ENGINEERING BY TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

RE: 1281250 - H&H-NC/Harmony/

Site Information:

Project Customer: H and H Project Name: 1281250
Lot/Block: 8 Subdivision: Southview
Model:
Address:
City: LELAND State: NC

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2009/TPI2007
Design Program: MiTek 20/20 7.6
Wind Code: ASCE 7-05 Wind Speed: 130 mph
Design Method: MWFRS(low-rise)/C-C hybrid Wind ASCE 7-05
Roof Load: 40.0 psf
Floor Load: N/A psf

Mean Roof Height (feet): 25
Exposure Category: C

No.	Seal#	Truss Name	Date
1	I31871737	A01	12/11/17
2	I31871738	A02	12/11/17
3	I31871739	A03	12/11/17
4	I31871740	A04	12/11/17
5	I31871741	A05	12/11/17
6	I31871742	A06	12/11/17
7	I31871743	A07	12/11/17
8	I31871744	A07A	12/11/17
9	I31871745	A08	12/11/17
10	I31871746	A09	12/11/17
11	I31871747	A10	12/11/17
12	I31871748	B04	12/11/17
13	I31871749	C01	12/11/17
14	I31871750	C02	12/11/17
15	I31871751	PB01	12/11/17
16	I31871752	PB02	12/11/17

The truss drawing(s) referenced above have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Builders FirstSource-Sumter,SC.

Truss Design Engineer's Name: Komnick, Chad
My license renewal date for the state of North Carolina is December 31, 2017.

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.

December 11,2017

Komnick, Chad

Job	Truss	Truss Type	Qty	Ply	H&H-NC/Harmony/
1281250	A01	GABLE	1	1	I31871737
					Job Reference (optional)

Builders First Source, Sumter SC

7.640 s Aug 16 2017 MiTek Industries, Inc. Mon Dec 11 07:55:21 2017 Page 1
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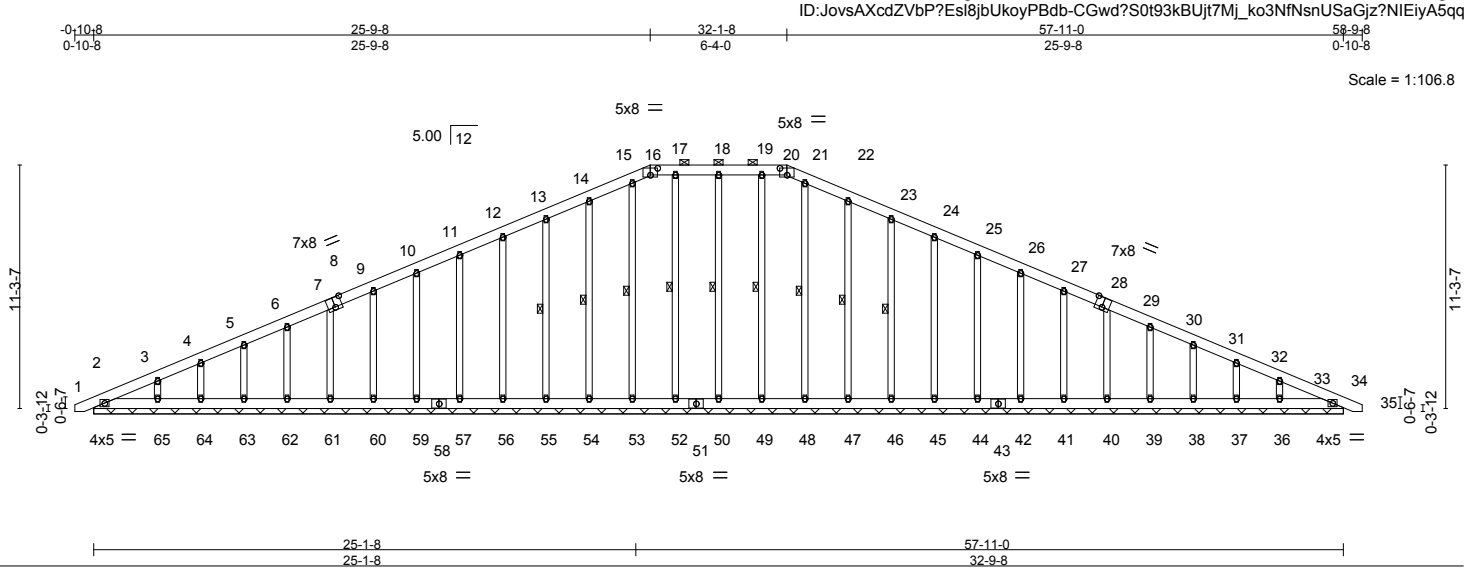


Plate Offsets (X,Y)-- [8:0-4-0,0-5-4], [16:0-4-0,0-3-13], [20:0-4-0,0-3-13], [28:0-4-0,0-5-4]

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	0.15	Vert(LL)	0.00	34	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(TL)	0.00	35	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(TL)	0.02	34	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	(Matrix)							Weight: 527 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
OTHERS 2x4 SP No.3

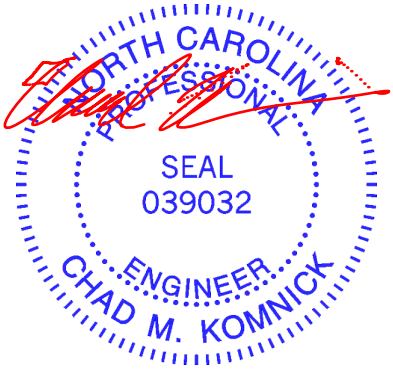
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 16-20.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 18-50, 17-52, 15-53, 14-54, 13-55, 19-49, 21-48, 22-47, 23-46

REACTIONS. All bearings 57-11-0.
(lb) - Max Horz 2=-302(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 2, 34, 52, 53, 49 except 50=-141(LC 7), 54=-165(LC 8), 55=-162(LC 8), 56=-155(LC 8), 57=-156(LC 8), 59=-156(LC 8), 60=-156(LC 8), 61=-156(LC 8), 62=-156(LC 8), 63=-159(LC 8), 64=-136(LC 8), 65=-229(LC 8), 47=-167(LC 9), 46=-163(LC 9), 45=-155(LC 9), 44=-156(LC 9), 42=-156(LC 9), 41=-156(LC 9), 40=-156(LC 9), 39=-156(LC 9), 38=-159(LC 9), 37=-136(LC 9), 36=-226(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 2, 34, 50, 52, 53, 54, 55, 56, 57, 59, 60, 61, 62, 63, 64, 65, 49, 48, 47, 46, 45, 44, 42, 41, 40, 39, 38, 37, 36

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-443/25, 3-4=-330/76, 4-5=-259/126, 7-8=-39/281, 8-9=-35/290, 9-10=-39/345, 10-11=-39/400, 11-12=-39/454, 12-13=-39/532, 13-14=-39/621, 14-15=-39/711, 15-16=-39/717, 16-17=-15/722, 17-18=-15/722, 18-19=-15/722, 19-20=-15/722, 20-21=-39/717, 21-22=-39/711, 22-23=-39/621, 23-24=-39/532, 24-25=-39/445, 25-26=-39/359, 26-27=-39/272, 33-34=-304/25
BOT CHORD 2-65=0/353, 64-65=0/353, 63-64=0/353, 62-63=0/353, 61-62=0/353, 60-61=0/353, 59-60=0/353, 58-59=0/353, 57-58=0/353, 56-57=0/353, 55-56=0/353, 54-55=0/353, 53-54=0/353, 52-53=0/353, 51-52=0/353, 50-51=0/353, 49-50=0/353, 48-49=0/353, 47-48=0/353, 46-47=0/353, 45-46=0/353, 44-45=0/353, 43-44=0/353, 42-43=0/353, 41-42=0/353, 40-41=0/353, 39-40=0/353, 38-39=0/353, 37-38=0/353, 36-37=0/353, 34-36=0/353
WEBS 3-65=-167/281, 33-36=-167/281

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 130mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
5) Provide adequate drainage to prevent water ponding.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

Continued on page 2



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NOTES-

11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 34, 52, 53, 49 except (jt=lb) 50=141, 54=165, 55=162, 56=155, 57=156, 59=156, 60=156, 61=156, 62=156, 63=159, 64=136, 65=229, 47=167, 46=163, 45=155, 44=156, 42=156, 41=156, 40=156, 39=156, 38=159, 37=136, 36=226.
12) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job	Truss	Truss Type	Qty	Ply	H&H-NC/Harmony/
1281250	A02	PIGGYBACK BASE	5	1	I31871738
					Job Reference (optional)

Builders First Source, Sumter SC

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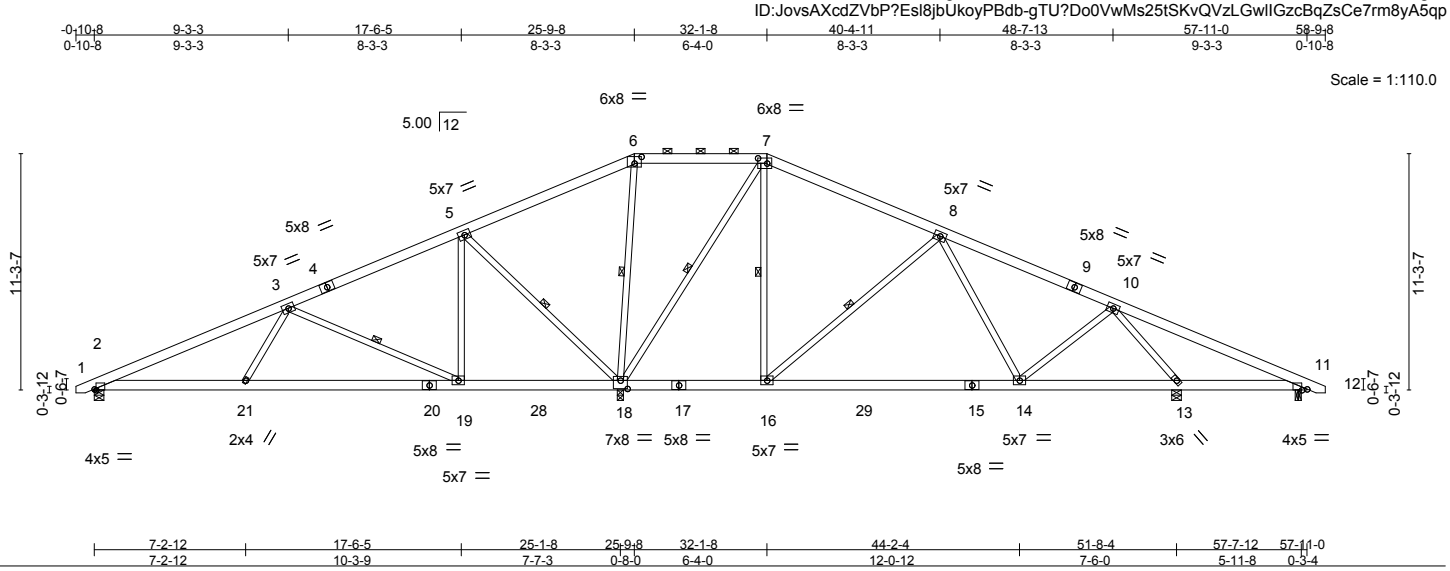

Plate Offsets (X,Y)-- [2:0-1-0,Edge], [6:0-4-0,0-3-13], [7:0-5-4,0-3-0], [11:0-3-0,Edge], [18:0-4-0,0-4-12]

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	0.46	Vert(LL)	-0.18	14-16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(TL)	-0.40	14-16	>803	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.97	Horz(TL)	-0.02	2	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	(Matrix-S)		Wind(LL)	0.07	21-24	>999	240	Weight: 422 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.3 *Except* 7-18: 2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins (10-0-0 max.): 6-7.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 3-19, 5-18, 7-18, 7-16, 8-16, 6-18

REACTIONS. All bearings 0-5-8 except (jt=length) 18=0-3-8, 11=0-3-8.

(lb) - Max Horz 18=-258(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) except 2=-371(LC 8), 18=-893(LC 8), 13=-612(LC 9), 11=-315(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 11 except 2=755(LC 13), 18=2692(LC 1), 13=1211(LC 14)

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

TOP CHORD	2-3=-1147/848, 5-6=-362/932, 6-7=-120/731, 7-8=-291/356, 8-9=-720/770, 9-10=-863/736, 10-11=-142/382
BOT CHORD	2-21=-553/980, 20-21=-576/856, 19-20=-576/856, 19-28=-99/386, 18-28=-99/386, 17-18=-164/605, 16-17=-164/605, 16-29=-103/635, 15-29=-103/635, 14-15=-103/635, 13-14=-392/596, 11-13=-269/330
WEBS	3-21=0/441, 3-19=-861/1047, 5-19=-310/638, 5-18=-1072/1185, 7-18=-1335/1085, 7-16=-479/782, 8-16=-656/924, 8-14=-61/332, 10-14=0/352, 10-13=-1303/1118, 6-18=-748/693

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 130mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; end vertical left and right exposed; porch 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 basic load combinations, which include cases with reductions for multiple concurrent live loads.
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 371 lb uplift at joint 2, 893 lb uplift at joint 18 , 612 lb uplift at joint 13 and 315 lb uplift at joint 11.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and ½" gypsum sheetrock be applied directly to the bottom chord.
9) 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	H&H-NC/Harmony/
1281250	A03	PIGGYBACK BASE	1	1	I31871739
					Job Reference (optional)

Builders First Source, Sumter SC

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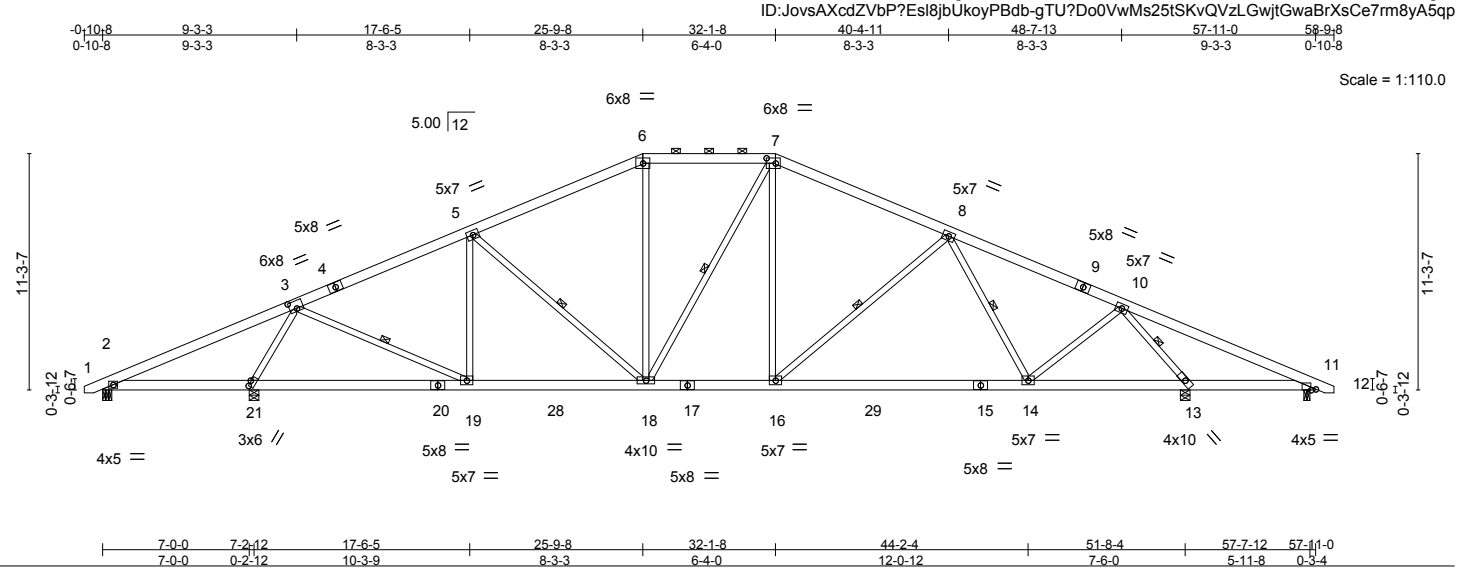


Plate Offsets (X,Y)-- [3:0-4-0,0-4-4], [7:0-5-4,0-3-0], [11:0-2-12,Edge], [21:0-3-3,0-0-8]

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	0.62	Vert(LL)	-0.21	14-16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(TL)	-0.51	14-16	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.91	Horz(TL)	0.08	13	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	(Matrix-S)		Wind(LL)	0.15	14-16	>999	240	Weight: 423 lb	FT = 20%

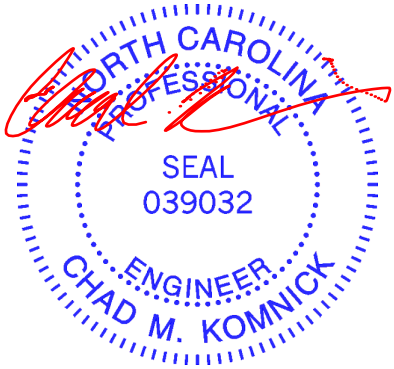
LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (5-6-13 max.): 6-7.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 3-19, 5-18, 7-18, 8-16, 8-14, 10-13

REACTIONS. All bearings 0-5-8 except (jt=length) 2=0-5-4, 11=0-3-8.
(lb) - Max Horz 21=-258(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) except 2=-281(LC 8), 21=-993(LC 8), 13=-937(LC 9), 11=-262(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 2, 11 except 21=2310(LC 1), 13=2296(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-442/673, 3-4=-2022/1910, 4-5=-1937/1945, 5-6=-1922/2020, 6-7=-1701/2003, 7-8=-1991/2034, 8-9=-1819/1867, 9-10=-1962/1833, 10-11=-554/844
BOT CHORD 2-21=-533/611, 20-21=-522/614, 19-20=-522/614, 19-28=-1210/1788, 18-28=-1210/1788, 17-18=-958/1765, 16-17=-958/1765, 16-29=-1359/1895, 15-29=-1359/1895, 14-15=-1359/1895, 13-14=-872/1042, 11-13=-696/710
WEBS 3-21=-2340/2301, 3-19=-761/1341, 5-19=-364/501, 5-18=-227/354, 6-18=-208/366, 7-18=-277/141, 7-16=-238/531, 8-16=-292/538, 8-14=-414/479, 10-14=-356/948, 10-13=-2704/2472

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 130mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
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 281 lb uplift at joint 2, 993 lb uplift at joint 21 , 937 lb uplift at joint 13 and 262 lb uplift at joint 11.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and ½" gypsum sheetrock be applied directly to the bottom chord.
9) 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	H&H-NC/Harmony/
1281250	A04	PIGGYBACK BASE	1	1	I31871740
					Job Reference (optional)

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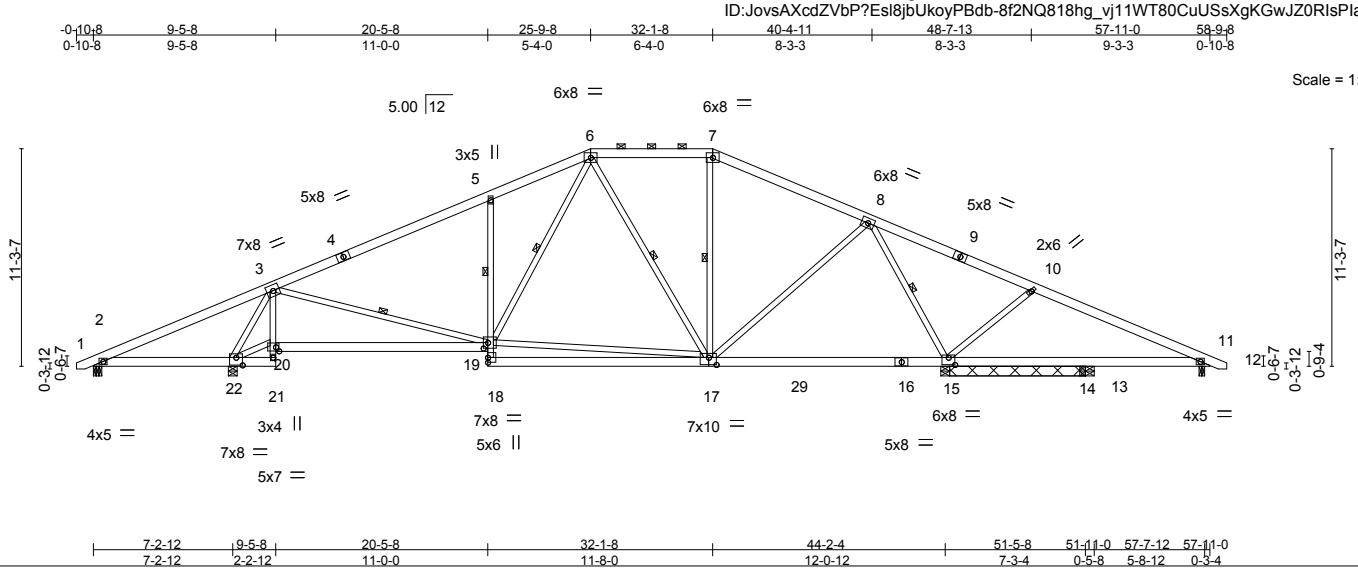

Plate Offsets (X,Y)-- [15:0-4-0,0-4-8], [17:0-4-12,0-4-8], [19:0-2-12,0-3-8], [20:0-2-0,0-2-8], [22:0-4-0,0-4-12]

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	0.75	Vert(LL)	-0.20	15-17	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.55	Vert(TL)	-0.38	19-20	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.86	Horz(TL)	0.06	15	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	(Matrix-S)		Wind(LL)	0.10	5-19	>999	240	Weight: 431 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
3-21,5-18: 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (6-0-0 max.): 6-7.
BOT CHORD Rigid ceiling directly applied. Except:
1 Row at midpt 5-19
WEBS 1 Row at midpt 3-19, 6-19, 6-17, 7-17, 8-15

REACTIONS. All bearings 0-5-8 except (jt=length) 2=0-5-4, 11=0-3-8, 14=0-3-8.
(lb) - Max Horz 2=258(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) except 2=-256(LC 9), 22=-1038(LC 8), 15=-797(LC 9), 11=-381(LC 9), 13=-906(LC 9), 14=-736(LC 2)
Max Grav All reactions 250 lb or less at joint(s) 2 except 22=2055(LC 1), 15=2146(LC 1), 15=2146(LC 1), 11=338(LC 14), 13=859(LC 2), 13=654(LC 1), 14=759(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-498/783, 3-4=-1657/1510, 4-5=-1520/1557, 5-6=-1576/1905, 6-7=-956/1324, 7-8=-1138/1294, 8-9=-190/552, 9-10=-226/372
BOT CHORD 2-22=-613/637, 3-20=0/377, 19-20=-323/579, 5-19=-516/895, 17-29=-63/438, 16-29=-63/438, 15-16=-63/438
WEBS 3-22=-2282/1868, 20-22=-188/625, 3-19=-473/857, 17-19=-261/865, 6-19=-738/631, 6-17=-371/310, 8-15=-1776/1687, 10-15=-567/954, 8-17=-272/696

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 130mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
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 256 lb uplift at joint 2, 1038 lb uplift at joint 22, 797 lb uplift at joint 15, 381 lb uplift at joint 11, 906 lb uplift at joint 13 and 736 lb uplift at joint 14.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and ½" gypsum sheetrock be applied directly to the bottom chord.
9) 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	H&H-NC/Harmony/
1281250	A05	PIGGYBACK BASE	1	1	I31871741
					Job Reference (optional)

Builders First Source, Sumter SC

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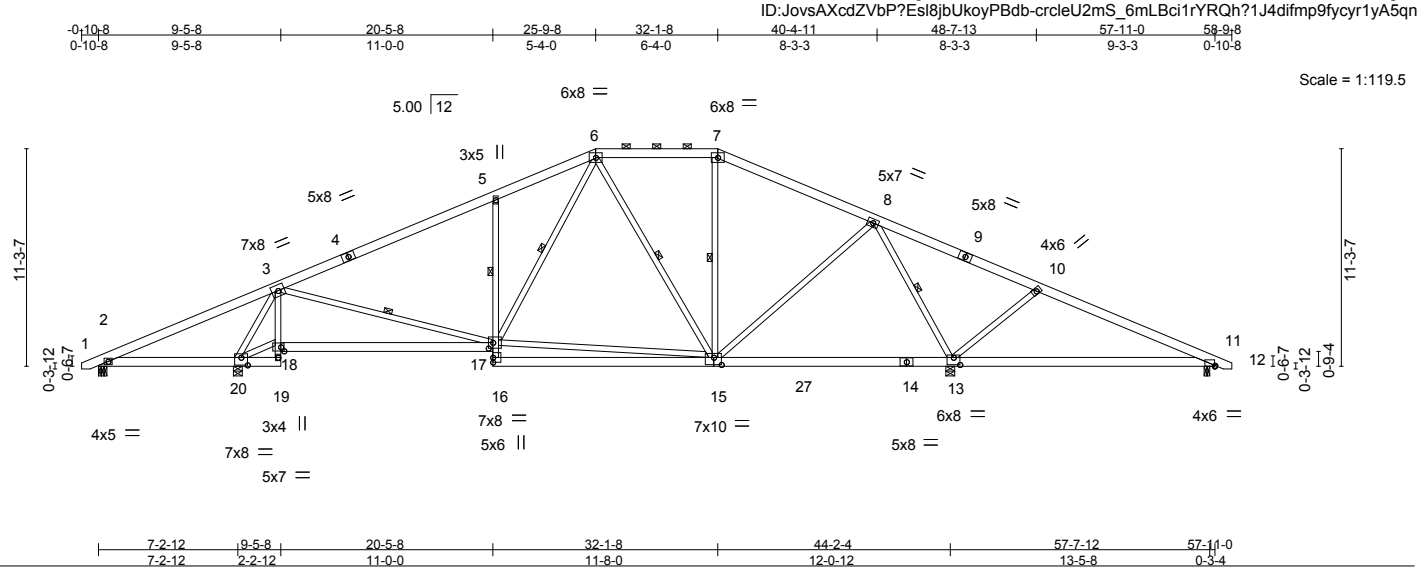

Plate Offsets (X,Y)-- [11:0-0-4,Edge], [13:0-4-0,0-4-8], [15:0-4-12,0-4-8], [17:0-2-12,0-3-8], [18:0-2-0,0-2-8], [20:0-4-0,0-4-12]

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	0.75	Vert(LL)	-0.23	13-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(TL)	-0.38	17-18	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.86	Horz(TL)	0.06	13	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	(Matrix-S)		Wind(LL)	0.56	13-26	>290	240	Weight: 431 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
3-19,5-16: 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (6-0-0 max.): 6-7.
BOT CHORD Rigid ceiling directly applied. Except:
1 Row at midpt 5-17
WEBS 1 Row at midpt 3-17, 6-17, 6-15, 7-15, 8-13

REACTIONS. All bearings 0-5-8 except (jt=length) 2=0-5-4, 11=0-3-8.
(lb) - Max Horz 2=258(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) except 2=-258(LC 9), 20=-1031(LC 8), 13=-1097(LC 9), 11=-582(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 2 except 20=2053(LC 1), 13=2207(LC 1), 11=454(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-488/781, 3-4=-1657/1499, 4-5=-1519/1545, 5-6=-1575/1894, 6-7=-951/1292, 7-8=-1133/1257, 8-9=-102/527, 9-10=-138/347, 10-11=-213/377
BOT CHORD 2-20=-611/628, 3-18=0/378, 17-18=-326/580, 5-17=-517/896, 15-27=-69/442, 14-27=-69/442, 13-14=-69/442
WEBS 3-20=-2280/1855, 18-20=-189/626, 3-17=-460/855, 15-17=-191/852, 6-17=-759/634, 6-15=-374/334, 8-13=-1742/1555, 10-13=-614/1107, 8-15=-222/686

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 130mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
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 258 lb uplift at joint 2, 1031 lb uplift at joint 20, 1097 lb uplift at joint 13 and 582 lb uplift at joint 11.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and ½" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

December 11,2017

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

Job	Truss	Truss Type	Qty	Ply	H&H-NC/Harmony/
1281250	A06	PIGGYBACK BASE	1	1	I31871742
					Job Reference (optional)

Builders First Source, Sumter SC

7.640 s Aug 16 2017 MiTek Industries, Inc. Mon Dec 11 07:55:25 2017 Page 1
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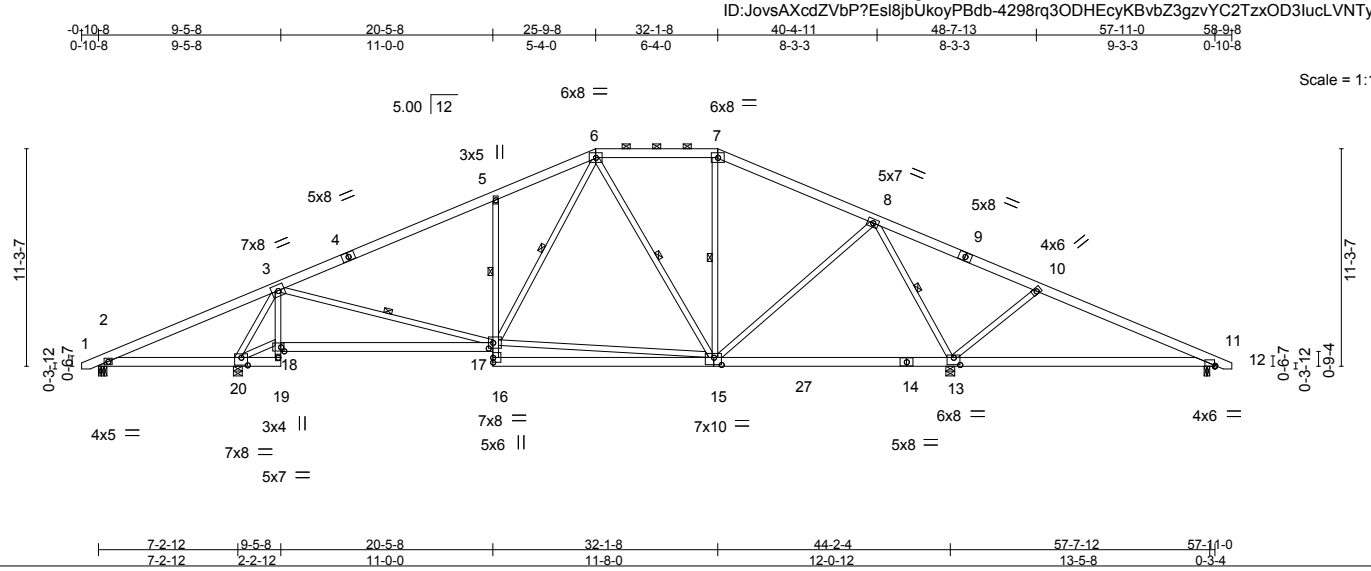


Plate Offsets (X,Y)-- [11:0-0-4,Edge], [13:0-4-0,0-4-8], [15:0-4-12,0-4-8], [17:0-2-12,0-3-8], [18:0-2-0,0-2-8], [20:0-4-0,0-4-12]

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	0.75	Vert(LL)	-0.23	13-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(TL)	-0.38	17-18	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.86	Horz(TL)	0.06	13	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	(Matrix-S)		Wind(LL)	0.56	13-26	>290	240	Weight: 431 lb	FT = 20%

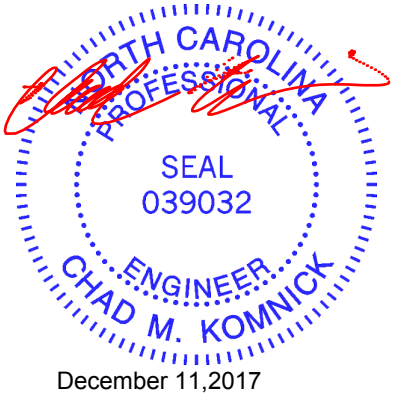
LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
3-19,5-16: 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (6-0-0 max.): 6-7.
BOT CHORD Rigid ceiling directly applied. Except:
1 Row at midpt 5-17
WEBS 1 Row at midpt 3-17, 6-17, 6-15, 7-15, 8-13

REACTIONS. All bearings 0-5-8 except (jt=length) 2=0-5-4, 11=0-3-8.
(lb) - Max Horz 2=258(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) except 2=-258(LC 9), 20=-1031(LC 8), 13=-1097(LC 9), 11=-582(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 2 except 20=2053(LC 1), 13=2207(LC 1), 11=454(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-488/781, 3-4=-1657/1499, 4-5=-1519/1545, 5-6=-1575/1894, 6-7=-951/1292, 7-8=-1133/1257, 8-9=-102/527, 9-10=-138/347, 10-11=-213/377
BOT CHORD 2-20=-611/628, 3-18=0/378, 17-18=-326/580, 5-17=-517/896, 15-27=-69/442, 14-27=-69/442, 13-14=-69/442
WEBS 3-20=-2280/1855, 18-20=-189/626, 3-17=-460/855, 15-17=-191/852, 6-17=-759/634, 6-15=-374/334, 8-13=-1742/1555, 10-13=-614/1107, 8-15=-222/686

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 130mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
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 258 lb uplift at joint 2, 1031 lb uplift at joint 20, 1097 lb uplift at joint 13 and 582 lb uplift at joint 11.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and ½" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 11,2017

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

Job	Truss	Truss Type	Qty	Ply	H&H-NC/Harmony/
1281250	A07	PIGGYBACK BASE	2	1	I31871743
					Job Reference (optional)

Builders First Source, Sumter SC

7.640 s Aug 16 2017 MiTek Industries, Inc. Mon Dec 11 07:55:26 2017 Page 1
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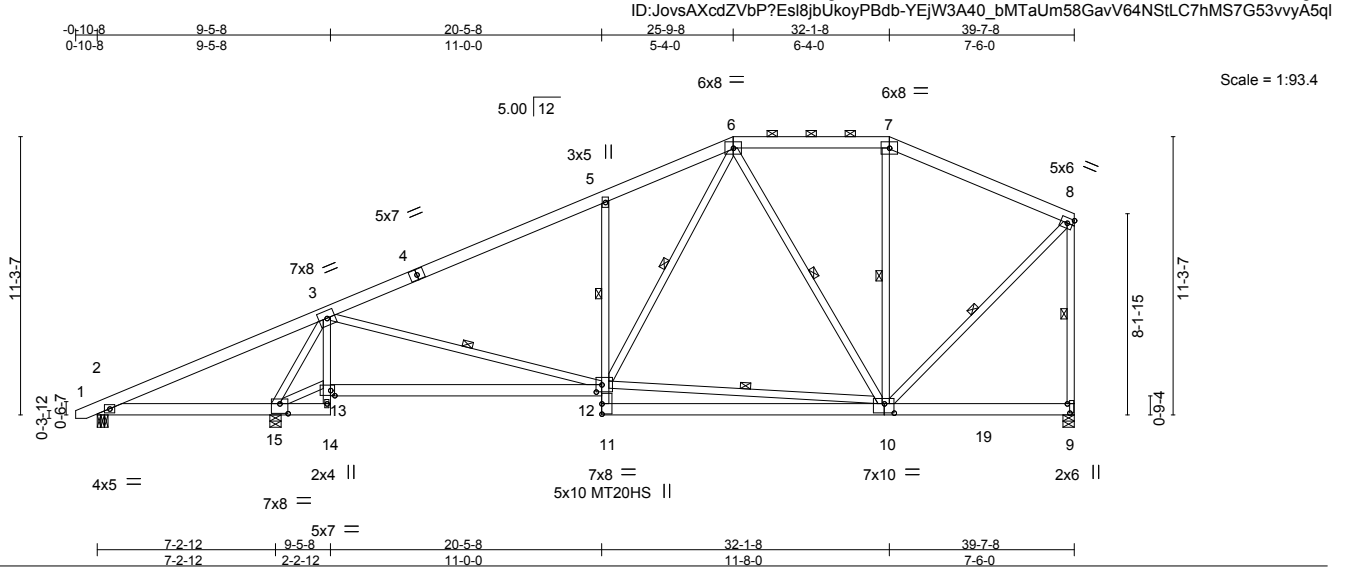

Plate Offsets (X,Y)-- [9:0-4-8,0-1-4], [10:0-4-12,0-4-8], [12:0-2-12,0-3-8], [13:0-2-0,0-2-8], [15:0-4-0,0-4-12]

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	0.71	Vert(LL)	-0.13	12-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.60	Vert(TL)	-0.37	12-13	>999	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.79	Horz(TL)	0.05	9	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	(Matrix-S)		Wind(LL)	0.09	12-13	>999	240	Weight: 329 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
3-14,5-11: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
8-9: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-7.
BOT CHORD Rigid ceiling directly applied. Except:
1 Row at midpt 5-12
WEBS 1 Row at midpt 3-12, 10-12, 6-12, 6-10, 7-10, 8-9, 8-10

REACTIONS. (lb/size) 2=64/0-5-4, 15=1898/0-5-8, 9=1235/0-5-8
Max Horz 2=559(LC 8)
Max Uplift 2=-117(LC 6), 15=-1073(LC 8), 9=-402(LC 7)
Max Grav 2=70(LC 13), 15=1898(LC 1), 9=1235(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1002/707, 3-4=-1458/1117, 4-5=-1320/1164, 5-6=-1378/1510, 6-7=-686/859, 7-8=-806/781, 8-9=-1179/1140
BOT CHORD 2-15=-543/338, 3-13=0/373, 12-13=-731/557, 5-12=-519/897
WEBS 3-15=-2101/2088, 13-15=-582/608, 3-12=-468/688, 10-12=-593/679, 6-12=-759/669, 6-10=-473/492, 7-10=-224/330, 8-10=-795/971

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 130mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; cantilever left exposed ; end vertical left exposed; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates 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 117 lb uplift at joint 2, 1073 lb uplift at joint 15 and 402 lb uplift at joint 9.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and ½" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

December 11,2017

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

Job	Truss	Truss Type	Qty	Ply	H&H-NC/Harmony/
1281250	A07A	PIGGYBACK BASE	1	1	I31871744
					Job Reference (optional)

Builders First Source, Sumter SC

7.640 s Aug 16 2017 MiTek Industries, Inc. Mon Dec 11 07:55:27 2017 Page 1
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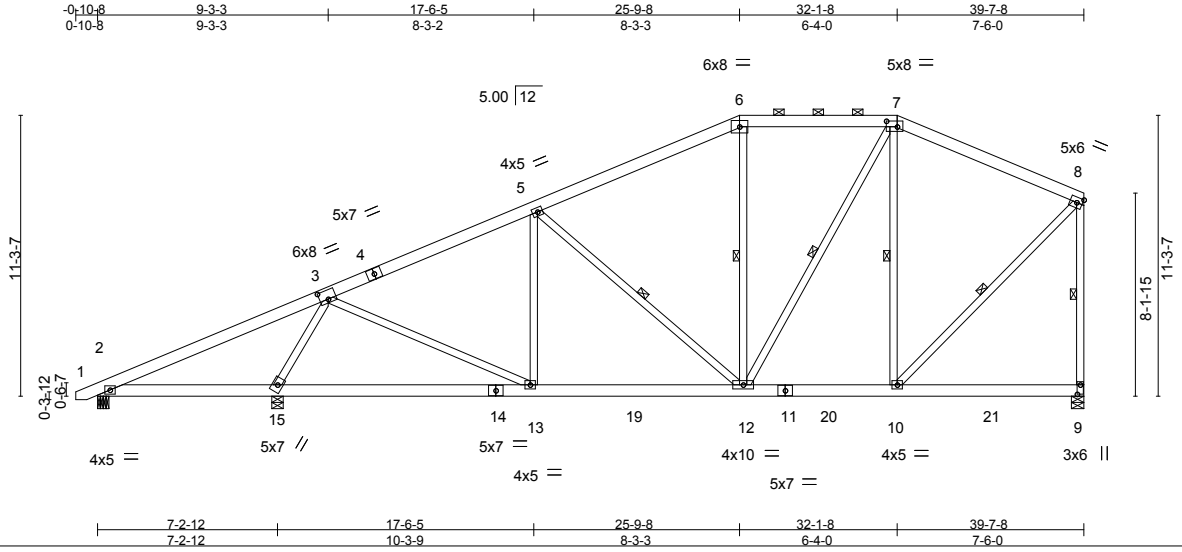

Plate Offsets (X,Y)-- [3:0-4-0,0-4-4], [7:0-5-4,0-2-12], [9:0-4-8,0-1-8]

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	0.64	Vert(LL)	-0.07	12-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(TL)	-0.16	13-15	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.65	Horz(TL)	0.03	9	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	(Matrix-S)		Wind(LL)	0.09	15-18	>938	240	Weight: 315 lb	FT = 20%

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

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

REACTIONS. (lb/size) 2=207/0-5-8, 15=1725/0-5-8, 9=1266/0-6-0
Max Horz 15=559(LC 8)
Max Uplift 2=-268(LC 8), 15=-855(LC 8), 9=-427(LC 7)
Max Grav 2=215(LC 13), 15=1725(LC 1), 9=1335(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-467/387, 3-4=-1420/1164, 4-5=-1264/1198, 5-6=-1109/1106, 6-7=-940/1155, 7-8=-826/829, 8-9=-1198/1212
BOT CHORD 2-15=-260/631, 14-15=-1000/558, 13-14=-1000/558, 13-19=-1284/1222, 12-19=-1284/1222, 11-12=-603/709, 11-20=-603/709, 10-20=-603/709
WEBS 3-15=-1681/1762, 3-13=-315/778, 5-13=-129/304, 5-12=-401/562, 7-12=-516/543, 7-10=-561/720, 8-10=-862/1009

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 130mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; cantilever left exposed ; end vertical left exposed; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
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 268 lb uplift at joint 2, 855 lb uplift at joint 15 and 427 lb uplift at joint 9.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and ½" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

December 11,2017

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

Job	Truss	Truss Type	Qty	Ply	H&H-NC/Harmony/
1281250	A08	PIGGYBACK BASE	2	1	I31871745 Job Reference (optional)

Builders First Source, Sumter SC

7.640 s Aug 16 2017 MiTek Industries, Inc. Mon Dec 11 07:55:27 2017 Page 1
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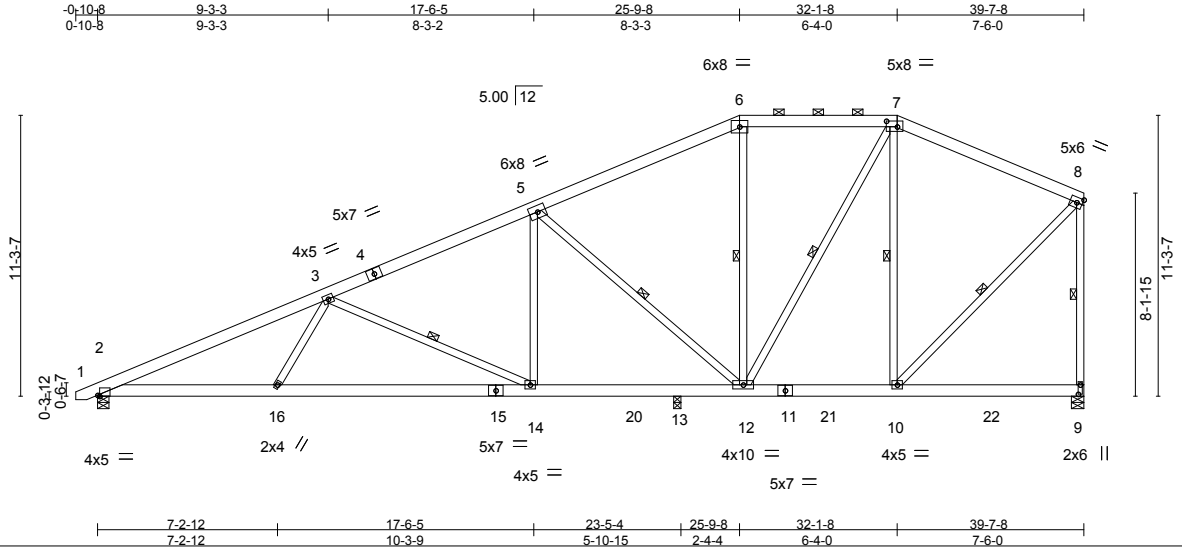

Plate Offsets (X,Y)-- [2:0-1-0,Edge], [7:0-5-4,0-2-12], [9:0-4-8,0-1-0]

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 0.63	Vert(LL)	-0.13	14-16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.86	Vert(TL)	-0.41	14-16	>680	240		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.59	Horz(TL)	-0.06	2	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007	(Matrix-S)	Wind(LL)	0.21	14-16	>999	240	Weight: 315 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-7.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 3-14, 5-12, 6-12, 7-12, 7-10, 8-9, 8-10

REACTIONS. (lb/size) 2=1378/0-5-8, 9=1217/0-6-0, 13=602/0-3-8
Max Horz 13=559(LC 8)
Max Uplift 2=-584(LC 8), 9=-428(LC 7), 13=-194(LC 8)
Max Grav 2=1378(LC 1), 9=1260(LC 2), 13=623(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2712/2182, 3-4=-1743/1523, 4-5=-1605/1557, 5-6=-997/1057, 6-7=-823/1107, 7-8=-789/831, 8-9=-1165/1217
BOT CHORD 2-16=-1780/2419, 15-16=-1797/2288, 14-15=-1797/2288, 14-20=-863/1524, 13-20=-863/1524, 12-13=-1624/1524, 11-12=-607/669, 11-21=-607/669, 10-21=-607/669
WEBS 3-16=0/454, 3-14=-846/1034, 5-14=-167/500, 5-12=-935/1077, 7-12=-413/384, 7-10=-425/630, 8-10=-867/952

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 130mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
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 584 lb uplift at joint 2, 428 lb uplift at joint 9 and 194 lb uplift at joint 13.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and ½" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

December 11,2017

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

Job	Truss	Truss Type	Qty	Ply	H&H-NC/Harmony/
1281250	A09	PIGGYBACK BASE	5	1	I31871746
					Job Reference (optional)

Builders First Source, Sumter SC — 7.640 s Aug 16 2017 MiTek Industries, Inc. Mon Dec 11 07:55:28 2017 Page 1
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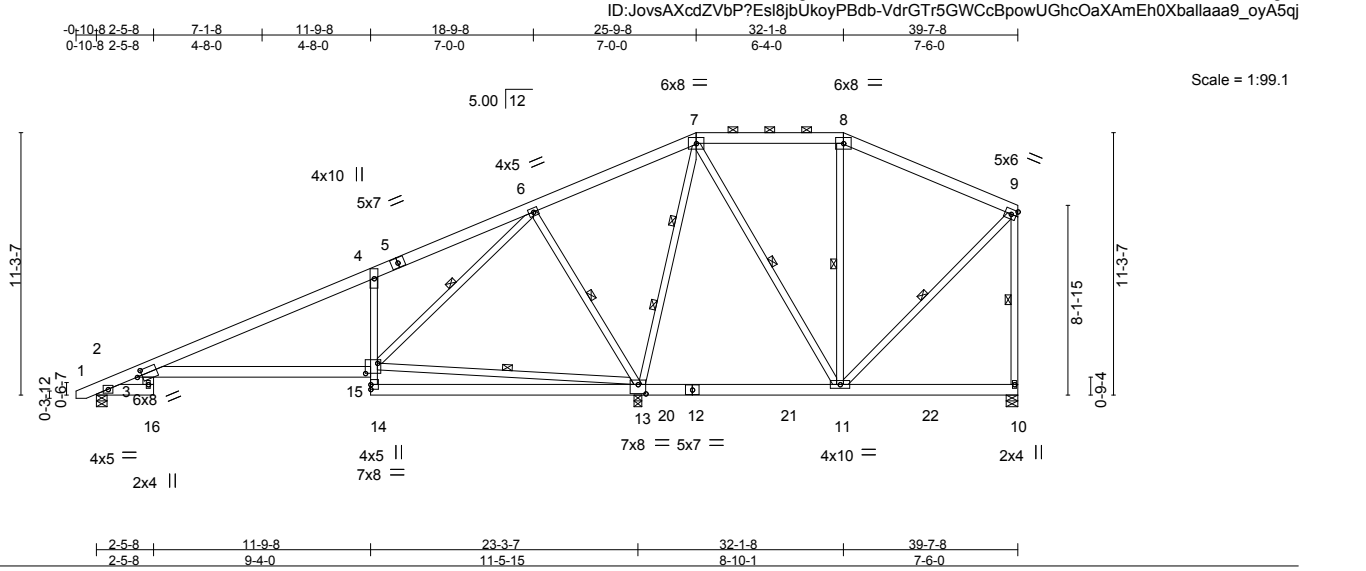

Plate Offsets (X,Y)-- [3:0-2-10,0-2-12], [13:0-4-0,0-4-12], [15:0-6-4,0-5-4]

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	0.50	Vert(LL)	-0.14	3-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(TL)	-0.41	3-15	>679	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.86	Horz(TL)	0.10	13	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	(Matrix-S)		Wind(LL)	0.29	3-15	>972	240	Weight: 322 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
4-14: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
7-11: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-8.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 13-15, 6-15, 6-13, 7-11, 8-11, 9-10, 9-11
2 Rows at 1/3 pts 7-13

REACTIONS. (lb/size) 2=508/0-5-8, 13=2750/0-4-0, 10=-60/0-6-0
Max Horz 2=559(LC 8)
Max Uplift 2=-111(LC 8), 13=-1359(LC 8), 10=-286(LC 13)
Max Grav 2=508(LC 13), 13=2750(LC 1), 10=340(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-502/0, 3-4=-430/67, 6-7=-1264/1317, 7-8=-129/287, 8-9=-238/339, 9-10=-246/353
BOT CHORD 4-15=-563/906, 13-20=-759/884, 12-20=-759/884, 12-21=-759/884, 11-21=-759/884
WEBS 13-15=-648/565, 6-15=-1142/1068, 6-13=-785/1079, 7-13=-1817/1966, 7-11=-1071/1048, 8-11=-530/681, 9-11=-411/509

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 130mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
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 111 lb uplift at joint 2, 1359 lb uplift at joint 13 and 286 lb uplift at joint 10.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and ½" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

December 11,2017

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

Job	Truss	Truss Type	Qty	Ply	H&H-NC/Harmony/
1281250	A10	GABLE	1	1	I31871747
					Job Reference (optional)

Builders First Source, Sumter SC

7.640 s Aug 16 2017 MiTek Industries, Inc. Mon Dec 11 07:55:29 2017 Page 1
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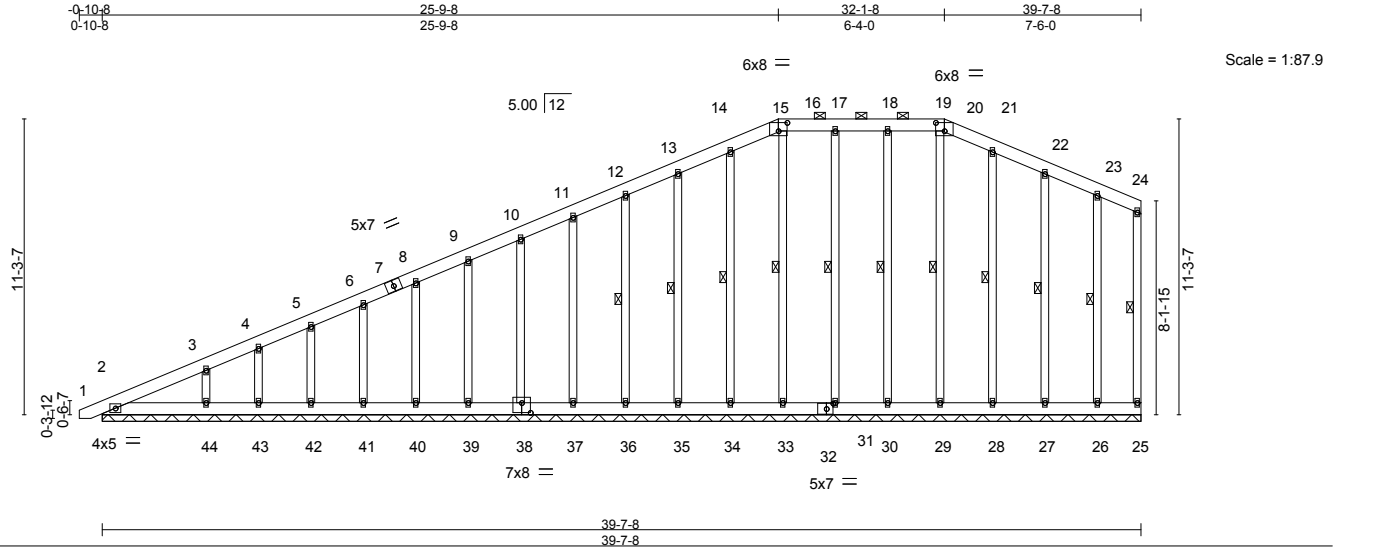

Plate Offsets (X,Y)-- [15:0-4-0,0-3-13], [20:0-4-0,0-3-13], [32:0-3-0,0-2-8], [38:0-4-0,0-4-8]

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	0.08	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(TL)	-0.00	25	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		(Matrix)							Weight: 396 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 15-20.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 24-25, 17-31, 16-33, 14-34, 13-35, 12-36, 18-30, 19-29, 21-28, 22-27, 23-26

REACTIONS. All bearings 39-7-8.
(lb) - Max Horz 2=780(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 25, 33, 29 except 31=-123(LC 6), 34=-141(LC 8), 35=-162(LC 8), 36=-156(LC 8), 37=-155(LC 8), 38=-157(LC 8), 39=-155(LC 8), 40=-156(LC 8), 41=-155(LC 8), 42=-165(LC 8), 43=-104(LC 8), 44=-308(LC 8), 30=-123(LC 6), 28=-135(LC 9), 27=-169(LC 9), 26=-140(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 2, 25, 31, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 30, 29, 28, 27, 26 except 44=313(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-751/50, 3-4=-604/10, 4-5=-544/24, 5-6=-463/22, 6-7=-384/0, 7-8=-379/22, 8-9=-306/22, 14-15=-24/282, 15-16=-0/296, 16-17=-0/296, 17-18=-0/296, 18-19=-0/296, 19-20=-0/296, 20-21=-24/282
WEBS 3-44=-221/370

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 130mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
5) Provide adequate drainage to prevent water ponding.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 25, 33, 29 except (jt=lb) 31=123, 34=141, 35=162, 36=156, 37=155, 38=157, 39=155, 40=156, 41=155, 42=165, 43=104, 44=308, 30=123, 28=135, 27=169, 26=140.
12) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

December 11,2017

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

Job	Truss	Truss Type	Qty	Ply	H&H-NC/Harmony/
1281250	B04	GABLE	1	1	I31871748
					Job Reference (optional)

Builders First Source, Sumter SC

7.640 s Aug 16 2017 MiTek Industries, Inc. Mon Dec 11 07:55:30 2017 Page 1
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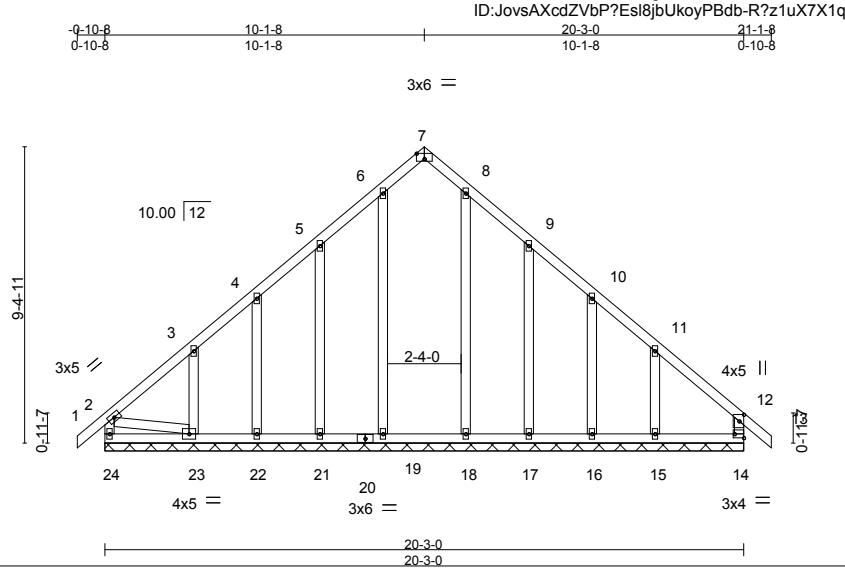

Plate Offsets (X,Y)-- [7:0-3-0,Edge], [12:0-2-8,0-1-12], [14:Edge,0-1-8]

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	0.34	Vert(LL)	-0.00	13	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.38	Vert(TL)	-0.00	13	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.26	Horz(TL)	0.02	14	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		(Matrix)							Weight: 141 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2 *Except* 2-23: 2x4 SP No.3
OTHERS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 7-9-13 oc bracing: 23-24.

REACTIONS. All bearings 20-3-0.
(lb) - Max Horz 24=-623(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 14 except 24=-252(LC 6), 19=-128(LC 7), 21=-321(LC 8), 22=-217(LC 8), 23=-451(LC 8), 17=-361(LC 9), 16=-133(LC 9), 15=-537(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 19, 21, 22, 23, 18, 17, 16, 15 except 24=411(LC 7), 14=259(LC 6)

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

TOP CHORD	2-24=-389/261, 2-3=-542/314, 3-4=-381/283, 4-5=-264/265, 5-6=-134/318, 6-7=-72/253, 8-9=-75/269, 11-12=-464/112
BOT CHORD	23-24=-574/614, 22-23=-77/539, 21-22=-77/539, 20-21=-77/539, 19-20=-77/539, 18-19=-77/539, 17-18=-77/539, 16-17=-77/539, 15-16=-77/539, 14-15=-77/539
WEBS	5-21=-123/344, 3-23=-142/324, 9-17=-123/373, 11-15=-141/454, 2-23=-238/555

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 130mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14 except (jt=lb) 24=252, 19=128, 21=321, 22=217, 23=451, 17=361, 16=133, 15=537.
12) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

December 11,2017

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

Job	Truss	Truss Type	Qty	Ply	H&H-NC/Harmony/
1281250	C01	GABLE	1	1	I31871749
					Job Reference (optional)

Builders First Source, Sumter SC

7.640 s Aug 16 2017 MiTek Industries, Inc. Mon Dec 11 07:55:31 2017 Page 1
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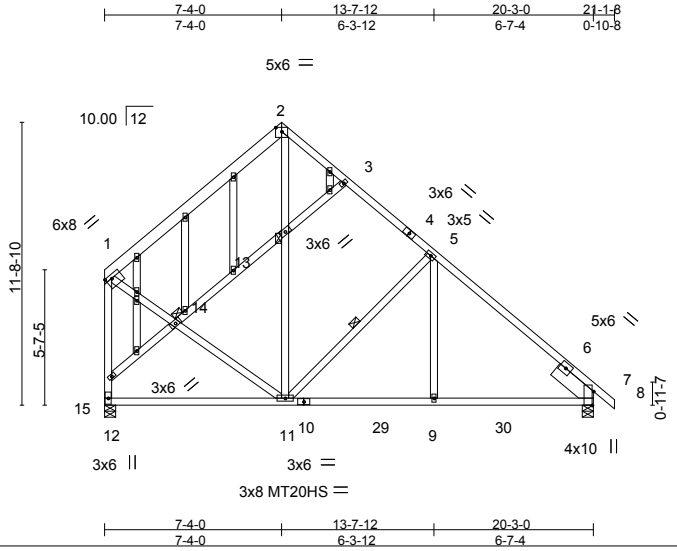

Scale: 1/8"=1'

Plate Offsets (X,Y)-- [1:0-3-0,0-1-12], [7:0-6-14,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	0.64	Vert(LL)	-0.07	11-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(TL)	-0.17	11-12	>999	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.19	Horz(TL)	0.06	7	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	(Matrix-S)		Wind(LL)	0.13	9-27	>999	240	Weight: 182 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 *Except*
	1-2: 2x6 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3
SLIDER	Right 2x8 SP DSS 1-11-12

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 5-11
JOINTS	1 Brace at Jt(s): 13, 14

REACTIONS. (lb/size) 12=803/0-5-8, 7=858/0-5-8
Max Horz 12=-702(LC 6)
Max Uplift 12=-602(LC 9), 7=-569(LC 9)

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

TOP CHORD	1-2=-526/463, 2-3=-422/594, 3-4=-488/595, 4-5=-578/573, 5-6=-914/621, 6-7=-337/0, 12-15=-730/667, 1-15=-670/585
BOT CHORD	11-12=-350/611, 10-11=-190/635, 10-29=-190/635, 9-29=-190/635, 9-30=-190/635, 7-30=-190/635
WEBS	11-13=-229/314, 2-13=-227/304, 5-11=-389/625, 5-9=-5/291, 1-14=-169/352, 11-14=-170/353

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 130mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) zone; end vertical 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) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
5) All plates are MT20 plates unless otherwise indicated.
6) All plates are 2x4 MT20 unless otherwise indicated.
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, with BCDL = 10.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=602, 7=569.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and ½" gypsum sheetrock be applied directly to the bottom chord.

December 11,2017

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

Job	Truss	Truss Type	Qty	Ply	H&H-NC/Harmony/
1281250	C02	COMMON	9	1	I31871750
					Job Reference (optional)

Builders First Source, Sumter SC

7.640 s Aug 16 2017 MiTek Industries, Inc. Mon Dec 11 07:55:31 2017 Page 1
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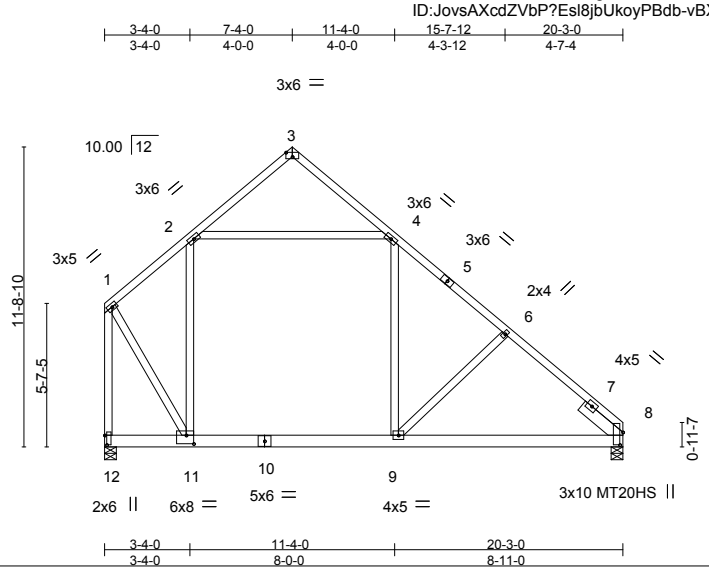


Plate Offsets (X,Y)-- [3:0-3-0,Edge], [8:0-5-14,0-1-7], [11:0-3-8,0-4-0], [12:0-4-8,0-1-0]

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	0.69	Vert(LL)	-0.27	9-15	>910	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.83	Vert(TL)	-0.64	9-15	>374	240	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.46	Horz(TL)	0.06	8	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		(Matrix-M)		Wind(LL)	0.61	9-15	>397	240	Weight: 151 lb	FT = 20%

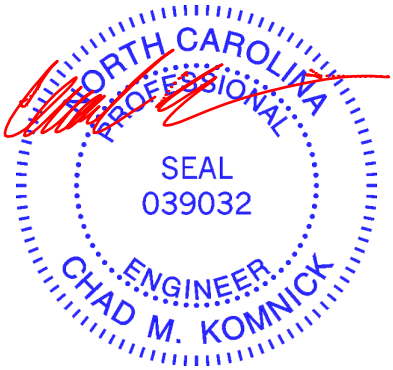
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP DSS *Except*
8-10: 2x6 SP No.2
WEBS 2x4 SP No.3
SLIDER Right 2x6 SP No.2 1-11-12

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-10-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (lb/size) 12=804/0-5-8, 8=804/0-5-8
Max Horz 12=-552(LC 6)
Max Uplift 12=-332(LC 9), 8=-241(LC 9)
Max Grav 12=858(LC 2), 8=804(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-616/516, 2-3=-277/232, 4-5=-616/567, 5-6=-717/552, 6-7=-754/586, 7-8=-866/496, 1-12=-1195/929
BOT CHORD 11-12=-336/562, 10-11=-136/473, 9-10=-136/473, 8-9=-297/637
WEBS 1-11=-653/934, 2-4=-367/552, 6-9=-283/497

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 130mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; end vertical 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 basic load combinations, which include cases with reductions for multiple concurrent live loads.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=332, 8=241.
8) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.



December 11,2017

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

Job	Truss	Truss Type	Qty	Ply	H&H-NC/Harmony/
1281250	PB01	GABLE	2	1	I31871751
					Job Reference (optional)

Builders First Source, Sumter SC

7.640 s Aug 16 2017 MiTek Industries, Inc. Mon Dec 11 07:55:32 2017 Page 1
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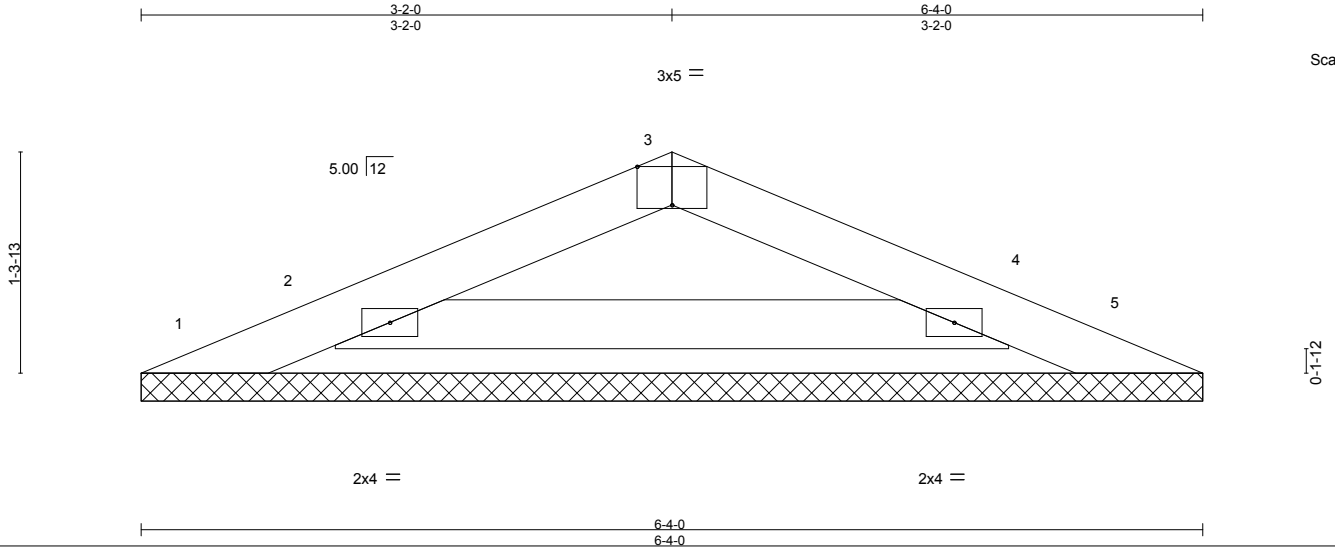


Plate Offsets (X,Y)-- [3:0-2-8,Edge]

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	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	(Matrix)							Weight: 16 lb	FT = 20%

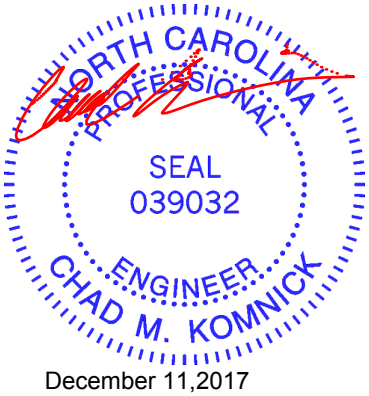
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

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

REACTIONS. All bearings 6-4-0.
(lb) - Max Horz 1=26(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 2=-114(LC 8), 4=-104(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 2, 4

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 7-05; 130mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
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) 1, 5 except (jt=lb) 2=114, 4=104.
10) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



December 11,2017

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TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	H&H-NC/Harmony/
1281250	PB02	GABLE	19	1	I31871752
					Job Reference (optional)

Builders First Source, Sumter SC

7.640 s Aug 16 2017 MiTek Industries, Inc. Mon Dec 11 07:55:32 2017 Page 1
ID:JovsAXcdZVbP?Esl8jbUkoyPBdb-NO5nJD8nZR6dIPDFVXhKlNKYzIUtXaBKVCYN7ZyA5qf

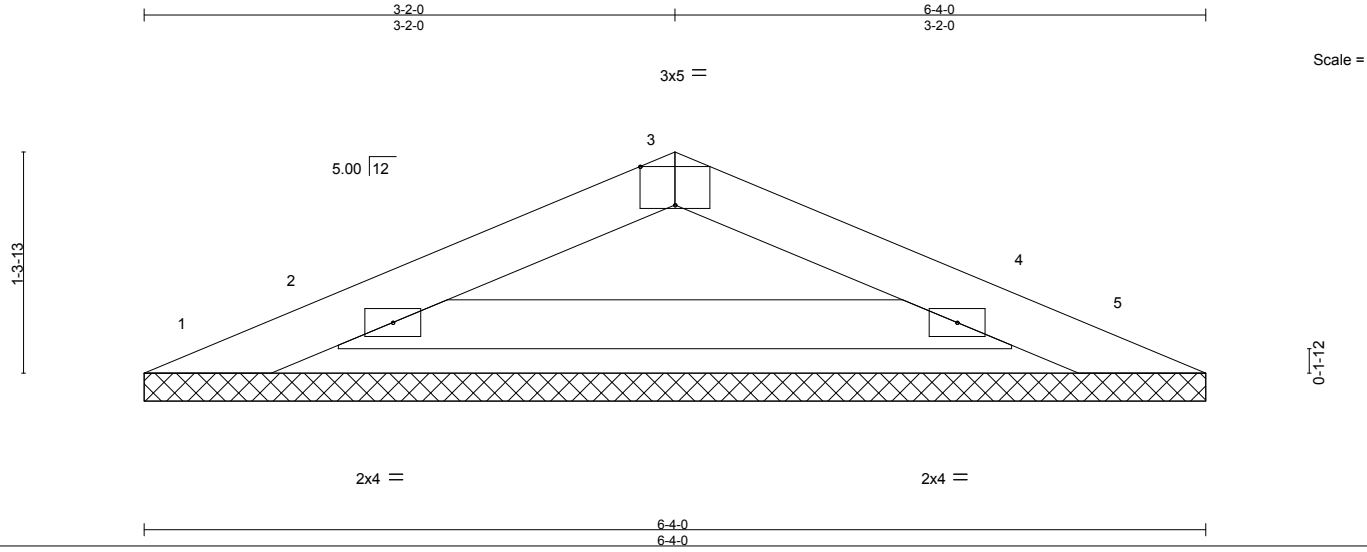

Plate Offsets (X,Y)-- [3:0-2-8,Edge]

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	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	(Matrix)							Weight: 16 lb	FT = 20%

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

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TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
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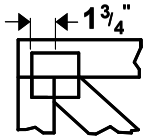
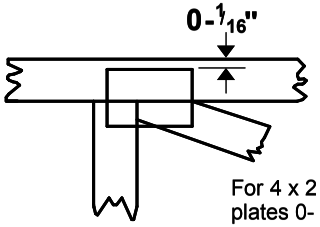
Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

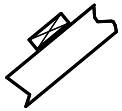
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

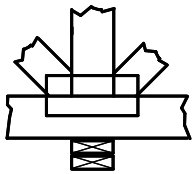
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

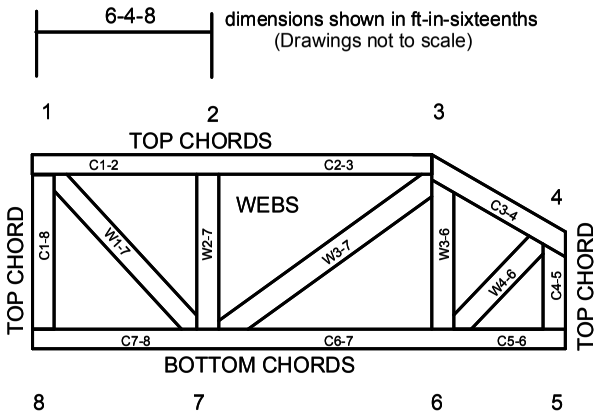


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.

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MiTek Engineering Reference Sheet: MII-7473 rev. 10/03/2015

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.