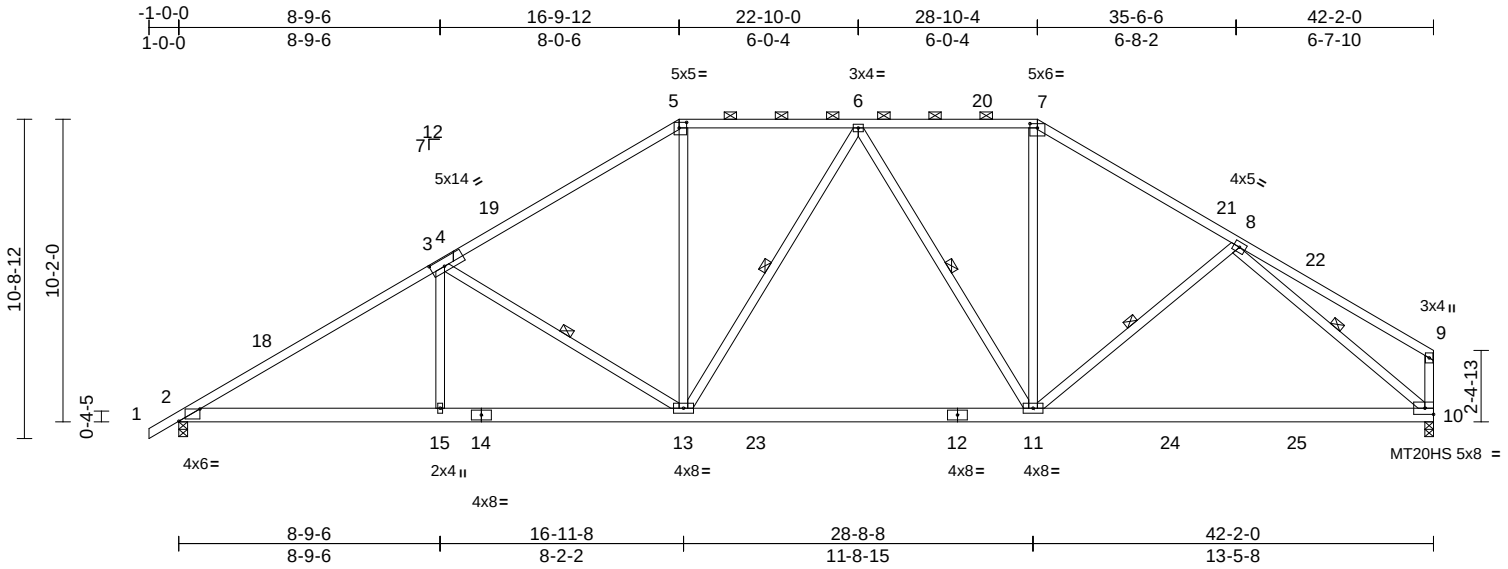


Scale = 1:77.4

Plate Offsets (X, Y): [2:0-8-8,Edge], [4:0-5-8,0-3-0], [5:0-3-0,0-2-4], [7:0-3-0,0-1-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.23	11-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.43	10-11	>999	180	MT20HS	187/143
BCLL	0.0*	Rep Stress Incr	YES	WB	0.81	Horz(CT)	0.09	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 280 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.1

BOT CHORD 2x6 SP No.2

WEBS 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-5-9 max.): 5-7.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

WEBS 1 Row at midpt 6-13, 6-11, 8-10, 8-11, 3-13

REACTIONS (lb/size) 2=1742/0-3-8, 10=1680/0-3-8

Max Horiz 2=212 (LC 10)

Max Uplift 2=-242 (LC 11), 10=-207 (LC 11)

Max Grav 2=1742 (LC 1), 10=1731 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/30, 2-3=-2893/389, 3-5=-2177/373, 5-6=-1803/373, 6-7=-1676/339, 7-8=-2013/343, 8-9=-262/100, 9-10=-256/97

BOT CHORD 2-15=-255/2477, 13-15=-255/2477, 11-13=-93/1866, 10-11=-168/1590

WEBS 5-13=-36/717, 6-13=-243/85, 6-11=-485/111, 7-11=-37/684, 8-10=-1977/266, 8-11=-68/222, 3-13=-775/219, 3-15=0/242

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=42ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -1-0-0 to 3-2-10, Interior (1) 3-2-10 to 16-9-12, Exterior (2) 16-9-12 to 22-10-0, Interior (1) 22-10-0 to 28-10-4, Exterior (2) 28-10-4 to 34-9-13, Interior (1) 34-9-13 to 42-0-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 242 lb uplift at joint 2 and 207 lb uplift at joint 10.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

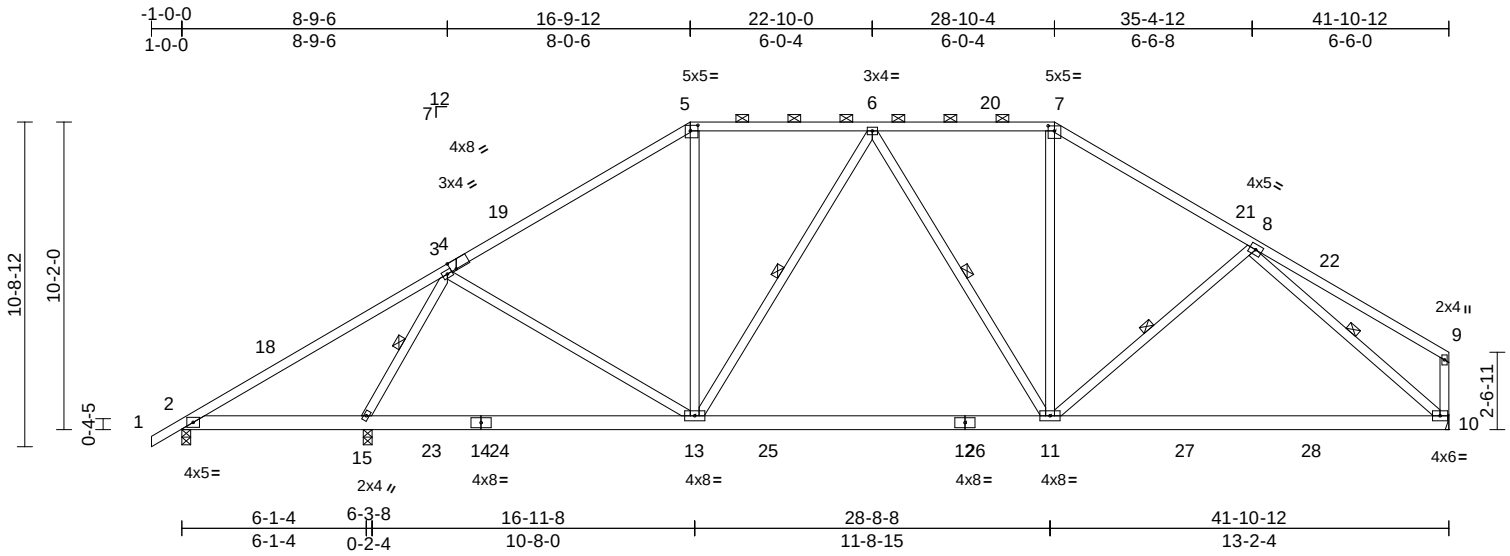
LOAD CASE(S) Standard

July 20,2021

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

Job	Truss	Truss Type	Qty	Ply	Yarbrough Front Load Crawl V4-Roof
P-7881-1	T2A	Piggyback Base	6	1	I47059122 Job Reference (optional)

Peak Truss Builders, LLC (Closed), New Hill, NC - 27562, Run: 8.43 S Jun 2 2021 Print: 8.430 S Jun 2 2021 MiTek Industries, Inc. Mon Jul 19 10:31:27 Page: 1
ID:iu797LEdS17vT1LzA7okOwzr7C5-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:76.2

Plate Offsets (X, Y): [4:0-2-2,Edge], [5:0-3-0,0-2-4], [7:0-2-8,0-2-1]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.17	11-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.38	10-11	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.63	Horz(CT)	0.04	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 280 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-3-6 oc purlins, except end verticals, and 2-0-0 oc purlins (5-3-7 max.): 5-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 2-15.
WEBS 1 Row at midpt 8-10, 6-13, 6-11, 3-15, 8-11

REACTIONS (lb/size) 2=145/0-3-8, 10=1405/ Mechanical, 15=1850/0-3-8
Max Horiz 2=214 (LC 10)
Max Uplift 2=-45 (LC 11), 10=-173 (LC 11), 15=-229 (LC 11)
Max Grav 2=168 (LC 23), 10=1483 (LC 20), 15=1937 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/30, 2-3=-267/576, 3-5=-1410/271, 5-6=-1130/284, 6-7=-1328/292, 7-8=-1612/290, 8-9=-236/100, 9-10=-239/95
BOT CHORD 2-15=-340/119, 13-15=-85/712, 11-13=-50/1340, 10-11=-124/1267
WEBS 5-13=0/371, 7-11=-12/467, 8-10=-1580/212, 6-13=-452/86, 6-11=-212/86, 3-13=0/627, 3-15=-1845/343, 8-11=-111/177

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=42ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -1-0-0 to 3-2-4, Interior (1) 3-2-4 to 16-9-12, Exterior (2) 16-9-12 to 22-10-0, Interior (1) 22-10-0 to 28-10-4, Exterior (2) 28-10-4 to 34-9-5, Interior (1) 34-9-5 to 41-9-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 45 lb uplift at joint 2, 173 lb uplift at joint 10 and 229 lb uplift at joint 15.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

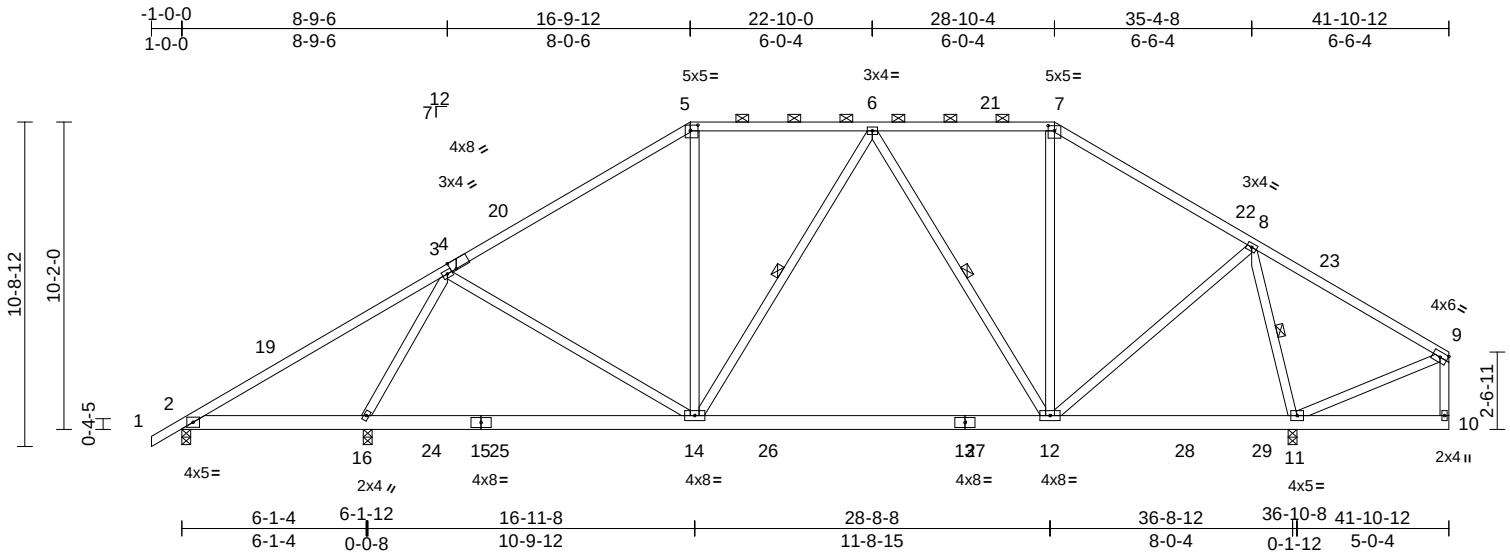
LOAD CASE(S) Standard

July 20,2021

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

Job	Truss	Truss Type	Qty	Ply	Yarbrough Front Load Crawl V4-Roof
P-7881-1	T2B	Piggyback Base	3	1	I47059123 Job Reference (optional)

Peak Truss Builders, LLC (Closed), New Hill, NC - 27562, Run: 8.43 S Jun 2 2021 Print: 8.430 S Jun 2 2021 MiTek Industries, Inc. Mon Jul 19 10:31:28 Page: 1
ID:A4hXKhFFDLFm5Bw9kqJzw8zr7C4-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:76.2

Plate Offsets (X, Y): [4:0-2-2,Edge], [5:0-3-0,0-2-4], [7:0-2-8,0-2-1]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.20	12-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.31	12-14	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.94	Horz(CT)	0.02	11	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 284 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-11-5 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 2-16.
WEBS 1 Row at midpt 6-14, 6-12, 8-11

REACTIONS (lb/size) 2=216/0-3-8, 11=1645/0-3-8, 16=1539/0-3-8
Max Horiz 2=214 (LC 10)
Max Uplift 2=-53 (LC 11), 11=-299 (LC 12), 16=-190 (LC 11)
Max Grav 2=224 (LC 23), 11=1645 (LC 1), 16=1625 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/30, 2-3=-248/436, 3-5=-1154/236, 5-6=-913/254, 6-7=-776/237, 7-8=-978/227, 8-9=-97/309, 9-10=-47/36
BOT CHORD 2-16=-217/103, 14-16=-75/665, 12-14=-8/967, 11-12=0/219, 10-11=-40/54
WEBS 5-14=0/246, 7-12=0/213, 9-11=-230/142, 6-14=-170/82, 6-12=-427/104, 8-12=0/775, 8-11=-1453/273, 3-14=0/431, 3-16=-1503/294

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=42ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -1-0-0 to 3-2-4, Interior (1) 3-2-4 to 16-9-12, Exterior (2) 16-9-12 to 22-10-0, Interior (1) 22-10-0 to 28-10-4, Exterior (2) 28-10-4 to 34-9-5, Interior (1) 34-9-5 to 41-9-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 53 lb uplift at joint 2, 299 lb uplift at joint 11 and 190 lb uplift at joint 16.
6) 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

July 20,2021

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

Job	Truss	Truss Type	Qty	Ply	Yarbrough Front Load Crawl V4-Roof
P-7881-1	T2GE	Piggyback Base Supported Gable	1	1	I47059124 Job Reference (optional)

Peak Truss Builders, LLC (Closed), New Hill, NC - 27562, Run: 8.43 S Jun 2 2021 Print: 8.430 S Jun 2 2021 MiTek Industries, Inc. Mon Jul 19 10:31:28 Page: 1
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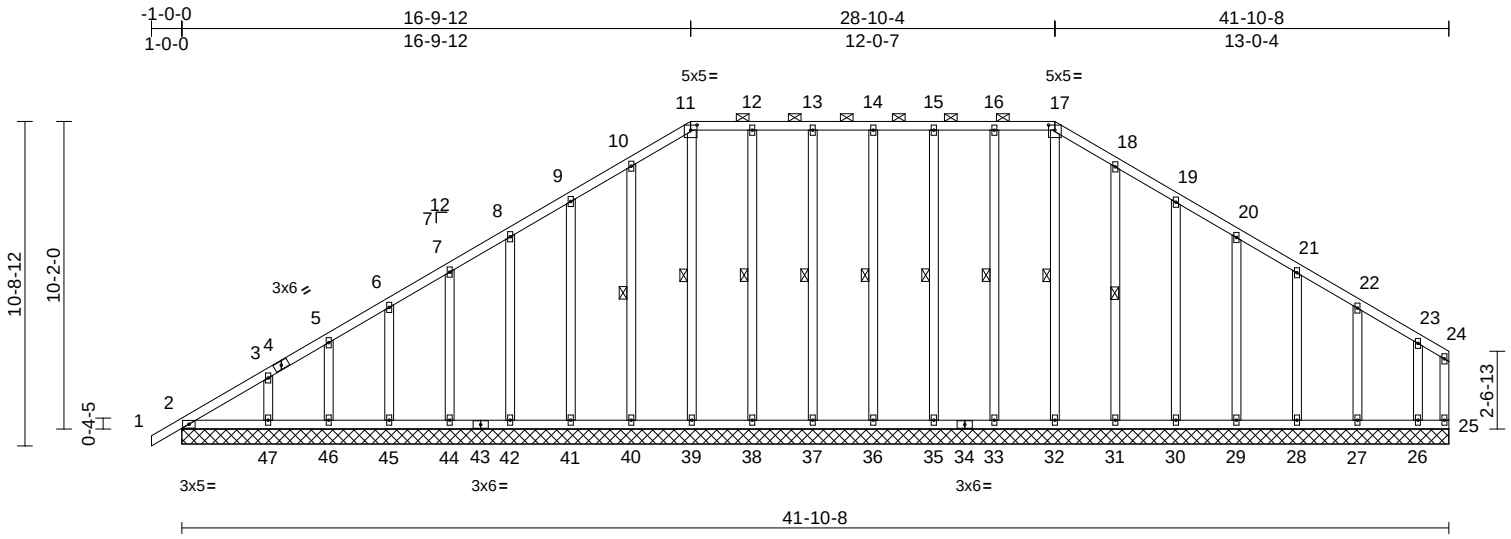


Scale = 1:76.1

Plate Offsets (X, Y): [11:0-2-8,0-2-1], [17:0-2-8,0-2-1]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	25	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 338 lb	FT = 20%

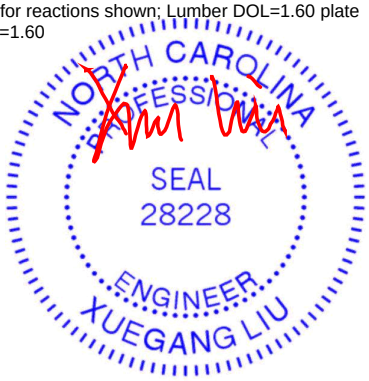
LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 11-17.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 17-32, 16-33, 15-35, 14-36, 13-37, 12-38, 11-39, 10-40, 18-31

REACTIONS (lb/size) 2=168/41-10-8, 25=22/41-10-8, 26=124/41-10-8, 27=166/41-10-8, 28=159/41-10-8, 29=160/41-10-8, 30=159/41-10-8, 31=166/41-10-8, 32=148/41-10-8, 33=166/41-10-8, 35=159/41-10-8, 36=160/41-10-8, 37=159/41-10-8, 38=167/41-10-8, 39=148/41-10-8, 40=164/41-10-8, 41=159/41-10-8, 42=160/41-10-8, 44=159/41-10-8, 45=165/41-10-8, 46=141/41-10-8, 47=217/41-10-8, 48=168/41-10-8
Max Horiz 2=216 (LC 10), 48=216 (LC 10)
Max Uplift 2=-31 (LC 11), 26=-74 (LC 11), 27=-41 (LC 11), 28=-43 (LC 11), 29=-42 (LC 11), 30=-46 (LC 11), 31=-39 (LC 11), 33=-10 (LC 11), 35=-23 (LC 11), 36=-19 (LC 11), 37=-23 (LC 11), 38=-11 (LC 11), 40=-38 (LC 11), 41=-46 (LC 11), 42=-42 (LC 11), 44=-43 (LC 11), 45=-43 (LC 11), 46=-41 (LC 11), 47=-49 (LC 11), 48=-31 (LC 11)
Max Grav 2=200 (LC 20), 25=33 (LC 19), 26=143 (LC 20), 27=166 (LC 1), 28=159 (LC 24), 29=160 (LC 1), 30=159 (LC 1), 31=166 (LC 24), 32=149 (LC 24), 33=167 (LC 23), 35=159 (LC 23), 36=160 (LC 1), 37=159 (LC 24), 38=169 (LC 24), 39=164 (LC 19), 40=165 (LC 19), 41=159 (LC 1), 42=160 (LC 23), 44=159 (LC 1), 45=165 (LC 23), 46=141 (LC 1), 47=220 (LC 19), 48=200 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/30, 2-3=-200/182, 3-5=-192/158, 5-6=-178/150, 6-7=-167/136, 7-8=-155/154, 8-9=-169/200, 9-10=-205/247, 10-11=-240/290, 11-12=-213/267, 12-13=-213/267, 13-14=-213/267, 14-15=-213/267, 15-16=-213/267, 16-17=-213/267, 17-18=-240/291, 18-19=-204/247, 19-20=-168/199, 20-21=-134/154, 21-22=-99/109, 22-23=-62/66, 23-24=-36/41, 24-25=-26/19
BOT CHORD 2-47=-36/42, 46-47=-36/42, 45-46=-36/42, 44-45=-36/42, 42-44=-36/42, 41-42=-36/42, 40-41=-36/42, 39-40=-36/42, 38-39=-36/42, 37-38=-36/42, 36-37=-36/42, 35-36=-36/42, 33-35=-36/42, 32-33=-36/42, 31-32=-36/42, 30-31=-36/42, 29-30=-36/42, 28-29=-36/42, 27-28=-36/42, 26-27=-36/42, 25-26=-36/42
WEBS 17-32=-109/37, 16-33=-127/37, 15-35=-119/47, 14-36=-120/43, 13-37=-119/47, 12-38=-129/38, 11-39=-124/37, 10-40=-125/62, 9-41=-119/70, 8-42=-120/66, 7-44=-120/67, 6-45=-122/67, 5-46=-110/64, 3-47=-151/75, 18-31=-126/63, 19-30=-119/70, 20-29=-120/66, 21-28=-119/66, 22-27=-125/69, 23-26=-103/66

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=42ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner (3) -1-0-0 to 3-2-4, Exterior (2) 3-2-4 to 16-9-12, Corner (3) 16-9-12 to 20-10-4, Exterior (2) 20-10-4 to 28-10-4, Corner (3) 28-10-4 to 32-10-4, Exterior (2) 32-10-4 to 41-8-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60



July 20,2021

Continued on page 2

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

3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 2, 10 lb uplift at joint 33, 23 lb uplift at joint 35, 19 lb uplift at joint 36, 23 lb uplift at joint 37, 11 lb uplift at joint 38, 38 lb uplift at joint 40, 46 lb uplift at joint 41, 42 lb uplift at joint 42, 43 lb uplift at joint 44, 43 lb uplift at joint 45, 41 lb uplift at joint 46, 49 lb uplift at joint 47, 39 lb uplift at joint 31, 46 lb uplift at joint 30, 42 lb uplift at joint 29, 43 lb uplift at joint 28, 41 lb uplift at joint 27, 74 lb uplift at joint 26 and 31 lb uplift at joint 2.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Yarbrough Front Load Crawl V4-Roof
P-7881-1	T3	Common	2	1	I47059125 Job Reference (optional)

Peak Truss Builders, LLC (Closed), New Hill, NC - 27562,

Run: 8.43 S Jun 2 2021 Print: 8.430 S Jun 2 2021 MiTek Industries, Inc. Mon Jul 19 10:31:29

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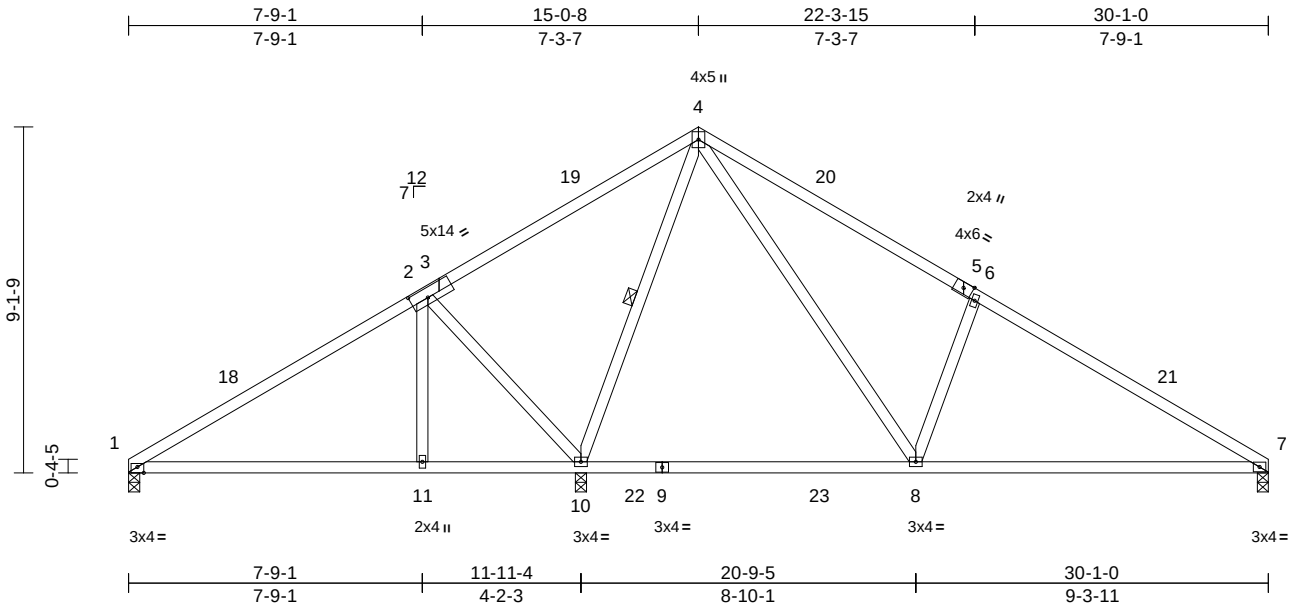

Scale = 1:60.8

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

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	0.59	Vert(LL)	-0.22	8-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.30	8-10	>718	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 148 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 5-10-10 oc purlins.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

WEBS 1 Row at midpt 4-10

REACTIONS (lb/size) 1=364/0-3-8, 7=651/0-3-8, 10=1391/0-3-8

Max Horiz 1=-157 (LC 9)

Max Uplift 1=-43 (LC 11), 7=-79 (LC 11), 10=-175 (LC 11)

Max Grav 1=398 (LC 20), 7=654 (LC 21), 10=1395 (LC 16)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-366/74, 2-4=0/333, 4-6=-761/234, 6-7=-844/145

BOT CHORD 1-11=-34/260, 10-11=-34/260, 8-10=-45/126, 7-8=-47/675

WEBS 2-11=0/169, 2-10=-609/201, 4-10=-898/121, 4-8=-144/855, 6-8=-464/237

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=30ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-0-0 to 3-0-2, Interior (1) 3-0-2 to 15-0-8, Exterior (2) 15-0-8 to 18-0-10, Interior (1) 18-0-10 to 30-1-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 43 lb uplift at joint 1, 175 lb uplift at joint 10 and 79 lb uplift at joint 7.

LOAD CASE(S) Standard

July 20,2021

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

Job	Truss	Truss Type	Qty	Ply	Yarbrough Front Load Crawl V4-Roof
P-7881-1	T3GE	Common Supported Gable	1	1	I47059126 Job Reference (optional)

Peak Truss Builders, LLC (Closed), New Hill, NC - 27562,

Run: 8.43 S Jun 2 2021 Print: 8.430 S Jun 2 2021 MiTek Industries, Inc. Mon Jul 19 10:31:30 Page: 1
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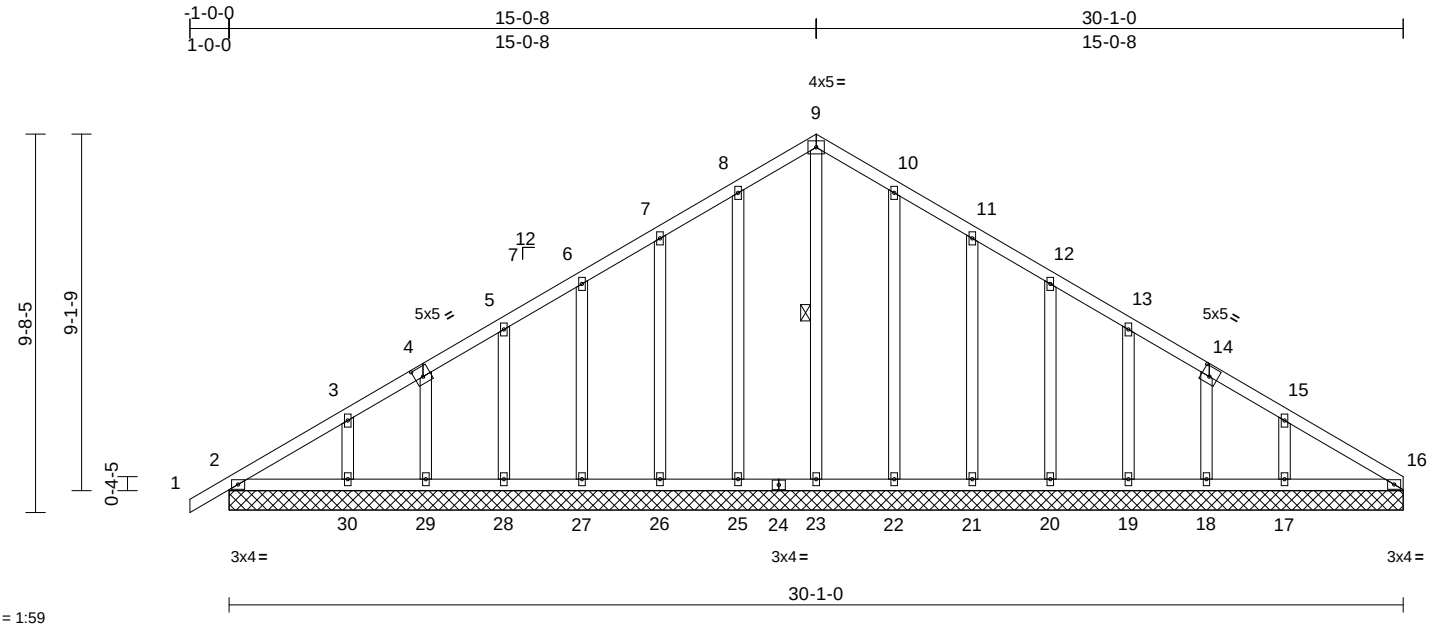

Scale = 1:59

Plate Offsets (X, Y): [4:0-2-8,0-3-0], [14:0-2-8,0-3-0]

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	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.00	16	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 192 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.
WEBS 1 Row at midpt 9-23

REACTIONS (lb/size) 2=185/30-1-0, 16=112/30-1-0, 17=247/30-1-0, 18=126/30-1-0, 19=171/30-1-0, 20=157/30-1-0, 21=160/30-1-0, 22=165/30-1-0, 23=130/30-1-0, 25=165/30-1-0, 26=160/30-1-0, 27=158/30-1-0, 28=169/30-1-0, 29=134/30-1-0, 30=228/30-1-0, 31=185/30-1-0, 34=112/30-1-0
Max Horiz 2=165 (LC 10), 31=165 (LC 10)
Max Uplift 2=-4 (LC 11), 17=-68 (LC 11), 18=-33 (LC 11), 19=-47 (LC 11), 20=-41 (LC 11), 21=-47 (LC 11), 22=-35 (LC 11), 25=-35 (LC 11), 26=-47 (LC 11), 27=-41 (LC 11), 28=-45 (LC 11), 29=-38 (LC 11), 30=-53 (LC 11), 31=-4 (LC 11)
Max Grav 2=185 (LC 1), 16=112 (LC 1), 17=247 (LC 21), 18=126 (LC 1), 19=171 (LC 21), 20=157 (LC 1), 21=160 (LC 1), 22=167 (LC 21), 23=161 (LC 11), 25=167 (LC 20), 26=160 (LC 1), 27=158 (LC 1), 28=169 (LC 20), 29=134 (LC 1), 30=230 (LC 16), 31=185 (LC 1), 34=112 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/30, 2-3=-125/120, 3-5=-120/94, 5-6=-98/74, 6-7=-95/102, 7-8=-132/150, 8-9=-165/192, 9-10=-165/192, 10-11=-132/150, 11-12=-95/102, 12-13=-61/57, 13-15=-76/33, 15-16=-101/78
BOT CHORD 2-30=-75/113, 29-30=-75/113, 28-29=-78/115, 27-28=-78/115, 26-27=-78/115, 25-26=-78/115, 23-25=-78/115, 22-23=-78/115, 21-22=-78/115, 20-21=-78/115, 19-20=-78/115, 18-19=-78/115, 17-18=-75/113, 16-17=-75/113
WEBS 9-23=-137/63, 8-25=-127/59, 7-26=-120/71, 6-27=-119/65, 5-28=-126/69, 4-29=-105/62, 3-30=-157/78, 10-22=-127/59, 11-21=-120/71, 12-20=-119/65, 13-19=-127/70, 14-18=-102/60, 15-17=-165/85

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=30ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner (3) -1-0-0 to 2-0-2, Exterior (2) 2-0-2 to 15-0-8, Corner (3) 15-0-8 to 18-0-10, Exterior (2) 18-0-10 to 30-1-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 4 lb uplift at joint 2, 35 lb uplift at joint 25, 47 lb uplift at joint 26, 41 lb uplift at joint 27, 45 lb uplift at joint 28, 38 lb uplift at joint 29, 53 lb uplift at joint 30, 35 lb uplift at joint 22, 47 lb uplift at joint 21, 41 lb uplift at joint 20, 47 lb uplift at joint 19, 33 lb uplift at joint 18, 68 lb uplift at joint 17 and 4 lb uplift at joint 2.

LOAD CASE(S) Standard

July 20,2021

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

Job	Truss	Truss Type	Qty	Ply	Yarbrough Front Load Crawl V4-Roof
P-7881-1	T4GRD	Monopitch Girder	1	3	I47059127 Job Reference (optional)

Peak Truss Builders, LLC (Closed), New Hill, NC - 27562, Run: 8.43 S Jun 2 2021 Print: 8.430 S Jun 2 2021 MiTek Industries, Inc. Mon Jul 19 10:31:30 Page: 1
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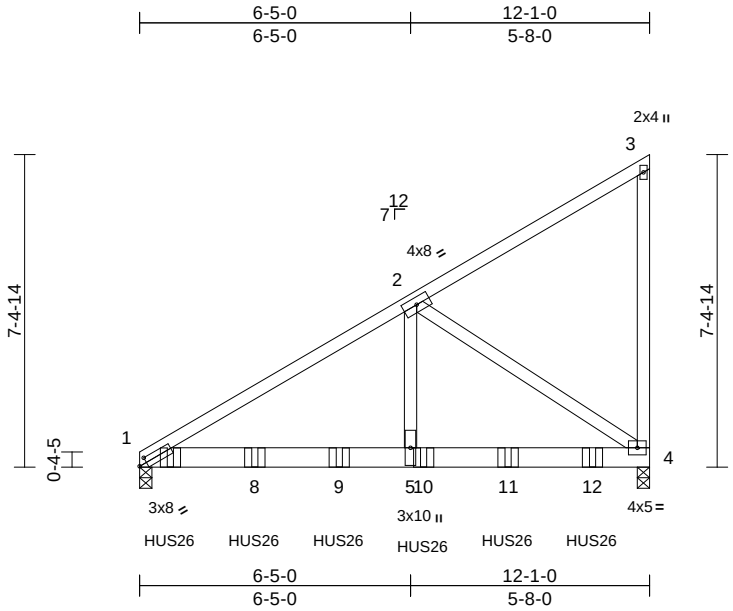

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Plate Offsets (X, Y): [1:0-2-3,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	-0.09	5-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.17	5-7	>826	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.73	Horz(CT)	0.02	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 220 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 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 (lb/size) 1=4798/0-3-8, 4=4467/0-3-8
Max Horiz 1=218 (LC 4)
Max Uplift 1=-607 (LC 7), 4=-619 (LC 7)
Max Grav 1=5018 (LC 12), 4=4714 (LC 12)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-5937/680, 2-3=-194/63, 3-4=-105/64
BOT CHORD 1-5=-606/4846, 4-5=-606/4846
WEBS 2-4=-5781/812, 2-5=-624/5494

NOTES
1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 3 rows staggered at 0-8-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=20ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 607 lb uplift at joint 1 and 619 lb uplift at joint 4.
6) Use USP HUS26 (With 14-16d nails into Girder & 6-16d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-8-12 from the left end to 10-8-12 to connect truss(es) to back face of bottom chord.
7) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-60, 1-4=-20
Concentrated Loads (lb)
Vert: 7=-1387 (B), 8=-1385 (B), 9=-1385 (B), 10=-1385 (B), 11=-1385 (B), 12=-1385 (B)

July 20,2021

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

Job	Truss	Truss Type	Qty	Ply	Yarbrough Front Load Crawl V4-Roof
P-7881-1	V1	Valley	1	1	I47059128 Job Reference (optional)

Peak Truss Builders, LLC (Closed), New Hill, NC - 27562, Run: 8.43 S Jun 2 2021 Print: 8.430 S Jun 2 2021 MiTek Industries, Inc. Mon Jul 19 10:31:31 Page: 1
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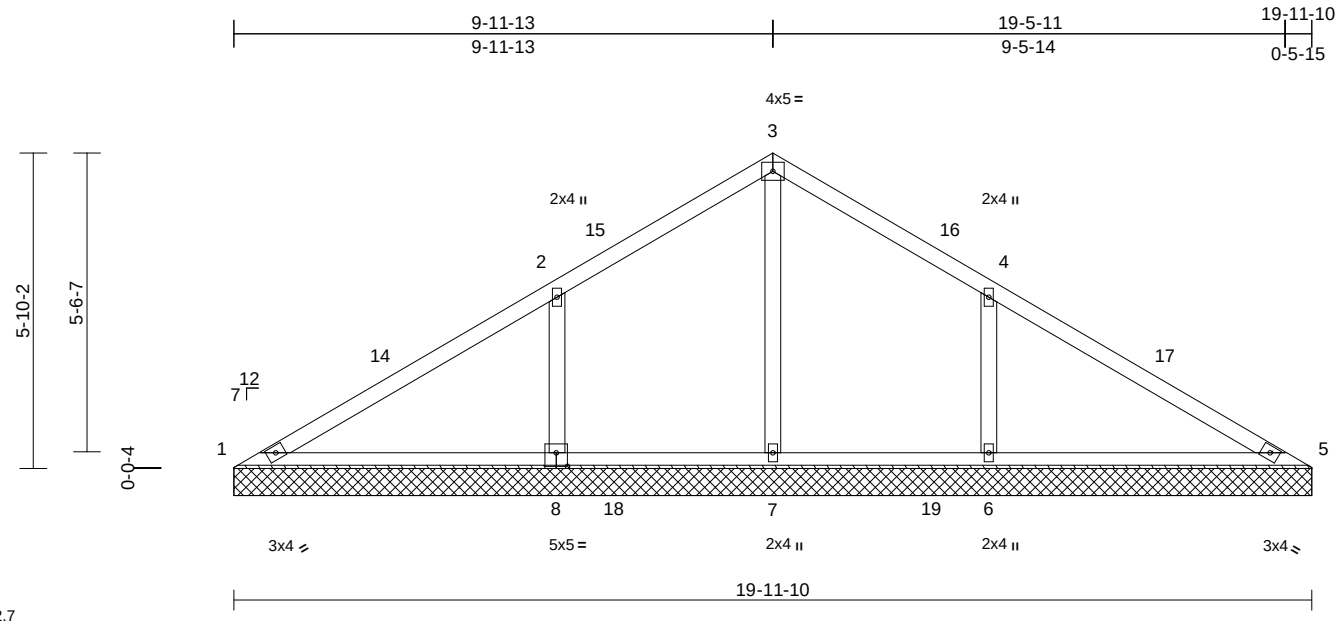

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Plate Offsets (X, Y): [8:0-2-8,0-3-0]

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	0.33	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.36	Horiz(TL)	-0.01	13	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 79 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 10-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 1=-1/19-11-10, 5=1/19-11-10, 6=480/19-11-10, 7=639/19-11-10, 8=479/19-11-10, 13=1/19-11-10
Max Horiz 1=-102 (LC 9)
Max Uplift 1=-96 (LC 21), 6=-128 (LC 11), 8=-130 (LC 11)
Max Grav 1=94 (LC 20), 5=1 (LC 1), 6=501 (LC 17), 7=691 (LC 17), 8=504 (LC 16), 13=1 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-97/522, 2-3=0/475, 3-4=0/474, 4-5=-120/521
BOT CHORD 1-7=-374/97, 6-7=-372/96, 5-6=-392/108
WEBS 3-7=-605/0, 2-8=-342/171, 4-6=-339/171

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=20ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-0-7 to 3-0-7, Interior (1) 3-0-7 to 10-0-4, Exterior (2) 10-0-4 to 13-0-4, Interior (1) 13-0-4 to 20-0-1 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 96 lb uplift at joint 1, 130 lb uplift at joint 8 and 128 lb uplift at joint 6.

LOAD CASE(S) Standard

July 20,2021

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

Job	Truss	Truss Type	Qty	Ply	Yarbrough Front Load Crawl V4-Roof
P-7881-1	V2	Valley	1	1	I47059129 Job Reference (optional)

Peak Truss Builders, LLC (Closed), New Hill, NC - 27562,

Run: 8.43 S Jun 2 2021 Print: 8.430 S Jun 2 2021 MiTek Industries, Inc. Mon Jul 19 10:31:31

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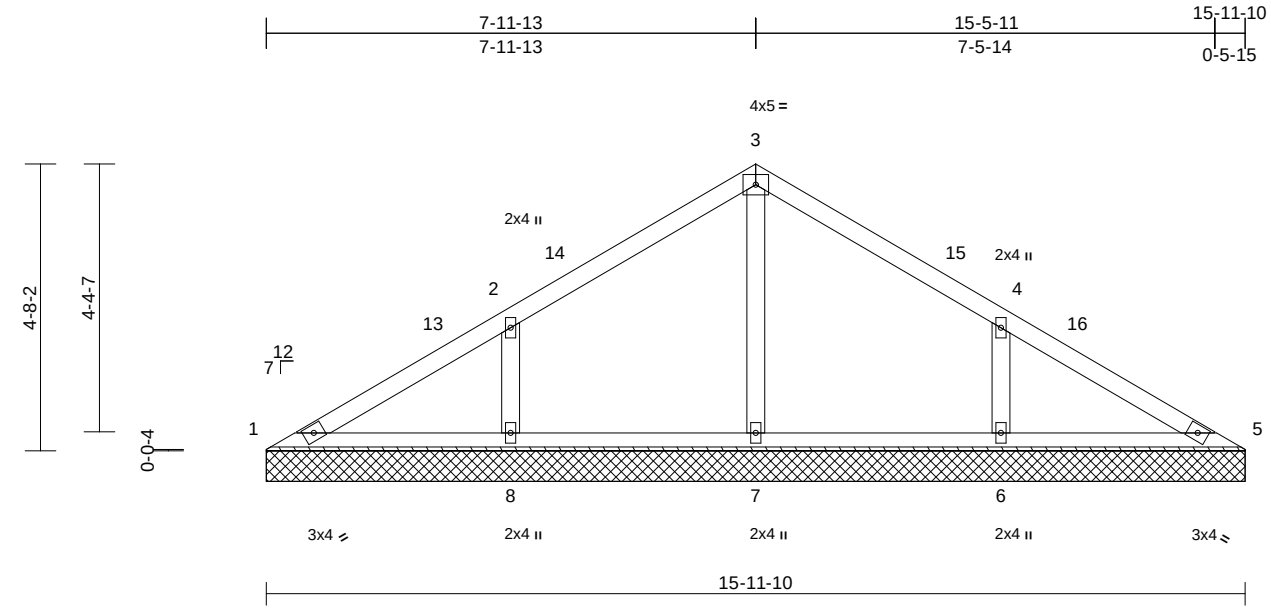

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.11	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							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 6-0-0 oc bracing.

REACTIONS (lb/size) 1=95/15-11-10, 5=95/15-11-10, 6=370/15-11-10, 7=347/15-11-10, 8=370/15-11-10
Max Horiz 1=-81 (LC 9)
Max Uplift 6=-97 (LC 11), 8=-97 (LC 11)
Max Grav 1=100 (LC 20), 5=100 (LC 21), 6=376 (LC 21), 7=347 (LC 1), 8=376 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-128/155, 2-3=-17/123, 3-4=-17/120, 4-5=-128/131
BOT CHORD 1-8=-95/120, 7-8=-95/60, 6-7=-95/60, 5-6=-95/105
WEBS 3-7=-279/15, 2-8=-270/134, 4-6=-270/134

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=20ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-0-7 to 3-0-7, Interior (1) 3-0-7 to 8-0-4, Exterior (2) 8-0-4 to 11-0-4, Interior (1) 11-0-4 to 16-0-1 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 97 lb uplift at joint 8 and 97 lb uplift at joint 6.

LOAD CASE(S) Standard

July 20,2021

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

Job	Truss	Truss Type	Qty	Ply	Yarbrough Front Load Crawl V4-Roof
P-7881-1	V3	Valley	1	1	I47059130 Job Reference (optional)

Peak Truss Builders, LLC (Closed), New Hill, NC - 27562, Run: 8.43 S Jun 2 2021 Print: 8.430 S Jun 2 2021 MiTek Industries, Inc. Mon Jul 19 10:31:31 Page: 1
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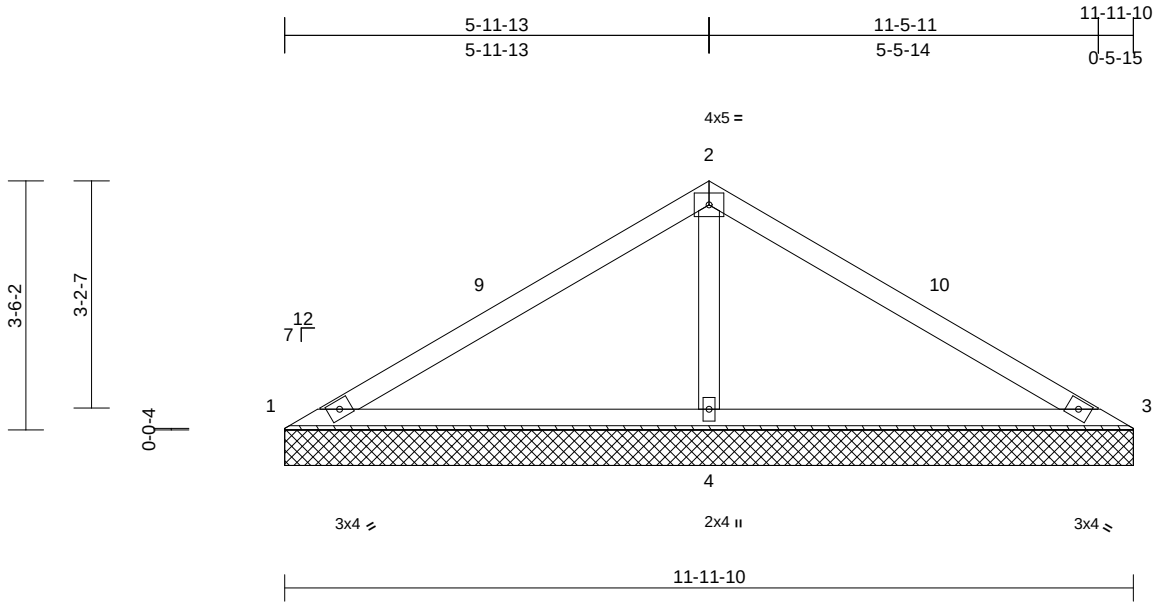

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.19	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 41 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 10-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 1=14/11-11-10, 3=14/11-11-10, 4=930/11-11-10
Max Horiz 1=60 (LC 10)
Max Uplift 1=-50 (LC 21), 3=-50 (LC 20), 4=-150 (LC 11)
Max Grav 1=70 (LC 20), 3=70 (LC 21), 4=930 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-91/484, 2-3=-91/484
BOT CHORD 1-4=-355/130, 3-4=-355/130
WEBS 2-4=-730/183

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=20ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-0-7 to 3-0-7, Interior (1) 3-0-7 to 6-0-4, Exterior (2) 6-0-4 to 9-0-4, Interior (1) 9-0-4 to 12-0-1 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 50 lb uplift at joint 1, 50 lb uplift at joint 3 and 150 lb uplift at joint 4.

LOAD CASE(S) Standard

July 20,2021

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

Job	Truss	Truss Type	Qty	Ply	Yarbrough Front Load Crawl V4-Roof
P-7881-1	V4	Valley	1	1	I47059131 Job Reference (optional)

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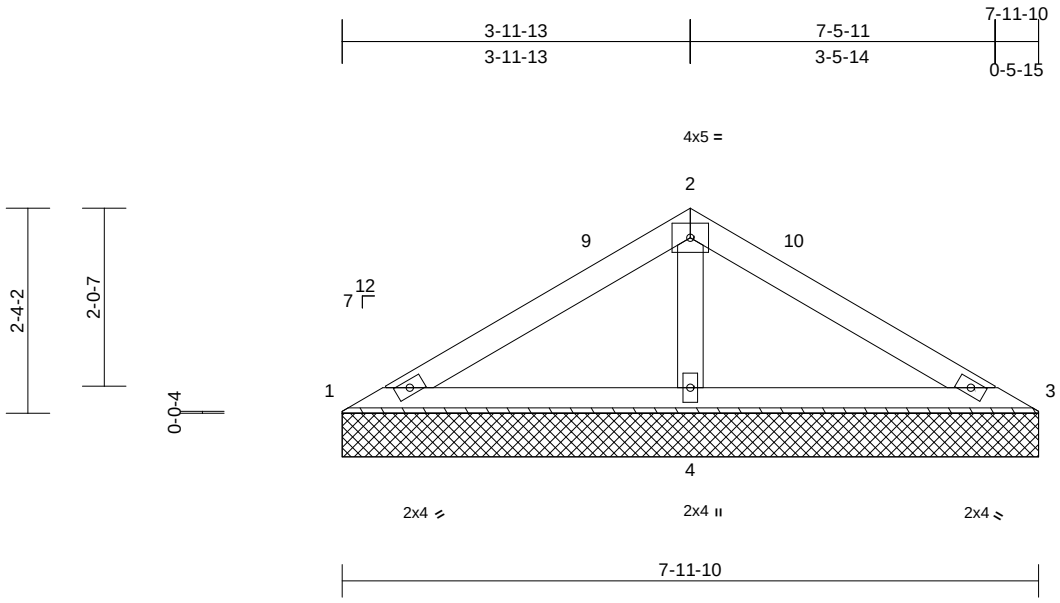

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 26 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 7-11-10 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 1=46/7-11-10, 3=46/7-11-10, 4=545/7-11-10
Max Horiz 1=-39 (LC 9)
Max Uplift 1=-5 (LC 21), 3=-5 (LC 20), 4=-81 (LC 11)
Max Grav 1=75 (LC 20), 3=75 (LC 21), 4=545 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-71/248, 2-3=-71/248
BOT CHORD 1-4=-195/77, 3-4=-195/77
WEBS 2-4=-385/89

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=20ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-0-7 to 3-0-7, Interior (1) 3-0-7 to 4-0-4, Exterior (2) 4-0-4 to 6-11-9, Interior (1) 6-11-9 to 8-0-1 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 5 lb uplift at joint 1, 5 lb uplift at joint 3 and 81 lb uplift at joint 4.

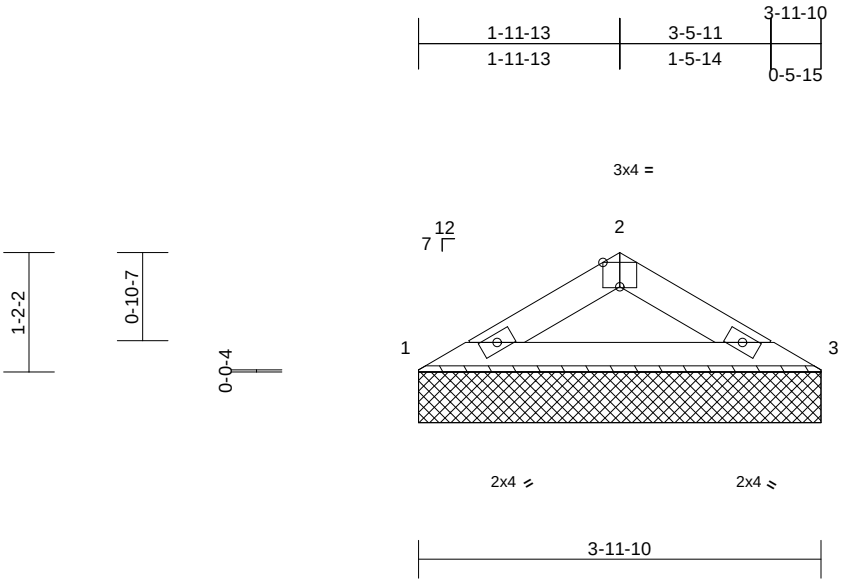
LOAD CASE(S) Standard

July 20,2021

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

Job	Truss	Truss Type	Qty	Ply	Yarbrough Front Load Crawl V4-Roof
P-7881-1	V5	Valley	1	1	I47059132 Job Reference (optional)

Peak Truss Builders, LLC (Closed), New Hill, NC - 27562, Run: 8.43 S Jun 2 2021 Print: 8.430 S Jun 2 2021 MiTek Industries, Inc. Mon Jul 19 10:31:32 Page: 1
ID:uo0robGbwGVXlybqJfAjFPzqojQ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:22.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 11 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 3-11-10 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 1=159/3-11-10, 3=159/3-11-10
Max Horiz 1=18 (LC 10)
Max Uplift 1=-20 (LC 11), 3=-20 (LC 11)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-253/40, 2-3=-253/40
BOT CHORD 1-3=-26/212

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=20ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 20 lb uplift at joint 1 and 20 lb uplift at joint 3.

LOAD CASE(S) Standard

July 20,2021

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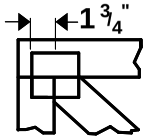
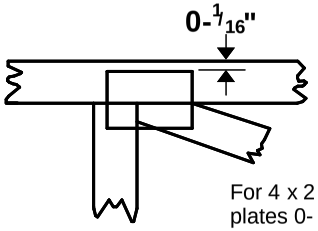
Edenton, NC 27932

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.

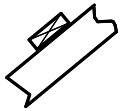
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

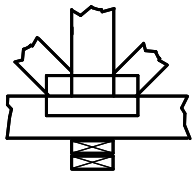
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

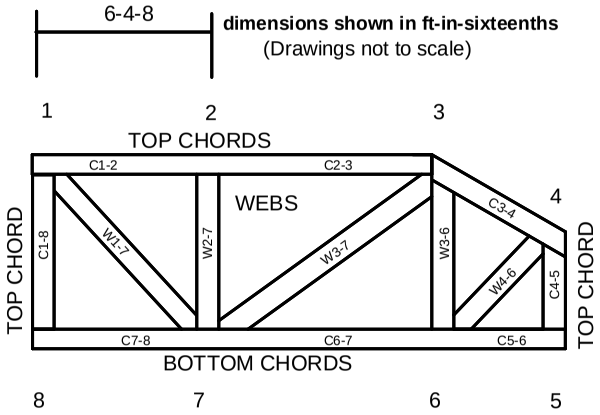


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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
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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.