ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: Quote_file
Barnes - Beverly A

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by 84 Components-Kings Mountain, NC.

Pages or sheets covered by this seal: I47762518 thru I47762575

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

North Carolina COA: C-0844

September 7,2021

Sevier, Scott

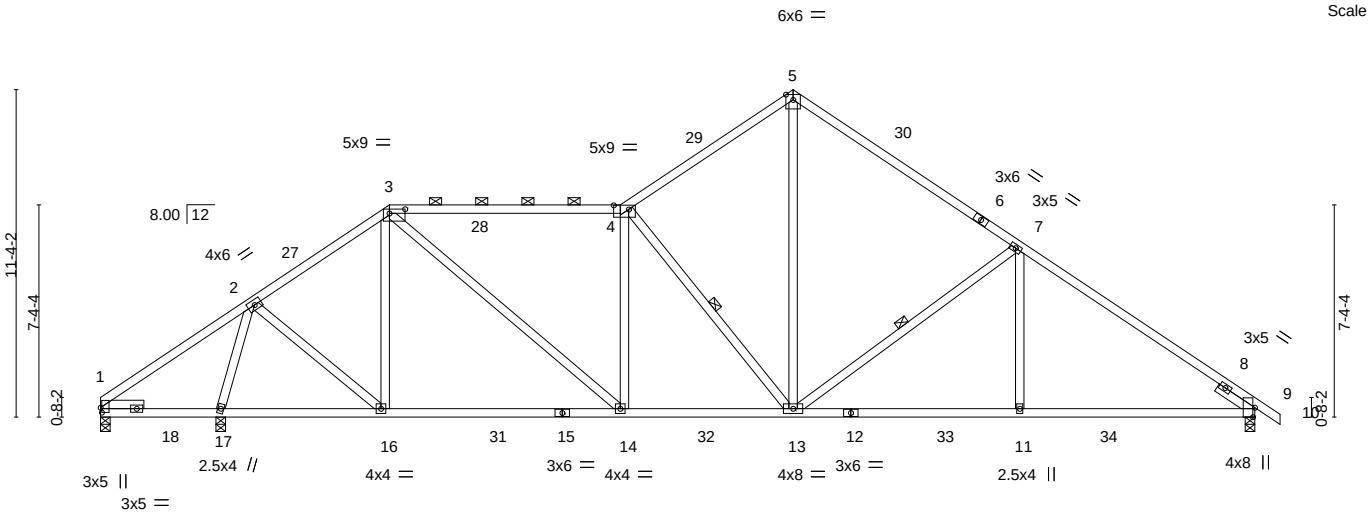
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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	Barnes - Beverly A
QUOTE_FILE	A	Roof Special	1	1	I47762518
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:26 2021 Page 1
ID:1OUQItubALAJMlaPgftmcUyoJ6G-RuVcnO8YE0mfdPqPTUyJTIdaJ2ffXsNMlP5?I7yhPP3

5-1-13	10-0-2	18-0-2	24-0-0	31-10-4	40-0-0	40-10-8
5-1-13	4-10-5	8-0-0	5-11-14	7-10-4	8-1-12	0-10-8

Scale = 1:79.8



4-2-0	10-0-2	18-0-2	24-0-0	31-10-4	40-0-0
4-2-0	5-10-2	8-0-0	5-11-14	7-10-4	8-1-12

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.97	Vert(LL)	-0.20	14-16	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.37	14-16	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.98	Horz(CT)	0.07	9	n/a	n/a		
BCDL	10.0	Code	IBC2018/TPI2014	Matrix-MS							Weight: 182 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 3-4: 2x4 SPF 1650F 1.5E
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF Stud
SLIDER	Left 2x4 SPF Stud 1-6-0, Right 2x4 SPF Stud 1-6-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins (2-2-0 max.): 3-4.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 4-13, 7-13

REACTIONS. (size) 1=0-4-0, 17=0-4-0, 9=0-4-0
Max Horz 1=-273(LC 8)
Max Uplift 1=-241(LC 22), 17=-603(LC 12), 9=-437(LC 13)
Max Grav 1=26(LC 12), 17=2383(LC 19), 9=1836(LC 20)

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

TOP CHORD	1-2=-115/726, 2-3=-1368/442, 3-4=-2091/642, 4-5=-1822/589, 5-7=-1817/575, 7-9=-2517/598
BOT CHORD	1-17=-639/479, 14-16=-271/1107, 13-14=-458/1997, 11-13=-352/1964, 9-11=-352/1964
WEBS	2-17=-2202/622, 2-16=-130/1210, 3-16=-483/185, 3-14=-292/1324, 4-14=-570/275, 4-13=-983/443, 5-13=-390/1505, 7-13=-889/425, 7-11=0/415

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 10-0-2, Exterior(2R) 10-0-2 to 13-0-2, Interior(1) 13-0-2 to 24-0-0, Exterior(2R) 24-0-0 to 27-0-0, Interior(1) 27-0-0 to 40-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) except (jt=lb) 1=241, 17=603, 9=437.
7) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

September 7,2021

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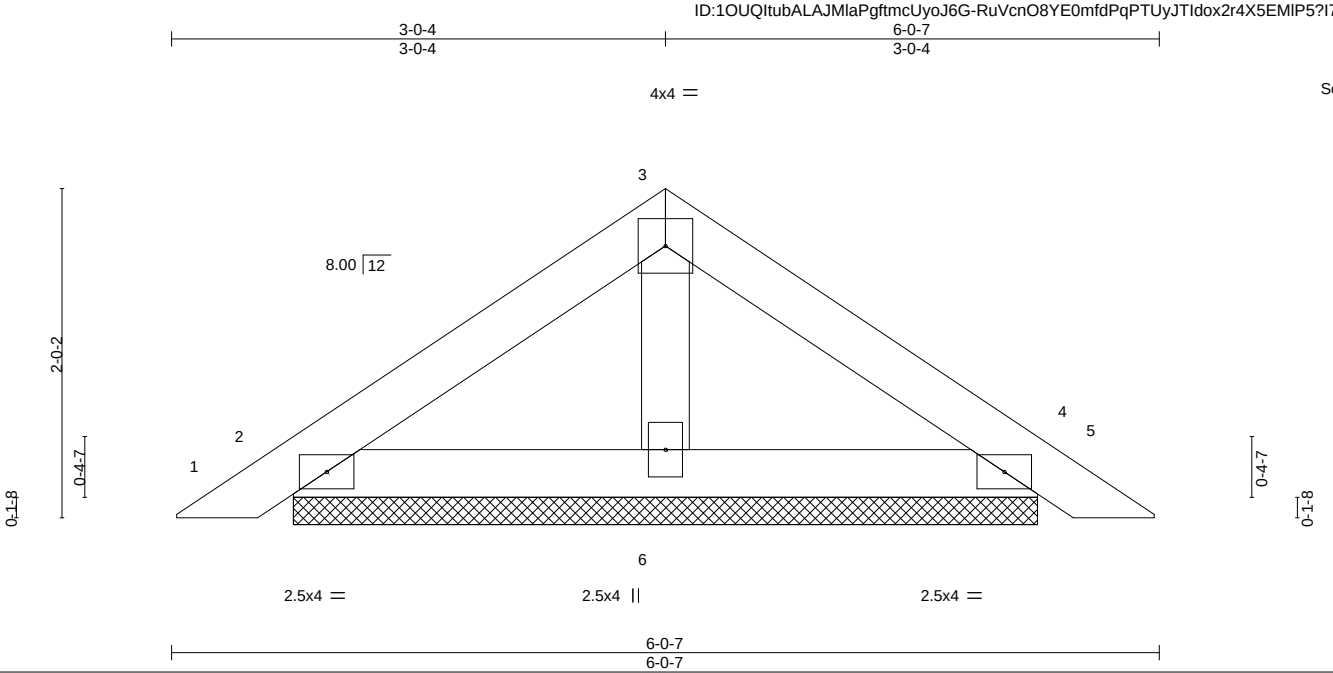
Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	ACP	Piggyback	10	1	I47762519
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:26 2021 Page 1
ID:1OUQItubALAJMlaPgftmcUyoJ6G-RuVcnO8YE0mfdPqPTUyJTIdox2r4X5EMlP5?I7yhPP3



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	0.00	5	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	5	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IBC2018/TPI2014		Matrix-P							Weight: 15 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF Stud

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=4-6-9, 4=4-6-9, 6=4-6-9
Max Horz 2=45(LC 11)
Max Uplift 2=-58(LC 12), 4=-64(LC 13), 6=-15(LC 12)
Max Grav 2=131(LC 19), 4=138(LC 20), 6=165(LC 19)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4, 6.
7) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

September 7,2021

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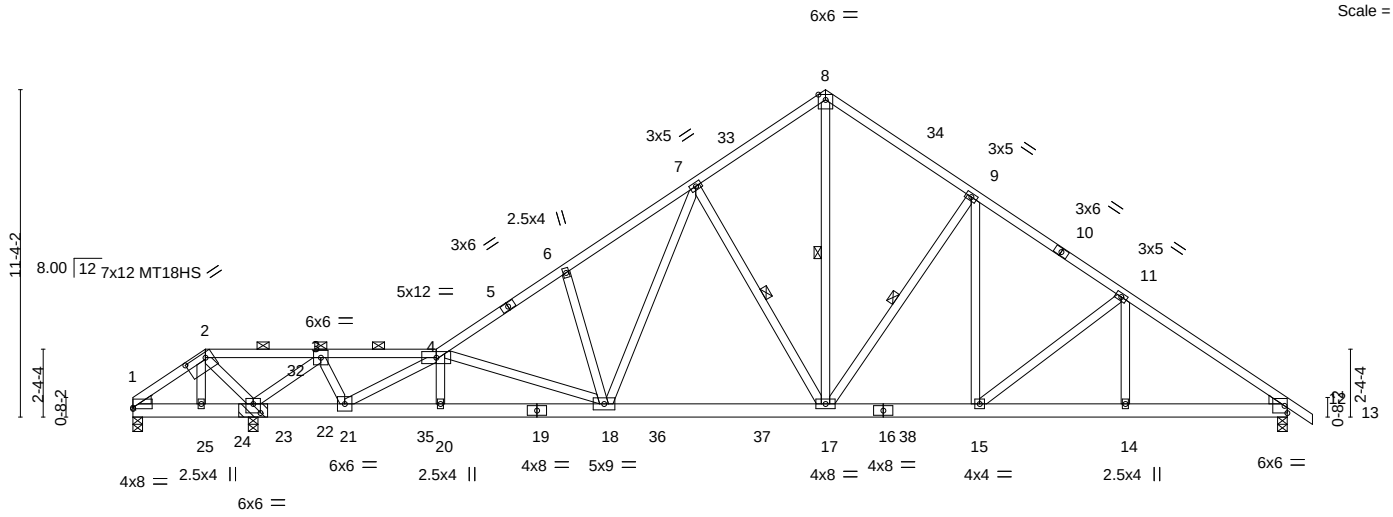
Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A	
QUOTE_FILE	AG	Roof Special Girder	1	1	Job Reference (optional)	I47762520

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:28 2021 Page 1
ID:1OUQItubALAJMlaPgftmcUyoJ6G-NHcMC49pmd1Nsj_oav?nYjiyarRx?oRfDja6M?yhPP1

2-6-2	6-6-2	10-6-2	15-0-1	19-6-1	24-0-0	29-2-6	34-4-11	40-0-0	40-10-8
2-6-2	4-0-0	4-0-0	4-5-15	4-5-15	4-5-15	5-2-6	5-2-6	5-7-5	0-10-8

Scale = 1:79.8



2-6-2	4-2-0	7-4-1	10-6-2	16-3-15	24-0-0	29-2-6	34-4-11	40-0-0
2-6-2	1-7-14	3-2-1	3-2-1	5-9-13	7-8-1	5-2-6	5-2-6	5-7-5

Plate Offsets (X,Y)-- [1:0-0-0,0-0-8], [2:0-8-12,0-2-0], [23:0-3-0,0-3-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	-0.15	17-18	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.26	17-18	>999	180	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.88	Horz(CT)	0.04	12	n/a	n/a		
BCDL	10.0	Code	IBC2018/TPI2014	Matrix-MS							Weight: 218 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF 1650F 1.5E
WEBS 2x4 SPF Stud
WEDGE
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-7-14 oc purlins, except
2-0-0 oc purlins (6-6-6 max.): 2-4.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 7-17, 8-17, 9-17

REACTIONS. (size) 1=0-4-0, 23=(0-4-0 + bearing block) (req. 0-5-9), 12=0-4-0
Max Horz 1=-273(LC 10)
Max Uplift 1=-1270(LC 19), 23=-996(LC 12), 12=-405(LC 13)
Max Grav 1=356(LC 12), 23=3526(LC 19), 12=1674(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-560/2072, 2-3=-811/2941, 3-4=-92/282, 4-6=-2274/553, 6-7=-2224/640, 7-8=-1589/542, 8-9=-1577/534, 9-11=-1995/545, 11-12=-2356/560
BOT CHORD 1-25=-1776/522, 23-25=-1789/523, 21-23=-934/338, 20-21=-560/2189, 18-20=-556/2197, 17-18=-299/1611, 15-17=-224/1571, 14-15=-339/1852, 12-14=-339/1852
WEBS 2-23=-1984/614, 3-23=-2692/769, 3-21=-338/1662, 4-21=-2709/670, 4-18=-326/145, 6-18=-339/269, 7-18=-222/751, 7-17=-731/379, 8-17=-419/1399, 9-17=-754/369, 9-15=-89/475, 11-15=-450/245

NOTES-
1) 2x6 SPF 1650F 1.5E bearing block 12" long at jt. 23 attached to front face with 3 rows of 10d (0.131"x3") nails spaced 3" o.c. 12 Total fasteners. Bearing is assumed to be SPF 1650F 1.5E.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 2-6-2, Exterior(2R) 2-6-2 to 5-6-2, Interior(1) 5-6-2 to 24-0-0, Exterior(2R) 24-0-0 to 27-0-0, Interior(1) 27-0-0 to 40-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) The Fabrication Tolerance at joint 2 = 16%
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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) except (jt=lb) 1=1270, 23=996, 12=405.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) Girder carries tie-in span(s): 3-0-0 from 4-0-0 to 10-0-0
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

September 7,2021

Continued on page 2

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NOTES-

13) 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.
14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-60, 2-4=-60, 4-8=-60, 8-13=-60, 23-26=-20, 23-35=-33(F=-13), 29-35=-20

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	AH	Hip	1	1	I47762521
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:29 2021 Page 1
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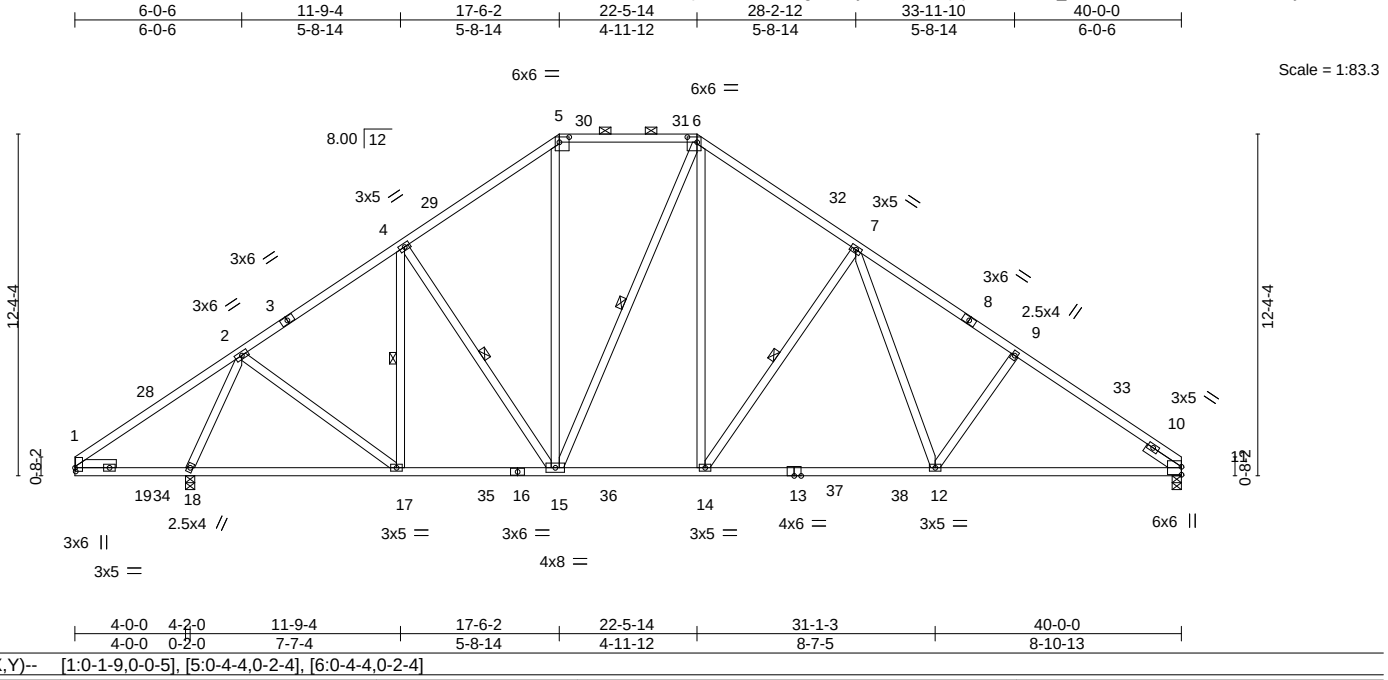

Plate Offsets (X,Y)-- [1:0-1-9,0-0-5], [5:0-4-4,0-2-4], [6:0-4-4,0-2-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.25	12-14	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.41	12-14	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.08	11	n/a	n/a		
BCDL	10.0	Code IBC2018/TPI2014		Matrix-MS							Weight: 204 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF Stud
SLIDER Left 2x4 SPF Stud 1-6-0, Right 2x4 SPF Stud 1-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-0-8 oc purlins, except 2-0-0 oc purlins (5-3-3 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 4-17, 4-15, 6-15, 7-14

REACTIONS. (size) 18=0-4-0, 11=0-4-0
Max Horz 18=289(LC 9)
Max Uplift 18=-510(LC 12), 11=-417(LC 13)
Max Grav 18=2138(LC 19), 11=1772(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-220/337, 2-4=-1611/435, 4-5=-1551/519, 5-6=-1238/497, 6-7=-1707/555, 7-9=-2389/650, 9-11=-2529/626
BOT CHORD 1-18=-377/521, 17-18=-288/794, 15-17=-249/1379, 14-15=-83/1297, 12-14=-217/1641, 11-12=-403/2000
WEBS 2-18=-2004/568, 2-17=-90/828, 4-17=-270/160, 4-15=-257/251, 5-15=-161/594, 6-15=-391/156, 6-14=-264/992, 7-14=-806/426, 7-12=-148/642, 9-12=-325/294

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 17-6-2, Exterior(2R) 17-6-2 to 21-9-1, Interior(1) 21-9-1 to 22-5-14, Exterior(2R) 22-5-14 to 26-8-13, Interior(1) 26-8-13 to 40-0-0 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 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) except (jt=lb) 18=510, 11=417.
7) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	B	Roof Special	1	1	I47762522
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:30 2021 Page 1
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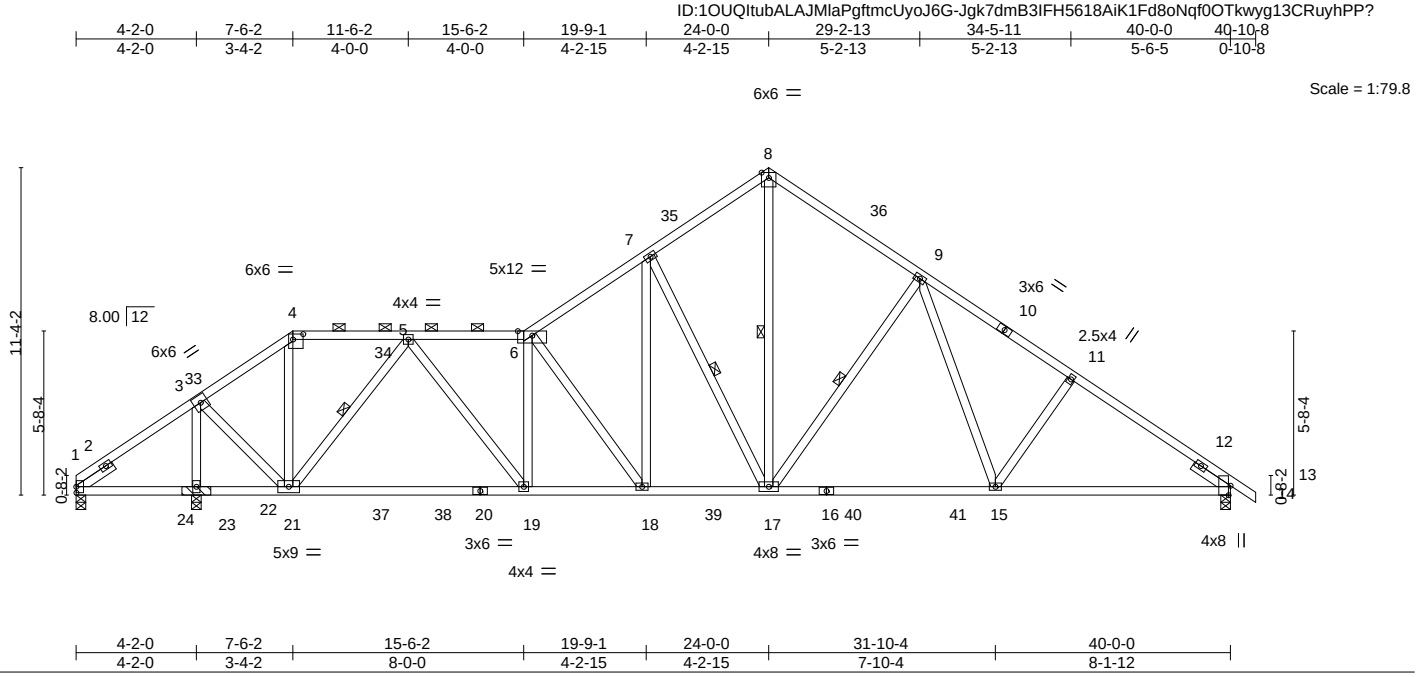

Plate Offsets (X,Y)-- [1:0-2-8,0-0-1], [4:0-4-4,0-2-4], [13:0-3-15,Edge]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	-0.23	15-17	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.39	15-17	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.08	13	n/a	n/a		
BCDL	10.0	Code IBC2018/TPI2014		Matrix-MS							Weight: 202 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF Stud
SLIDER	Left 2x4 SPF Stud 1-6-0, Right 2x4 SPF Stud 1-6-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-2-8 oc purlins, except 2-0-0 oc purlins (3-11-3 max.): 4-6.
BOT CHORD	Rigid ceiling directly applied or 5-4-15 oc bracing.
WEBS	1 Row at midpt 5-21, 7-17, 8-17, 9-17

REACTIONS. (size) 1=0-4-0, 23=(0-4-0 + bearing block) (req. 0-4-4), 13=0-4-0
Max Horz 1=-273(LC 10)
Max Uplift 1=-541(LC 19), 23=-758(LC 12), 13=-422(LC 13)
Max Grav 1=164(LC 12), 23=2691(LC 19), 13=1760(LC 20)

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

TOP CHORD	1-3=-304/1184, 3-4=-650/216, 4-5=-478/211, 5-6=-2211/608, 6-7=-2117/615, 7-8=-1716/583, 8-9=-1705/570, 9-11=-2313/622, 11-13=-2438/599
BOT CHORD	1-23=-1029/341, 21-23=-1029/341, 19-21=-388/1414, 18-19=-506/2149, 17-18=-334/1702, 15-17=-259/1611, 13-15=-374/1923
WEBS	3-23=-2495/722, 3-21=-371/1832, 5-21=-1570/437, 5-19=-230/1274, 6-19=-722/270, 6-18=-757/278, 7-18=-190/660, 7-17=-846/417, 8-17=-469/1554, 9-17=-717/383, 9-15=-129/560, 11-15=-279/265

NOTES-

1) 2x4 SPF No.2 bearing block 12" long at jt. 23 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF 1650F 1.5E.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 7-6-2, Exterior(2R) 7-6-2 to 10-6-2, Interior(1) 10-6-2 to 24-0-0, Exterior(2R) 24-0-0 to 27-0-0, Interior(1) 27-0-0 to 40-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) All plates are 3x5 MT20 unless otherwise indicated.
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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=541, 23=758, 13=422.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 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.

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	BCP	Piggyback	1	2	I47762523
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:31 2021 Page 1
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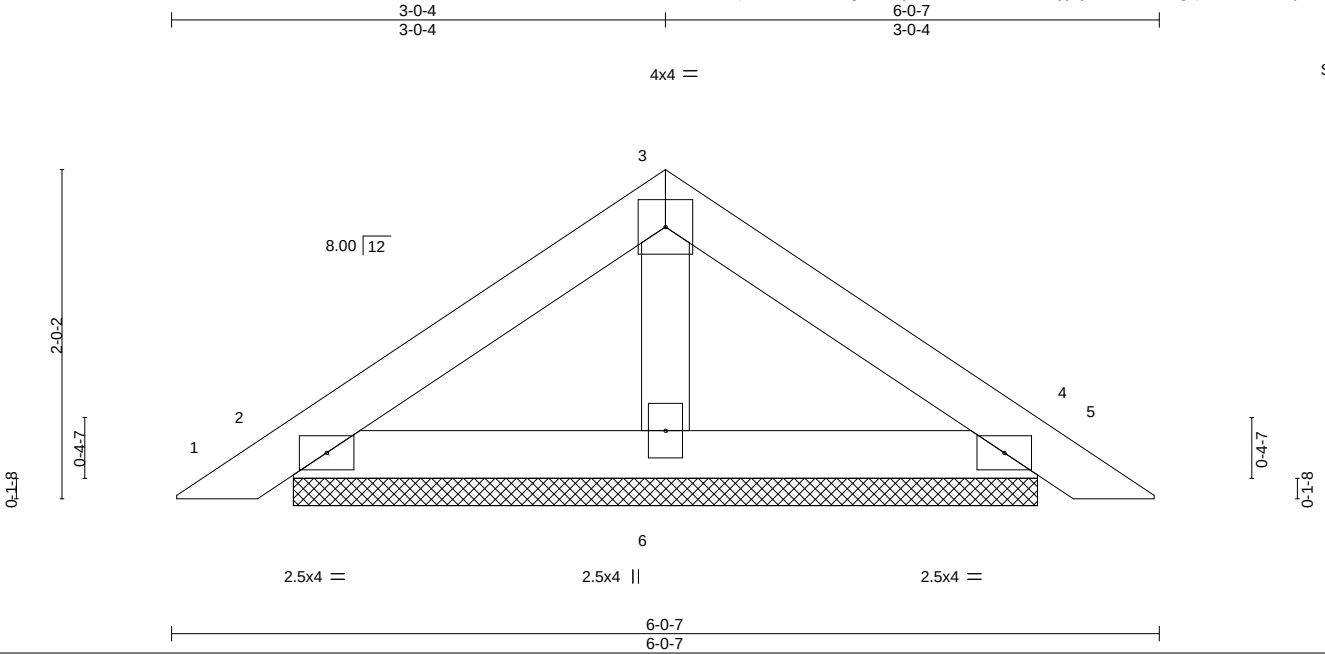

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	0.00	4	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	5	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IBC2018/TPI2014		Matrix-P							Weight: 30 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF Stud

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=4-6-9, 4=4-6-9, 6=4-6-9
Max Horz 2=45(LC 11)
Max Uplift 2=-58(LC 12), 4=-64(LC 13), 6=-15(LC 12)
Max Grav 2=131(LC 19), 4=138(LC 20), 6=165(LC 19)

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

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) Gable requires continuous bottom chord bearing.
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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 2, 4, 6.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	BG	ATTIC	1	2	I47762524
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:32 2021 Page 1
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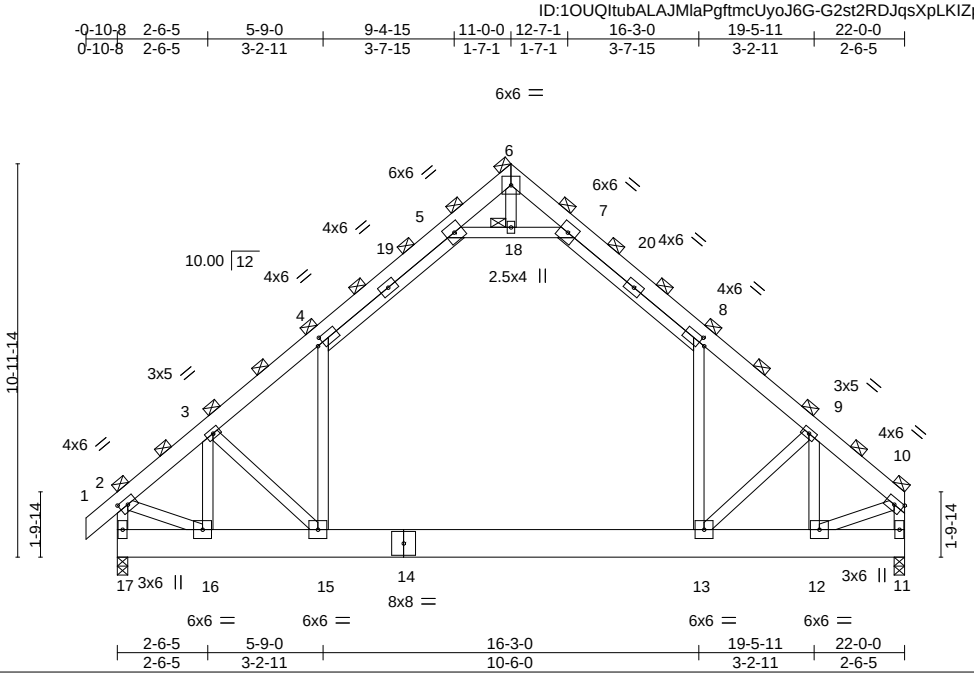

Plate Offsets (X,Y)-- [2:0-2-14,0-2-0], [4:0-2-0,0-2-0], [8:0-2-0,0-2-0]

LOADING (psf)		SPACING-	4-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.18	13-15	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.30	13-15	>867	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.41	Horz(CT)	0.01	11	n/a	n/a		
BCDL	10.0	Code IBC2018/TPI2014		Matrix-MS		Attic	-0.08	13-15	1520	360	Weight: 384 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SPF 1650F 1.5E
BOT CHORD 2x10 SP No.1
WEBS 2x4 SPF Stud

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.
JOINTS 1 Brace at Jt(s): 6, 18, 2, 10

REACTIONS. (size) 17=0-3-8, 11=0-3-8
Max Horz 17=567(LC 9)
Max Uplift 17=-280(LC 12), 11=-232(LC 13)
Max Grav 17=2816(LC 20), 11=2696(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2419/275, 3-4=-3190/357, 4-5=-2022/496, 5-6=-109/947, 6-7=-109/948, 7-8=-2022/496, 8-9=-3193/358, 9-10=-2427/265, 2-17=-2606/349, 10-11=-2489/271
BOT CHORD 16-17=-521/523, 15-16=-351/2214, 13-15=0/2016, 12-13=-148/1860
WEBS 5-18=-3269/691, 7-18=-3269/691, 4-15=0/1600, 8-13=0/1602, 3-16=-1499/167, 9-12=-1492/184, 3-15=-494/583, 9-13=-509/581, 2-16=-91/2038, 10-12=-146/2044

NOTES-
1) 2-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: 2x10 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 11-0-0, Exterior(2R) 11-0-0 to 14-0-0, Interior(1) 14-0-0 to 21-10-4 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
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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Ceiling dead load (5.0 psf) on member(s). 4-5, 7-8, 5-18, 7-18; Wall dead load (5.0psf) on member(s).4-15, 8-13
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 13-15
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=280, 11=232.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 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.
12) Attic room checked for L/360 deflection.

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	BH	Hip	1	1	I47762525
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:33 2021 Page 1
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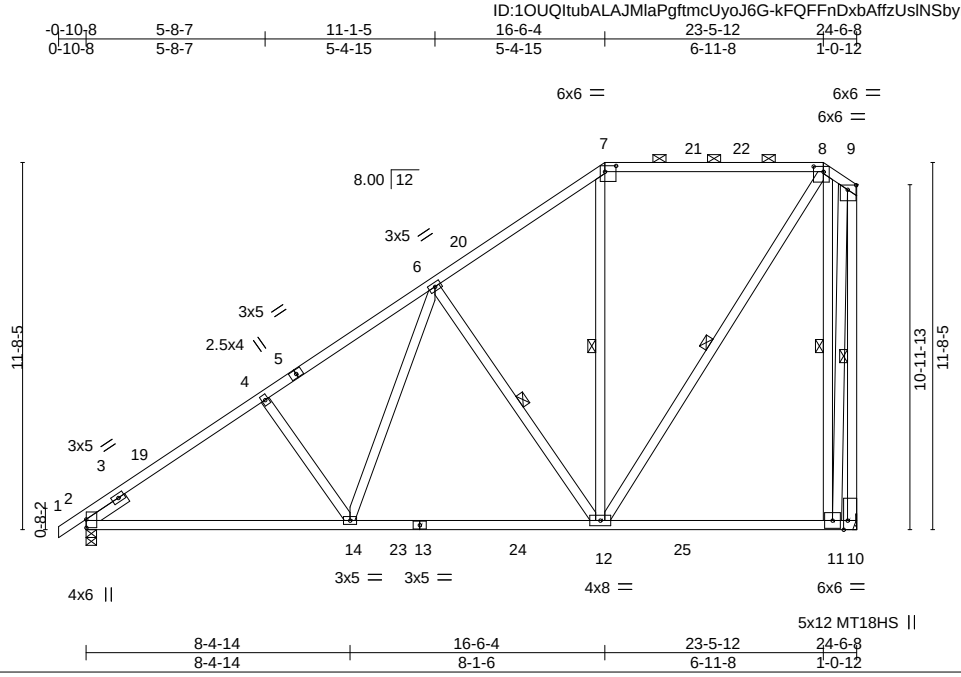

Plate Offsets (X,Y)-- [2:0-3-3,0-0-1], [7:0-4-4,0-2-4], [8:0-3-12,0-2-0], [9:0-3-4,0-1-12], [10:0-3-8,Edge]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.14	12-14	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.22	12-14	>999	180	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.67	Horz(CT)	0.03	10	n/a	n/a		
BCDL	10.0	Code IBC2018/TPI2014		Matrix-MS							Weight: 152 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF Stud *Except*
9-10: 2x4 SPF 2100F 1.8E
SLIDER Left 2x4 SPF Stud 1-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-6-11 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-8.
BOT CHORD Rigid ceiling directly applied or 8-3-6 oc bracing.
WEBS 1 Row at midpt 6-12, 7-12, 8-12, 8-11, 9-10

REACTIONS. (size) 2=0-4-0, 10=Mechanical
Max Horz 2=431(LC 11)
Max Uplift 2=-311(LC 12), 10=-328(LC 9)
Max Grav 2=1272(LC 19), 10=1212(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1618/414, 4-6=-1487/437, 6-7=-857/343, 7-8=-649/354, 8-9=-451/425, 9-10=-1357/506
BOT CHORD 2-14=-497/1453, 12-14=-378/1058
WEBS 4-14=-336/284, 6-14=-150/628, 6-12=-757/402, 8-12=-312/1019, 8-11=-932/512, 9-11=-270/1149

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 16-6-4, Exterior(2R) 16-6-4 to 20-9-3, Interior(1) 20-9-3 to 23-5-12, Exterior(2E) 23-5-12 to 24-4-12 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) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=311, 10=328.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 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.

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	C	Roof Special	1	1	I47762526
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:34 2021 Page 1
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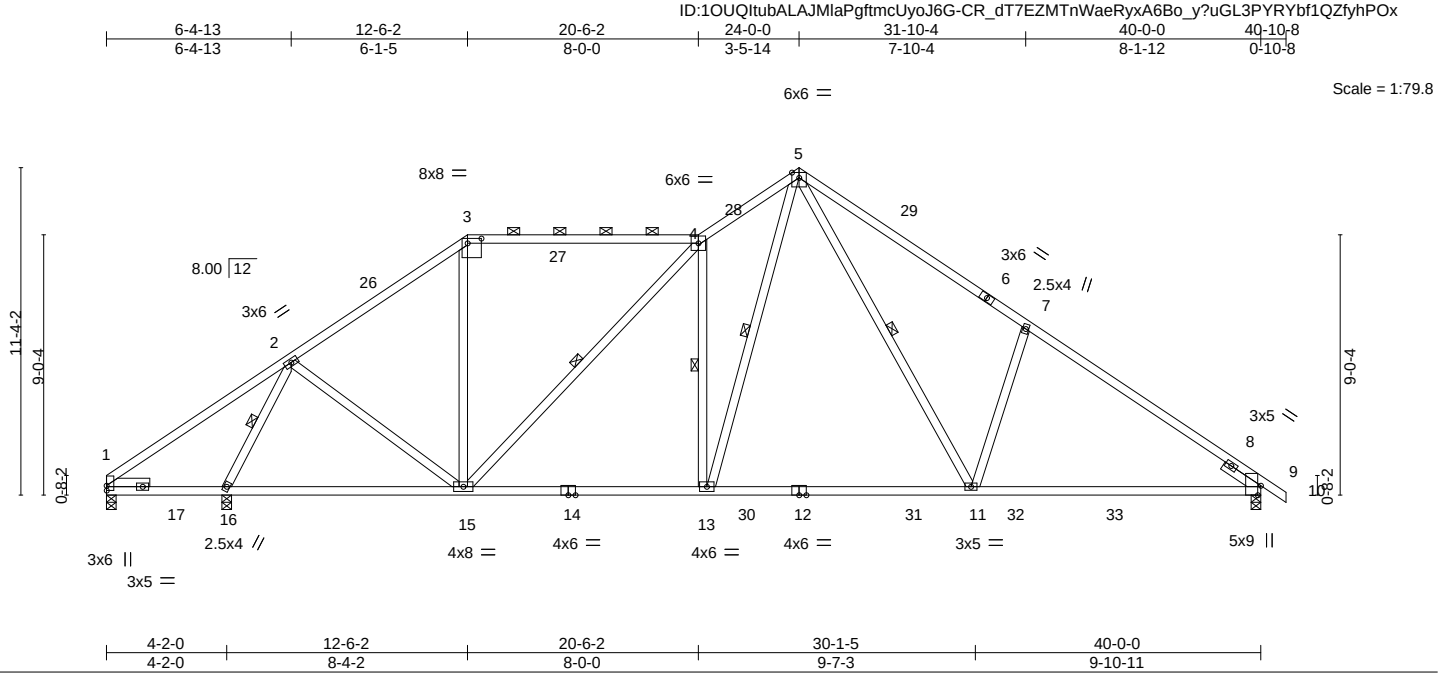

Plate Offsets (X,Y)-- [1:0-2-0,0-0-1], [3:0-5-12,0-2-0], [9:0-3-15,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.27	11-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.45	11-13	>956	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.06	9	n/a	n/a		
BCDL	10.0	Code	IBC2018/TPI2014	Matrix-MS							Weight: 184 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF 1650F 1.5E *Except* 1-3,4-5: 2x4 SPF No.2
BOT CHORD	2x4 SPF 1650F 1.5E *Except* 12-14: 2x4 SPF No.2
WEBS	2x4 SPF Stud
SLIDER	Left 2x4 SPF Stud 1-6-0, Right 2x4 SPF Stud 1-6-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (4-4-5 max.): 3-4.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	1 Row at midpt 2-16, 4-15, 4-13, 5-13, 5-11

REACTIONS. (size) 1=0-4-0, 16=0-4-0, 9=0-4-0
Max Horz 1=-273(LC 8)
Max Uplift 1=-200(LC 28), 16=-544(LC 12), 9=-441(LC 13)
Max Grav 16=2311(LC 19), 9=1868(LC 20)

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

TOP CHORD	1-2=-54/622, 2-3=-1575/526, 3-4=-1227/520, 4-5=-2255/778, 5-7=-2491/778, 7-9=-2530/620
BOT CHORD	1-16=-570/722, 15-16=-309/715, 13-15=-342/1758, 11-13=-186/1366, 9-11=-370/1982
WEBS	2-16=-2171/621, 2-15=-76/821, 3-15=-68/473, 4-15=-933/204, 4-13=-829/583, 5-13=-502/1303, 5-11=-403/1106, 7-11=-570/480

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 12-6-2, Exterior(2R) 12-6-2 to 15-6-2, Interior(1) 15-6-2 to 24-0-0, Exterior(2R) 24-0-0 to 27-0-0, Interior(1) 27-0-0 to 40-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) except (jt=lb) 1=200, 16=544, 9=441.
7) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	CCP	Piggyback	1	1	I47762527
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:35 2021 Page 1
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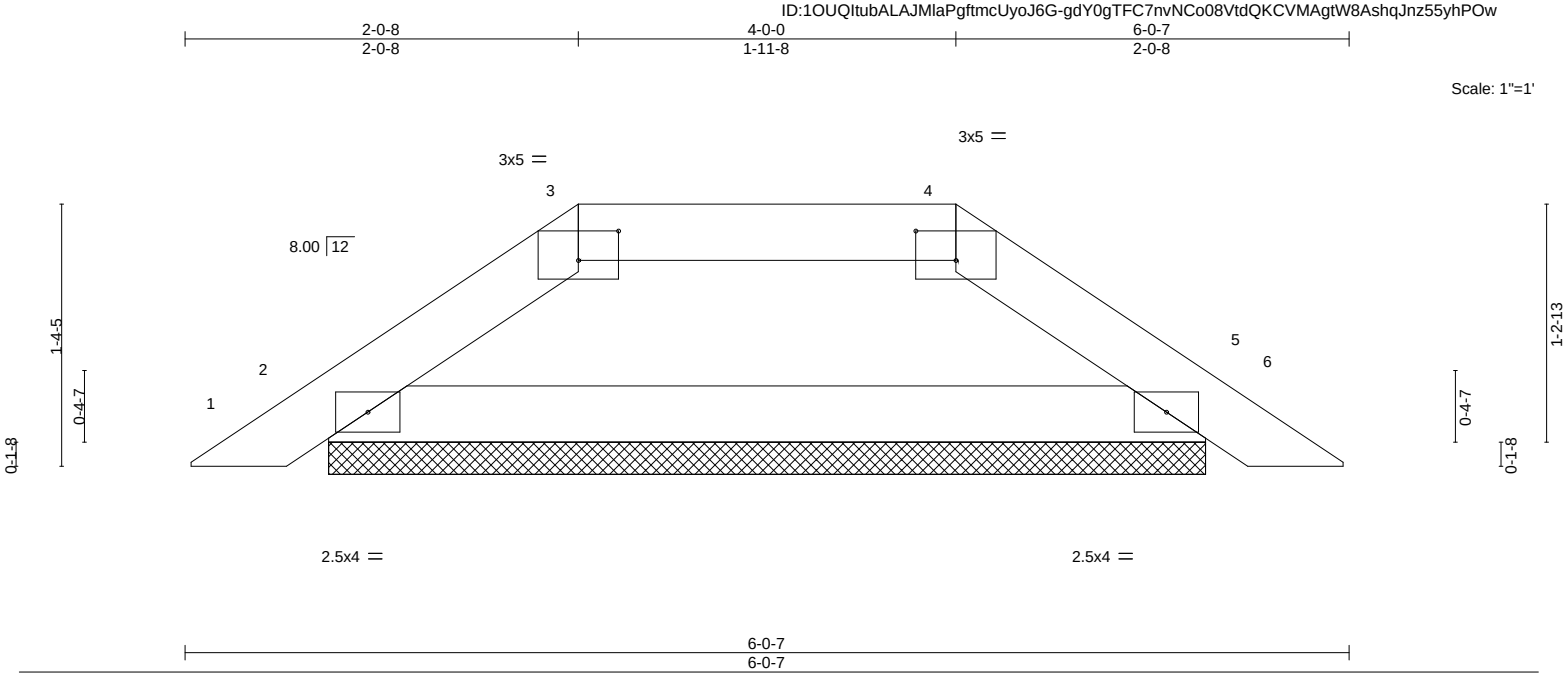

Plate Offsets (X,Y)-- [3:0-2-8,0-1-13], [4:0-2-8,0-1-13]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	0.00	5	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	0.00	6	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IBC2018/TPI2014	Matrix-R							Weight: 13 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2

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

REACTIONS. (size) 2=4-6-9, 5=4-6-9
Max Horz 2=-30(LC 10)
Max Uplift 2=-58(LC 12), 5=-58(LC 13)
Max Grav 2=210(LC 1), 5=210(LC 1)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) Gable requires continuous bottom chord bearing.
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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 2, 5.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	CG	Roof Special Girder	1	2	I47762528
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:36 2021 Page 1
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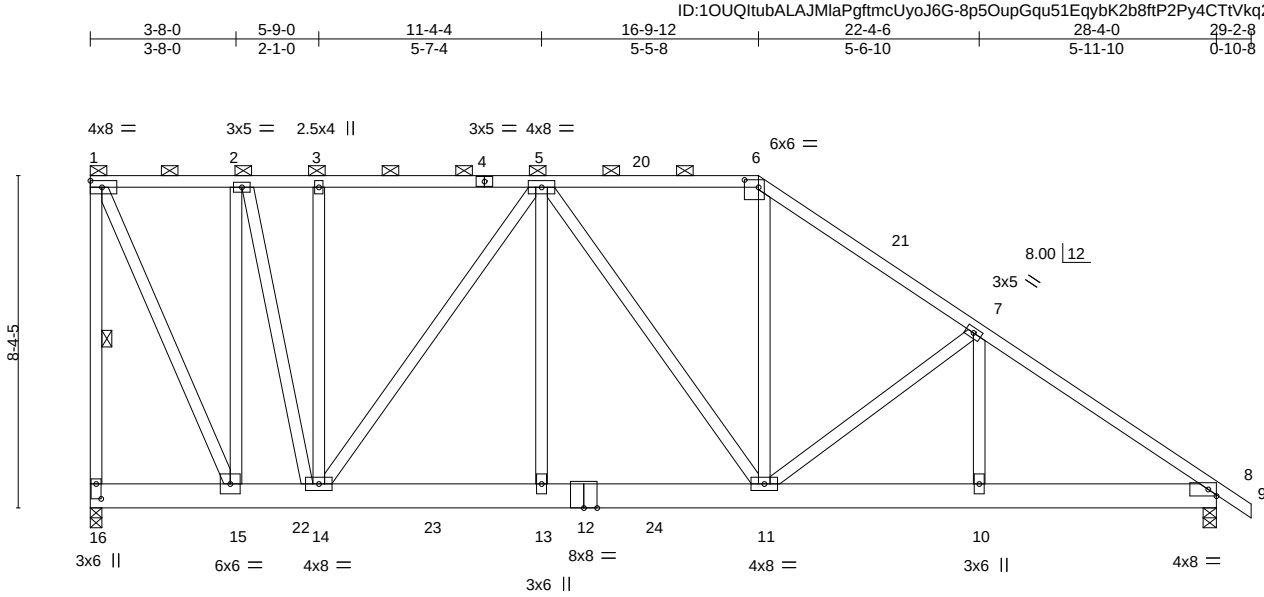

Plate Offsets (X,Y)-- [6:0-4-4,0-2-4], [16:0-4-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	0.05	13-14	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.08	13-14	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.54	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code	IBC2018/TPI2014	Matrix-MS							Weight: 433 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x8 SP No.1
WEBS 2x4 SPF Stud

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.): 1-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 1-16

REACTIONS. (size) 16=0-3-8, 8=0-4-0
Max Horz 16=-308(LC 10)
Max Uplift 16=-884(LC 8), 8=-439(LC 13)
Max Grav 16=2738(LC 21), 8=1684(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-16=-2764/913, 1-2=-1288/490, 2-3=-1736/608, 3-5=-1736/608, 5-6=-1629/579, 6-7=-2064/630, 7-8=-2395/633
BOT CHORD 15-16=-288/369, 14-15=-376/1291, 13-14=-470/1912, 11-13=-470/1912, 10-11=-402/1936, 8-10=-402/1936
WEBS 5-14=-436/146, 5-13=0/350, 5-11=-484/295, 6-11=-166/852, 7-11=-530/294, 2-15=-1779/641, 1-15=-928/2896, 2-14=-551/1760

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-6-0 oc.
Webs 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 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 16-9-12, Exterior(2R) 16-9-12 to 19-9-12, Interior(1) 19-9-12 to 29-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) except (jt=lb) 16=884, 8=439.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1882 lb down and 566 lb up at 5-3-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

September 7,2021

Continued on page 2

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LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-6=-60, 6-9=-60, 16-17=-20
   Concentrated Loads (lb)
   Vert: 22=-1525(F)

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	CH	Hip	1	1	I47762529
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:38 2021 Page 1
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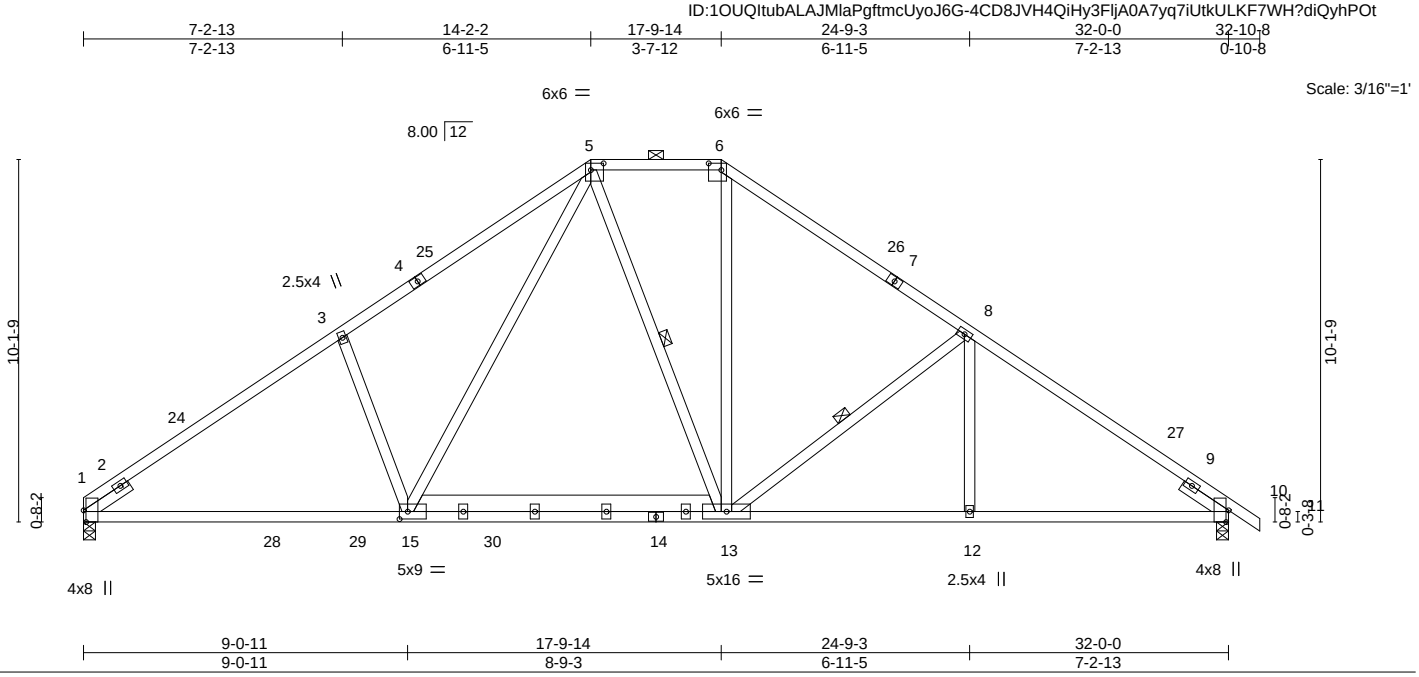

Plate Offsets (X,Y)-- [1:0-3-15,Edge], [5:0-4-4,0-2-4], [6:0-4-4,0-2-4], [10:0-3-15,Edge], [15:0-2-12,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	-0.12	15-18	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.24	15-18	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.07	10	n/a	n/a		
BCDL	10.0	Code	IBC2018/TPI2014	Matrix-MS							Weight: 155 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
13-15: 2x6 SPF 1650F 1.5E
WEBS 2x4 SPF Stud
SLIDER Left 2x4 SPF Stud 1-6-0, Right 2x4 SPF Stud 1-6-0

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

REACTIONS. (size) 1=0-4-0, 10=0-4-0
Max Horz 1=-244(LC 8)
Max Uplift 1=-367(LC 12), 10=-389(LC 13)
Max Grav 1=1589(LC 19), 10=1608(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-2190/533, 3-5=-2138/666, 5-6=-1306/476, 6-8=-1644/468, 8-10=-2166/524
BOT CHORD 1-15=-462/1900, 13-15=-165/1280, 12-13=-285/1687, 10-12=-285/1687
WEBS 3-15=-504/422, 5-15=-337/969, 6-13=-143/640, 8-13=-700/380, 8-12=0/255

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 14-2-2, Exterior(2E) 14-2-2 to 17-9-14, Exterior(2R) 17-9-14 to 22-0-13, Interior(1) 22-0-13 to 32-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 3x5 MT20 unless otherwise indicated.
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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) except (jt=lb) 1=367, 10=389.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

September 7,2021

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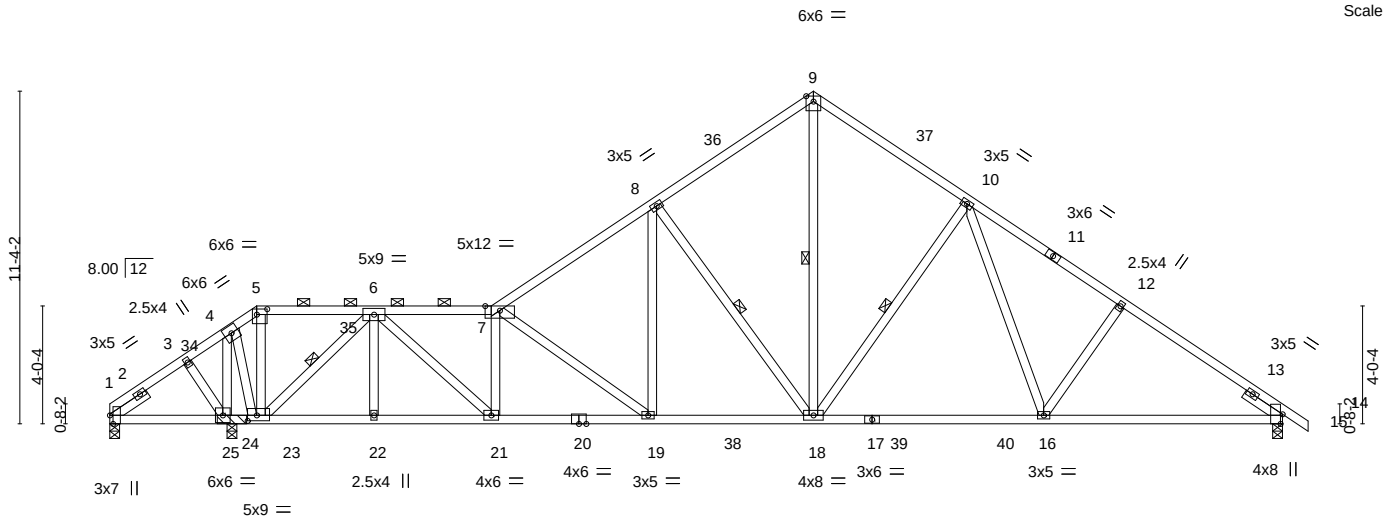
Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	D	Roof Special	1	1	I47762530
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:39 2021 Page 1
ID:1OUQItubALAJMlaPgftmcUyoJ6G-YOnWWqIiA0PphPKvkjhMV2guCH6x4mnHlxlBEsyhPOs

2-7-13	5-0-2	9-0-2	13-0-2	18-6-1	24-0-0	29-2-13	34-5-11	40-0-0	40-10-8
2-7-13	2-4-5	4-0-0	4-0-0	5-5-15	5-5-15	5-2-13	5-2-13	5-6-5	0-10-8

Scale = 1:78.6



4-0-0	5-0-2	9-0-2	13-0-2	18-6-1	24-0-0	31-10-4	40-0-0
4-0-0	1-0-2	4-0-0	4-0-0	5-5-15	5-5-15	7-10-4	8-1-12

Plate Offsets (X,Y)-- [1:0-3-8,Edge], [5:0-4-4,0-2-4], [14:0-3-15,Edge], [23:0-3-12,0-2-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.23	16-18	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.40	16-18	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.07	14	n/a	n/a		
BCDL	10.0	Code	IBC2018/TPI2014	Matrix-MS							Weight: 199 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF Stud
SLIDER	Left 2x4 SPF Stud 1-6-0, Right 2x4 SPF Stud 1-6-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-4-3 oc purlins, except 2-0-0 oc purlins (3-11-0 max.): 5-7.
BOT CHORD	Rigid ceiling directly applied or 4-3-1 oc bracing.
WEBS	1 Row at midpt 6-23, 8-18, 9-18, 10-18

REACTIONS. (size) 1=0-4-0, 25=(0-4-0 + bearing block) (req. 0-5-2), 14=0-4-0
Max Horz 1=-273(LC 10)
Max Uplift 1=-1091(LC 19), 25=-935(LC 12), 14=-413(LC 13)
Max Grav 1=326(LC 12), 25=3252(LC 19), 14=1711(LC 20)

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

TOP CHORD	1-3=-515/1857, 3-4=-511/1899, 4-5=-238/1011, 5-6=-180/842, 6-7=-2234/583, 7-8=-2133/571, 8-9=-1655/549, 9-10=-1619/547, 10-12=-2233/607, 12-14=-2357/584
BOT CHORD	1-25=-1498/429, 23-25=-1690/490, 22-23=-250/873, 21-22=-250/873, 19-21=-544/2163, 18-19=-357/1750, 16-18=-237/1558, 14-16=-357/1858
WEBS	3-25=-410/185, 5-23=-660/235, 6-23=-2277/598, 6-21=-412/1790, 7-21=-1036/338, 7-19=-567/226, 8-19=-65/520, 8-18=-816/393, 9-18=-420/1439, 10-18=-719/382, 10-16=-131/567, 12-16=-283/266, 4-25=-2533/716, 4-23=-593/2197

NOTES-

1) 2x4 SPF No.2 bearing block 12" long at jt. 25 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF 1650F 1.5E.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 5-0-2, Exterior(2R) 5-0-2 to 8-0-2, Interior(1) 8-0-2 to 24-0-0, Exterior(2R) 24-0-0 to 27-0-0, Interior(1) 27-0-0 to 40-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) except (jt=lb) 1=1091, 25=935, 14=413.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) 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.

September 7,2021

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Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	DG	COMMON GIRDER	1	1	I47762531
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:40 2021 Page 1
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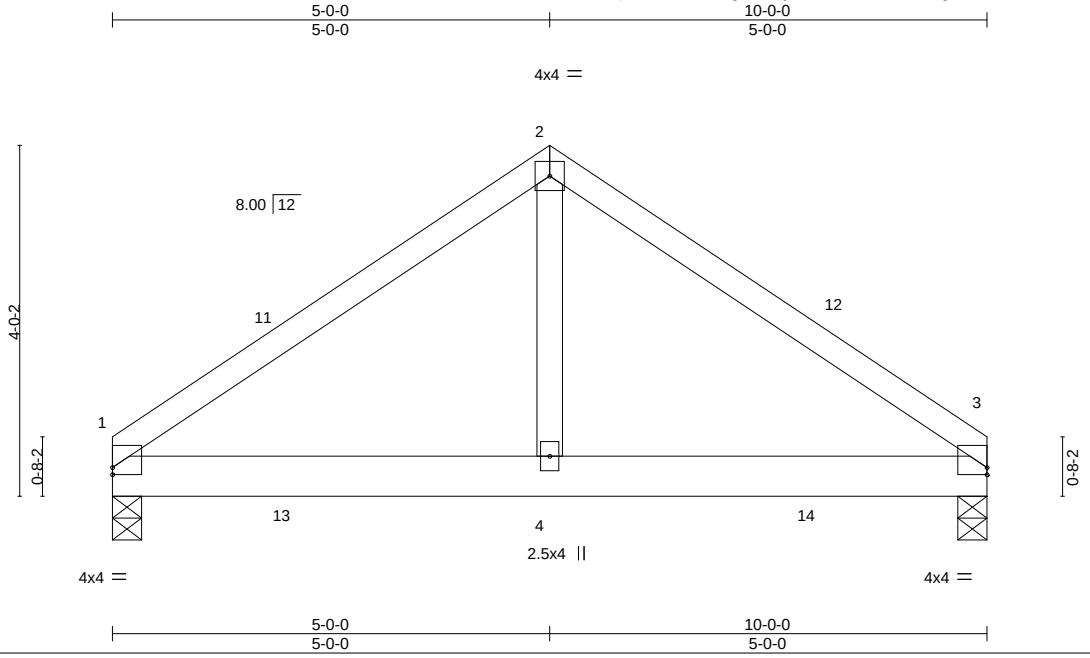

Plate Offsets (X,Y)-- [1:0-0-0,0-1-0], [3:0-0-0,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	-0.01	4-10	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	-0.02	4-10	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.10	Horz(CT)	0.00	1	n/a	n/a		
BCDL	10.0	Code	IBC2018/TPI2014	Matrix-MS							Weight: 36 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF 1650F 1.5E
WEBS 2x4 SPF Stud

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

REACTIONS. (size) 1=0-4-0, 3=0-4-0
Max Horz 1=82(LC 9)
Max Uplift 1=-133(LC 12), 3=-133(LC 13)
Max Grav 1=453(LC 19), 3=453(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-532/245, 2-3=-532/245
BOT CHORD 1-4=-91/384, 3-4=-91/384
WEBS 2-4=-46/260

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 5-0-0, Exterior(2R) 5-0-0 to 8-0-0, Interior(1) 8-0-0 to 10-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) except (jt=lb) 1=133, 3=133.
6) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
7) Girder carries tie-in span(s): 3-0-0 from 2-0-0 to 8-0-0
8) 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 + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-60, 2-3=-60, 5-13=-20, 13-14=-33(F=-13), 8-14=-20

September 7,2021

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	DH	Hip	1	1	I47762532
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:41 2021 Page 1
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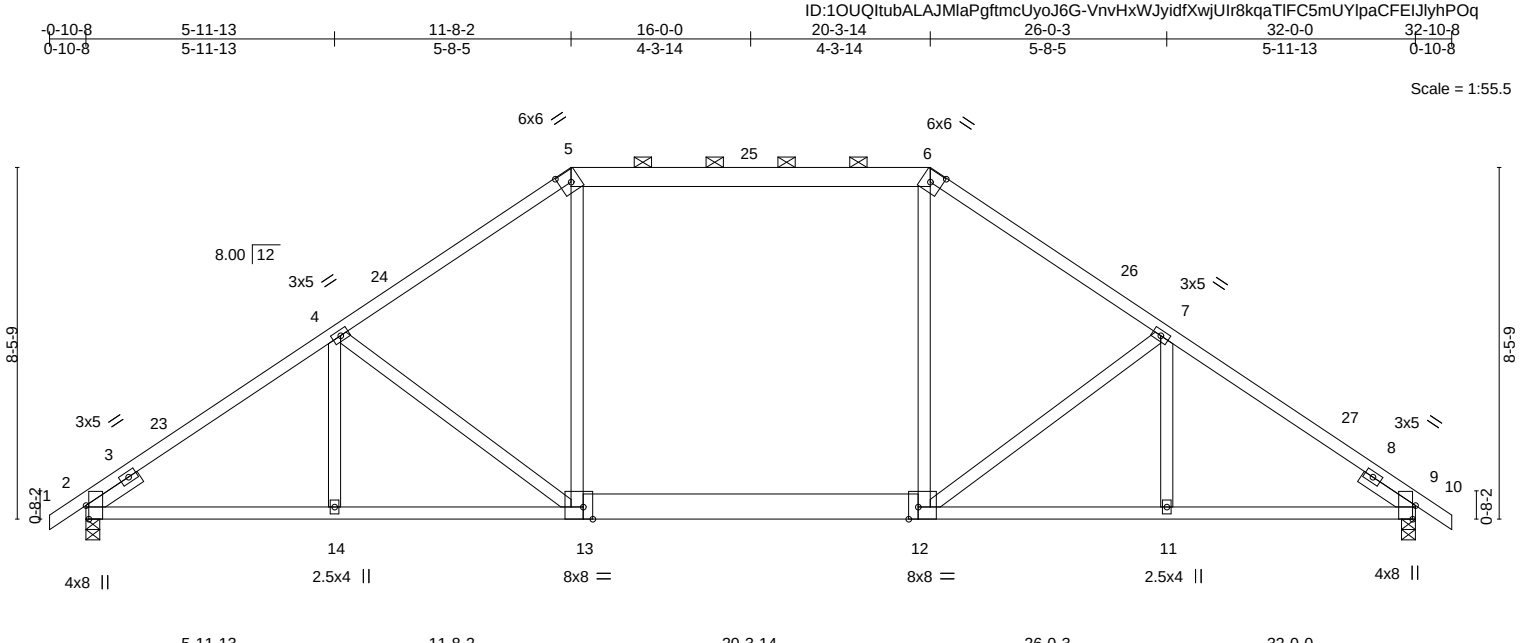

Plate Offsets (X,Y)-- [2:0-3-15,Edge], [5:0-3-5,0-3-4], [6:0-3-5,0-3-4], [9:0-3-15,Edge], [12:0-2-12,Edge], [13:0-2-12,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	-0.44	11-12	>882	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.51	11-12	>756	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.07	9	n/a	n/a		
BCDL	10.0	Code	IBC2018/TPI2014	Matrix-MS							Weight: 149 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 5-6: 2x6 SPF 1650F 1.5E
BOT CHORD	2x4 SPF 1650F 1.5E *Except* 12-13: 2x8 SP No.1
WEBS	2x4 SPF Stud
SLIDER	Left 2x4 SPF Stud 1-6-0, Right 2x4 SPF Stud 1-6-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-4-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD	Rigid ceiling directly applied or 9-11-12 oc bracing.

REACTIONS. (size) 2=0-4-0, 9=0-4-0
Max Horz 2=-207(LC 10)
Max Uplift 2=-372(LC 12), 9=-372(LC 13)
Max Grav 2=1581(LC 19), 9=1581(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-2170/517, 4-5=-1739/459, 5-6=-1411/436, 6-7=-1739/461, 7-9=-2171/518
BOT CHORD 2-14=-438/1857, 13-14=-438/1857, 12-13=-203/1415, 11-12=-299/1702, 9-11=-299/1702
WEBS 4-13=-572/344, 5-13=-49/590, 6-12=-49/590, 7-12=-573/344

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 11-8-2, Exterior(2R) 11-8-2 to 15-11-1, Interior(1) 15-11-1 to 20-3-14, Exterior(2R) 20-3-14 to 24-6-13, Interior(1) 24-6-13 to 32-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) except (jt=lb) 2=372, 9=372.
7) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

September 7,2021

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	E	Roof Special	1	1	I47762533
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:42 2021 Page 1
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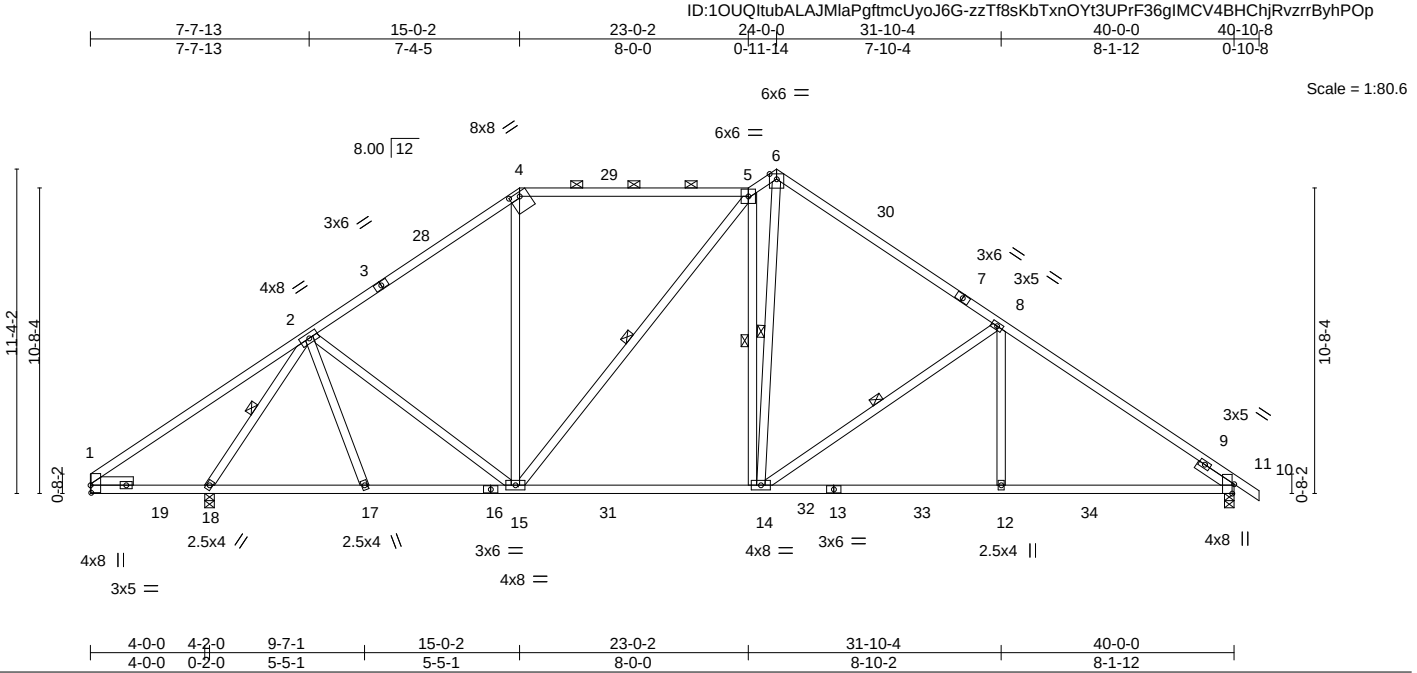


Plate Offsets (X,Y)-- [1:0-3-2,0-0-5], [4:0-4-4,0-1-11], [10:0-3-15,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.24	14-15	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.41	14-15	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.63	Horz(CT)	0.08	10	n/a	n/a		
BCDL	10.0	Code	IBC2018/TPI2014	Matrix-MS							Weight: 195 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 4-5: 2x4 SPF 1650F 1.5E
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF Stud
SLIDER	Left 2x4 SPF Stud 1-6-0, Right 2x4 SPF Stud 1-6-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins (4-7-1 max.): 4-5.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	1 Row at midpt 2-18, 5-15, 5-14, 6-14, 8-14

REACTIONS. (size) 18=0-4-0, 10=0-4-0
Max Horz 18=-273(LC 8)
Max Uplift 18=-491(LC 12), 10=-432(LC 13)
Max Grav 18=2074(LC 19), 10=1839(LC 20)

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

TOP CHORD	1-2=-206/393, 2-4=-1584/494, 4-5=-1256/489, 5-6=-1712/622, 6-8=-1796/539, 8-10=-2517/585
BOT CHORD	1-18=-580/771, 17-18=-288/1084, 15-17=-261/1130, 14-15=-125/1458, 12-14=-339/1964, 10-12=-339/1964
WEBS	2-18=-2094/663, 2-15=-128/394, 4-15=-54/488, 5-15=-508/163, 5-14=-815/477, 6-14=-438/1474, 8-14=-884/426, 8-12=0/404

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 15-0-2, Exterior(2R) 15-0-2 to 18-0-2, Interior(1) 18-0-2 to 24-0-0, Exterior(2R) 24-0-0 to 27-0-0, Interior(1) 27-0-0 to 40-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) except (jt=lb) 18=491, 10=432.
7) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

September 7,2021

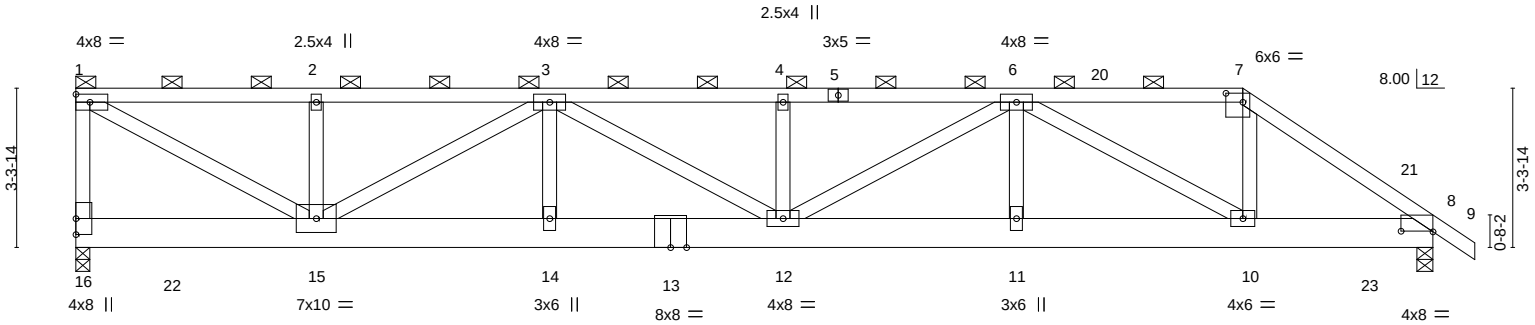
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	EG	Roof Special Girder	1	1	I47762534
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:43 2021 Page 1
ID:1OUQItubALAJMlaPgftmcUyoJ6G-RA01MCLDEEwF90dgzZmIfuqabuX?0ZhsfZjONeyhPOo

5-0-4	9-10-11	14-9-3	19-7-10	24-4-6	28-4-0	29-2-8
5-0-4	4-10-8	4-10-8	4-10-8	4-8-12	3-11-10	0-10-8

Scale: 1/4"=1'



5-0-4	9-10-11	14-9-3	19-7-10	24-4-6	28-4-0
5-0-4	4-10-8	4-10-8	4-10-8	4-8-12	3-11-10

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	0.22	12	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.35	12	>960	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.97	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code	IBC2018/TPI2014	Matrix-MS							Weight: 168 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x8 SP No.1
WEBS 2x4 SPF Stud *Except*
1-15,3-15,3-12,6-12,6-10: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-9-3 oc purlins, except end verticals, and 2-0-0 oc purlins (2-8-4 max.): 1-7.
BOT CHORD Rigid ceiling directly applied or 8-0-6 oc bracing.

REACTIONS. (size) 16=0-3-8, 8=0-4-0
Max Horz 16=-118(LC 10)
Max Uplift 16=-556(LC 8), 8=-500(LC 8)
Max Grav 16=1546(LC 1), 8=1616(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-16=-1433/551, 1-2=-2235/819, 2-3=-2235/819, 3-4=-3881/1385, 4-6=-3881/1385, 6-7=-1827/656, 7-8=-2332/772
BOT CHORD 14-15=-1257/3601, 12-14=-1257/3601, 11-12=-1137/3401, 10-11=-1137/3401, 8-10=-572/1880
WEBS 1-15=-907/2554, 2-15=-305/216, 3-15=-1586/575, 3-14=-32/344, 3-12=-112/325, 4-12=-280/197, 6-12=-223/557, 6-11=-21/334, 6-10=-1828/694, 7-10=-299/1046

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 24-4-6, Exterior(2R) 24-4-6 to 27-4-6 , Interior(1) 27-4-6 to 29-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) except (jt=lb) 16=556, 8=500.
6) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
7) Girder carries tie-in span(s): 4-0-0 from 2-0-0 to 27-0-0
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) 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 + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-7=-60, 7-9=-60, 16-22=-20, 22-23=-54(F=-34), 17-23=-20

September 7,2021

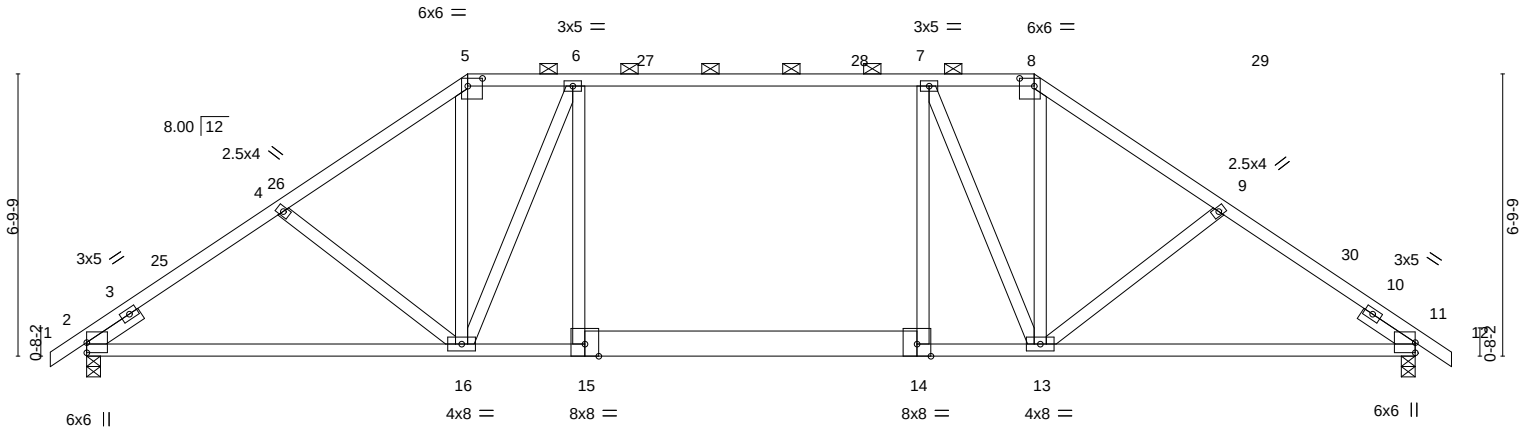
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	EH	Hip	1	1	I47762535
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:44 2021 Page 1
ID:1OUQItubALAJMlaPgftmcUyoJ6G-vMaPZYMr?Y26nACtWGHXC5NjJInml3O0uCSyv4yhPOn

-0-10-8	4-8-13	9-2-2	12-0-0	16-0-0	20-0-0	22-9-14	27-3-3	32-0-0	32-10-8
0-10-8	4-8-13	4-5-5	2-9-14	4-0-0	4-0-0	2-9-14	4-5-5	4-8-13	0-10-8

Scale = 1:55.5



9-2-2	12-0-0	16-0-0	20-0-0	22-9-14	32-0-0
9-2-2	2-9-14	4-0-0	4-0-0	2-9-14	9-2-2

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	0.19	15-16	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.26	13-23	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.07	11	n/a	n/a		
BCDL	10.0	Code IBC2018/TPI2014		Matrix-MS							Weight: 155 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
14-15: 2x8 SP No.1
WEBS 2x4 SPF Stud
SLIDER Left 2x4 SPF Stud 1-6-0, Right 2x4 SPF Stud 1-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-9-4 oc purlins, except 2-0-0 oc purlins (3-5-4 max.): 5-8.
BOT CHORD Rigid ceiling directly applied or 8-5-13 oc bracing.

REACTIONS. (size) 2=0-4-0, 11=0-4-0
Max Horz 2=166(LC 11)
Max Uplift 2=-350(LC 12), 11=-350(LC 13)
Max Grav 2=1525(LC 19), 11=1525(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-2043/504, 4-5=-1851/447, 5-6=-1489/430, 6-7=-1711/476, 7-8=-1489/430, 8-9=-1851/447, 9-11=-2043/504
BOT CHORD 2-16=-456/1745, 15-16=-397/1747, 14-15=-394/1750, 13-14=-393/1745, 11-13=-312/1620
WEBS 4-16=-295/249, 5-16=-226/892, 6-16=-733/421, 7-13=-733/421, 8-13=-226/892, 9-13=-296/249, 6-15=-42/283, 7-14=-42/283

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 9-2-2, Exterior(2R) 9-2-2 to 13-5-1, Interior(1) 13-5-1 to 22-9-14, Exterior(2R) 22-9-14 to 27-0-13, Interior(1) 27-0-13 to 32-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) except (jt=lb) 2=350, 11=350.
7) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	F	ATTIC	3	1	I47762536
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:45 2021 Page 1
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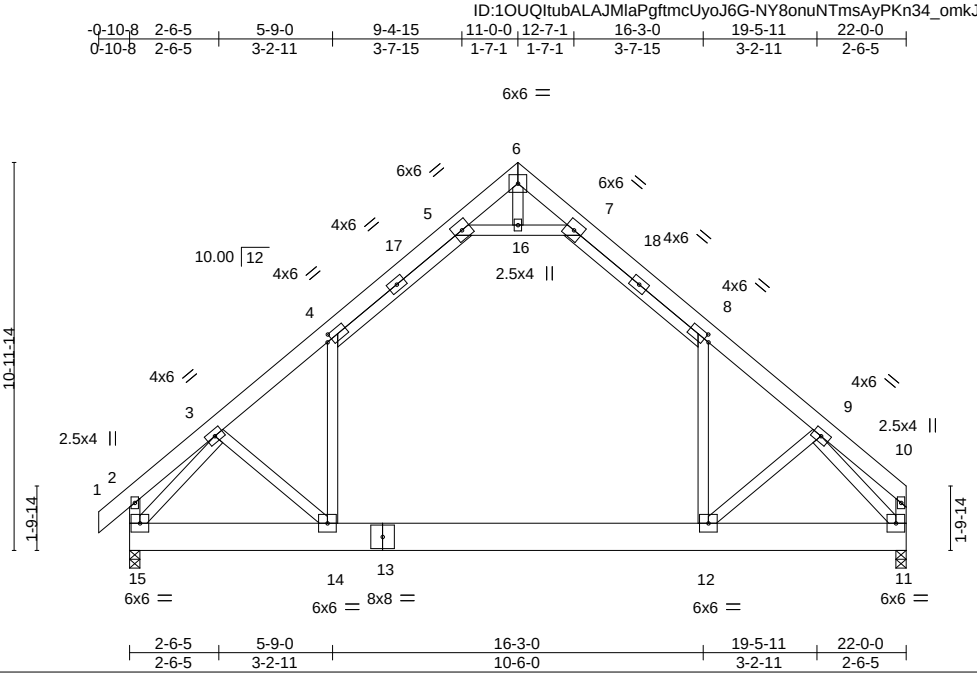

Plate Offsets (X,Y)-- [4:0-1-12,0-2-0], [8:0-1-12,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.19	12-14	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.32	12-14	>827	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.01	11	n/a	n/a		
BCDL	10.0	Code IBC2018/TPI2014		Matrix-MS		Attic	-0.09	12-14	1381	360	Weight: 188 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SPF 1650F 1.5E
BOT CHORD 2x10 SP No.1
WEBS 2x4 SPF Stud

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) 15=0-3-8, 11=0-3-8
Max Horz 15=283(LC 9)
Max Uplift 15=-140(LC 12), 11=-116(LC 13)
Max Grav 15=1408(LC 20), 11=1348(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-1565/173, 4-5=-1008/249, 5-6=-59/483, 6-7=-58/483, 7-8=-1008/250, 8-9=-1567/173
BOT CHORD 14-15=-147/1114, 12-14=0/1003, 11-12=-78/1005
WEBS 5-16=-1640/350, 7-16=-1640/350, 4-14=0/758, 8-12=0/760, 3-15=-1606/103, 9-11=-1607/120

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-4-0, Interior(1) 2-4-0 to 11-0-0, Exterior(2R) 11-0-0 to 14-0-0, Interior(1) 14-0-0 to 21-10-4 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Ceiling dead load (5.0 psf) on member(s). 4-5, 7-8, 5-16, 7-16; Wall dead load (5.0psf) on member(s).4-14, 8-12
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 12-14
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=140, 11=116.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Attic room checked for L/360 deflection.

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	F1	ATTIC	4	1	I47762537
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:46 2021 Page 1
ID:1OUQItubALAJMlaPgftmcUyoJ6G-rliA_EN5X9Ip0UMFehJ?HWS3a6X9D1MJMWx3_yyhPOI

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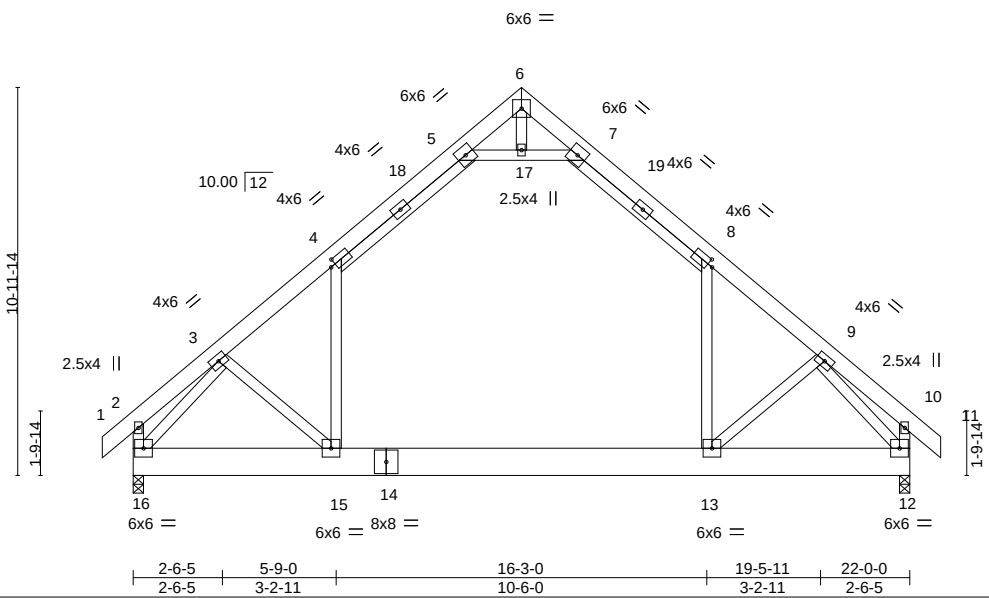


Plate Offsets (X,Y)-- [4:0-1-12,0-2-0], [8:0-1-12,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.19	13-15	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.31	13-15	>827	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.01	12	n/a	n/a		
BCDL	10.0	Code IBC2018/TPI2014		Matrix-MS		Attic	-0.09	13-15	1381	360	Weight: 190 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SPF 1650F 1.5E
BOT CHORD 2x10 SP No.1
WEBS 2x4 SPF Stud

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) 16=0-3-8, 12=0-3-8
Max Horz 16=290(LC 11)
Max Uplift 16=-141(LC 12), 12=-141(LC 13)
Max Grav 16=1407(LC 20), 12=1407(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-1563/174, 4-5=-1007/250, 5-6=-59/482, 6-7=-59/482, 7-8=-1007/250, 8-9=-1563/174
BOT CHORD 15-16=-133/1123, 13-15=0/1011, 12-13=-38/1006
WEBS 5-17=-1637/351, 7-17=-1637/351, 4-15=0/758, 8-13=0/758, 3-16=-1604/104, 9-12=-1603/104

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-4-0, Interior(1) 2-4-0 to 11-0-0, Exterior(2R) 11-0-0 to 14-0-0, Interior(1) 14-0-0 to 22-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Ceiling dead load (5.0 psf) on member(s). 4-5, 7-8, 5-17, 7-17; Wall dead load (5.0psf) on member(s).4-15, 8-13
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 13-15
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=141, 12=141.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Attic room checked for L/360 deflection.

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	FGE	Common Supported Gable	1	1	I47762538
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:48 2021 Page 1
ID:1OUQItubALAJMlaPgftmcUyoJ6G-o7qwPvPL3nYXGoWel6MTMxXVKvJ3hzZbpqQ92ryhPOj

-0-10-8 11-0-0 22-0-0 22-10-8
0-10-8 11-0-0 11-0-0 0-10-8

Scale = 1:68.5

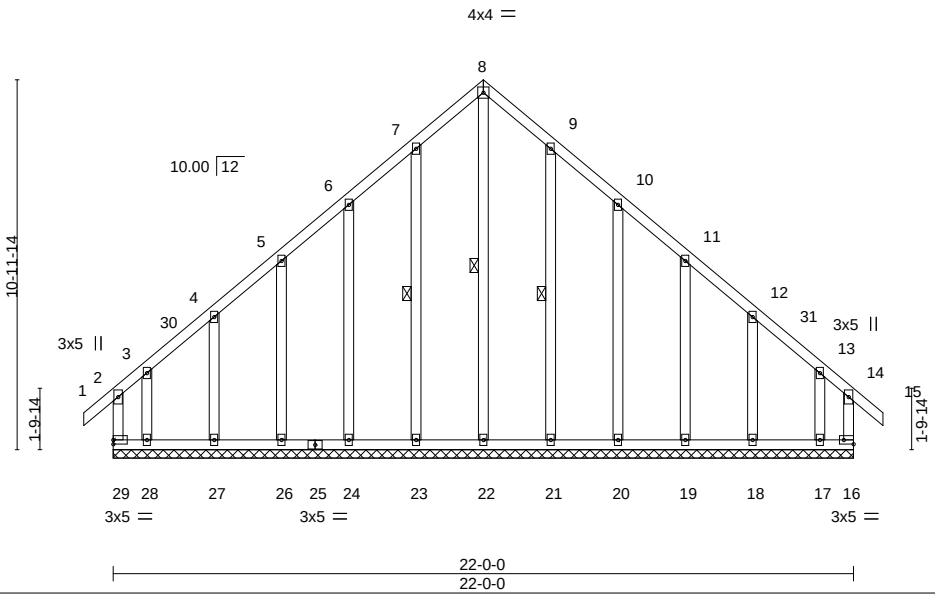


Plate Offsets (X,Y)-- [16:Edge,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	-0.00	15	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.00	15	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.35	Horz(CT)	-0.01	16	n/a	n/a		
BCDL	10.0	Code IBC2018/TPI2014		Matrix-R							Weight: 138 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF Stud
OTHERS	2x4 SPF Stud

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 8-22, 7-23, 9-21

REACTIONS. All bearings 22-0-0.
(lb) - Max Horz 29=303(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 22 except 29=-361(LC 10), 16=-326(LC 11), 23=-106(LC 12), 24=-141(LC 12), 26=-129(LC 12), 27=-118(LC 12), 28=-397(LC 9), 21=-105(LC 13), 20=-141(LC 13), 19=-129(LC 13), 18=-119(LC 13), 17=-372(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 23, 24, 26, 27, 21, 20, 19, 18 except 29=402(LC 9), 16=369(LC 8), 22=487(LC 13), 28=461(LC 10), 17=435(LC 11)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 5-6=-200/332, 6-7=-277/450, 7-8=-336/539, 8-9=-336/539, 9-10=-277/450, 10-11=-201/332
WEBS 8-22=-576/298

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 11-0-0, Corner(3R) 11-0-0 to 14-0-0, Exterior(2N) 14-0-0 to 22-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 22 except (jt=lb) 29=361, 16=326, 23=106, 24=141, 26=129, 27=118, 28=397, 21=105, 20=141, 19=129, 18=119, 17=372.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

September 7,2021

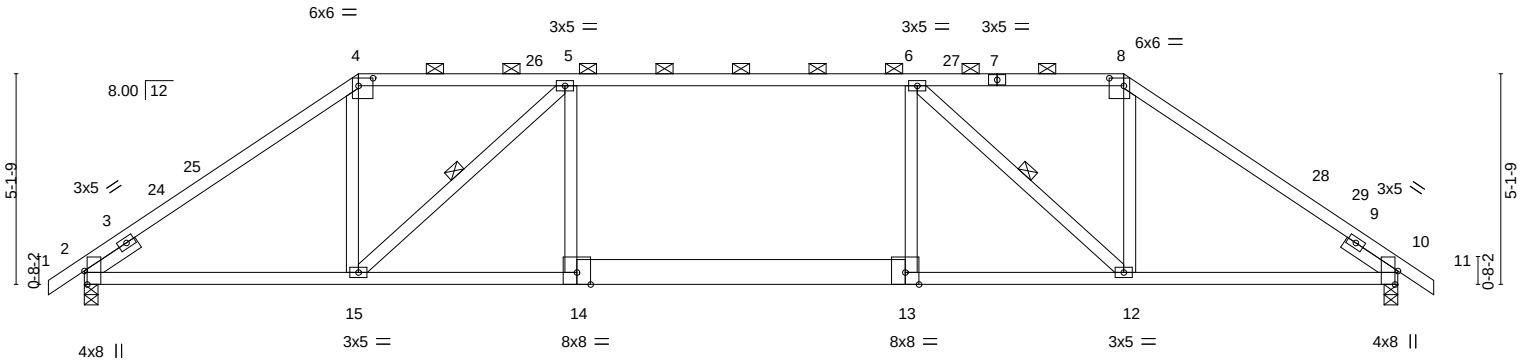
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	FH	Hip	1	1	I47762539
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:49 2021 Page 1
ID:1OUQItubALAJMlaPgftmcUyoJ6G-GKOIcFQ_q4gOux5qJqtiv94ZdJVsQQSl2UAjbHyhPOi

-0-10-8	6-8-2	12-0-0	12-10-11	19-1-5	20-0-0	25-3-14	32-0-0	32-10-8
0-10-8	6-8-2	5-3-14	0-10-11	6-2-9	0-10-11	5-3-14	6-8-2	0-10-8

Scale = 1:56.1



6-8-2	12-0-0	16-0-0	20-0-0	25-3-14	32-0-0
6-8-2	5-3-14	4-0-0	4-0-0	5-3-14	6-8-2

Plate Offsets (X,Y)-- [2:0-3-15,Edge], [4:0-4-4,0-2-4], [8:0-4-4,0-2-4], [10:0-3-15,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	-0.18	12-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.28	13-14	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.09	10	n/a	n/a		
BCDL	10.0	Code	IBC2018/TPI2014	Matrix-MS							Weight: 134 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
13-14: 2x8 SP No.1
WEBS 2x4 SPF Stud
SLIDER Left 2x4 SPF Stud 1-6-0, Right 2x4 SPF Stud 1-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-11-6 oc purlins, except
2-0-0 oc purlins (2-8-1 max.): 4-8.
BOT CHORD Rigid ceiling directly applied or 7-2-6 oc bracing.
WEBS 1 Row at midpt 5-15, 6-12

REACTIONS. (size) 2=0-4-0, 10=0-4-0
Max Horz 2=125(LC 11)
Max Uplift 2=-344(LC 9), 10=-344(LC 8)
Max Grav 2=1464(LC 19), 10=1464(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-2008/535, 4-5=-1565/490, 5-6=-2316/681, 6-8=-1565/490, 8-10=-2008/536
BOT CHORD 2-15=-450/1653, 14-15=-640/2347, 13-14=-637/2356, 12-13=-638/2346, 10-12=-335/1590
WEBS 4-15=-186/875, 5-15=-1080/434, 6-12=-1080/434, 8-12=-186/875, 5-14=0/358, 6-13=0/358

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-8-2, Exterior(2R) 6-8-2 to 10-11-1, Interior(1) 10-11-1 to 25-3-14, Exterior(2R) 25-3-14 to 29-6-13, Interior(1) 29-6-13 to 32-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) except (jt=lb) 2=344, 10=344.
7) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	GH	Hip	1	1	I47762540
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:50 2021 Page 1
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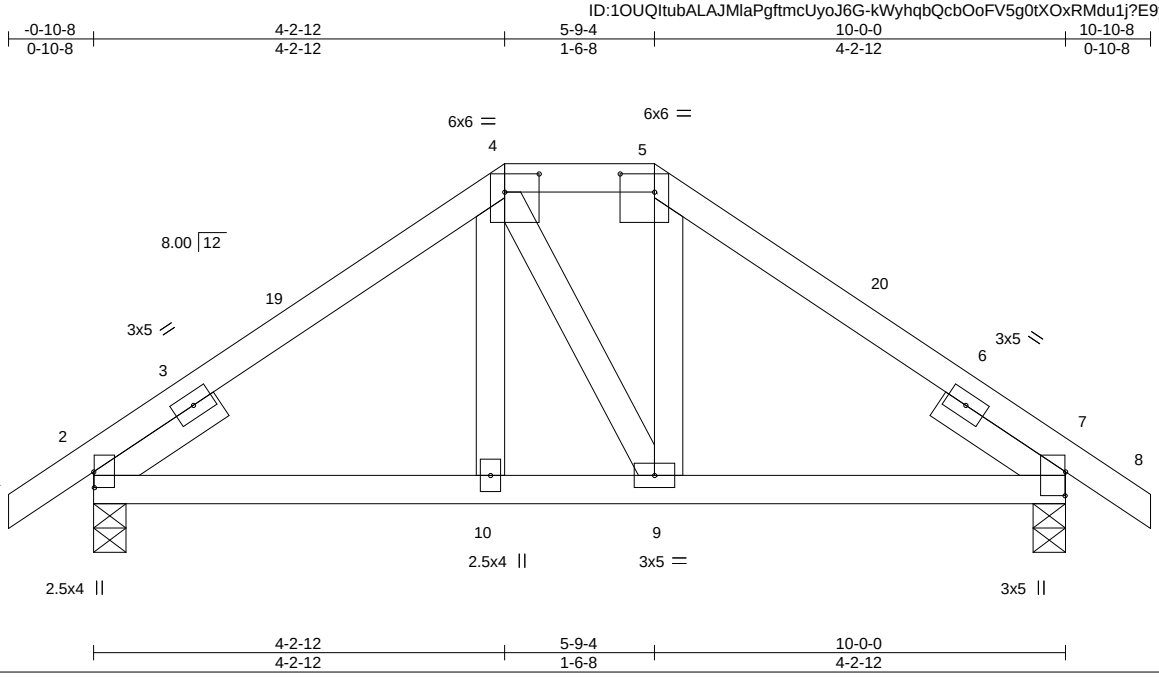

Plate Offsets (X,Y)-- [2:0-1-15,0-0-1], [4:0-4-4,0-2-4], [5:0-4-4,0-2-4], [7:0-2-15,0-0-1]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	-0.01	10-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.02	10-13	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	-0.01	2	n/a	n/a		
BCDL	10.0	Code	IBC2018/TPI2014	Matrix-MS							Weight: 41 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF Stud
SLIDER Left 2x4 SPF Stud 1-6-0, Right 2x4 SPF Stud 1-6-0

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

REACTIONS. (size) 2=0-4-0, 7=0-4-0
Max Horz 2=-85(LC 10)
Max Uplift 2=-134(LC 12), 7=-134(LC 13)
Max Grav 2=452(LC 1), 7=452(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-396/203, 4-5=-343/228, 5-7=-397/203
BOT CHORD 2-10=-56/332, 9-10=-56/328, 7-9=-48/318

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-2-12, Exterior(2E) 4-2-12 to 5-9-4, Exterior(2R) 5-9-4 to 10-0-0, Interior(1) 10-0-0 to 10-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=134, 7=134.
7) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	HA	Half Hip Girder	1	2	I47762541
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:50 2021 Page 1
ID:1OUQltubALAJMlaPgftmcUyoJ6G-kWyhqbQcbOoFV5g0tXOxRMdllj_A9nUuG8vG7kyhPOh

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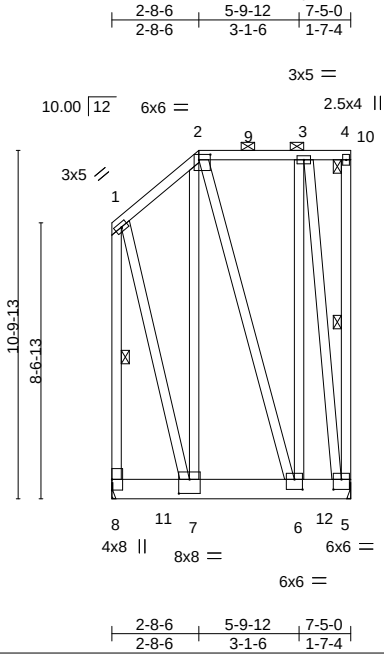

Plate Offsets (X,Y)-- [2:0-4-4,0-2-0], [5:0-3-0,0-3-12], [6:0-3-0,0-3-12], [7:0-4-0,0-5-4]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	0.03	6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	-0.03	6-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.71	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IBC2018/TPI2014		Matrix-MP							Weight: 216 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x8 SP No.1
WEBS 2x4 SPF Stud *Except*
4-5: 2x4 SPF 1650F 1.5E

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.): 2-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-5, 1-8

REACTIONS. (size) 5=Mechanical, 8=Mechanical
Max Horz 8=378(LC 9)
Max Uplift 5=-1089(LC 9), 8=-861(LC 8)
Max Grav 5=1900(LC 19), 8=1715(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-538/337, 2-3=-362/326, 3-4=-241/257, 1-8=-1604/990
BOT CHORD 7-8=-485/430, 6-7=-447/524, 5-6=-209/272
WEBS 2-7=-813/915, 1-7=-756/1278, 3-6=-981/1425, 2-6=-810/779, 3-5=-1532/1147

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 2-8-6, Exterior(2R) 2-8-6 to 6-11-5, Interior(1) 6-11-5 to 7-3-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=1089, 8=861.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) Girder carries tie-in span(s): 25-0-0 from 1-6-0 to 6-6-0
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

September 7,2021

LOAD CASE(S) Standard

Continued on page 2

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

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-60, 2-4=-60, 8-11=-20, 11-12=-478(F=-458), 5-12=-20

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	HB	Half Hip	1	1	I47762542
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:51 2021 Page 1
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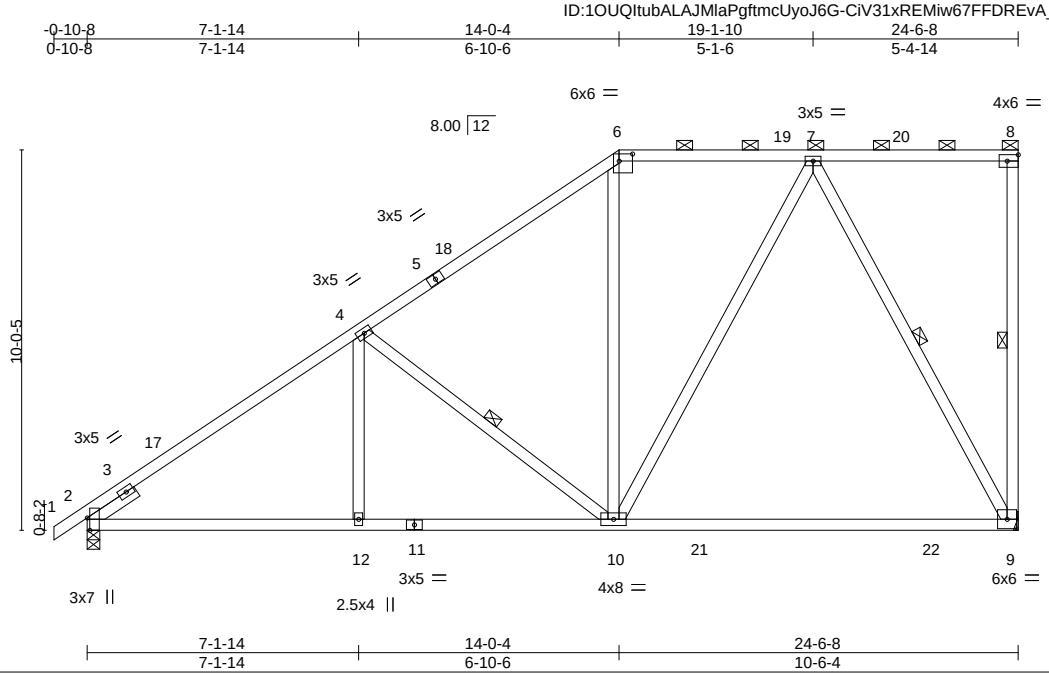

Plate Offsets (X,Y)-- [2:0-3-15,Edge], [6:0-4-4,0-2-4], [8:Edge,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	-0.63	9-10	>464	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.97	9-10	>301	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.03	9	n/a	n/a		
BCDL	10.0	Code IBC2018/TPI2014		Matrix-MS							Weight: 123 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
9-11: 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF Stud *Except*
8-9: 2x4 SPF 1650F 1.5E
SLIDER Left 2x4 SPF Stud 1-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-6-9 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-8.
BOT CHORD Rigid ceiling directly applied or 8-5-3 oc bracing.
WEBS 1 Row at midpt 8-9, 4-10, 7-9

REACTIONS. (size) 9=Mechanical, 2=0-4-0
Max Horz 2=377(LC 11)
Max Uplift 9=-368(LC 9), 2=-309(LC 12)
Max Grav 9=1120(LC 19), 2=1236(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1534/394, 4-6=-1073/328, 6-7=-809/360
BOT CHORD 2-12=-470/1338, 10-12=-470/1338, 9-10=-200/456
WEBS 4-10=-681/388, 6-10=0/262, 7-10=-166/711, 7-9=-935/382

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 14-0-4, Exterior(2R) 14-0-4 to 18-3-3, Interior(1) 18-3-3 to 24-4-12 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=368, 2=309.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	HC	Half Hip	1	1	I47762543
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:52 2021 Page 1
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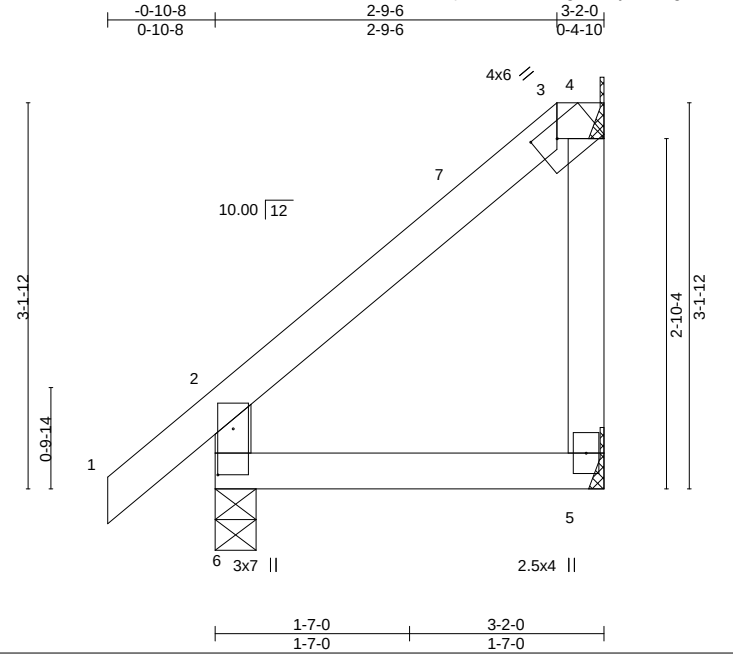

Plate Offsets (X,Y)-- [3:0-2-3,0-1-6], [6:0-4-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	-0.00	5-6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.01	5-6	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.02	4	n/a	n/a		
BCDL	10.0	Code IBC2018/TPI2014		Matrix-MR							Weight: 13 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF Stud

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-2-0 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) 4=Mechanical, 5=Mechanical, 6=0-4-0
Max Horz 6=121(LC 9)
Max Uplift 4=-75(LC 9), 6=-46(LC 12)
Max Grav 4=96(LC 19), 5=59(LC 3), 6=187(LC 20)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 2-9-6, Exterior(2E) 2-9-6 to 3-0-4 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 6.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	HD	Half Hip Girder	1	1	I47762544
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:53 2021 Page 1
ID:1OUQItubALAJMlaPgftmcUyoJ6G-85dpSdTUtJAqMZObYfye3?FQOw3oMJjLz68wk2yhPOe

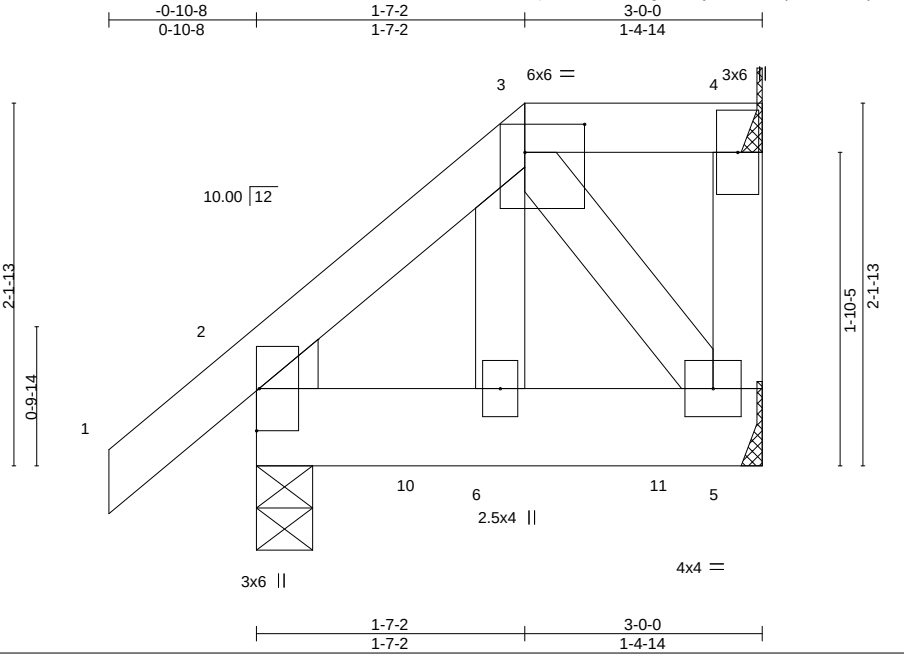

Plate Offsets (X,Y)-- [3:0-4-4,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.00	6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	6	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.04	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code	IBC2018/TPI2014	Matrix-MP							Weight: 16 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF 1650F 1.5E
WEBS 2x4 SPF Stud
WEDGE
Left: 2x4 SPF Stud

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-0-0 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) 4=Mechanical, 2=0-4-0, 5=Mechanical
Max Horz 2=79(LC 11)
Max Uplift 4=-26(LC 8), 2=-60(LC 12), 5=-40(LC 9)
Max Grav 4=38(LC 1), 2=185(LC 1), 5=96(LC 19)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2, 5.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Girder carries tie-in span(s): 3-0-0 from 1-0-0 to 2-6-0
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-4=-60, 7-10=-20, 10-11=-38(F=-17), 5-11=-20

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	HE	Half Hip Girder	1	1	I47762545
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:53 2021 Page 1
ID:1OUQItubALAJMlaPgftmcUyoJ6G-85dpSdTUtJAqMZObYfye3?FQZw3lMJgLz68wk2yhPOe

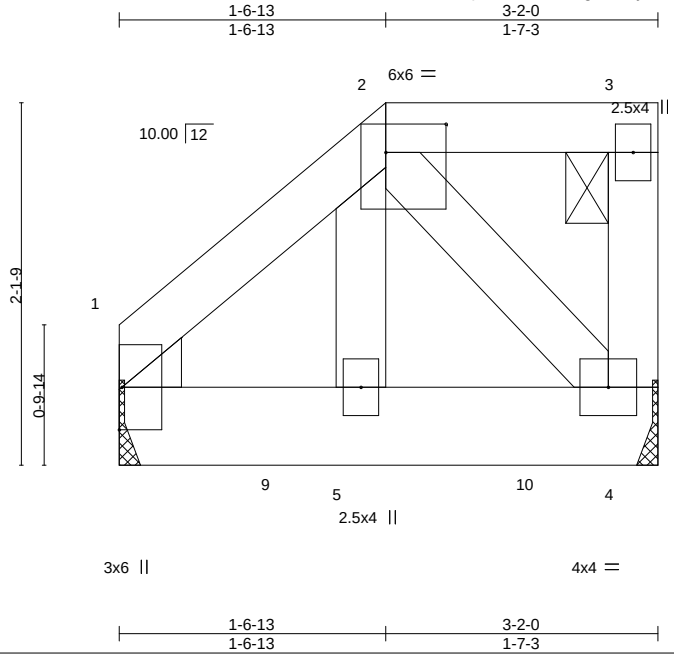

Plate Offsets (X,Y)-- [2:0-4-4,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	5	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.04	Horz(CT)	-0.00	1	n/a	n/a		
BCDL	10.0	Code	IBC2018/TPI2014	Matrix-MP							Weight: 16 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF 1650F 1.5E
WEBS 2x4 SPF Stud
WEDGE
Left: 2x4 SPF Stud

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 2-3.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 1=Mechanical
Max Horz 1=66(LC 11)
Max Uplift 4=-68(LC 9), 1=-39(LC 12)
Max Grav 4=136(LC 1), 1=135(LC 22)

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

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 1.
7) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
8) Girder carries tie-in span(s): 3-0-0 from 1-0-0 to 2-6-0
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) 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 + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-60, 2-3=-60, 6-9=-20, 9-10=-38(F=-17), 4-10=-20

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	HF	Half Hip	2	1	I47762546
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:54 2021 Page 1
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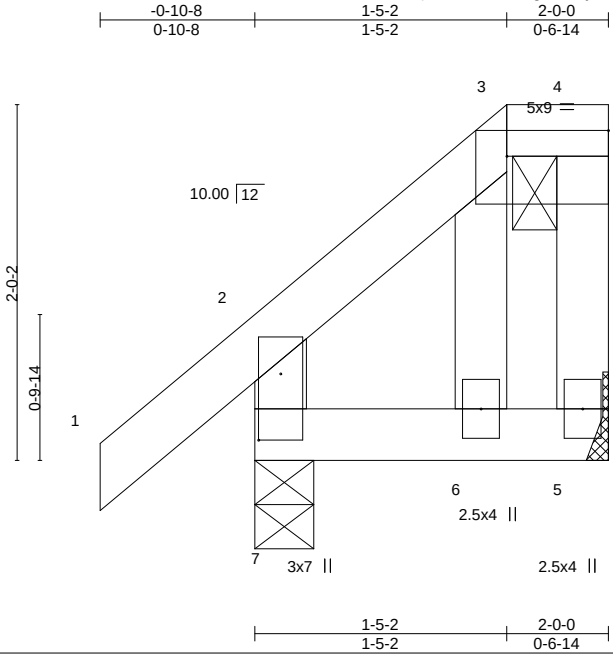

Plate Offsets (X,Y)-- [3:Edge,0-1-12], [7:0-4-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00	7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.01	Horz(CT)	-0.00	5	n/a	n/a		
BCDL	10.0	Code IBC2018/TPI2014		Matrix-MR							Weight: 10 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF Stud

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-0-0 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) 5=Mechanical, 7=0-4-0
Max Horz 7=78(LC 9)
Max Uplift 5=-49(LC 9), 7=-43(LC 12)
Max Grav 5=64(LC 19), 7=148(LC 1)

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

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 7.
7) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	HG	Half Hip Girder	1	1	I47762547
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:55 2021 Page 1
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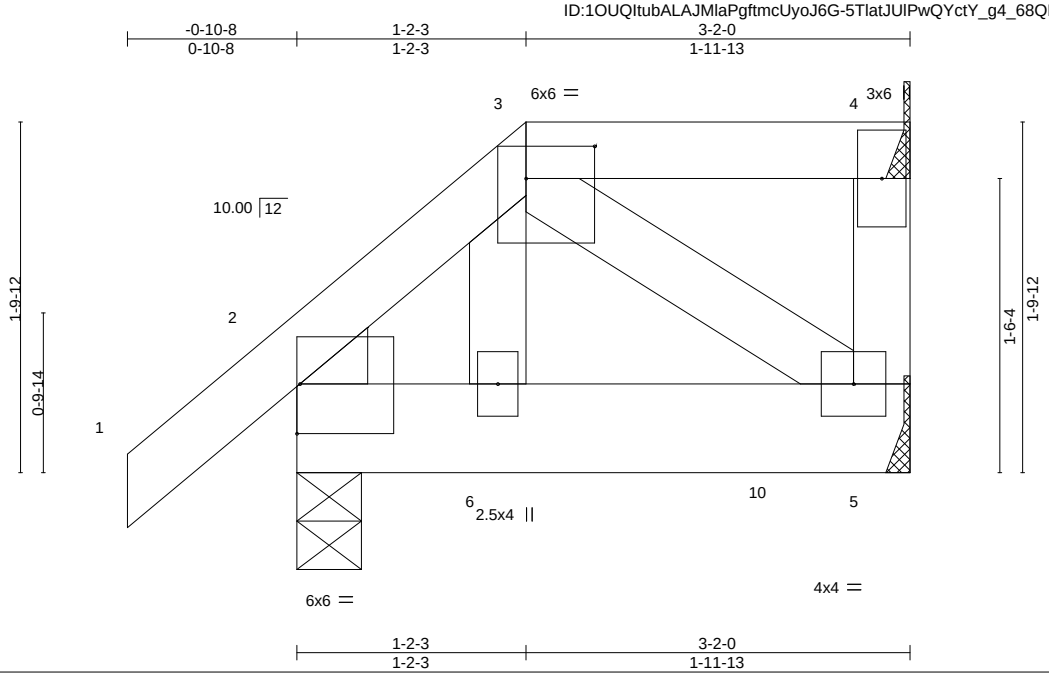


Plate Offsets (X,Y)-- [2:Edge,0-3-1], [3:0-4-4,0-2-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.00	6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	6	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.03	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IBC2018/TPI2014		Matrix-MP							Weight: 16 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF 1650F 1.5E
WEBS 2x4 SPF Stud
WEDGE
Left: 2x4 SPF Stud

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-2-0 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) 4=Mechanical, 2=0-4-0, 5=Mechanical
Max Horz 2=66(LC 11)
Max Uplift 4=-38(LC 9), 2=-62(LC 12), 5=-25(LC 9)
Max Grav 4=55(LC 1), 2=192(LC 1), 5=78(LC 19)

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

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2, 5.
7) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
8) Girder carries tie-in span(s): 3-0-0 from 0-9-0 to 2-6-0
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
11) 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 + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-4=-60, 6-7=-20, 6-10=-38(F=-17), 5-10=-20

September 7,2021

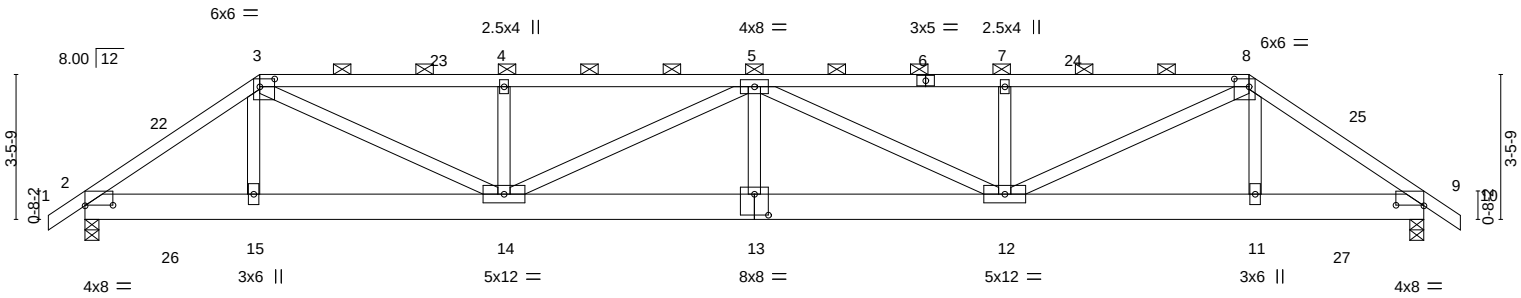
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	HH	Hip Girder	1	1	I47762548
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:56 2021 Page 1
ID:1OUQItubALAJMlaPgftmcUyoJ6G-ZgJy4eVNAEYPD07ADoVLhdtmm8wlZSJnf4MaLNyhPOb

-0-10-8	4-2-2	10-0-3	16-0-0	21-11-13	27-9-14	32-0-0	32-10-8
0-10-8	4-2-2	5-10-1	5-11-13	5-11-13	5-10-1	4-2-2	0-10-8

Scale = 1:55.1



4-2-2	10-0-3	16-0-0	21-11-13	27-9-14	32-0-0
4-2-2	5-10-1	5-11-13	5-11-13	5-10-1	4-2-2

Plate Offsets (X,Y)-- [2:0-8-0,0-0-2], [3:0-4-4,0-2-4], [8:0-4-4,0-2-4], [9:0-8-0,0-0-2], [13:0-4-0,0-6-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	0.30	13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.50	13	>776	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.94	Horz(CT)	0.06	9	n/a	n/a		
BCDL	10.0	Code IBC2018/TPI2014		Matrix-MS							Weight: 183 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except* 3-6,6-8: 2x4 SPF 1650F 1.5E
BOT CHORD 2x8 SP No.1
WEBS 2x4 SPF Stud

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-5-1 oc purlins, except 2-0-0 oc purlins (3-0-0 max.): 3-8.
BOT CHORD Rigid ceiling directly applied or 6-11-15 oc bracing.

REACTIONS. (size) 2=0-4-0, 9=0-4-0
Max Horz 2=84(LC 11)
Max Uplift 2=-554(LC 9), 9=-554(LC 8)
Max Grav 2=1799(LC 1), 9=1799(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2729/894, 3-4=-4119/1444, 4-5=-4119/1444, 5-7=-4119/1443, 7-8=-4119/1443, 8-9=-2729/895
BOT CHORD 2-15=-745/2208, 14-15=-746/2197, 13-14=-1658/4855, 12-13=-1658/4855, 11-12=-673/2197, 9-11=-673/2208
WEBS 3-15=-19/259, 3-14=-805/2196, 4-14=-376/265, 5-14=-843/318, 5-13=-23/384, 5-12=-843/317, 7-12=-376/265, 8-12=-806/2196, 8-11=-20/260

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-2-2, Exterior(2R) 4-2-2 to 8-5-1, Interior(1) 8-5-1 to 27-9-14, Exterior(2R) 27-9-14 to 32-0-0, Interior(1) 32-0-0 to 32-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=554, 9=554.
7) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
8) Girder carries tie-in span(s): 4-0-0 from 2-0-0 to 30-0-0
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) 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 + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-8=-60, 8-10=-60, 16-26=-20, 26-27=-53(F=-33), 19-27=-20

September 7,2021

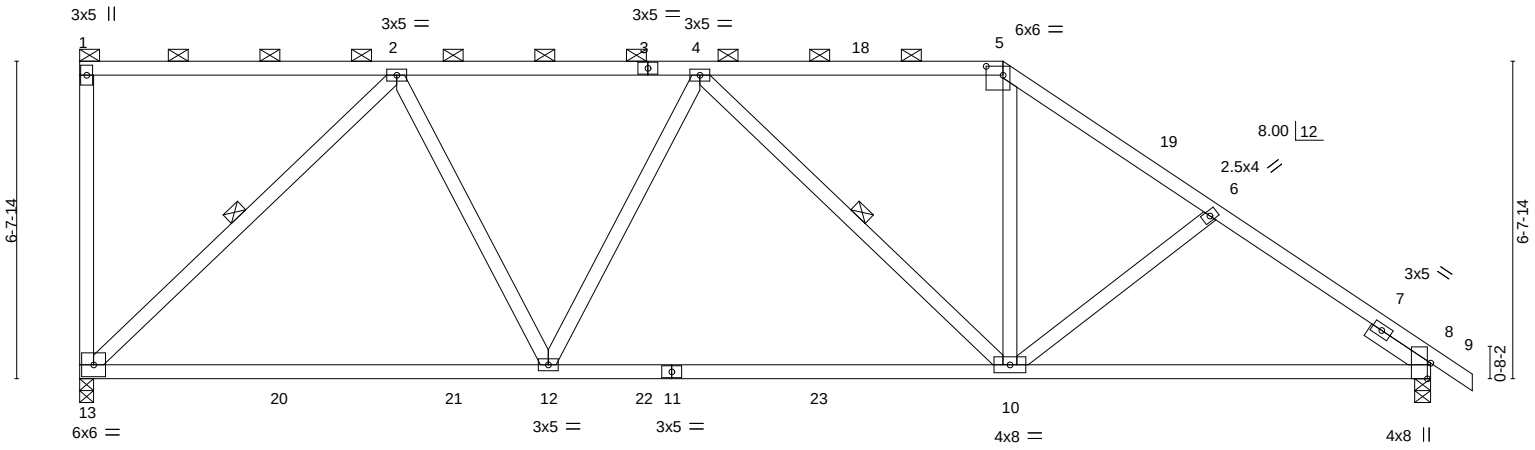
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	I	Roof Special	1	1	I47762549
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:56 2021 Page 1
ID:1OUQItubALAJMlaPgftmcUyoJ6G-ZgJy4eVNAEYPD07ADoVLhdtp28uuZWanf4MaLNyhPOb

6-7-13	13-0-1	19-4-6	23-8-7	28-4-0	29-2-8
6-7-13	6-4-5	6-4-5	4-4-1	4-7-9	0-10-8

Scale: 1/4"=1'



9-9-15	19-4-6	28-4-0
9-9-15	9-6-7	8-11-10

Plate Offsets (X,Y)-- [5:0-4-4,0-2-4], [8:0-3-15,Edge]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.56	Vert(LL)	-0.31	12-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.53	12-13	>642	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.67	Horz(CT)	0.06	8	n/a	n/a		
BCDL	10.0	Code IBC2018/TPI2014		Matrix-MS							Weight: 125 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
11-13: 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF Stud
SLIDER Right 2x4 SPF Stud 1-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-1-9 oc purlins, except end verticals, and 2-0-0 oc purlins (4-9-10 max.): 1-5.
BOT CHORD Rigid ceiling directly applied or 9-5-9 oc bracing.
WEBS 1 Row at midpt 2-13, 4-10

REACTIONS. (size) 13=0-3-8, 8=0-4-0
Max Horz 13=-250(LC 10)
Max Uplift 13=-422(LC 8), 8=-317(LC 13)
Max Grav 13=1269(LC 2), 8=1338(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1391/423, 4-5=-1279/433, 5-6=-1613/459, 6-8=-1758/495
BOT CHORD 12-13=-324/1089, 10-12=-378/1471, 8-10=-298/1419
WEBS 2-13=-1384/508, 2-12=-71/702, 4-12=-273/216, 4-10=-276/239, 5-10=-66/601, 6-10=-283/246

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 19-4-6, Exterior(2R) 19-4-6 to 22-4-6 , Interior(1) 22-4-6 to 29-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) except (jt=lb) 13=422, 8=317.
6) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	IH	Hip Girder	1	1	I47762550
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:57 2021 Page 1
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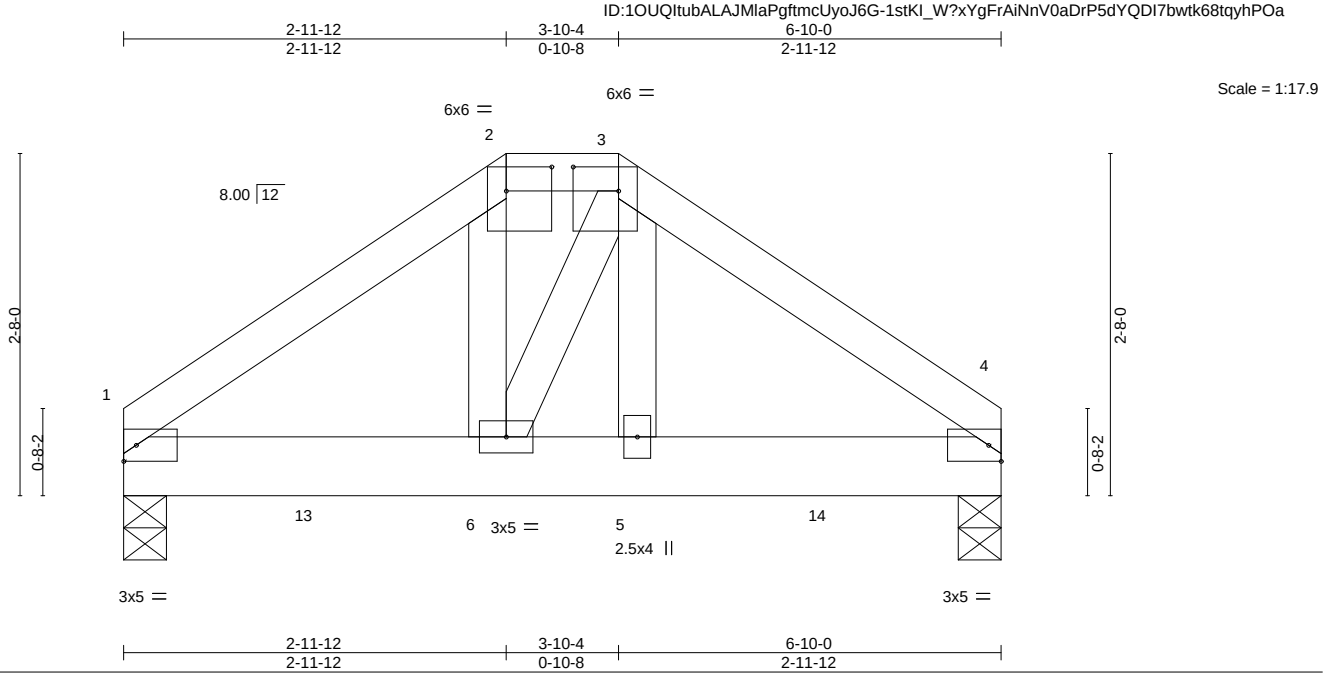

Plate Offsets (X,Y)-- [2:0-4-4,0-2-4], [3:0-4-4,0-2-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00	5	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.05	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IBC2018/TPI2014		Matrix-MP							Weight: 28 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF 1650F 1.5E
WEBS 2x4 SPF Stud

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

REACTIONS. (size) 1=0-4-0, 4=0-4-0
Max Horz 1=-50(LC 8)
Max Uplift 1=-108(LC 12), 4=-110(LC 13)
Max Grav 1=346(LC 19), 4=350(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-392/206, 2-3=-293/213, 3-4=-389/206
BOT CHORD 1-6=-92/293, 5-6=-89/273, 4-5=-91/278

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=108, 4=110.
7) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
8) Girder carries tie-in span(s): 4-0-0 from 1-6-0 to 5-6-0
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) 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 + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-60, 2-3=-60, 3-4=-60, 7-13=-20, 13-14=-53(F=-33), 10-14=-20

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	J	Common	4	1	I47762551
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:58 2021 Page 1
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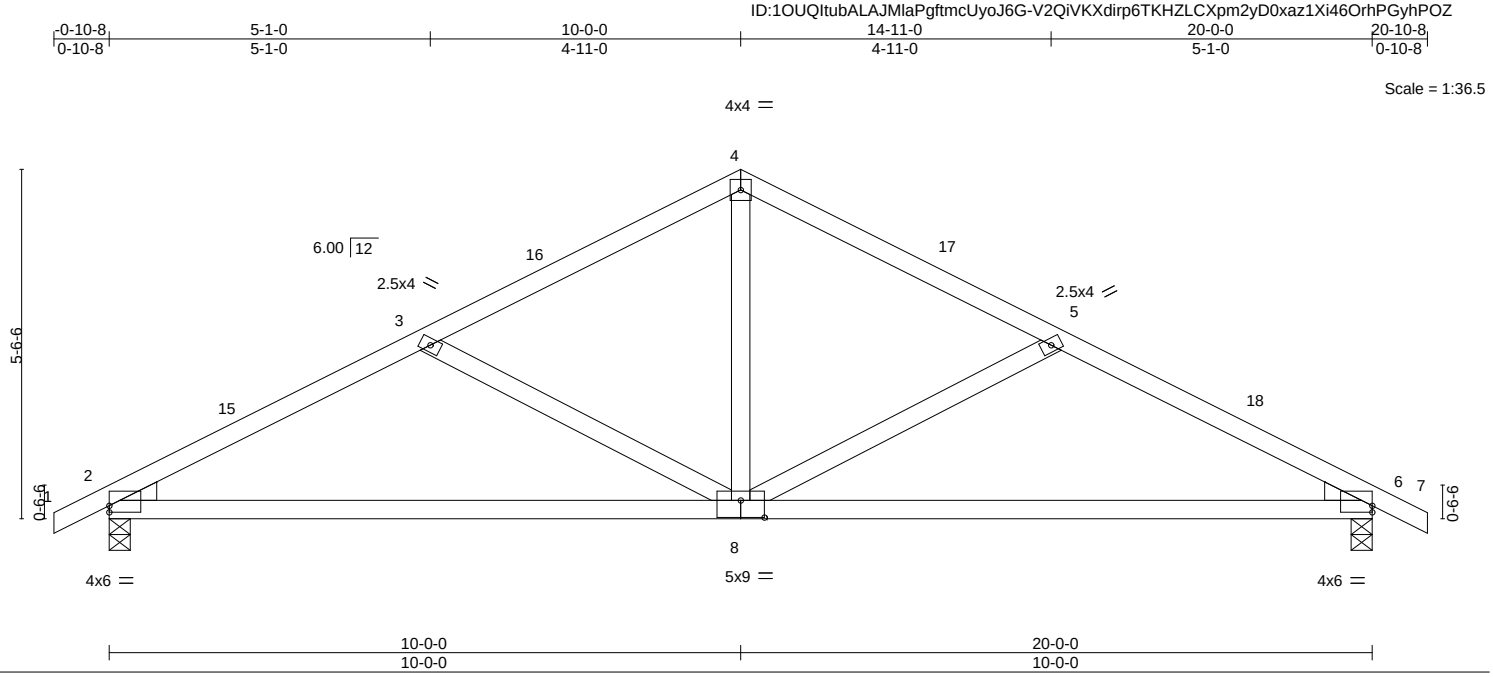

Plate Offsets (X,Y)-- [2:0-0-0,0-1-4], [6:0-0-0,0-1-4], [8:0-4-8,0-3-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.15	8-14	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.31	8-14	>764	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code IBC2018/TPI2014		Matrix-MS							Weight: 71 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF Stud
WEDGE
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-0-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-2-7 oc bracing.

REACTIONS. (size) 2=0-4-0, 6=0-4-0
Max Horz 2=91(LC 16)
Max Uplift 2=-266(LC 12), 6=-266(LC 13)
Max Grav 2=853(LC 1), 6=853(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1302/535, 3-4=-974/395, 4-5=-974/395, 5-6=-1302/535
BOT CHORD 2-8=-390/1110, 6-8=-391/1110
WEBS 4-8=-131/566, 5-8=-363/298, 3-8=-363/298

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-0-0, Exterior(2R) 10-0-0 to 13-0-0, Interior(1) 13-0-0 to 20-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) except (jt=lb) 2=266, 6=266.
6) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	JA	Jack-Open	1	1	I47762552
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:58 2021 Page 1
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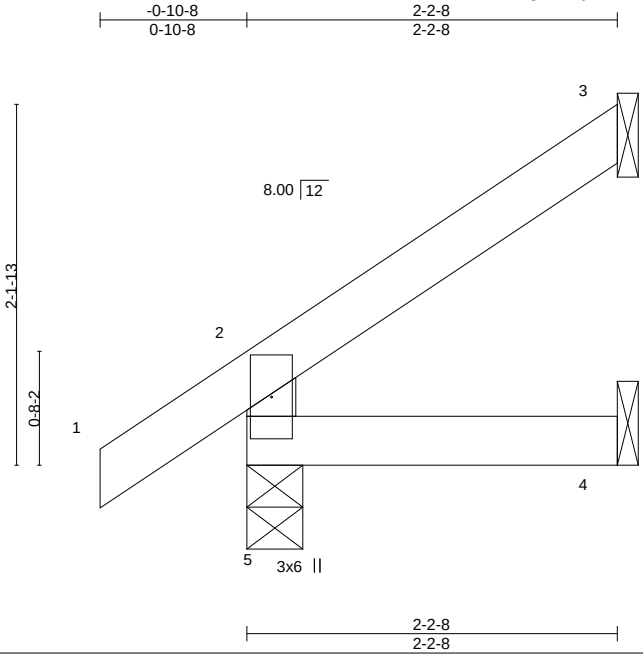

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.00	4-5	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IBC2018/TPI2014	Matrix-MR							Weight: 7 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF Stud

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

REACTIONS. (size) 5=0-4-0, 3=Mechanical, 4=Mechanical
Max Horz 5=88(LC 12)
Max Uplift 5=-23(LC 12), 3=-60(LC 12), 4=-2(LC 12)
Max Grav 5=157(LC 1), 3=66(LC 19), 4=37(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3, 4.
6) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	JB	Jack-Open	1	1	I47762553
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:59 2021 Page 1
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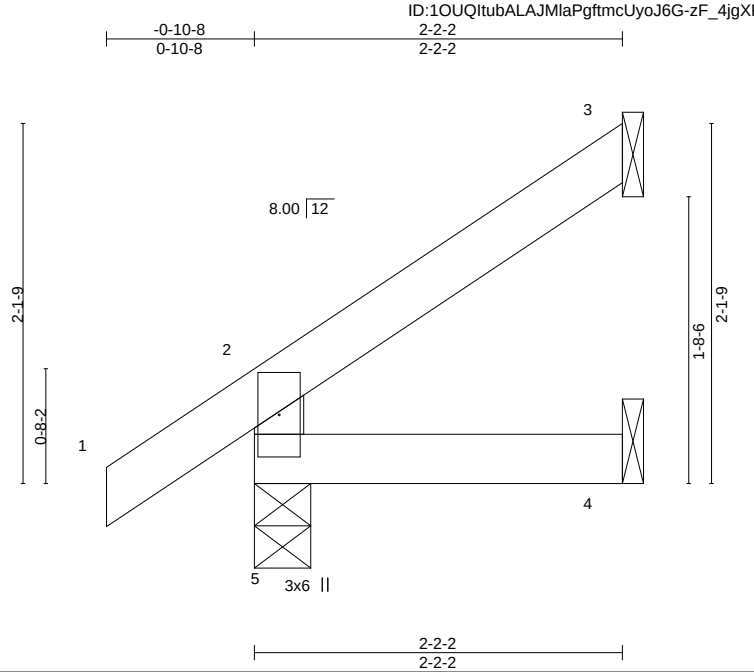


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.00	4-5	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IBC2018/TPI2014		Matrix-MR							Weight: 7 lb	FT = 20%

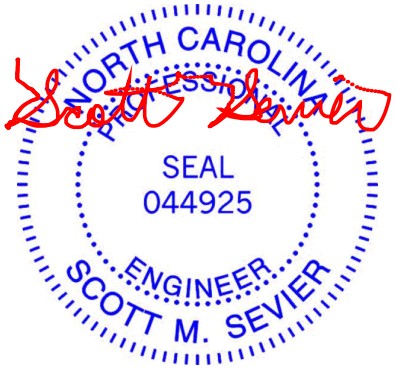
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF Stud

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-4-0, 3=Mechanical, 4=Mechanical
Max Horz 5=87(LC 12)
Max Uplift 5=-23(LC 12), 3=-59(LC 12), 4=-2(LC 12)
Max Grav 5=156(LC 1), 3=65(LC 19), 4=36(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3, 4.
6) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	JC	Jack-Open	1	1	I47762554
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:40:59 2021 Page 1
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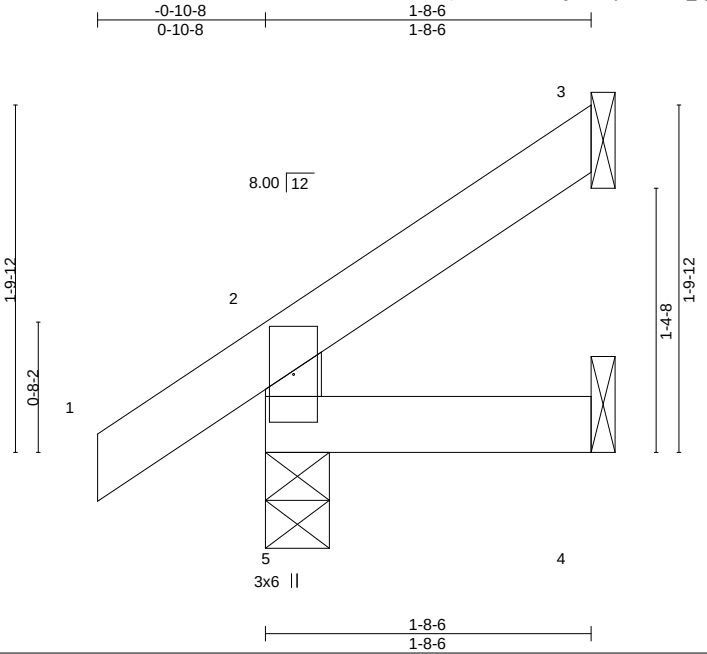

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	5	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IBC2018/TPI2014	Matrix-MR							Weight: 6 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF Stud

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-8-6 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-4-0, 3=Mechanical, 4=Mechanical
Max Horz 5=73(LC 12)
Max Uplift 5=-23(LC 12), 3=-46(LC 12), 4=-3(LC 12)
Max Grav 5=143(LC 1), 3=47(LC 19), 4=27(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3, 4.
6) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	JD	Jack-Partial	8	1	I47762555
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:41:00 2021 Page 1
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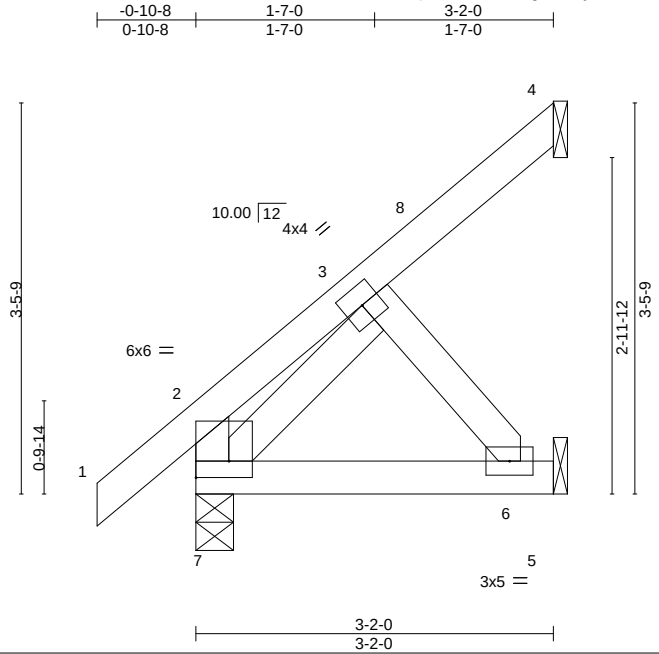

Plate Offsets (X,Y)-- [2:Edge,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	-0.00	6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.01	6-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IBC2018/TPI2014		Matrix-MP							Weight: 15 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF Stud

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

REACTIONS. (size) 4=Mechanical, 5=Mechanical, 7=0-4-0
Max Horz 7=150(LC 12)
Max Uplift 4=-54(LC 12), 5=-64(LC 12)
Max Grav 4=61(LC 19), 5=92(LC 19), 7=190(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-140/255

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-1-4 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
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.
6) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	JE	Jack-Partial	4	1	I47762556
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:41:01 2021 Page 1
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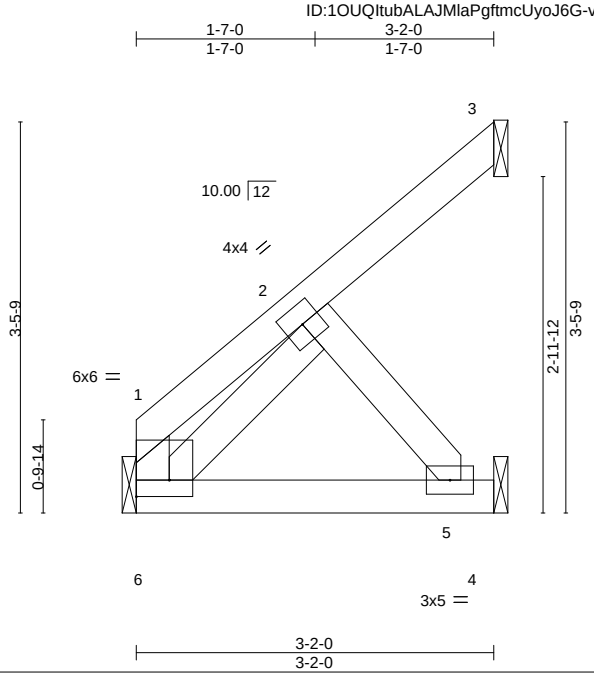

Plate Offsets (X,Y)-- [1:Edge,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	-0.00	5-6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.01	5-6	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IBC2018/TPI2014		Matrix-MP							Weight: 13 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF Stud

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

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 6=Mechanical
Max Horz 6=122(LC 12)
Max Uplift 3=-52(LC 12), 4=-69(LC 12)
Max Grav 3=58(LC 19), 4=105(LC 19), 6=118(LC 1)

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

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4.
6) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	JF	Jack-Open	9	1	I47762557
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:41:01 2021 Page 1
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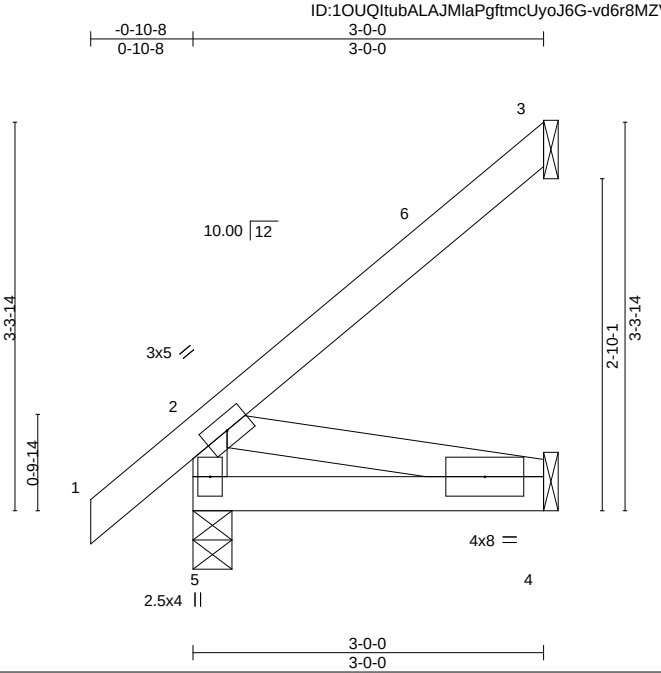

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	-0.00	4-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.01	4-5	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IBC2018/TPI2014	Matrix-MP							Weight: 13 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF Stud

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

REACTIONS. (size) 5=0-4-0, 3=Mechanical, 4=Mechanical
Max Horz 5=144(LC 12)
Max Uplift 3=-98(LC 12), 4=-14(LC 12)
Max Grav 5=185(LC 1), 3=103(LC 19), 4=57(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
BOT CHORD 4-5=-270/126
WEBS 2-4=-129/276

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 2-11-4 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
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4.
6) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	JG	Jack-Open	3	1	I47762558
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:41:02 2021 Page 1
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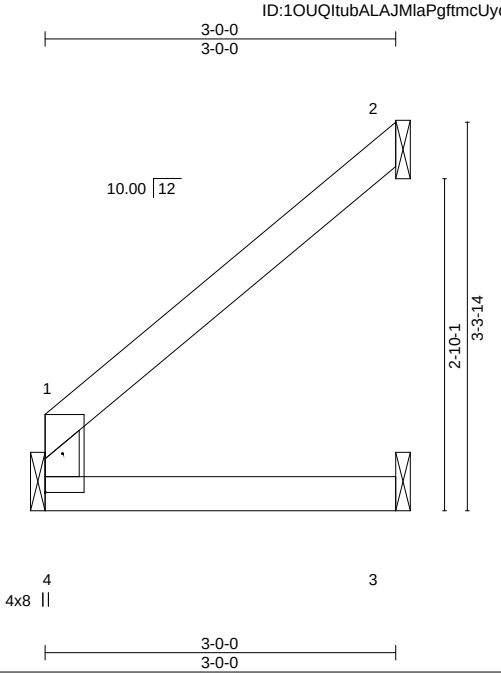

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	0.01	3-4	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	-0.01	3-4	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.02	2	n/a	n/a		
BCDL	10.0	Code IBC2018/TPI2014		Matrix-MR							Weight: 9 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF Stud

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

REACTIONS. (size) 4=Mechanical, 2=Mechanical, 3=Mechanical
Max Horz 4=115(LC 12)
Max Uplift 2=-105(LC 12), 3=-10(LC 12)
Max Grav 4=112(LC 1), 2=110(LC 19), 3=54(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 2=105.
6) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	JGE	Common Supported Gable	1	1	I47762559
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:41:03 2021 Page 1
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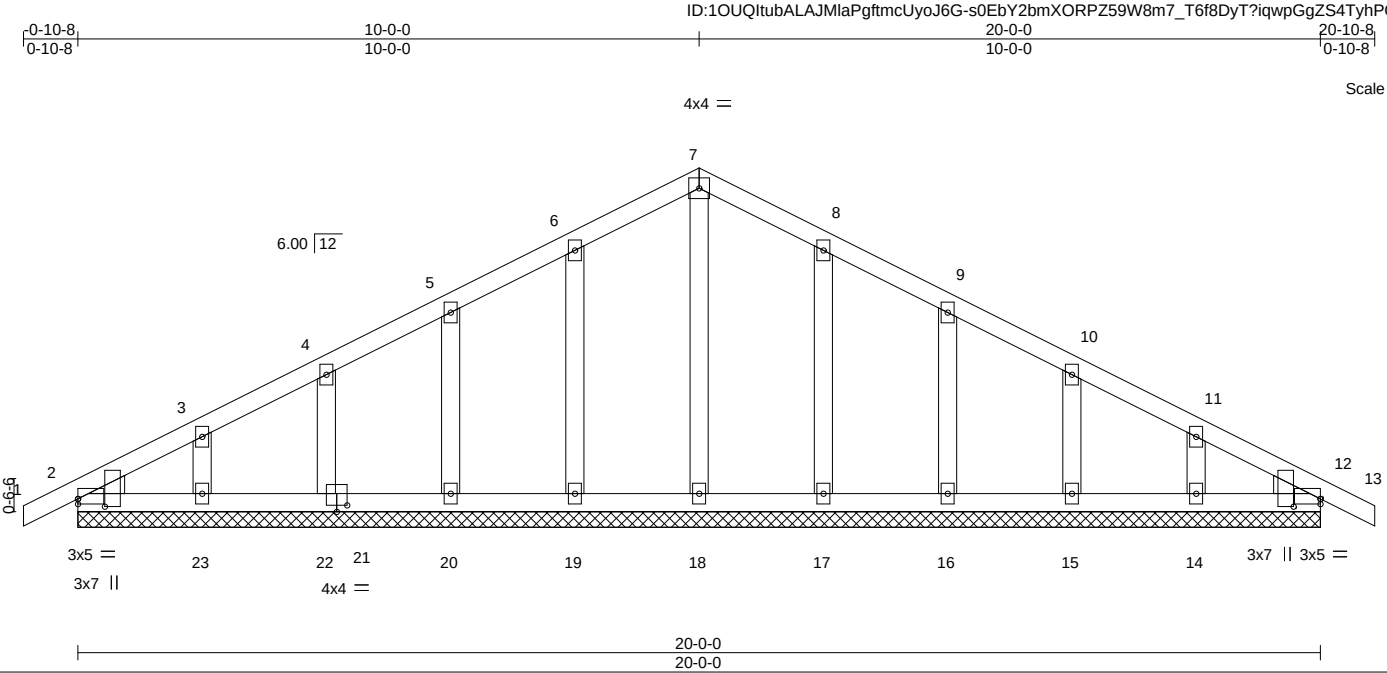

Plate Offsets (X,Y)-- [2:0-0-0,0-1-0], [2:0-1-8,0-5-3], [12:0-1-8,0-5-3], [12:0-0-0,0-1-0], [21:0-2-0,0-1-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	-0.00	12	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	12	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code	IBC2018/TPI2014	Matrix-S							Weight: 81 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF Stud
WEDGE
Left: 2x4 SPF Stud , Right: 2x4 SPF Stud

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. All bearings 20-0-0.
(lb) - Max Horz 2=91(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 2, 19, 20, 22, 17, 16, 15, 14, 12 except 23=-103(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 2, 18, 19, 20, 22, 23, 17, 16, 15, 14, 12

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-0-0, Exterior(2N) 2-0-0 to 10-0-0, Corner(3R) 10-0-0 to 13-0-0, Exterior(2N) 13-0-0 to 20-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 19, 20, 22, 17, 16, 15, 14, 12 except (jt=lb) 23=103.
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 12.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	JH	Jack-Open Supported Gable	1	1	I47762560
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:41:04 2021 Page 1
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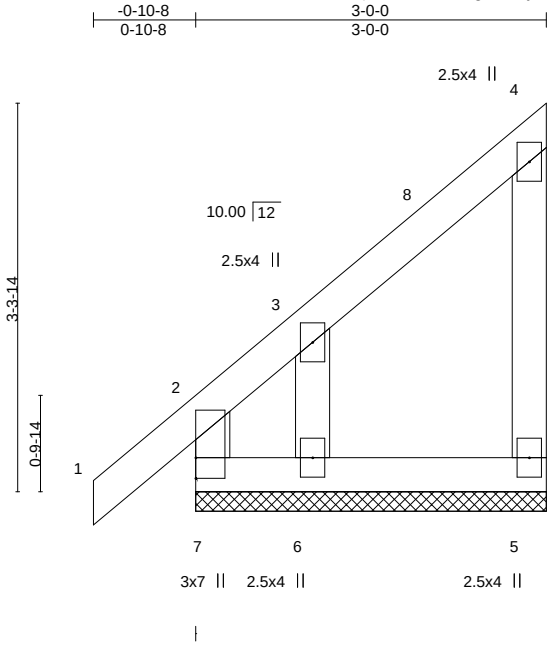

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	0.00	1	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.00	2	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IBC2018/TPI2014		Matrix-R							Weight: 14 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF Stud
OTHERS	2x4 SPF Stud

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=3-0-0, 5=3-0-0, 6=3-0-0
Max Horz 7=121(LC 11)
Max Uplift 7=-43(LC 8), 5=-32(LC 9), 6=-157(LC 12)
Max Grav 7=140(LC 20), 5=80(LC 19), 6=181(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-348/201
WEBS 3-6=-212/367

NOTES-

1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 2-10-4 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
2) 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.
3) Gable requires continuous bottom chord bearing.
4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 7, 5 except (jt=lb) 6=157.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	JI	Jack-Open	2	1	I47762561
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:41:04 2021 Page 1
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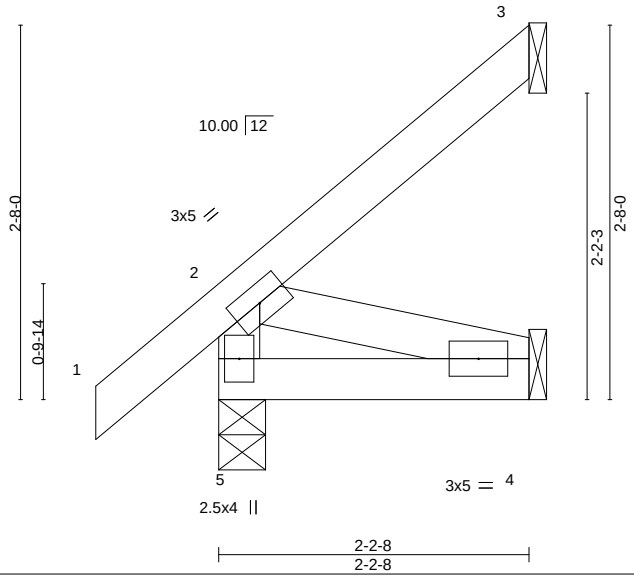

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	-0.00	4-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	4-5	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IBC2018/TPI2014	Matrix-MP							Weight: 10 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF Stud

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

REACTIONS. (size) 5=0-4-0, 3=Mechanical, 4=Mechanical
Max Horz 5=110(LC 12)
Max Uplift 3=-64(LC 12), 4=-21(LC 12)
Max Grav 5=158(LC 1), 3=66(LC 19), 4=41(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4.
6) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	JJ	Jack-Open	4	1	I47762562
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:41:05 2021 Page 1
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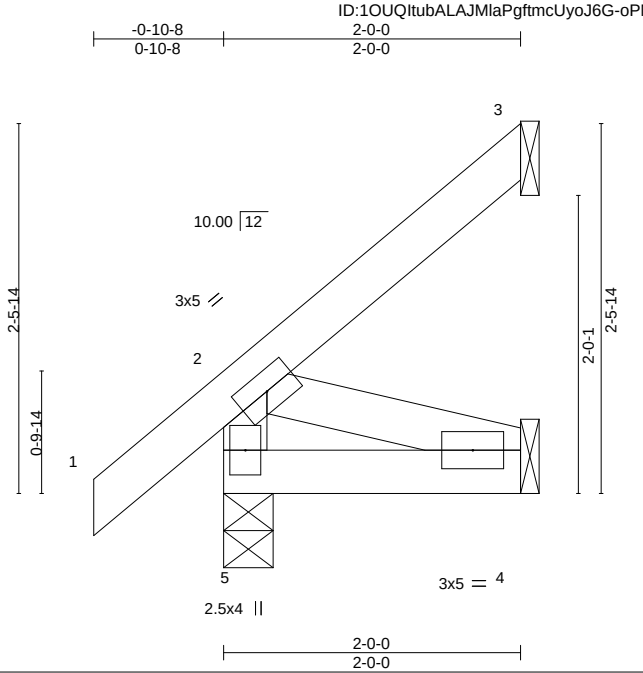

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	4-5	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IBC2018/TPI2014	Matrix-MP							Weight: 9 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF Stud

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-4-0, 4=Mechanical, 3=Mechanical
Max Horz 5=104(LC 12)
Max Uplift 4=-23(LC 12), 3=-57(LC 12)
Max Grav 5=152(LC 1), 4=38(LC 10), 3=59(LC 19)

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

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 3.
6) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	JK	Jack-Open	3	1	I47762563
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:41:05 2021 Page 1
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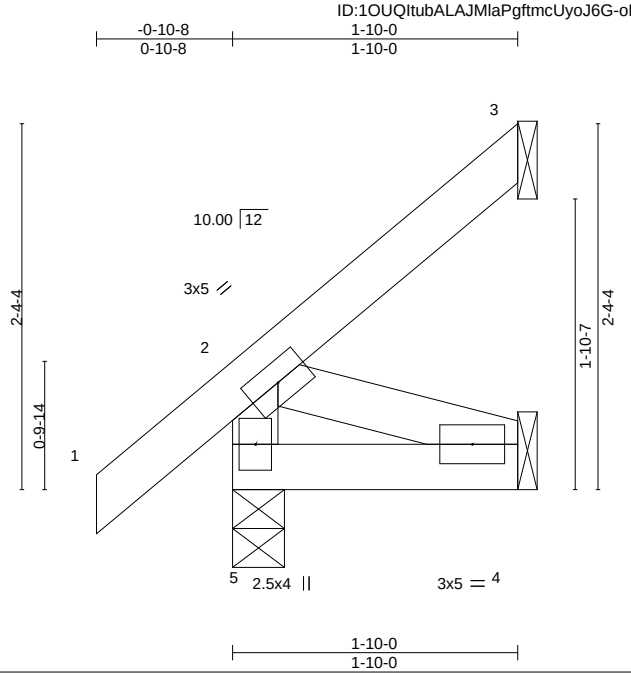


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	5	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IBC2018/TPI2014	Matrix-MP							Weight: 9 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF Stud

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

REACTIONS. (size) 5=0-4-0, 3=Mechanical, 4=Mechanical
Max Horz 5=97(LC 12)
Max Uplift 3=-49(LC 12), 4=-25(LC 12)
Max Grav 5=147(LC 1), 3=50(LC 19), 4=36(LC 10)

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

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4.
6) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

September 7,2021

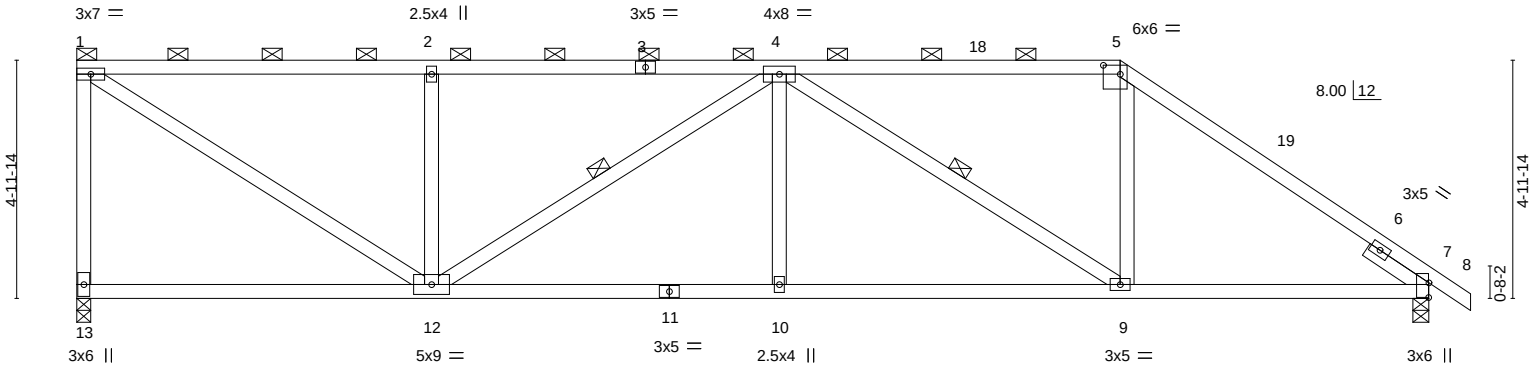
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	K	Roof Special	1	1	I47762564
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:41:06 2021 Page 1
ID:1OUQItubALAJMlaPgftmcUyoJ6G-GbvkB3deqJp_QZu5pugh5kHU2ALhvzPFyen6hoyhPOR

7-5-3	14-8-11	21-10-6	28-4-0	29-2-8
7-5-3	7-3-7	7-1-11	6-5-10	0-10-8

Scale: 1/4"=1'



7-5-3	14-8-11	21-10-6	28-4-0
7-5-3	7-3-7	7-1-11	6-5-10

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	0.11	9-10	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.21	9-10	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.05	7	n/a	n/a		
BCDL	10.0	Code	IBC2018/TPI2014	Matrix-MS							Weight: 118 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF Stud
SLIDER Right 2x4 SPF Stud 1-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-15 oc purlins, except end verticals, and 2-0-0 oc purlins (3-10-9 max.): 1-5.
BOT CHORD Rigid ceiling directly applied or 7-9-4 oc bracing.
WEBS 1 Row at midpt 4-12, 4-9

REACTIONS. (size) 13=0-3-8, 7=0-4-0
Max Horz 13=-187(LC 10)
Max Uplift 13=-421(LC 8), 7=-315(LC 8)
Max Grav 13=1127(LC 1), 7=1181(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-13=-1060/455, 1-2=-1377/523, 2-4=-1377/523, 4-5=-1216/450, 5-7=-1578/482
BOT CHORD 10-12=-568/1762, 9-10=-568/1762, 7-9=-297/1230
WEBS 1-12=-599/1604, 2-12=-468/327, 4-12=-459/177, 4-10=0/292, 4-9=-651/341, 5-9=-84/520

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 21-10-6, Exterior(2R) 21-10-6 to 24-10-6, Interior(1) 24-10-6 to 29-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) except (jt=lb) 13=421, 7=315.
6) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	KH	HIP GIRDER	1	1	I47762565
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:41:07 2021 Page 1
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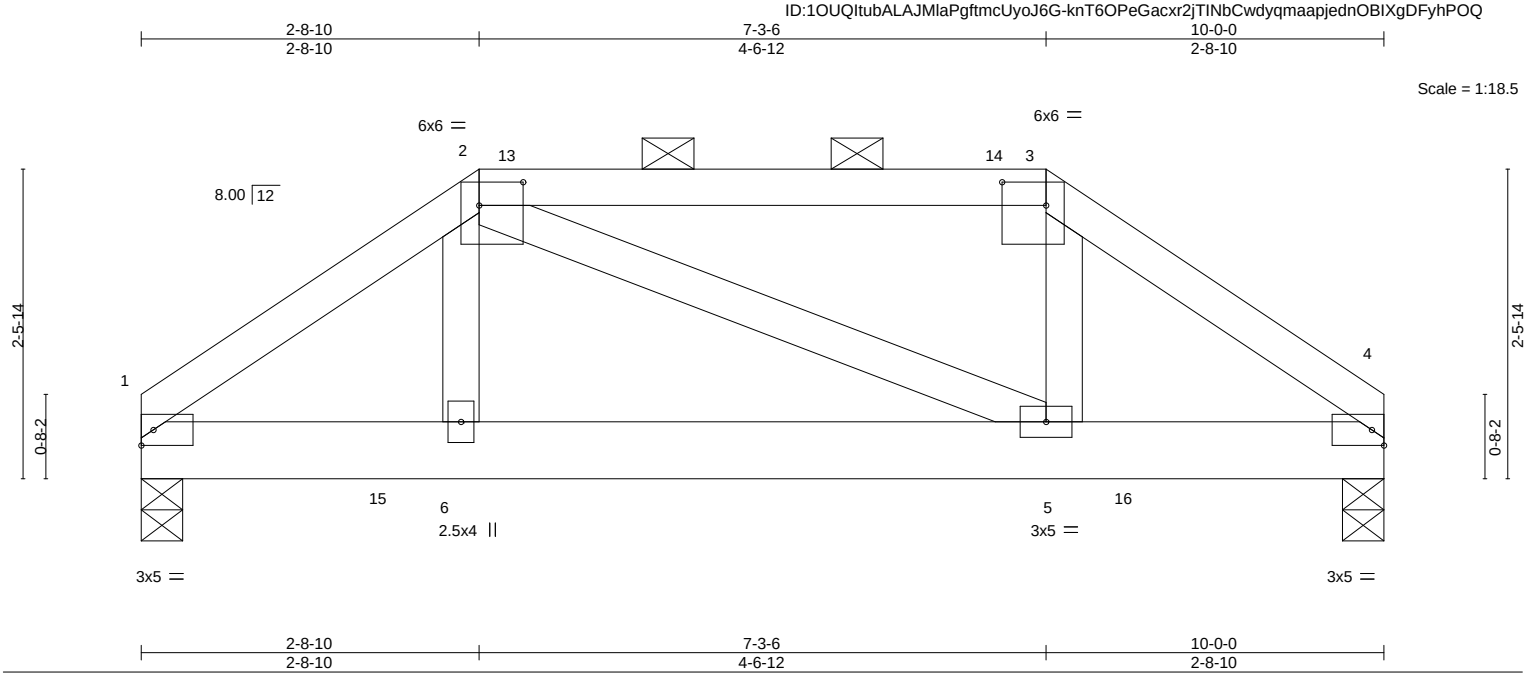

Plate Offsets (X,Y)-- [2:0-4-4,0-2-4], [3:0-4-4,0-2-4]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.01	5-6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	-0.02	5-6	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.06	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IBC2018/TPI2014		Matrix-MS							Weight: 40 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF 1650F 1.5E
WEBS 2x4 SPF Stud

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

REACTIONS. (size) 1=0-4-0, 4=0-4-0
Max Horz 1=-46(LC 8)
Max Uplift 1=-117(LC 12), 4=-117(LC 13)
Max Grav 1=440(LC 1), 4=440(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-594/254, 2-3=-450/252, 3-4=-591/249
BOT CHORD 1-6=-158/459, 5-6=-160/452, 4-5=-151/456

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 2-8-10, Exterior(2R) 2-8-10 to 6-11-9, Interior(1) 6-11-9 to 7-3-6, Exterior(2E) 7-3-6 to 10-0-0 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 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=117, 4=117.
7) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
8) Girder carries tie-in span(s): 3-0-0 from 2-0-0 to 8-0-0
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) 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 + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-60, 2-3=-60, 3-4=-60, 7-15=-20, 15-16=-33(F=-13), 10-16=-20

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	L	Common	1	1	I47762566
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:41:08 2021 Page 1
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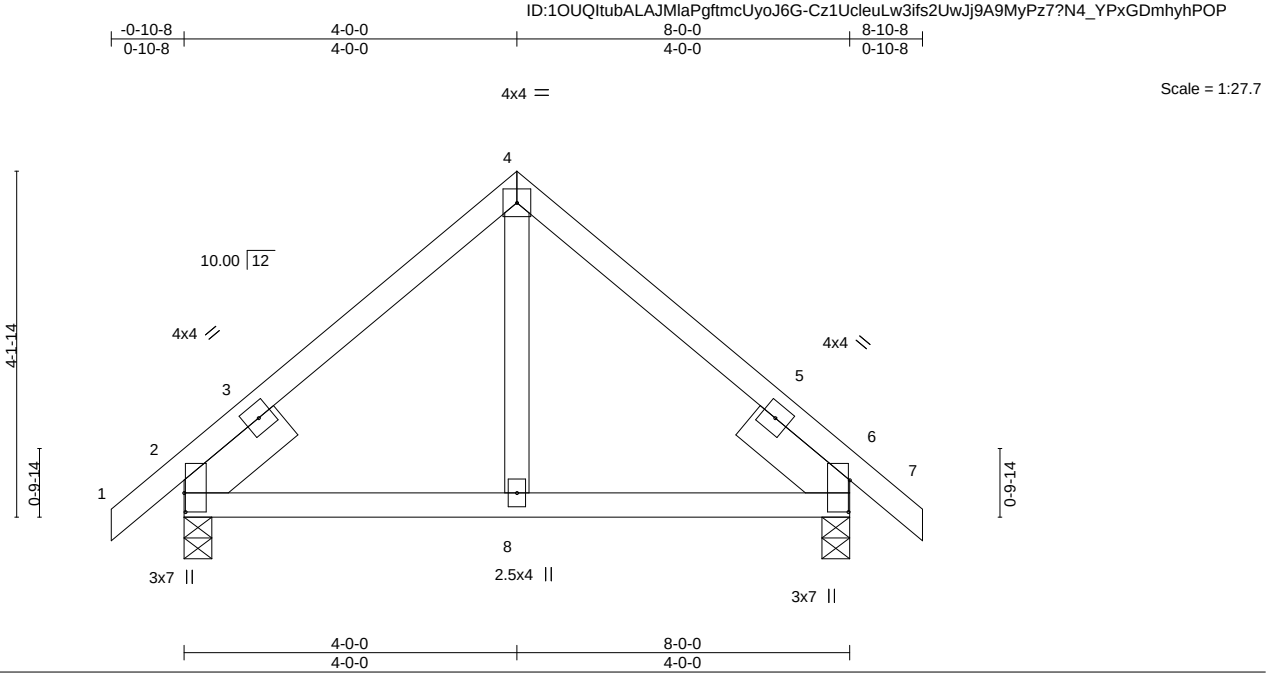

Plate Offsets (X,Y)-- [2:0-2-12,0-0-3], [6:0-4-9,0-0-3]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	0.02	8-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.02	8-11	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	-0.01	2	n/a	n/a		
BCDL	10.0	Code	IBC2018/TPI2014	Matrix-MP							Weight: 33 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF Stud
SLIDER Left 2x6 SPF 1650F 1.5E 1-6-0, Right 2x6 SPF 1650F 1.5E 1-6-0

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

REACTIONS. (size) 2=0-4-0, 6=0-4-0
Max Horz 2=-100(LC 10)
Max Uplift 2=-109(LC 12), 6=-109(LC 13)
Max Grav 2=373(LC 1), 6=373(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-312/207, 4-6=-312/207

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-0-0, Exterior(2R) 4-0-0 to 7-0-0, Interior(1) 7-0-0 to 8-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) except (jt=lb) 2=109, 6=109.
6) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	LGE	Common Supported Gable	1	1	I47762567
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:41:08 2021 Page 1
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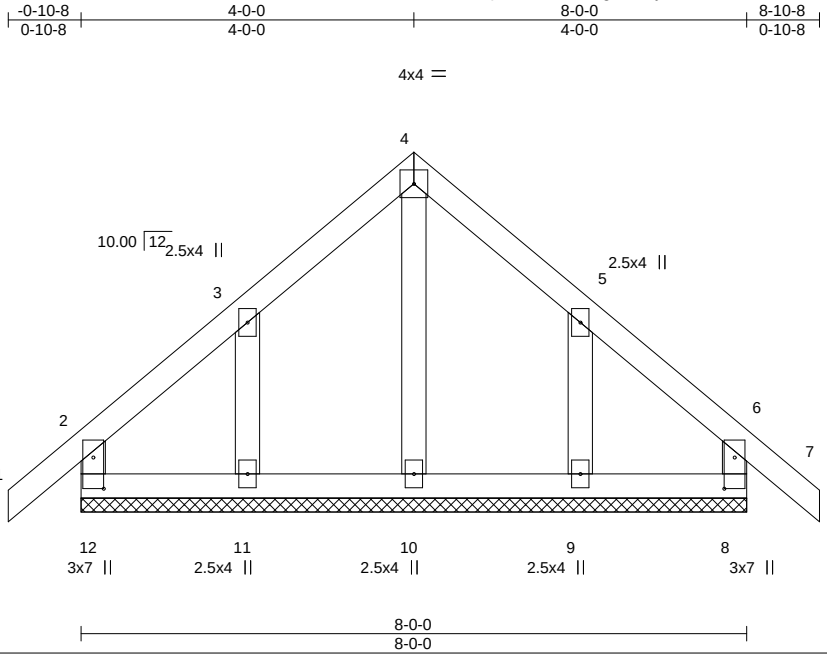

Plate Offsets (X,Y)-- [8:0-4-8,0-1-8], [12:0-4-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	-0.00	7	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	7	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code	IBC2018/TPI2014	Matrix-R							Weight: 33 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF Stud
OTHERS 2x4 SPF Stud

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

REACTIONS. All bearings 8-0-0.
(lb) - Max Horz 12=-123(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 12, 8 except 11=-154(LC 12), 9=-152(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 12, 8, 10, 11, 9

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-0-0, Exterior(2N) 2-0-0 to 4-0-0, Corner(3R) 4-0-0 to 7-0-0, Exterior(2N) 7-0-0 to 8-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 8 except (jt=lb) 11=154, 9=152.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	TA	Piggyback Base	1	1	I47762568
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:41:09 2021 Page 1
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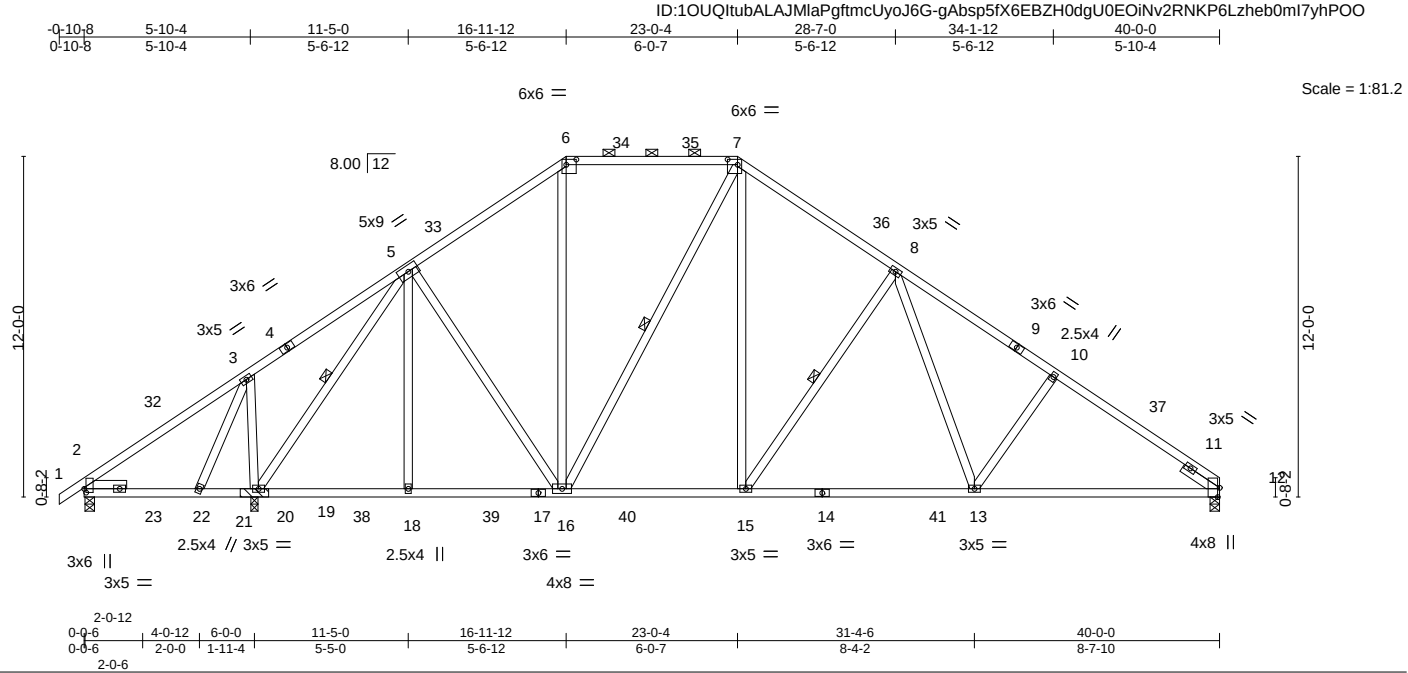

Plate Offsets (X,Y)-- [2:0-1-9,0-0-13], [6:0-4-4,0-2-4], [7:0-4-4,0-2-4], [12:0-3-15,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.21	13-15	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.35	13-15	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.85	Horz(CT)	0.07	12	n/a	n/a		
BCDL	10.0	Code	IBC2018/TPI2014	Matrix-MS							Weight: 211 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF Stud
SLIDER Left 2x4 SPF Stud 1-6-0, Right 2x4 SPF Stud 1-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-3-5 oc purlins, except 2-0-0 oc purlins (5-2-6 max.): 6-7.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 5-20, 7-16, 8-15

REACTIONS. (size) 2=0-4-0, 20=(0-3-0 + bearing block) (req. 0-3-5), 12=0-4-0
Max Horz 2=290(LC 9)
Max Uplift 2=-42(LC 13), 20=-526(LC 12), 12=-399(LC 13)
Max Grav 2=279(LC 25), 20=2124(LC 19), 12=1693(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 5-6=-1374/467, 6-7=-1069/435, 7-8=-1612/528, 8-10=-2267/620, 10-12=-2401/597
BOT CHORD 2-22=-504/614, 18-20=-180/1033, 16-18=-180/1033, 15-16=-72/1189, 13-15=-176/1519, 12-13=-382/1897
WEBS 3-20=-560/400, 5-20=-1713/255, 5-18=0/299, 5-16=-75/262, 6-16=-119/477, 7-16=-468/161, 7-15=-251/979, 8-15=-775/412, 8-13=-144/616, 10-13=-315/285

NOTES-
1) 2x4 SPF No.2 bearing block 12" long at jt. 20 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF 1650F 1.5E.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 16-11-12, Exterior(2R) 16-11-12 to 21-2-11, Interior(1) 21-2-11 to 23-0-4, Exterior(2R) 23-0-4 to 27-3-2, Interior(1) 27-3-2 to 40-0-0 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
4) Provide adequate drainage to prevent water ponding.
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 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 2 except (jt=lb) 20=526, 12=399.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	TA1	Piggyback Base	5	1	I47762569
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:41:10 2021 Page 1
ID:1OUQItubALAJMlaPgftmcUyoJ6G-8M9E0Rg9tXJPvACs2kldFaS9xndxrrZrtFlKqZyhPON

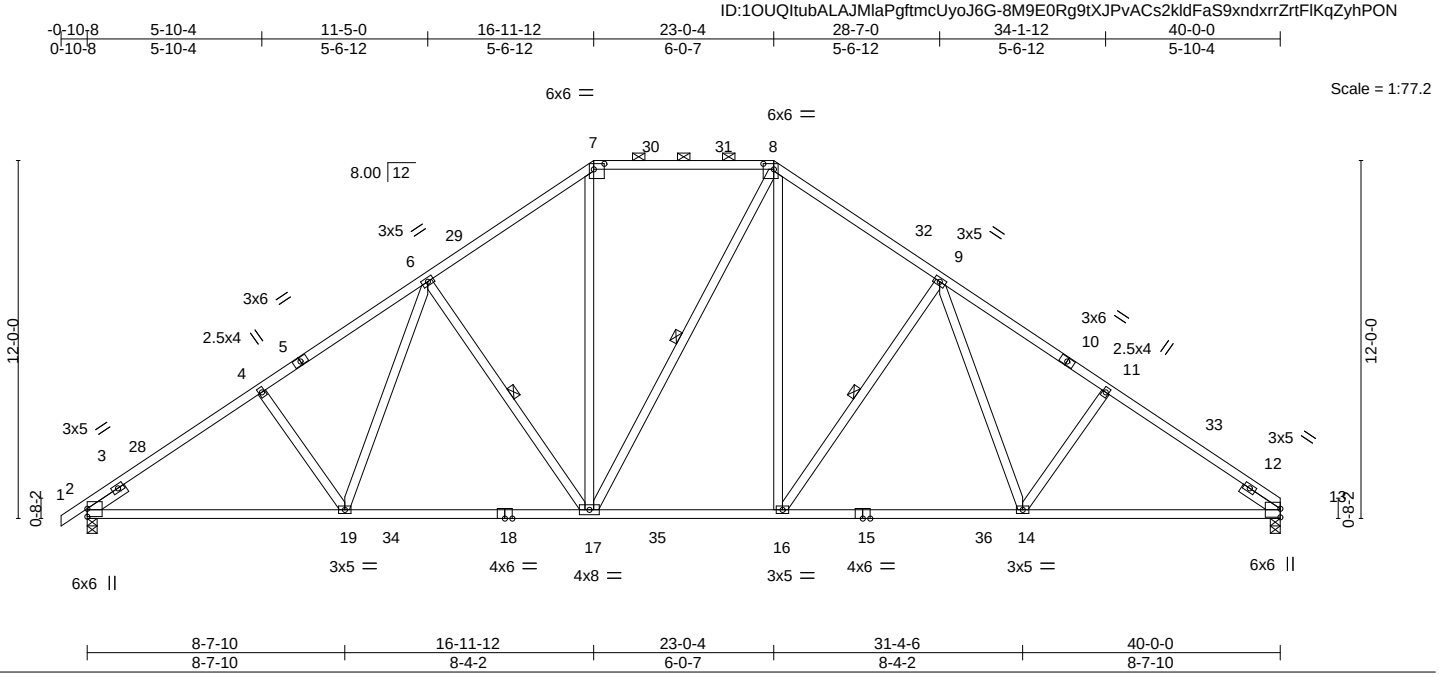

Plate Offsets (X,Y)-- [7:0-4-4,0-2-4], [8:0-4-4,0-2-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.79	Vert(LL)	-0.28	14-16	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.48	14-16	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.13	13	n/a	n/a		
BCDL	10.0	Code	IBC2018/TPI2014	Matrix-MS							Weight: 195 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF Stud
SLIDER Left 2x4 SPF Stud 1-6-0, Right 2x4 SPF Stud 1-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (4-0-3 max.): 7-8.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 6-17, 8-17, 9-16

REACTIONS. (size) 2=0-4-0, 13=0-4-0
Max Horz 2=290(LC 9)
Max Uplift 2=-476(LC 12), 13=-454(LC 13)
Max Grav 2=2026(LC 19), 13=1979(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-2870/687, 4-6=-2736/711, 6-7=-2106/625, 7-8=-1696/589, 8-9=-2112/626, 9-11=-2745/712, 11-13=-2880/689
BOT CHORD 2-19=-645/2487, 17-19=-442/2131, 16-17=-162/1642, 14-16=-289/1966, 13-14=-457/2286
WEBS 4-19=-290/280, 6-19=-136/586, 6-17=-764/409, 7-17=-194/874, 8-16=-254/954, 9-16=-767/410, 9-14=-138/590, 11-14=-293/281

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 16-11-12, Exterior(2R) 16-11-12 to 21-2-11, Interior(1) 21-2-11 to 23-0-4, Exterior(2R) 23-0-4 to 27-3-2, Interior(1) 27-3-2 to 40-0-0 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 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) except (jt=lb) 2=476, 13=454.
7) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	TA2	Piggyback Base	1	1	I47762570
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:41:12 2021 Page 1
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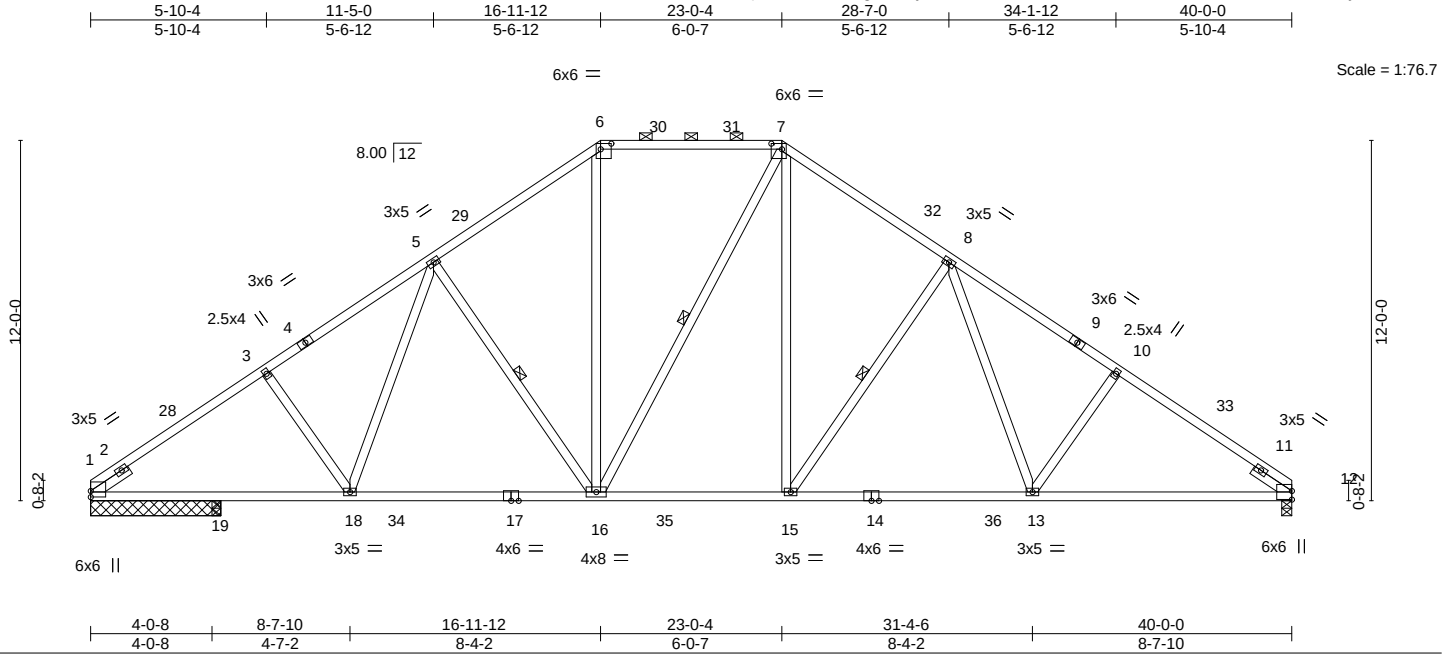

Plate Offsets (X,Y)-- [6:0-4-4,0-2-4], [7:0-4-4,0-2-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.95	Vert(LL)	-0.29	16-18	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.51	16-18	>844	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.13	12	n/a	n/a		
BCDL	10.0	Code IBC2018/TPI2014		Matrix-MS							Weight: 194 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF Stud
SLIDER Left 2x4 SPF Stud 1-6-0, Right 2x4 SPF Stud 1-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (4-0-8 max.): 6-7.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 5-16, 7-16, 8-15

REACTIONS. (size) 1=4-4-0, 12=0-4-0, 19=0-3-8
Max Horz 1=281(LC 11)
Max Uplift 1=-451(LC 12), 12=-457(LC 13), 19=-4(LC 12)
Max Grav 1=1867(LC 19), 12=1970(LC 20), 19=127(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-2776/686, 3-5=-2641/709, 5-6=-2079/625, 6-7=-1673/589, 7-8=-2094/629, 8-10=-2729/716, 10-12=-2864/693
BOT CHORD 1-19=-644/2399, 18-19=-644/2399, 16-18=-442/2083, 15-16=-162/1623, 13-15=-289/1949, 12-13=-460/2273
WEBS 3-18=-267/280, 5-18=-135/501, 5-16=-720/408, 6-16=-196/863, 7-15=-254/951, 8-15=-768/410, 8-13=-137/592, 10-13=-294/281

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 16-11-12, Exterior(2R) 16-11-12 to 21-2-11, Interior(1) 21-2-11 to 23-0-4, Exterior(2R) 23-0-4 to 27-3-2, Interior(1) 27-3-2 to 40-0-0 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 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 19 except (jt=lb) 1=451, 12=457.
7) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	TA3	Piggyback Base	1	1	I47762571
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:41:13 2021 Page 1
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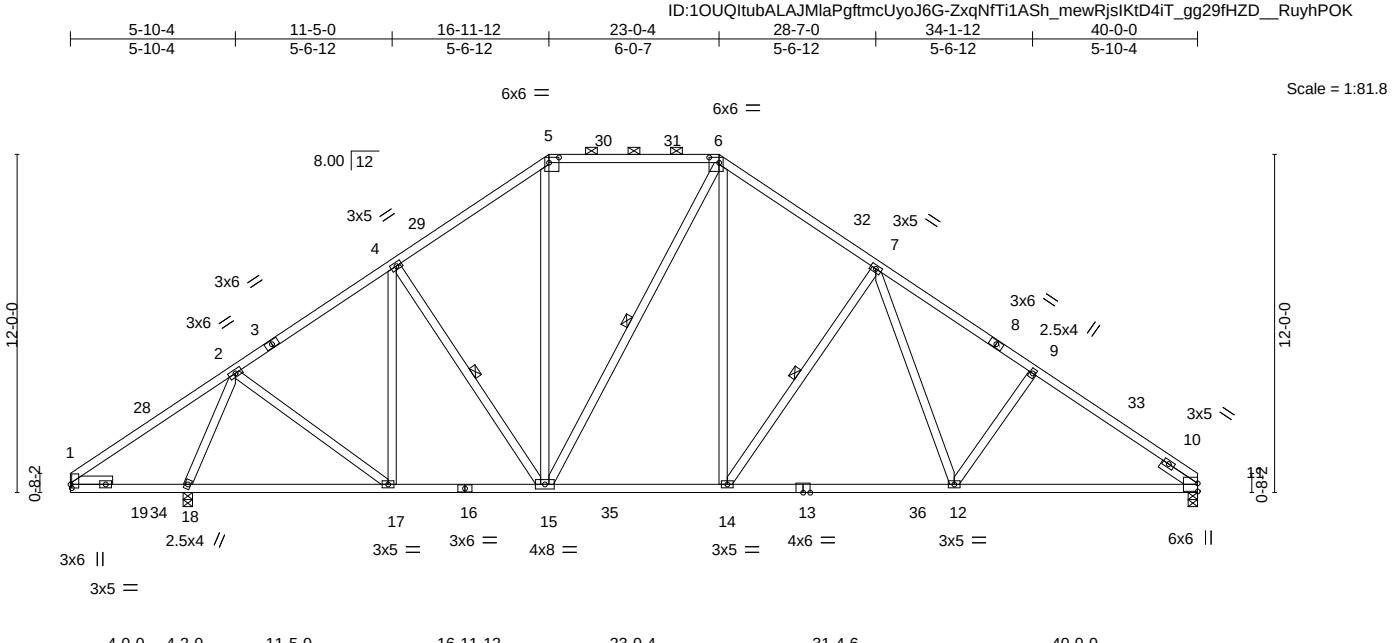

Plate Offsets (X,Y)-- [1:0-1-9,0-0-9], [5:0-4-4,0-2-4], [6:0-4-4,0-2-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.22	12-14	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.37	12-14	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.87	Horz(CT)	0.08	11	n/a	n/a		
BCDL	10.0	Code	IBC2018/TPI2014	Matrix-MS							Weight: 201 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF Stud
SLIDER Left 2x4 SPF Stud 1-6-0, Right 2x4 SPF Stud 1-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-0-9 oc purlins, except 2-0-0 oc purlins (4-9-15 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 4-15, 6-15, 7-14

REACTIONS. (size) 18=0-4-0, 11=0-4-0
Max Horz 18=-281(LC 8)
Max Uplift 18=-507(LC 12), 11=-415(LC 13)
Max Grav 18=2126(LC 19), 11=1764(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-215/332, 2-4=-1578/425, 4-5=-1549/505, 5-6=-1241/490, 6-7=-1736/555, 7-9=-2385/646, 9-11=-2519/623
BOT CHORD 1-18=-351/486, 17-18=-284/733, 15-17=-245/1350, 14-15=-99/1315, 12-14=-215/1643, 11-12=-404/1993
WEBS 2-18=-1981/560, 2-17=-103/861, 4-17=-305/162, 5-15=-140/572, 6-15=-390/156, 6-14=-249/980, 7-14=-772/412, 7-12=-143/608, 9-12=-310/284

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 16-11-12, Exterior(2R) 16-11-12 to 21-2-11, Interior(1) 21-2-11 to 23-0-4, Exterior(2R) 23-0-4 to 27-3-2, Interior(1) 27-3-2 to 40-0-0 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 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) except (jt=lb) 18=507, 11=415.
7) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	TA4	Piggyback Base	1	1	I47762572
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:41:13 2021 Page 1
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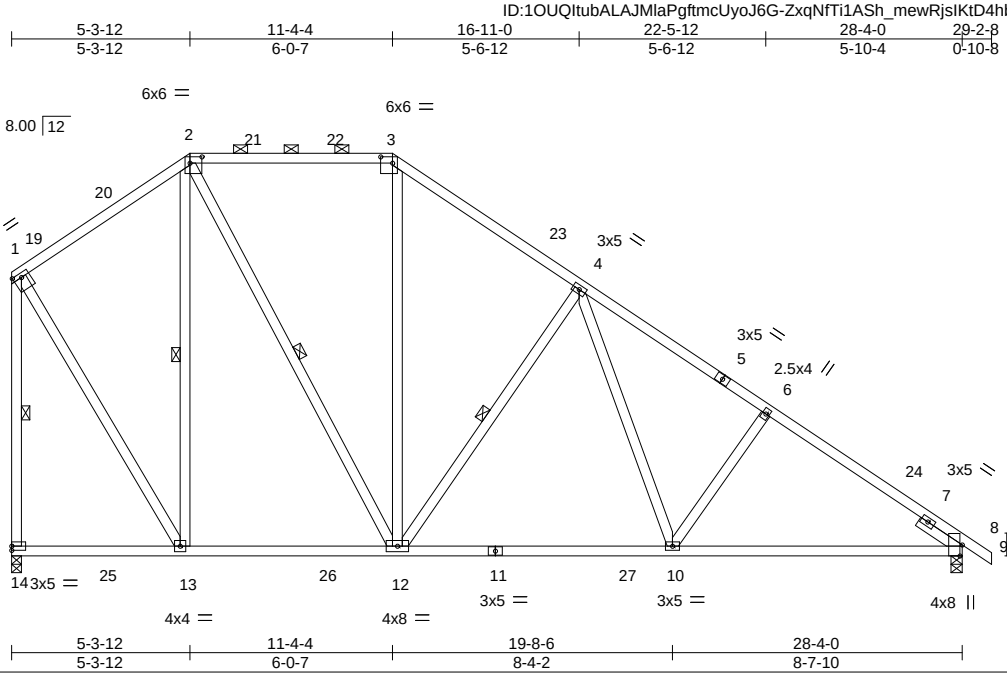

Plate Offsets (X,Y)-- [1:0-3-0,0-1-8], [2:0-4-4,0-2-4], [3:0-4-4,0-2-4], [8:0-3-15,Edge]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.17	10-12	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.29	10-12	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.41	Horz(CT)	0.04	8	n/a	n/a		
BCDL	10.0	Code IBC2018/TPI2014		Matrix-MS							Weight: 159 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF Stud *Except*
1-14: 2x4 SPF No.2
SLIDER Right 2x4 SPF Stud 1-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-0-14 oc purlins, except end verticals, and 2-0-0 oc purlins (5-10-15 max.): 2-3.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 2-13, 2-12, 4-12, 1-14

REACTIONS. (size) 14=0-3-8, 8=0-4-0
Max Horz 14=-406(LC 10)
Max Uplift 14=-312(LC 13), 8=-359(LC 13)
Max Grav 14=1398(LC 20), 8=1460(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-747/346, 2-3=-882/420, 3-4=-1116/419, 4-6=-1791/515, 6-8=-1926/492, 1-14=-1301/365
BOT CHORD 13-14=-278/377, 12-13=-108/604, 10-12=-92/1168, 8-10=-277/1506
WEBS 2-13=-570/262, 2-12=-229/758, 3-12=-46/329, 4-12=-784/415, 4-10=-150/642, 6-10=-333/289, 1-13=-217/969

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 5-3-12, Exterior(2R) 5-3-12 to 9-6-11 , Interior(1) 9-6-11 to 11-4-4, Exterior(2R) 11-4-4 to 15-7-2, Interior(1) 15-7-2 to 29-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) except (jt=lb) 14=312, 8=359.
7) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	TA5	Piggyback Base	1	1	I47762573
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:41:14 2021 Page 1
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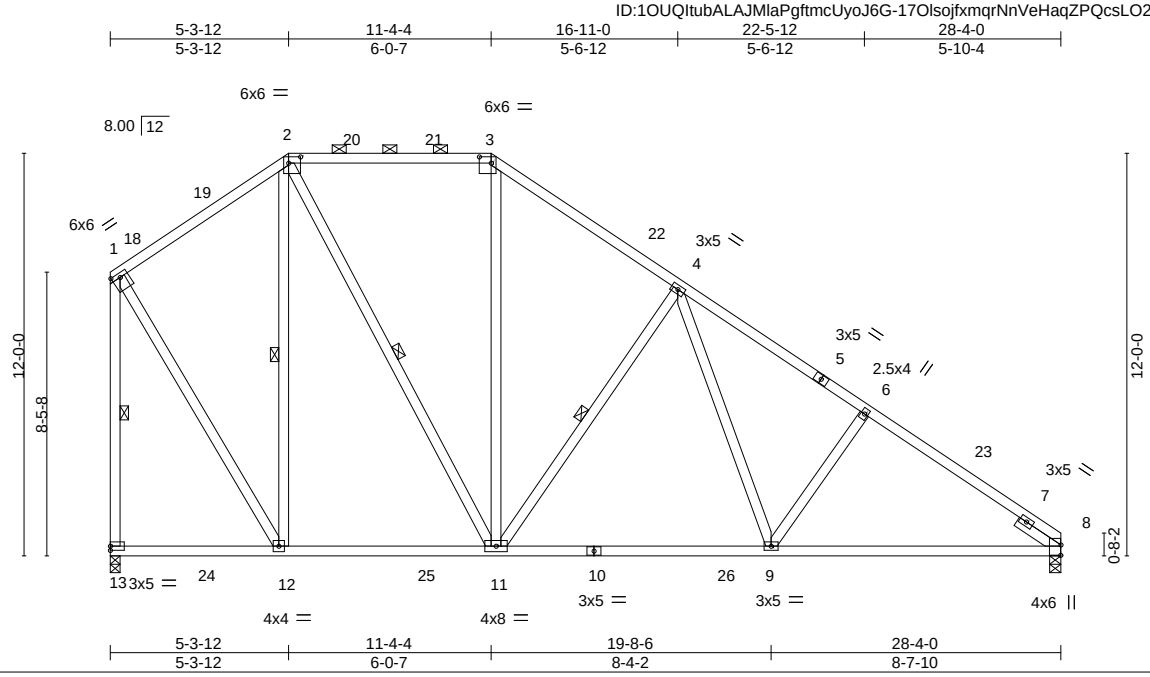

Plate Offsets (X,Y)-- [1:0-3-0,0-1-8], [2:0-4-4,0-2-4], [3:0-4-4,0-2-4], [8:0-3-11,0-0-1]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.17	9-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.29	9-11	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.41	Horz(CT)	0.04	8	n/a	n/a		
BCDL	10.0	Code	IBC2018/TPI2014	Matrix-MS							Weight: 158 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF Stud *Except*
1-13: 2x4 SPF No.2
SLIDER Right 2x4 SPF Stud 1-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-1-1 oc purlins, except end verticals, and 2-0-0 oc purlins (5-10-15 max.): 2-3.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 2-12, 2-11, 4-11, 1-13

REACTIONS. (size) 13=0-3-8, 8=0-4-0
Max Horz 13=-397(LC 10)
Max Uplift 13=-313(LC 13), 8=-337(LC 13)
Max Grav 13=1399(LC 20), 8=1410(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-748/347, 2-3=-883/420, 3-4=-1117/419, 4-6=-1795/517, 6-8=-1930/494, 1-13=-1301/365
BOT CHORD 12-13=-273/367, 11-12=-114/590, 9-11=-119/1162, 8-9=-298/1514
WEBS 2-12=-570/262, 2-11=-229/759, 3-11=-47/329, 4-11=-786/415, 4-9=-151/646, 6-9=-336/290, 1-12=-217/969

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 5-3-12, Exterior(2R) 5-3-12 to 9-6-11 , Interior(1) 9-6-11 to 11-4-4, Exterior(2R) 11-4-4 to 15-7-2, Interior(1) 15-7-2 to 28-4-0 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 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) except (jt=lb) 13=313, 8=337.
7) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

September 7,2021

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

Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	TA6	Piggyback Base	1	1	I47762574
					Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:41:15 2021 Page 1
ID:1OUQItubALAJMlaPgftmcUyoJ6G-VKy748kHi4yi?x4qrHLoye90xoPiW4Ya0XT5VnyhPOI

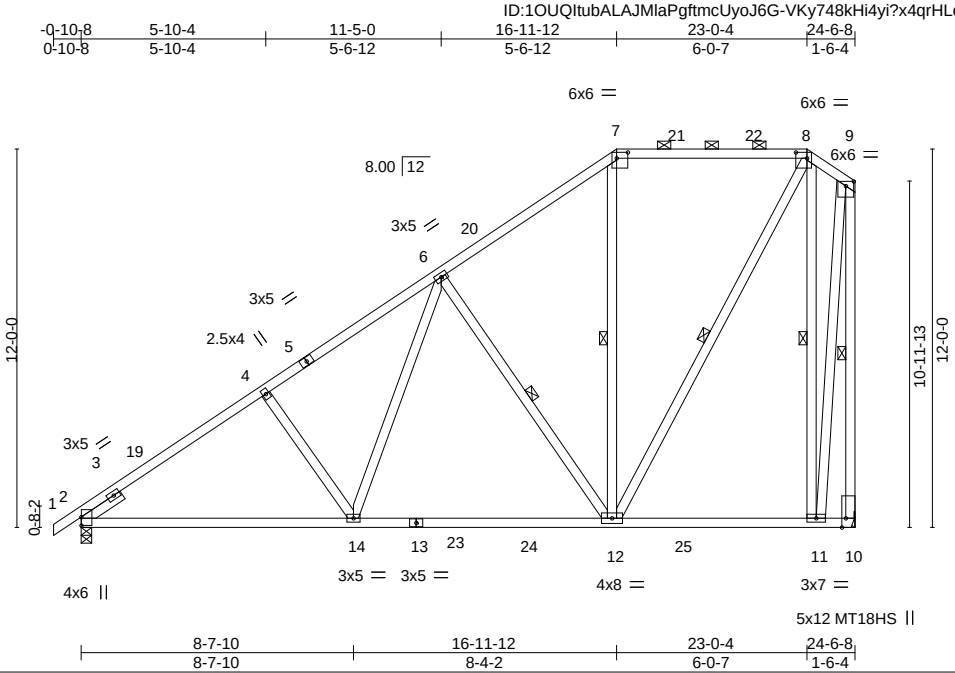

Plate Offsets (X,Y)-- [2:0-3-3,0-0-1], [7:0-4-4,0-2-4], [8:0-4-4,0-2-4], [9:0-3-0,0-1-12], [10:0-3-8,Edge]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	-0.17	12-14	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.27	12-14	>999	180	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.03	10	n/a	n/a		
BCDL	10.0	Code IBC2018/TPI2014		Matrix-MS							Weight: 154 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF Stud *Except*
9-10: 2x4 SPF 2100F 1.8E
SLIDER Left 2x4 SPF Stud 1-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-6-12 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-8.
BOT CHORD Rigid ceiling directly applied or 8-3-10 oc bracing.
WEBS 1 Row at midpt 6-12, 7-12, 8-12, 8-11, 9-10

REACTIONS. (size) 2=0-4-0, 10=Mechanical
Max Horz 2=439(LC 11)
Max Uplift 2=-311(LC 12), 10=-311(LC 12)
Max Grav 2=1274(LC 19), 10=1225(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1616/412, 4-6=-1481/436, 6-7=-828/343, 7-8=-616/351, 8-9=-445/401, 9-10=-1242/448
BOT CHORD 2-14=-493/1456, 12-14=-372/1043
WEBS 4-14=-348/292, 6-14=-154/659, 6-12=-789/415, 8-12=-301/998, 8-11=-925/444, 9-11=-315/1118

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 16-11-12, Exterior(2R) 16-11-12 to 21-2-11, Interior(1) 21-2-11 to 23-0-4, Exterior(2E) 23-0-4 to 24-4-12 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) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=311, 10=311.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 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.

September 7,2021

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Job	Truss	Truss Type	Qty	Ply	Barnes - Beverly A
QUOTE_FILE	TB	Piggyback Base Girder	1	2	I47762575 Job Reference (optional)

84 Lumber 2381 (Kings Mountain, NC), Kings Mountain, NC - 28086, 8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Sep 3 07:41:16 2021 Page 1
ID:1OUQItubALAJMlaPgftmcUyoJ6G-zWWWHUlwTN4Zd5f0O_s1VriDNCthFaUjFBCe2DyhPOH

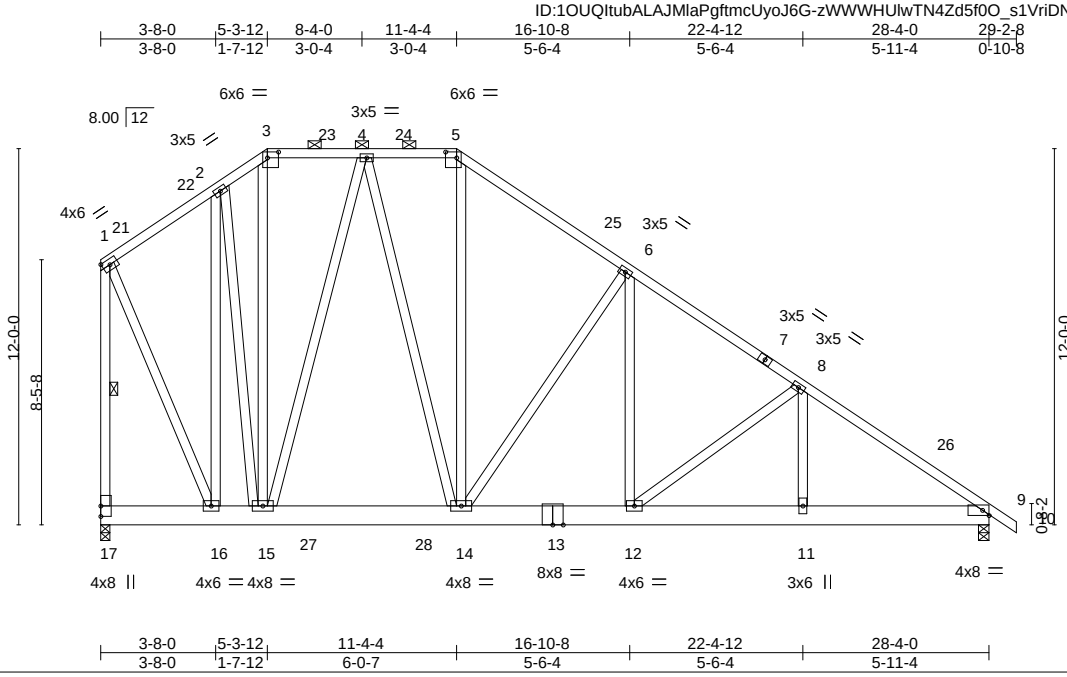

Plate Offsets (X,Y)-- [3:0-4-4,0-2-4], [5:0-4-4,0-2-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	-0.04	14-15	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.08	14-15	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.61	Horz(CT)	0.01	9	n/a	n/a		
BCDL	10.0	Code	IBC2018/TPI2014	Matrix-MS							Weight: 499 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x8 SP No.1
WEBS 2x4 SPF Stud

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 1-17

REACTIONS. (size) 17=0-3-8, 9=0-4-0
Max Horz 17=-400(LC 10)
Max Uplift 17=-776(LC 13), 9=-461(LC 13)
Max Grav 17=2785(LC 19), 9=1749(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1293/507, 2-3=-1474/607, 3-4=-1200/523, 4-5=-1330/571, 5-6=-1698/603, 6-8=-2088/625, 8-9=-2500/659, 1-17=-2853/852
BOT CHORD 16-17=-279/374, 15-16=-281/1077, 14-15=-266/1279, 12-14=-219/1673, 11-12=-413/1971, 9-11=-413/1971
WEBS 3-15=-263/699, 4-15=-532/188, 4-14=-119/454, 5-14=-183/697, 6-14=-790/384, 6-12=-78/481, 8-12=-511/264, 2-16=-1318/415, 1-16=-629/2269, 2-15=-325/1088

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=4.2psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 5-3-12, Exterior(2R) 5-3-12 to 9-6-11 , Interior(1) 9-6-11 to 11-4-4, Exterior(2R) 11-4-4 to 15-7-2, Interior(1) 15-7-2 to 29-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=776, 9=461.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 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.
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1882 lb down and 566 lb up at 5-3-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

September 7,2021

LOAD CASE(S) Standard
Continued on page 2

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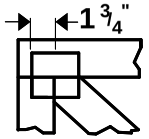
LOAD CASE(S) Standard

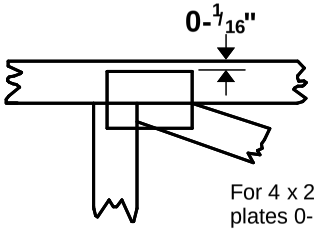
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-60, 3-5=-60, 5-10=-60, 17-18=-20
   Concentrated Loads (lb)
   Vert: 15=-1525(F)

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.

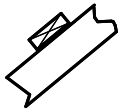
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

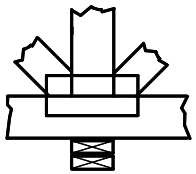
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

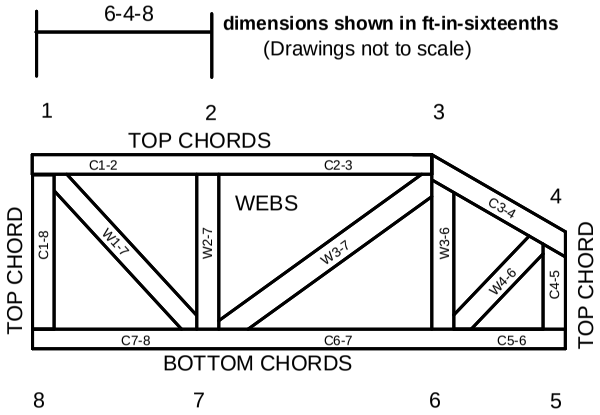


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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 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.