Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 18101894
Lot-72-CLK/2317-Jasper-A2/RF

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by   The Building Center.

Pages or sheets covered by this seal: I34930338 thru I34930359

My license renewal date for the state of North Carolina is   December 31, 2018.

North Carolina COA: C-0844

(Seal: NORTH CAROLINA PROFESSIONAL ENGINEER — SEAL 45844 — ANDREW JOHNSON)

October 10,2018

Johnson, Andrew

IMPORTANT NOTE: Truss Engineer's responsibility is solely for design of individual trusses based upon design parameters shown on referenced truss drawings. Parameters have not been verified as appropriate for any use. Any location identification specified is for file reference only and has not been used in preparing design. Suitability of truss designs for any particular building is the responsibility of the building designer, not the Truss Engineer, per ANSI/TPI-1, Chapter 2.
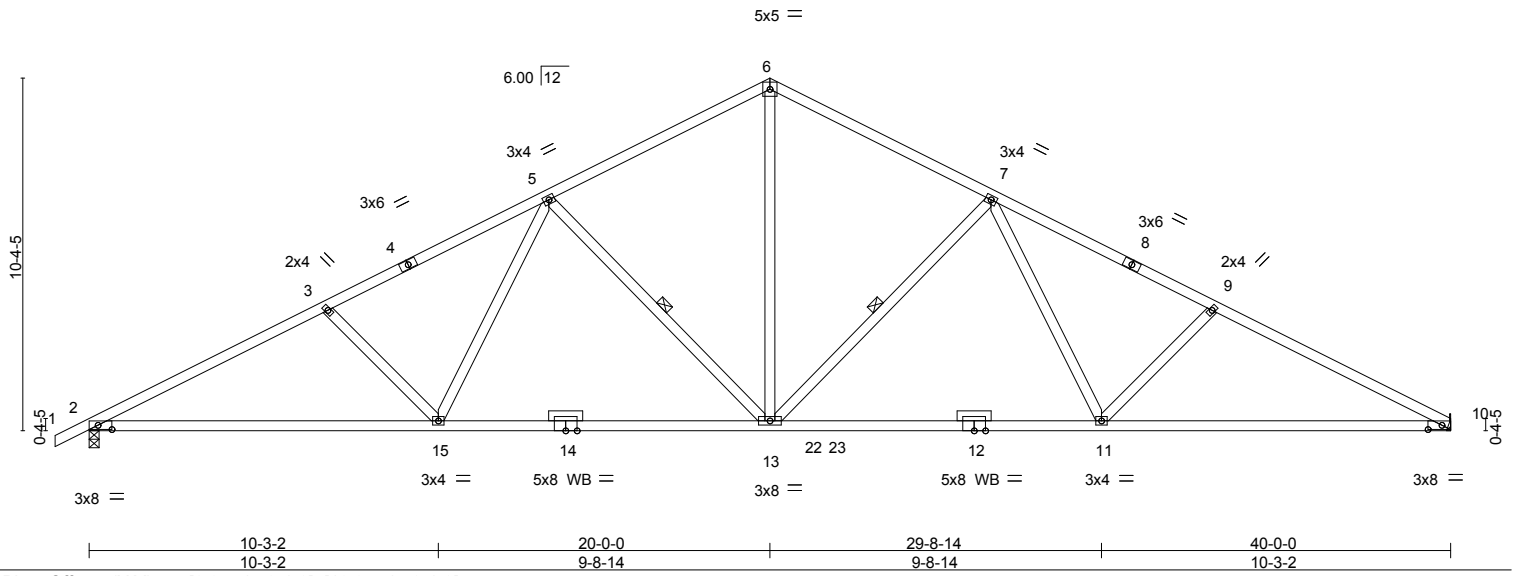
Job	Truss	Truss Type	Qty	Ply	Lot-72-CLK/2317-Jasper-A2/RF	
18101894	A	COMMON TRUSS	12	1	Job Reference (optional)	I34930338

The Building Center Inc.,   Gastonia, NC 28052   8.220 s Sep 24 2018 MiTek Industries, Inc. Wed Oct 10 09:42:01 2018 Page 1
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Scale = 1:67.7

Plate Offsets (X,Y)-- [2:0-4-14,0-1-8], [10:0-4-14,0-1-8]

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	0.44	Vert(LL)	-0.41	13-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(TL)	-0.78	13-15	>617	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.63	Horz(TL)	0.16	10	n/a	n/a		
BCDL	10.0	Code IRC2012/TPI2007		Matrix-AS							Weight: 208 lb	FT = 20%

LUMBER-
TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.1 *Except*
     12-14: 2x4 SP DSS
WEBS   2x4 SP No.3
OTHERS   2x4 SP No.3

BRACING-
TOP CHORD   Structural wood sheathing directly applied.
BOT CHORD   Rigid ceiling directly applied.
WEBS   1 Row at midpt   7-13, 5-13

REACTIONS. (lb/size)   2=1660/0-3-8, 10=1600/Mechanical
     Max Horz   2=150(LC 10)
     Max Uplift   2=-165(LC 10), 10=-148(LC 11)
     Max Grav   2=1732(LC 2), 10=1681(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-3182/588, 3-5=-2955/559, 5-6=-2133/476, 6-7=-2133/476, 7-9=-2957/560,
     9-10=-3184/590
BOT CHORD   2-15=-448/2777, 13-15=-288/2325, 11-13=-289/2326, 10-11=-450/2780
WEBS   6-13=-261/1531, 7-13=-716/247, 7-11=-51/598, 9-11=-359/201, 5-13=-715/247,
     5-15=-50/596, 3-15=-357/200

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) V(IRC2012)=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed;
    MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces &
    MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
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 with a clearance greater than 6-0-0
    between the bottom chord and any other members, with BCDL = 10.0psf.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
    2=165, 10=148.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum
   sheetrock be applied directly to the bottom chord.

NORTH CAROLINA
PROFESSIONAL
SEAL
45844
ENGINEER
ANDREW JOHNSON

October 10,2018

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

Job	Truss	Truss Type	Qty	Ply	Lot-72-CLK/2317-Jasper-A2/RF	
18101894	A1	COMMON TRUSS	3	1	Job Reference (optional)	I34930339

The Building Center Inc.,   Gastonia, NC 28052

8.220 s Sep 24 2018 MiTek Industries, Inc. Wed Oct 10 09:42:02 2018 Page 1
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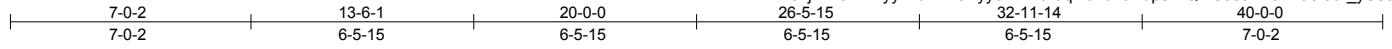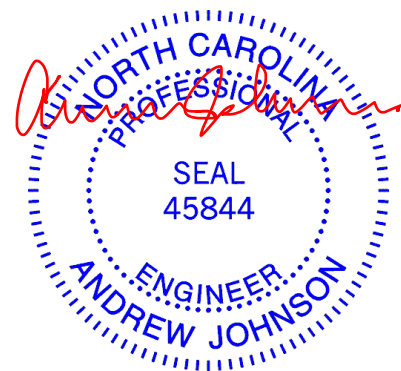
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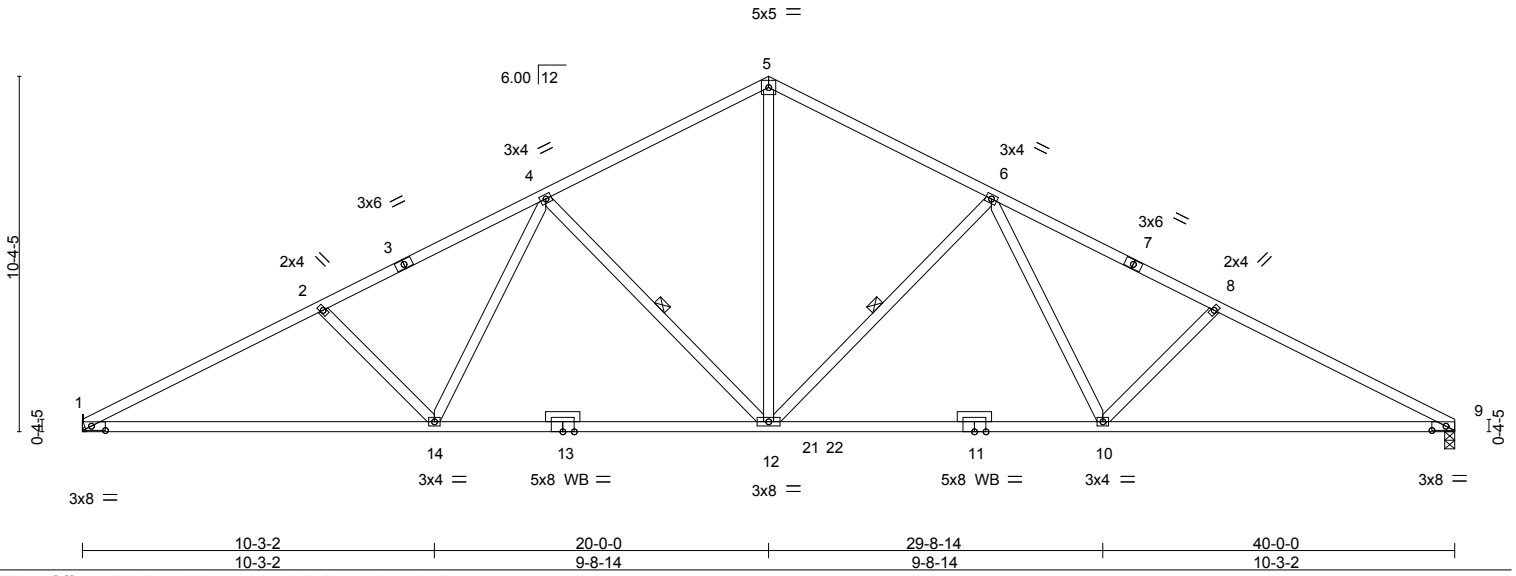
Plate Offsets (X,Y)--   [1:0-4-14,0-1-8], [9:0-4-14,0-1-8]

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	0.44	Vert(LL)	-0.41	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(TL)	-0.78	12-14	>618	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.63	Horz(TL)	0.16	9	n/a	n/a		
BCDL	10.0	Code IRC2012/TPI2007		Matrix-AS							Weight: 206 lb	FT = 20%

LUMBER-
TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.1 *Except*
    11-13: 2x4 SP DSS
WEBS   2x4 SP No.3
OTHERS   2x4 SP No.3

BRACING-
TOP CHORD   Structural wood sheathing directly applied.
BOT CHORD   Rigid ceiling directly applied.
WEBS   1 Row at midpt   6-12, 4-12

REACTIONS.   (lb/size)   1=1600/Mechanical, 9=1600/0-3-8
    Max Horz   1=-137(LC 15)
    Max Uplift   1=-148(LC 10), 9=-148(LC 11)
    Max Grav   1=1682(LC 2), 9=1682(LC 2)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   1-2=-3185/590, 2-4=-2957/560, 4-5=-2134/476, 5-6=-2134/476, 6-8=-2957/560,
       8-9=-3185/590
BOT CHORD   1-14=-450/2780, 12-14=-289/2326, 10-12=-289/2326, 9-10=-450/2780
WEBS   5-12=-262/1532, 6-12=-716/247, 6-10=-51/598, 8-10=-359/201,
       4-14=-51/598, 2-14=-359/201

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) V(IRC2012)=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed;
   MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces &
   MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
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 with a clearance greater than 6-0-0
   between the bottom chord and any other members, with BCDL = 10.0psf.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
   1=148, 9=148.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum
   sheetrock be applied directly to the bottom chord.

[Seal: NORTH CAROLINA PROFESSIONAL ENGINEER — SEAL 45844 — ANDREW JOHNSON]

October 10,2018

Job	Truss	Truss Type	Qty	Ply	Lot-72-CLK/2317-Jasper-A2/RF	
18101894	A1GE	GABLE	2	1		I34930340
					Job Reference (optional)	

The Building Center Inc.,   Gastonia, NC 28052

8.220 s Sep 24 2018 MiTek Industries, Inc. Wed Oct 10 09:42:04 2018 Page 1
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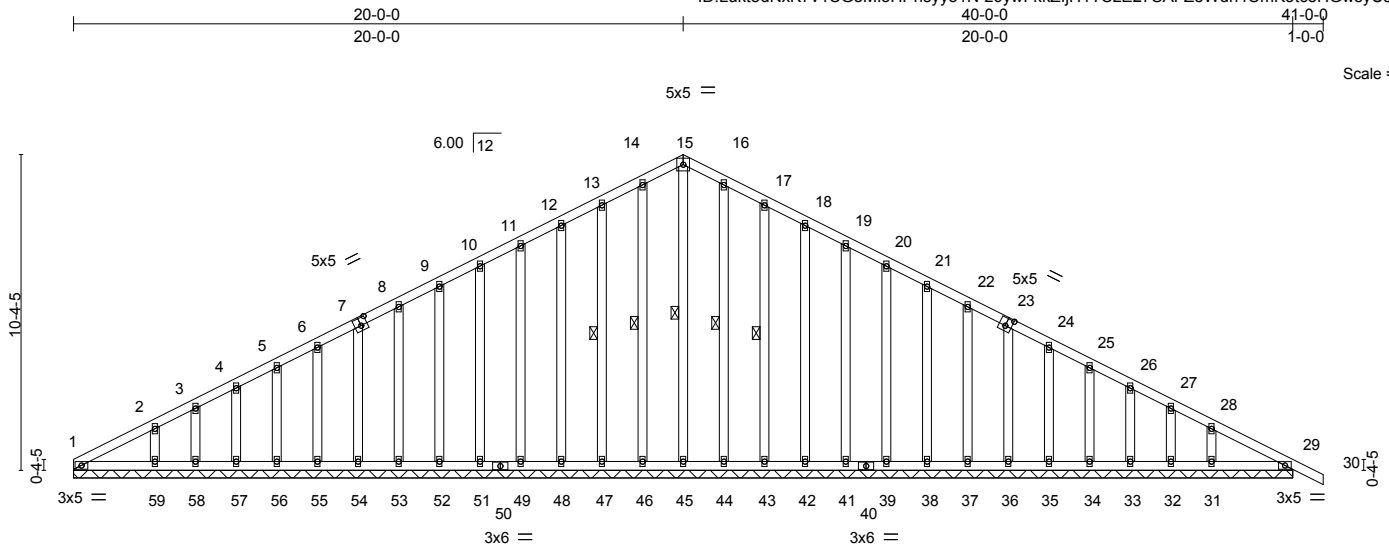
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Plate Offsets (X,Y)--   [7:0-2-8,0-3-0], [23:0-2-8,0-3-0]

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	29	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	0.00	29	n/r	90		
BCLL 0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(TL)	0.01	29	n/a	n/a		
BCDL 10.0	Code IRC2012/TPI2007		Matrix-S							Weight: 342 lb	FT = 20%

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS   1 Row at midpt   15-45, 14-46, 13-47, 16-44, 17-43

REACTIONS.   All bearings 40-0-0.
    (lb) - Max Horz 1=-149(LC 11)
            Max Uplift   All uplift 100 lb or less at joint(s) 1, 46, 47, 48, 49, 51, 52, 53, 54, 55, 56, 57, 58, 59, 44, 43, 42, 41, 39, 38, 37, 36, 35, 34, 33, 32, 31
            Max Grav   All reactions 250 lb or less at joint(s) 1, 45, 46, 47, 48, 49, 51, 52, 53, 54, 55, 56, 57, 58, 59, 44, 43, 42, 41, 39, 38, 37, 36, 35, 34, 33, 32, 31, 29

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   14-15=-91/251, 15-16=-91/251

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) V(IRC2012)=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 1-4-0 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 with a clearance greater than 6-0-0 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) 1, 46, 47, 48, 49, 51, 52, 53, 54, 55, 56, 57, 58, 59, 44, 43, 42, 41, 39, 38, 37, 36, 35, 34, 33, 32, 31.

October 10,2018

TRENCO
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A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot-72-CLK/2317-Jasper-A2/RF	
18101894	B	Common Truss	1	1		I34930341
					Job Reference (optional)	

The Building Center Inc.,   Gastonia, NC 28052   8.220 s Sep 24 2018 MiTek Industries, Inc. Wed Oct 10 09:42:05 2018 Page 1
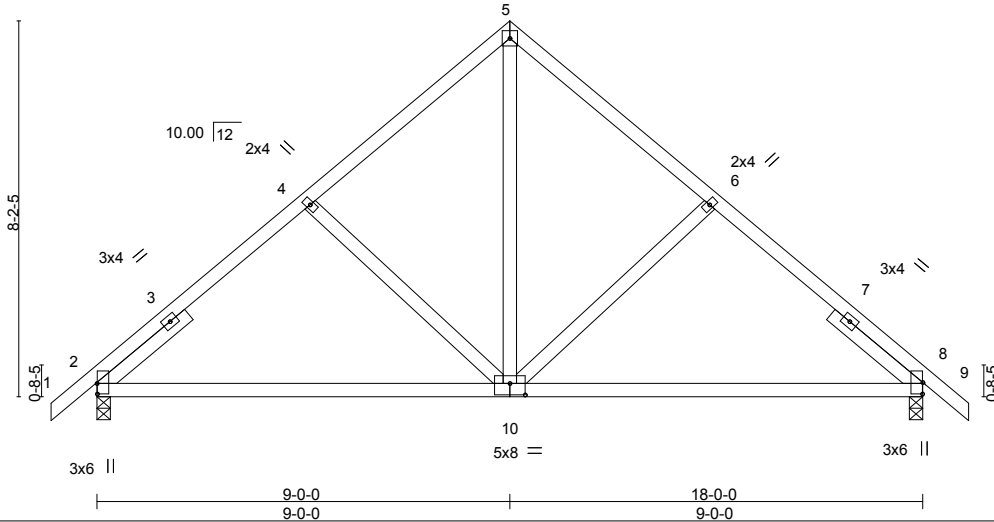ID:Fja9h?rEETweBLVIU6SbS?z3kws-RCWIS4kB31Pu5MYRbrzPomefKBGEVlr1qj1pSIyUs30

Scale = 1:50.2

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

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	0.21	Vert(LL)	-0.09	10-17	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(TL)	-0.23	10-17	>942	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.19	Horz(TL)	0.01	2	n/a	n/a		
BCDL	10.0	Code IRC2012/TPI2007		Matrix-AS							Weight: 102 lb	FT = 20%

LUMBER-
TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.2
WEBS   2x4 SP No.3
SLIDER   Left 2x4 SP No.2 2-6-0, Right 2x4 SP No.2 2-6-0

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

REACTIONS. (lb/size)   2=780/0-3-8, 8=780/0-3-8
Max Horz 2=169(LC 9)
Max Uplift 2=-68(LC 10), 8=-68(LC 11)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-4=-716/145, 4-5=-656/157, 5-6=-656/157, 6-8=-716/145
BOT CHORD   2-10=-86/626, 8-10=-14/590
WEBS   5-10=-96/510

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) V(IRC2012)=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
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 with a clearance greater than 6-0-0 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) 2, 8.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
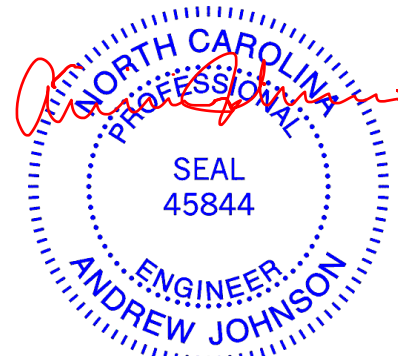
(Seal: NORTH CAROLINA Professional SEAL 45844 ENGINEER ANDREW JOHNSON)

October 10,2018

TRENCO
ENGINEERING BY
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot-72-CLK/2317-Jasper-A2/RF	
18101894	BGE	GABLE	1	1		I34930342
					Job Reference (optional)	

The Building Center Inc.,   Gastonia, NC 28052   8.220 s Sep 24 2018 MiTek Industries, Inc. Wed Oct 10 09:42:07 2018 Page 1
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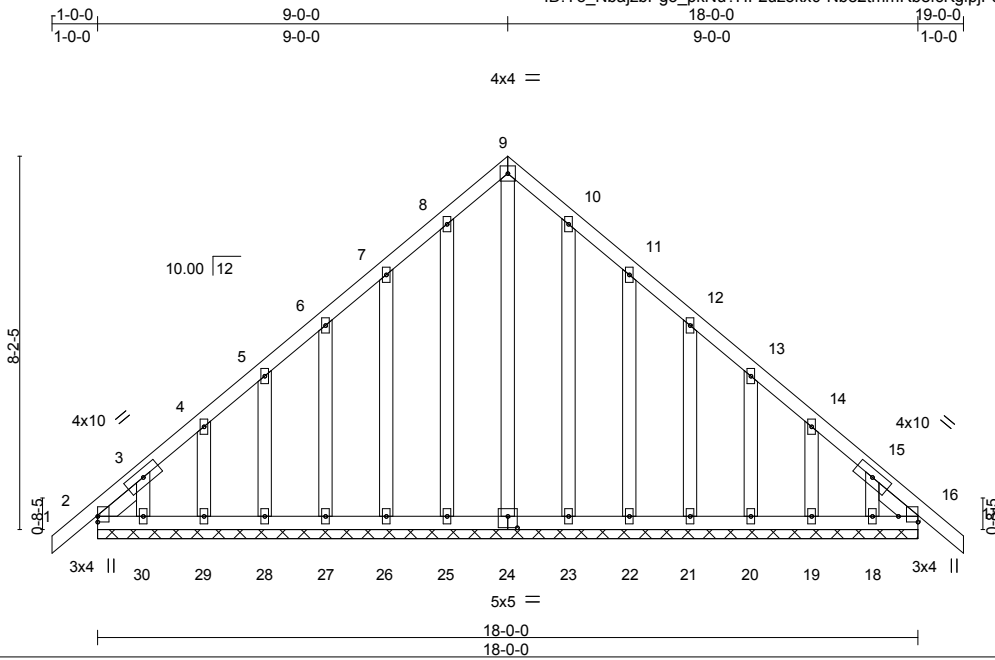
Scale = 1:50.6

Plate Offsets (X,Y)--   [16:Edge,0-5-3], [24:0-2-8,0-3-0]

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	17	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	-0.00	17	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(TL)	0.00	16	n/a	n/a		
BCDL	10.0	Code IRC2012/TPI2007		Matrix-S							Weight: 148 lb	FT = 20%

LUMBER-
TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.2
OTHERS   2x4 SP No.3
SLIDER   Left 2x4 SP No.2 1-1-8, Right 2x4 SP No.2 1-1-8

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 18-0-0.
(lb) -   Max Horz   2=-169(LC 8)
     Max Uplift   All uplift 100 lb or less at joint(s) 2, 16, 25, 26, 27, 28, 29, 30, 23, 22, 21, 20, 19, 18
     Max Grav   All reactions 250 lb or less at joint(s) 2, 16, 24, 25, 26, 27, 28, 29, 30, 23, 22, 21, 20, 19, 18

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 7-10; Vult=115mph (3-second gust) V(IRC2012)=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed;
   MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right
   exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry
   Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 1-4-0 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 with a clearance greater than 6-0-0
   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) 2, 16, 25, 26, 27,
   28, 29, 30, 23, 22, 21, 20, 19, 18.

October 10,2018

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot-72-CLK/2317-Jasper-A2/RF	
18101894	BGR	COMMON GIRDER	1	**3**		I34930343
					Job Reference (optional)	

The Building Center Inc.,   Gastonia, NC 28052

8.220 s Sep 24 2018 MiTek Industries, Inc. Wed Oct 10 09:42:08 2018 Page 1
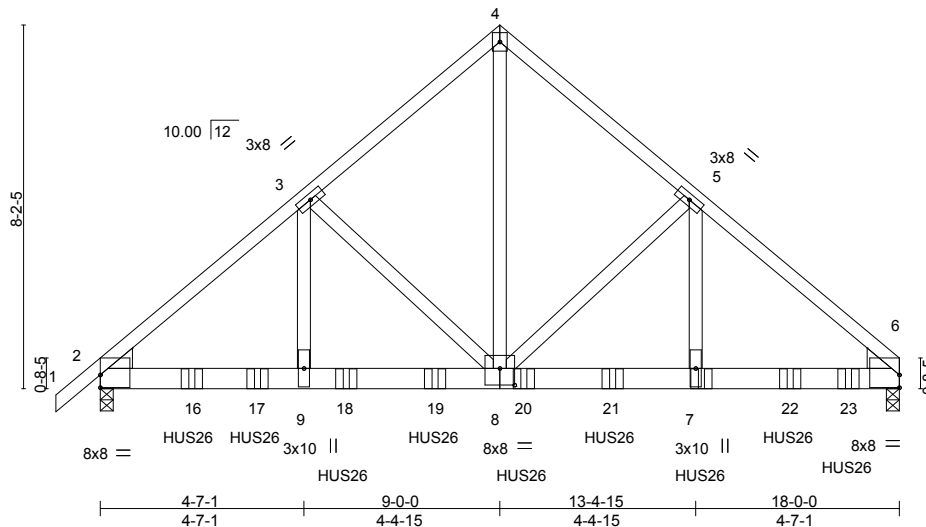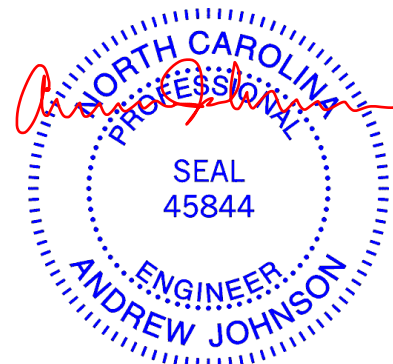ID:Rfnz1Eil1EkM7Qn?mVbvzyyEhiI-rnCR46n3MynSypH0HzX6PPG7YOHRi?ITXhFT2dyUs2z

Scale = 1:51.9

Plate Offsets (X,Y)--   [2:Edge,0-3-7], [6:0-0-0,0-3-7], [8:0-4-0,0-4-8]

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	0.34	Vert(LL)	-0.08	8-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.74	Vert(TL)	-0.18	8-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.66	Horz(TL)	0.04	6	n/a	n/a		
BCDL	10.0	Code IRC2012/TPI2007		Matrix-MSH							Weight: 363 lb	FT = 20%

LUMBER-
TOP CHORD   2x4 SP No.2
BOT CHORD   2x6 SP No.1
WEBS   2x4 SP No.3 *Except*
4-8: 2x4 SP No.2
WEDGE
Left: 2x6 SP No.2, Right: 2x6 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.   (lb/size)   6=8189/0-3-8, 2=7450/0-3-8
Max Horz 2=163(LC 7)
Max Uplift 6=-679(LC 9), 2=-630(LC 8)
Max Grav 6=8493(LC 2), 2=7700(LC 2)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-9496/780, 3-4=-6558/611, 4-5=-6561/611, 5-6=-9580/785
BOT CHORD   2-9=-624/7214, 8-9=-624/7214, 7-8=-557/7291, 6-7=-557/7291
WEBS   4-8=-689/8072, 5-8=-3123/374, 5-7=-274/3860, 3-8=-3018/364, 3-9=-265/3755

NOTES-
1) 3-ply truss to be connected together with 10d (0.148"x3") nails as follows:
   Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
   Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-5-0 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 7-10; Vult=115mph (3-second gust) V(IRC2012)=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed;
   MWFRS (envelope) gable end zone; cantilever left and right exposed ; Lumber DOL=1.33 plate grip DOL=1.33
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 with a clearance greater than 6-0-0
   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) except (jt=lb)
   6=679, 2=630.
8) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left
   end to 16-10-4 to connect truss(es) to front face of bottom chord.
9) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

October 10,2018

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TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot-72-CLK/2317-Jasper-A2/RF	
18101894	BGR	COMMON GIRDER	1	**3**		I34930343
					Job Reference (optional)	

The Building Center Inc.,   Gastonia, NC 28052   8.220 s Sep 24 2018 MiTek Industries, Inc. Wed Oct 10 09:42:08 2018 Page 2

ID:Rfnz1Eil1EkM7Qn?mVbvzyyEhiI-rnCR46n3MynSypH0HzX6PPG7YOHRi?ITXhFT2dyUs2z

LOAD CASE(S) Standard

    Uniform Loads (plf)

        Vert: 1-4=-60, 4-6=-60, 10-13=-20

    Concentrated Loads (lb)

        Vert: 7=-1572(F) 16=-1571(F) 17=-1571(F) 18=-1571(F) 19=-1571(F) 20=-1571(F) 21=-1571(F) 22=-1572(F) 23=-1572(F)

ENGINEERING BY
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A MiTek Affiliate

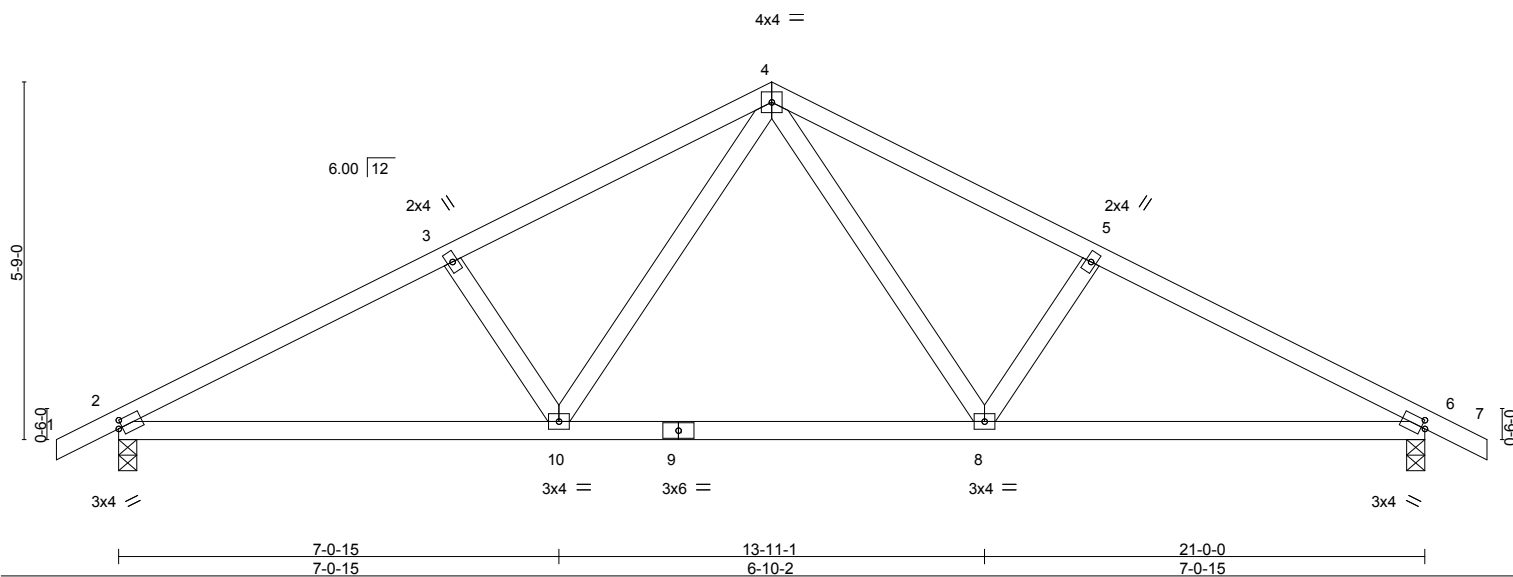818 Soundside Road
Edenton, NC 27932

The Building Center Inc.,   Gastonia, NC 28052

8.220 s Sep 24 2018 MiTek Industries, Inc. Wed Oct 10 09:42:09 2018 Page 1
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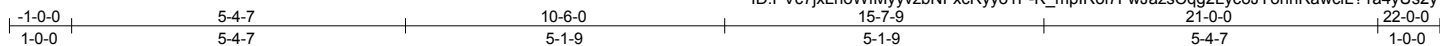
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Plate Offsets (X,Y)--   [2:0-0-12,0-1-8], [6:0-0-12,0-1-8]

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	0.26	Vert(LL)	-0.05	8-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(TL)	-0.16	8-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.19	Horz(TL)	0.04	6	n/a	n/a		
BCDL	10.0	Code IRC2012/TPI2007		Matrix-AS							Weight: 97 lb	FT = 20%

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

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

REACTIONS. (lb/size)   2=900/0-3-8, 6=900/0-3-8
      Max Horz   2=-79(LC 11)
      Max Uplift   2=-94(LC 10), 6=-94(LC 11)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-1407/283, 3-4=-1244/290, 4-5=-1244/290, 5-6=-1407/283
BOT CHORD   2-10=-166/1198, 8-10=-44/815, 6-8=-166/1198
WEBS   4-8=-73/456, 5-8=-294/156, 4-10=-73/456, 3-10=-294/156

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) V(IRC2012)=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed;
   MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces &
   MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
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 with a clearance greater than 6-0-0
   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) 2, 6.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum
   sheetrock be applied directly to the bottom chord.

NORTH CAROLINA
PROFESSIONAL
SEAL
45844
ENGINEER
ANDREW JOHNSON

October 10, 2018

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

The Building Center Inc.,   Gastonia, NC 28052

8.220 s Sep 24 2018 MiTek Industries, Inc. Wed Oct 10 09:42:11 2018 Page 1
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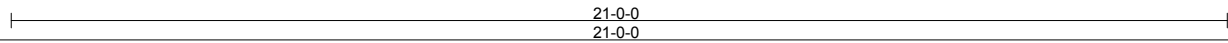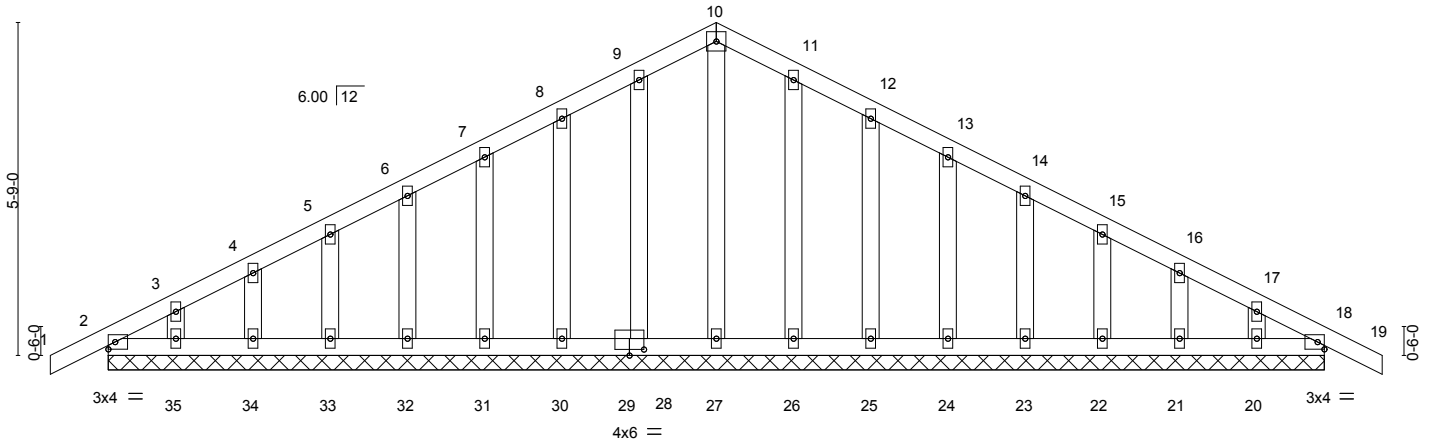Plate Offsets (X,Y)-- [28:0-1-12,0-0-0], [29:0-3-0,0-1-4], [29:0-0-0,0-1-12]

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	0.07	Vert(LL)	-0.00	19	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	-0.00	19	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(TL)	0.00	18	n/a	n/a		
BCDL	10.0	Code IRC2012/TPI2007		Matrix-S							Weight: 130 lb	FT = 20%

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

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

REACTIONS. All bearings 21-0-0.
(lb) - Max Horz 2=-79(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 28, 30, 31, 32, 33, 34, 35, 26, 25, 24, 23, 22, 21, 20, 18
Max Grav All reactions 250 lb or less at joint(s) 2, 27, 28, 30, 31, 32, 33, 34, 35, 26, 25, 24, 23, 22, 21, 20, 18

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 7-10; Vult=115mph (3-second gust) V(IRC2012)=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed;
   MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces &
   MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry
   Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 1-4-0 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 with a clearance greater than 6-0-0
   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, 28, 30, 31, 32,
   33, 34, 35, 26, 25, 24, 23, 22, 21, 20, 18.

October 10,2018

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818 Soundside Road
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Job	Truss	Truss Type	Qty	Ply	Lot-72-CLK/2317-Jasper-A2/RF	
18101894	H1	ROOF SPECIAL	8	1		I34930346
					Job Reference (optional)	

The Building Center Inc.,   Gastonia, NC 28052

8.220 s Sep 24 2018 MiTek Industries, Inc. Wed Oct 10 09:42:11 2018 Page 1
ID:PVc7jxLhoWfMyyvzbNFxcRyyo1P-GMuZj7pyftA1pH?by54p11ufTbQjvWMvDfU7fyyUs2w

4-10-8   5-10-8
4-10-8   1-0-0

Scale = 1:15.0

1 2x4 ‖

5.00 ⎿12

2-5-6
2-1-14
0-3-8

2

4

3

0-5-0

2x4 ‖

2x4 =

4-10-8
4-10-8

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	0.30	Vert(LL)	-0.02	4-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(TL)	-0.06	4-7	>942	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(TL)	-0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2012/TPI2007		Matrix-AS							Weight: 19 lb	FT = 20%

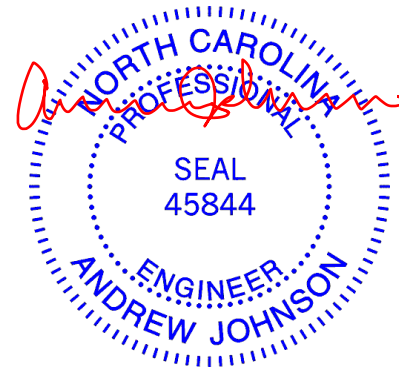**LUMBER-**
TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.2
WEBS   2x4 SP No.3

BRACING-
TOP CHORD   Structural wood sheathing directly applied, except end verticals.
BOT CHORD   4-0-0 oc bracing.

REACTIONS.   (lb/size)   2=256/0-3-8, 4=183/0-1-8
              Max Horz 4=-74(LC 11)
              Max Uplift 2=-32(LC 11), 4=-40(LC 11)

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

NOTES-
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) V(IRC2012)=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

NORTH CAROLINA
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ENGINEER
ANDREW JOHNSON

October 10,2018

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot-72-CLK/2317-Jasper-A2/RF	
18101894	H1GE	GABLE	2	1		I34930347
					Job Reference (optional)	

The Building Center Inc.,   Gastonia, NC 28052   8.220 s Sep 24 2018 MiTek Industries, Inc. Wed Oct 10 09:42:12 2018 Page 1
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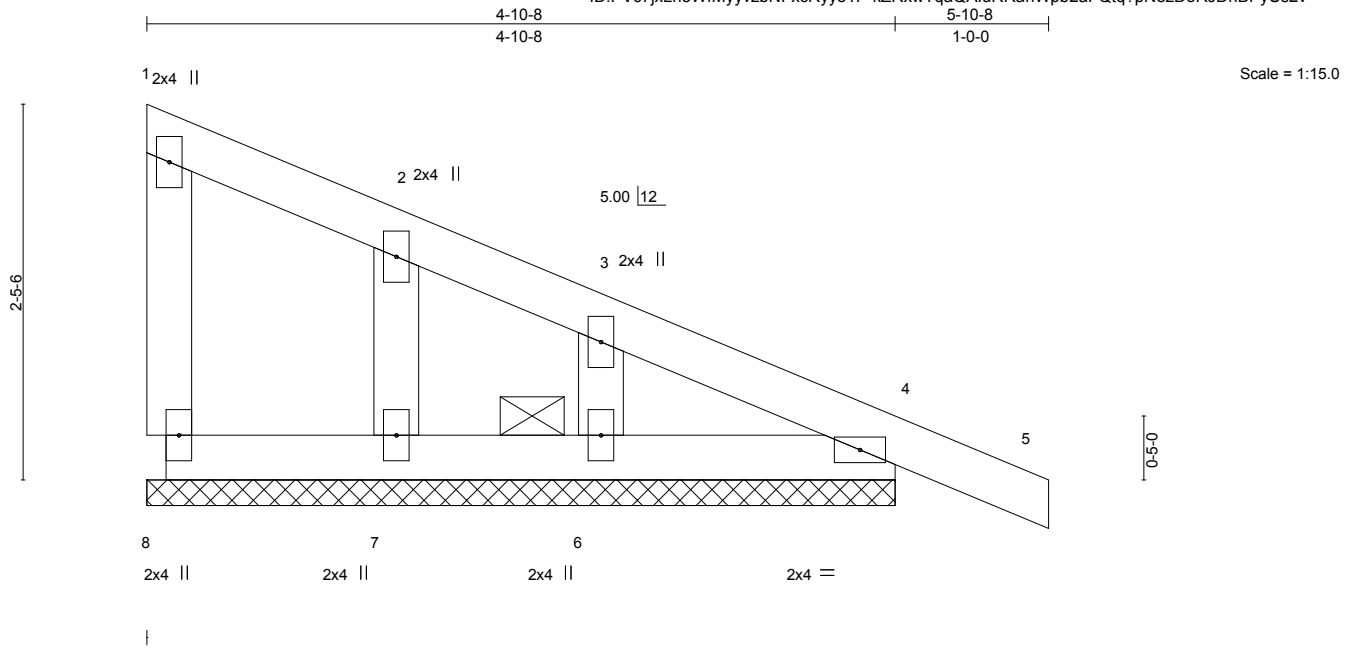
LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d		**PLATES**	**GRIP**
TCLL	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	0.00	5	n/r	120		MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	-0.00	4	n/r	90			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(TL)	0.00	4	n/a	n/a			
BCDL	10.0	Code IRC2012/TPI2007		Matrix-P								Weight: 22 lb	FT = 20%

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 4-10-8 oc purlins,
                   except end verticals.
BOT CHORD   4-0-0 oc bracing.

REACTIONS.   All bearings 4-10-8.
     (lb) -   Max Horz   8=-74(LC 11)
          Max Uplift   All uplift 100 lb or less at joint(s) 8, 4, 7, 6
          Max Grav   All reactions 250 lb or less at joint(s) 8, 4, 7, 6

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

NOTES-
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) V(IRC2012)=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed;
   MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces &
   MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
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) Gable studs spaced at 1-4-0 oc.
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 with a clearance greater than 6-0-0
   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) 8, 4, 7, 6.

North Carolina Professional Engineer Seal 45844 — Andrew Johnson

October 10,2018

The Building Center Inc.,   Gastonia, NC 28052   8.220 s Sep 24 2018 MiTek Industries, Inc.   Wed Oct 10 09:42:13 2018   Page 1
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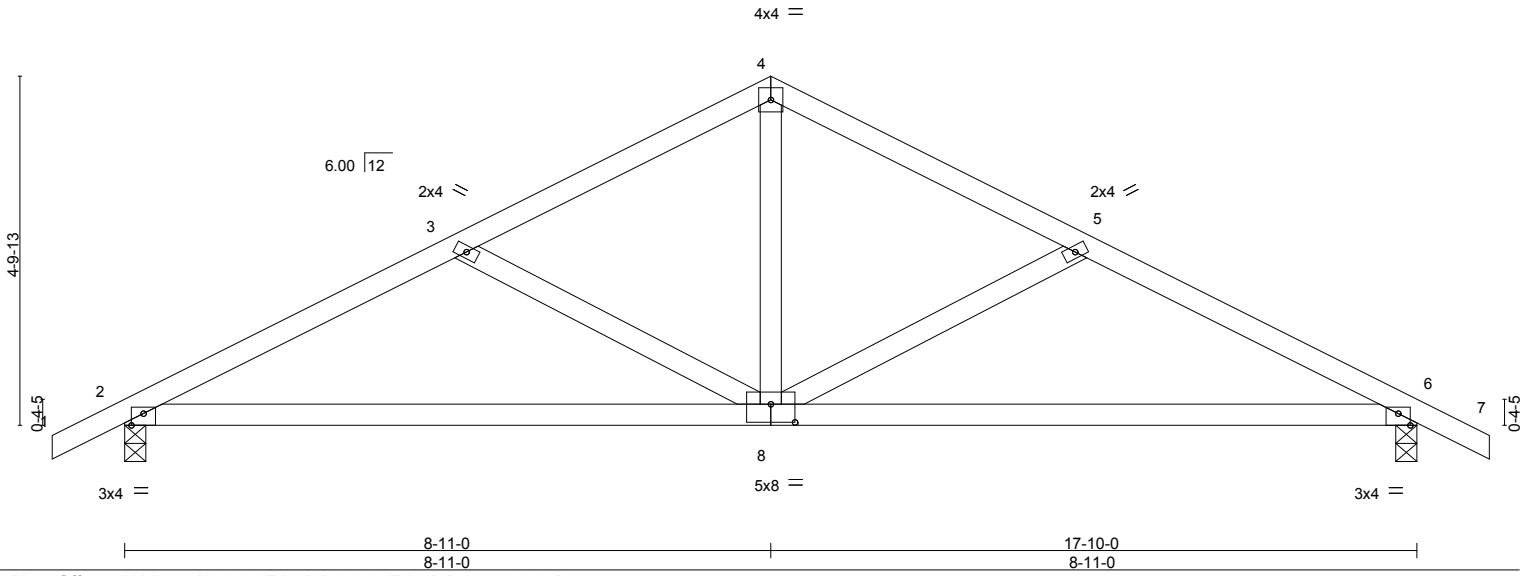

Scale: 3/8"=1'

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

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	0.19	Vert(LL)	-0.08	8-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.63	Vert(TL)	-0.22	8-14	>977	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.18	Horz(TL)	0.03	6	n/a	n/a		
BCDL	10.0	Code IRC2012/TPI2007		Matrix-AS							Weight: 80 lb	FT = 20%

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

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

REACTIONS.   (lb/size)   2=773/0-3-8, 6=773/0-3-8
               Max Horz   2=68(LC 14)
               Max Uplift   2=-84(LC 10), 6=-84(LC 11)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-1121/261, 3-4=-845/193, 4-5=-845/193, 5-6=-1121/261
BOT CHORD   2-8=-152/958, 6-8=-152/958
WEBS   4-8=-56/460, 5-8=-305/152, 3-8=-305/152

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) V(IRC2012)=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed;
    MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces &
    MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
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 with a clearance greater than 6-0-0
    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) 2, 6.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum
    sheetrock be applied directly to the bottom chord.

October 10,2018

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type		Qty	Ply	Lot-72-CLK/2317-Jasper-A2/RF	
18101894	JGE	GABLE		1	1		I34930349
						Job Reference (optional)	

The Building Center Inc.,   Gastonia, NC 28052

8.220 s Sep 24 2018 MiTek Industries, Inc. Wed Oct 10 09:42:14 2018 Page 1
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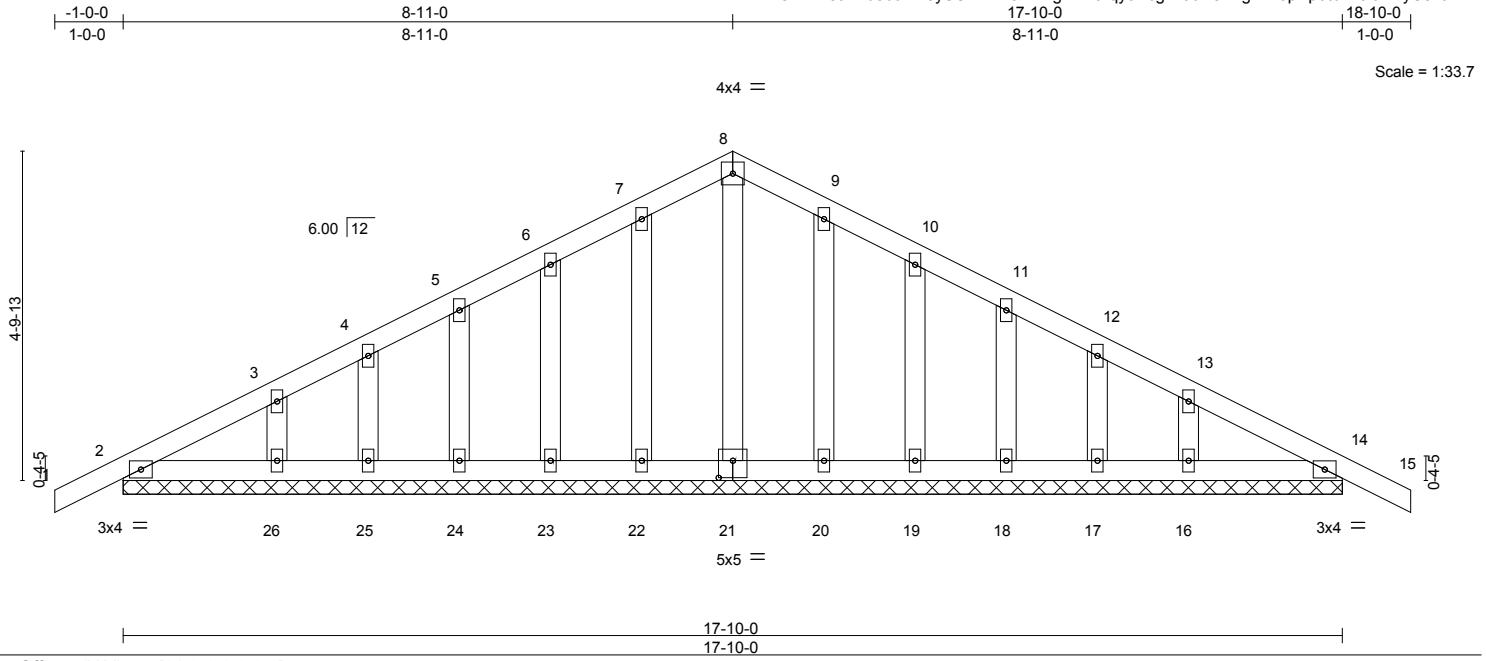
Plate Offsets (X,Y)--   [21:0-2-8,0-3-0]

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	14	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	-0.00	15	n/r	90		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(TL)	0.00	14	n/a	n/a		
BCDL	10.0	Code IRC2012/TPI2007		Matrix-S							Weight: 100 lb	FT = 20%

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

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

REACTIONS.   All bearings 17-10-0.
   (lb) - Max Horz 2=-68(LC 15)
          Max Uplift   All uplift 100 lb or less at joint(s) 2, 22, 23, 24, 25, 26, 20, 19, 18, 14, 17, 16
          Max Grav   All reactions 250 lb or less at joint(s) 2, 21, 22, 23, 24, 25, 26, 20, 19, 18, 14, 17, 16

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 7-10; Vult=115mph (3-second gust) V(IRC2012)=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed;
   MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces &
   MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry
   Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 1-4-0 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 with a clearance greater than 6-0-0
   between the bottom chord and any other members.
9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 22, 23, 24, 25,
   26, 20, 19, 18, 14, 17, and 16. This connection is for uplift only and does not consider lateral forces.

NORTH CAROLINA
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45844
ENGINEER
ANDREW JOHNSON

October 10,2018

Job	Truss	Truss Type	Qty	Ply	Lot-72-CLK/2317-Jasper-A2/RF	
18101894	JGR	COMMON GIRDER	1	**2**		I34930350
					Job Reference (optional)	

The Building Center Inc.,   Gastonia, NC 28052

8.220 s Sep 24 2018 MiTek Industries, Inc. Wed Oct 10 09:42:16 2018 Page 1
ID:G4DIX3tYDbebuPVeySUXPwz3kvX-cKhSmrt5UPoKv2uYleg_k5bM?c?5aYmeMwBuKAyUs2r

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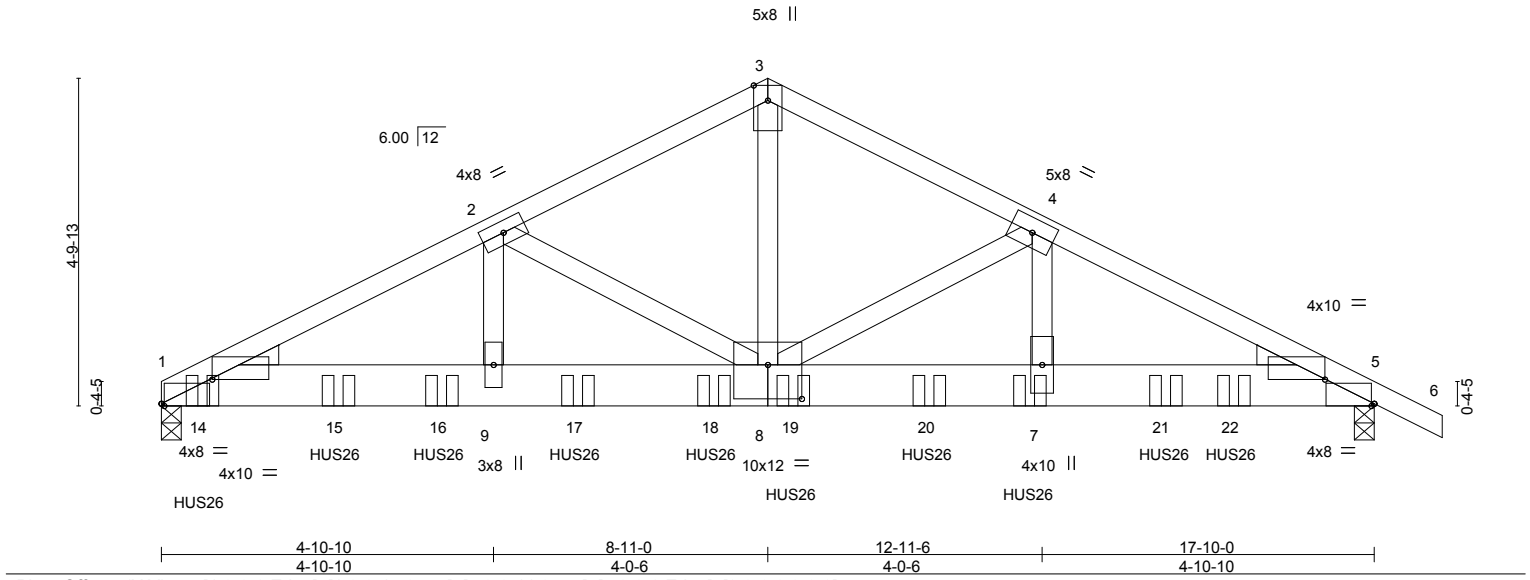
Plate Offsets (X,Y)--   [1:0-0-8,Edge], [1:0-8-15,0-4-4], [5:0-8-11,0-4-4], [5:0-0-8,Edge], [8:0-6-0,0-6-0]

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	0.95	Vert(LL)	-0.16	8-9	>999	360		MT20	137/130
TCDL	10.0	Lumber DOL	1.15	BC	0.81	Vert(TL)	-0.38	8-9	>556	240			
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.95	Horz(TL)	0.10	5	n/a	n/a			
BCDL	10.0	Code IRC2012/TPI2007		Matrix-MSH								Weight: 244 lb	FT = 20%

LUMBER-
TOP CHORD   2x4 SP No.1 *Except*
           3-6: 2x4 SP DSS
BOT CHORD   1-1/2X7-1/4 LP-LSL TC 1.75E
WEBS   2x4 SP No.3 *Except*
           3-8: 2x4 SP No.1
WEDGE
Left: 2x4 SP No.3, Right: 2x4 SP No.3

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 2-1-8 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.   (lb/size)   1=9012/0-3-8, 5=8600/0-3-8
               Max Horz 1=-75(LC 9)
               Max Uplift 1=-785(LC 8), 5=-794(LC 9)
               Max Grav 1=9332(LC 2), 5=8853(LC 2)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   1-2=-15177/1299, 2-3=-10933/967, 3-4=-10933/969, 4-5=-15893/1390
BOT CHORD   1-9=-1164/13556, 8-9=-1164/13556, 7-8=-1179/14207, 5-7=-1179/14207
WEBS   3-8=-794/9492, 4-8=-5149/528, 4-7=-364/4587, 2-8=-4396/430, 2-9=-276/3911

NOTES-
1) 2-ply truss to be connected together with 10d (0.148"x3") nails as follows:
   Top chords connected as follows: 2x4 - 1 row at 0-4-0 oc.
   Bottom chords connected as follows: 1-1/2x7-1/4 - 2 rows staggered at 0-3-0 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 7-10; Vult=115mph (3-second gust) V(IRC2012)=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; Lumber DOL=1.33 plate grip DOL=1.33
5) The solid section of the plate is required to be placed over the splice line at joint(s) 8.
6) Plate(s) at joint(s) 8 checked for a plus or minus 1 degree rotation about its center.
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 with a clearance greater than 6-0-0 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) except (jt=lb) 1=785, 5=794.
10) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-7-4 from the left end to 15-9-4 to connect truss(es) to front face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S)   Standard

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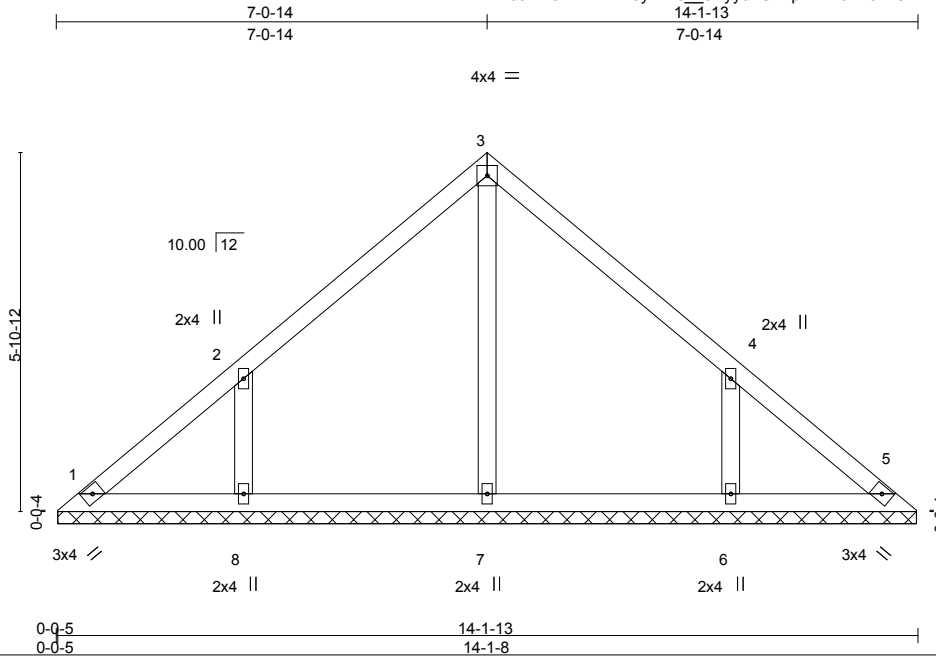
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot-72-CLK/2317-Jasper-A2/RF	
18101894	JGR	COMMON GIRDER	1	**2**		I34930350
					Job Reference (optional)	

The Building Center Inc.,   Gastonia, NC 28052

8.220 s Sep 24 2018 MiTek Industries, Inc. Wed Oct 10 09:42:16 2018 Page 2
ID:G4DIX3tYDbebuPVeySUXPwz3kvX-cKhSmrt5UPoKv2uYleg_k5bM?c?5aYmeMwBuKAyUs2r

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

    Uniform Loads (plf)

        Vert: 1-3=-60, 3-6=-60, 1-5=-20

    Concentrated Loads (lb)

        Vert: 7=-1641(F) 14=-1577(F) 15=-1572(F) 16=-1572(F) 17=-1572(F) 18=-1641(F) 19=-1641(F) 20=-1641(F) 21=-1641(F) 22=-1641(F)

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Job	Truss	Truss Type	Qty	Ply	Lot-72-CLK/2317-Jasper-A2/RF	
18101894	V1	Valley Truss	1	1		I34930351
					Job Reference (optional)	

The Building Center Inc.,   Gastonia, NC 28052

8.220 s Sep 24 2018 MiTek Industries, Inc. Wed Oct 10 09:42:17 2018 Page 1
ID:X0u1ROVrkWHW0yPTrc__eByyo1C-5WFqzAujEjwBXCTkIMBDHI8iC0U9JCwobaxSscyUs2q

8-3-5

16-6-10

8-3-5

8-3-5

4x4

Scale = 1:46.1

10.00 │12

2x4 ||

2x4 ||

6-10-12

2x4 ||

2x4 ||

0-0-4

0-0-4

3x4 //

3x4 \\

2x4 ||

5x5 =

2x4 ||

0-0-5

16-6-10

0-0-5

16-6-5
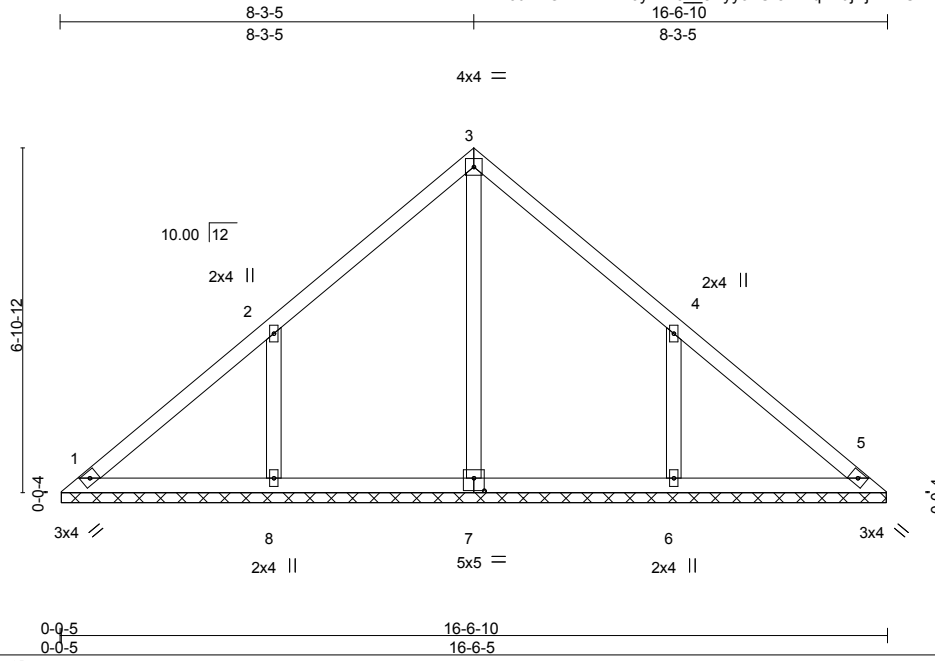
Plate Offsets (X,Y)--   [7:0-2-8,0-3-0]

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	0.22	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2012/TPI2007		Matrix-S							Weight: 73 lb	FT = 20%

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

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

REACTIONS.   All bearings 16-6-0.
    (lb) - Max Horz 1=-133(LC 6)
          Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-161(LC 10), 6=-161(LC 11)
          Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=358(LC 20), 8=450(LC 17), 6=450(LC 18)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS   2-8=-297/198, 4-6=-296/198

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) V(IRC2012)=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed;
   MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces &
   MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
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 with a clearance greater than 6-0-0
   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) 1 except (jt=lb)
   8=161, 6=161.

NORTH CAROLINA
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SEAL
45844
ENGINEER
ANDREW JOHNSON

October 10,2018

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LOADING (psf)
TCLL 20.0
TCDL 10.0
BCLL 0.0 *
BCDL 10.0

SPACING- 2-0-0
Plate Grip DOL 1.15
Lumber DOL 1.15
Rep Stress Incr YES
Code IRC2012/TPI2007

CSI.
TC 0.18
BC 0.12
WB 0.10
Matrix-S

DEFL. | in | (loc) | l/defl | L/d
Vert(LL) | n/a | - | n/a | 999
Vert(TL) | n/a | - | n/a | 999
Horz(TL) | 0.00 | 5 | n/a | n/a

PLATES **GRIP**
MT20 244/190

Weight: 61 lb   FT = 20%

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

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

REACTIONS.   All bearings 14-1-3.
(lb) - Max Horz 1=112(LC 7)
        Max Uplift   All uplift 100 lb or less at joint(s) 1 except 8=-139(LC 10), 6=-139(LC 11)
        Max Grav   All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=334(LC 17), 6=334(LC 18)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS   2-8=-258/174, 4-6=-258/174

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) V(IRC2012)=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed;
   MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces &
   MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
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 with a clearance greater than 6-0-0
   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) 1 except (jt=lb)
   8=139, 6=139.

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Job	Truss	Truss Type	Qty	Ply	Lot-72-CLK/2317-Jasper-A2/RF	
18101894	V3	Valley Truss	1	1		I34930353
					Job Reference (optional)	

The Building Center Inc.,   Gastonia, NC 28052   8.220 s Sep 24 2018 MiTek Industries, Inc. Wed Oct 10 09:42:18 2018 Page 1
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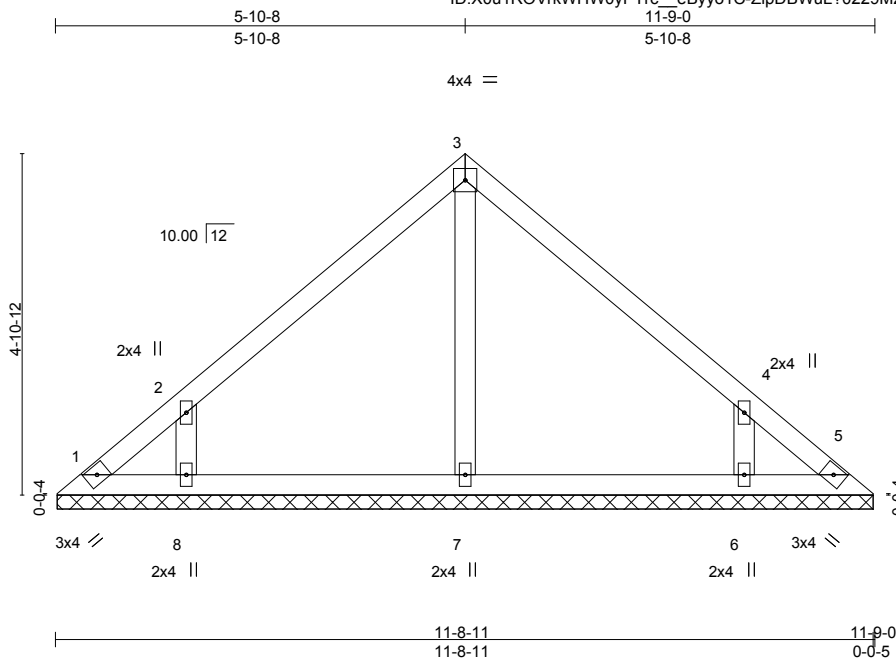
5-10-8   11-9-0
5-10-8   5-10-8

4x4 ═

Scale = 1:33.0

11-8-11   11-9-0
11-8-11   0-0-5

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	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2012/TPI2007		Matrix-S							Weight: 48 lb	FT = 20%

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

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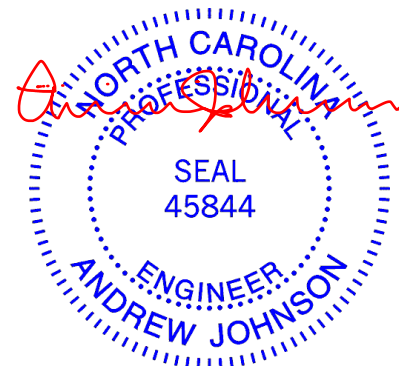TOP CHORD   Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.   All bearings 11-8-6.
    (lb) - Max Horz   1=-92(LC 6)
          Max Uplift   All uplift 100 lb or less at joint(s) 1, 5 except 8=-133(LC 10), 6=-132(LC 11)
          Max Grav   All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=309(LC 17), 6=309(LC 18)

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 7-10; Vult=115mph (3-second gust) V(IRC2012)=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed;
   MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces &
   MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
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 with a clearance greater than 6-0-0
   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) 1, 5 except (jt=lb)
   8=133, 6=132.

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4-8-2 | 9-4-3
4-8-2 | 4-8-2

4x4 ═

2

10.00 |12

3-10-12

1   4   3

0-0-4   2x4 ‖   0-0-4

2x4 ⁄⁄   2x4 ＼

4
2x4 ‖

0-0-5 | 9-4-3
0-0-5 | 9-3-14
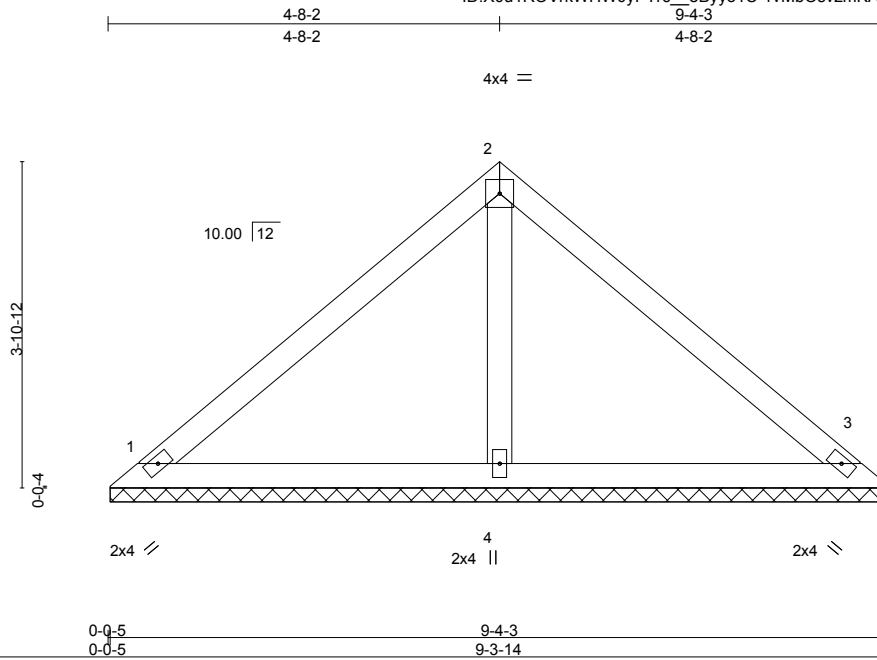
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LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2012/TPI2007		Matrix-S							Weight: 35 lb	FT = 20%

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

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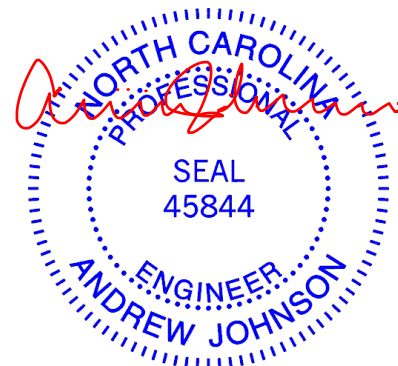TOP CHORD   Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size)   1=181/9-3-10, 3=181/9-3-10, 4=322/9-3-10
Max Horz 1=72(LC 7)
Max Uplift 1=-23(LC 11), 3=-32(LC 11), 4=-3(LC 10)

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 7-10; Vult=115mph (3-second gust) V(IRC2012)=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed;
   MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces &
   MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
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 with a clearance greater than 6-0-0
   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) 1, 3, 4.

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October 10,2018

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8.220 s Sep 24 2018 MiTek Industries, Inc. Wed Oct 10 09:42:20 2018 Page 1
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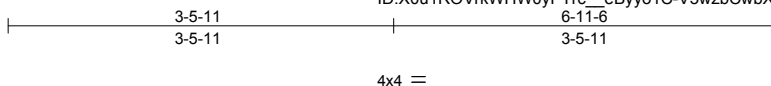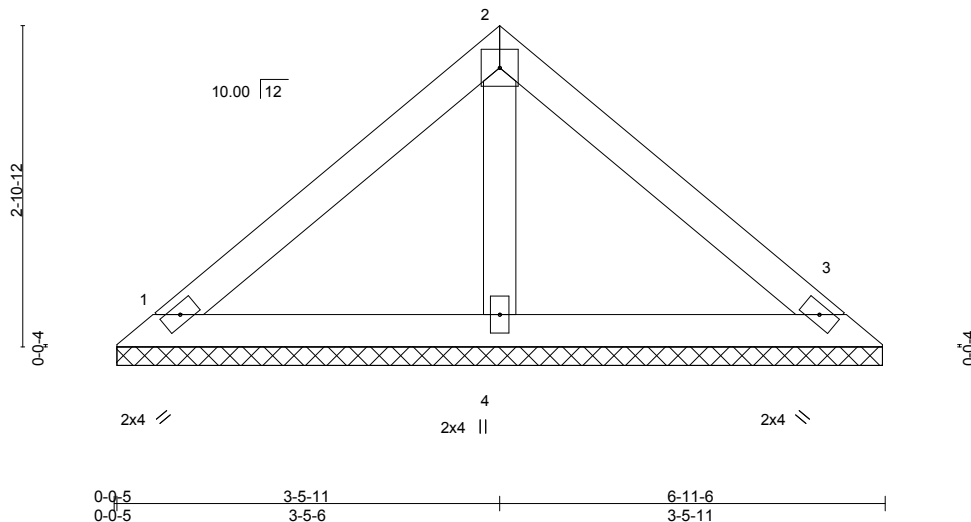
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2012/TPI2007		Matrix-P							Weight: 26 lb	FT = 20%

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

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

REACTIONS. (lb/size)   1=141/6-10-13, 3=141/6-10-13, 4=210/6-10-13
Max Horz 1=52(LC 7)
Max Uplift 1=-24(LC 11), 3=-30(LC 11)

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 7-10; Vult=115mph (3-second gust) V(IRC2012)=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed;
   MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces &
   MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
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 with a clearance greater than 6-0-0
   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) 1, 3.

October 10,2018

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Job	Truss	Truss Type	Qty	Ply	Lot-72-CLK/2317-Jasper-A2/RF	
18101894	V6	Valley Truss	1	1		I34930356
					Job Reference (optional)	

The Building Center Inc.,   Gastonia, NC 28052   8.220 s Sep 24 2018 MiTek Industries, Inc. Wed Oct 10 09:42:21 2018 Page 1
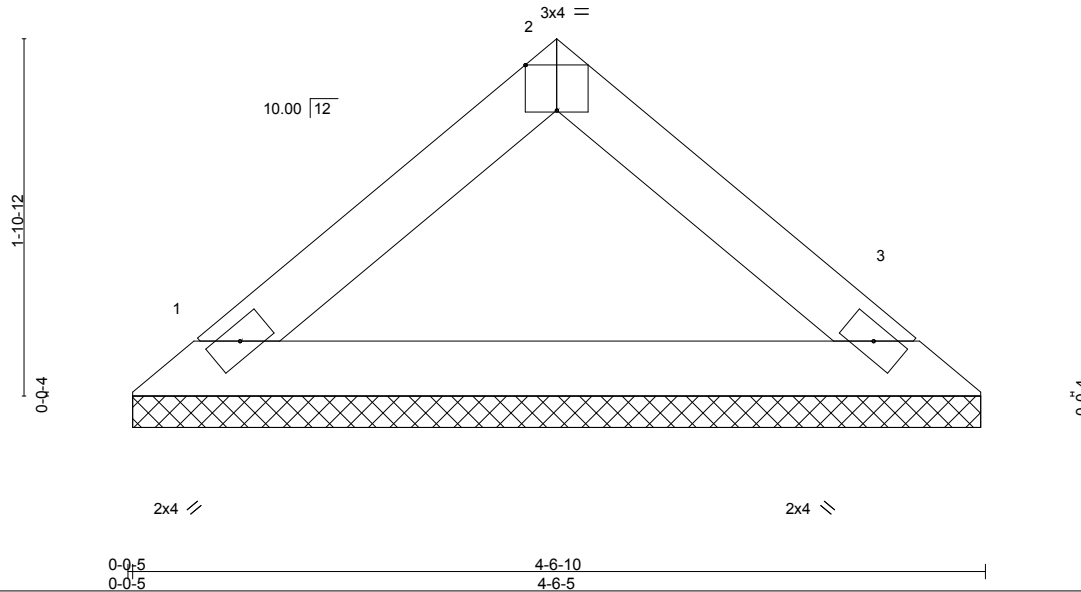ID:X0u1ROVrkWHW0yPTrc__eByyo1C-zHULpYxDIxQc0pmWXCG9R8IRfdsIF1qNWCvf?NyUs2m
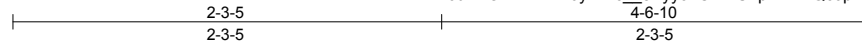
Plate Offsets (X,Y)--   [2:0-2-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2012/TPI2007		Matrix-P							Weight: 14 lb	FT = 20%

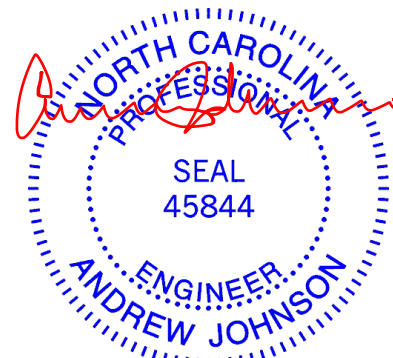**LUMBER-**
TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.2

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 4-6-10 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.   (lb/size)   1=150/4-6-0, 3=150/4-6-0
           Max Horz 1=32(LC 9)
           Max Uplift 1=-11(LC 10), 3=-11(LC 11)

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 7-10; Vult=115mph (3-second gust) V(IRC2012)=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed;
    MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces &
    MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
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 with a clearance greater than 6-0-0
    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) 1, 3.

October 10,2018

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

The Building Center Inc.,   Gastonia, NC 28052

8.220 s Sep 24 2018 MiTek Industries, Inc. Wed Oct 10 09:42:21 2018 Page 1
ID:3pLfE2VCzC9fOoqHIuSl5zyyo1D-zHULpYxDIxQc0pmWXCG9R8Il1docF0INWCvf?NyUs2m

7-0-8   14-1-0
7-0-8   7-0-8

Scale = 1:25.3

4x6

6.00 ⌐12

3-6-4

3x4

2x4

3x4

0-0-8   14-1-0
0-0-8   14-0-8
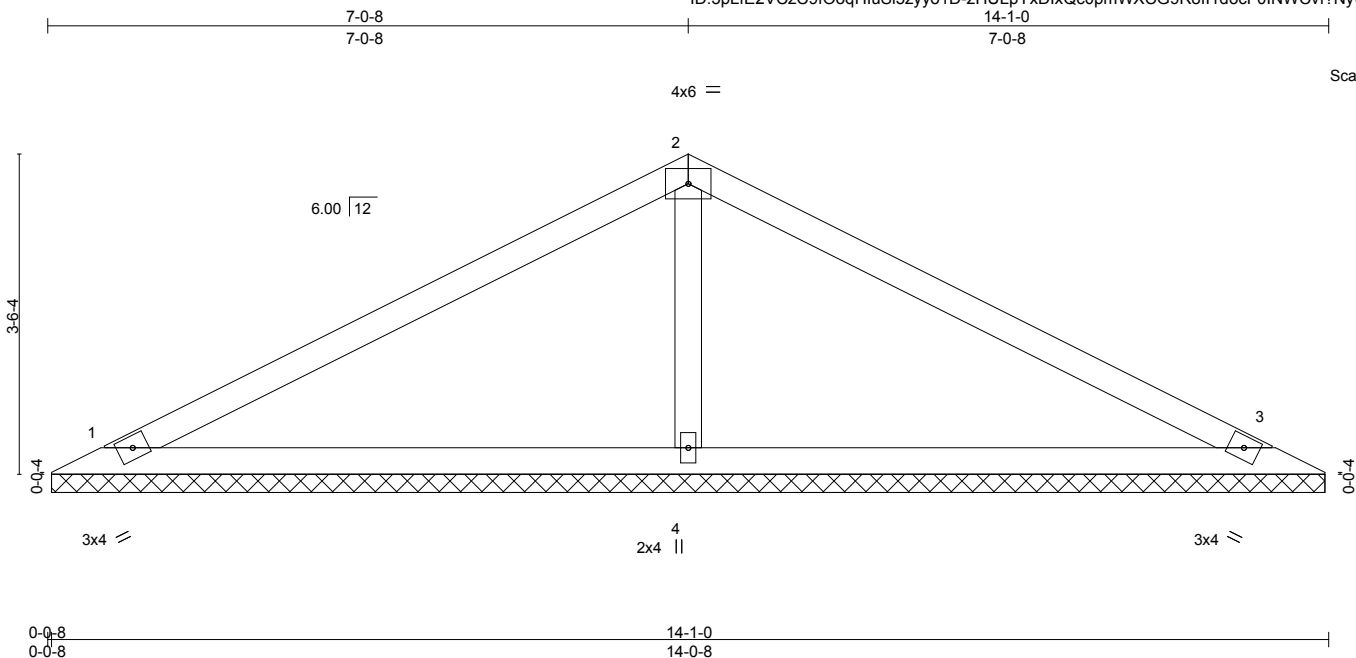
LOADING (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC	0.41	Vert(TL)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(TL)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2012/TPI2007		Matrix-S							Weight: 46 lb	FT = 20%

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

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

REACTIONS. (lb/size)   1=234/14-0-0, 3=234/14-0-0, 4=558/14-0-0
           Max Horz 1=-44(LC 15)
           Max Uplift 1=-38(LC 10), 3=-46(LC 11), 4=-19(LC 10)
           Max Grav 1=236(LC 21), 3=236(LC 22), 4=558(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS   2-4=-370/144

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) V(IRC2012)=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed;
   MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces &
   MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
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 with a clearance greater than 6-0-0
   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) 1, 3.
7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 4. This
   connection is for uplift only and does not consider lateral forces.

NORTH CAROLINA
PROFESSIONAL
SEAL
45844
ENGINEER
ANDREW JOHNSON

October 10,2018

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8.220 s Sep 24 2018 MiTek Industries, Inc. Wed Oct 10 09:42:22 2018 Page 1
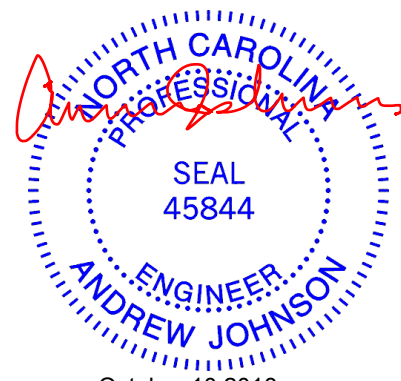ID:3pLfE2VCzC9fOoqHIuSl5zyyo1D-RU2j0uyr3FYTdzLi5vnO_MrY51BB_UEXlseDXpyUs2l
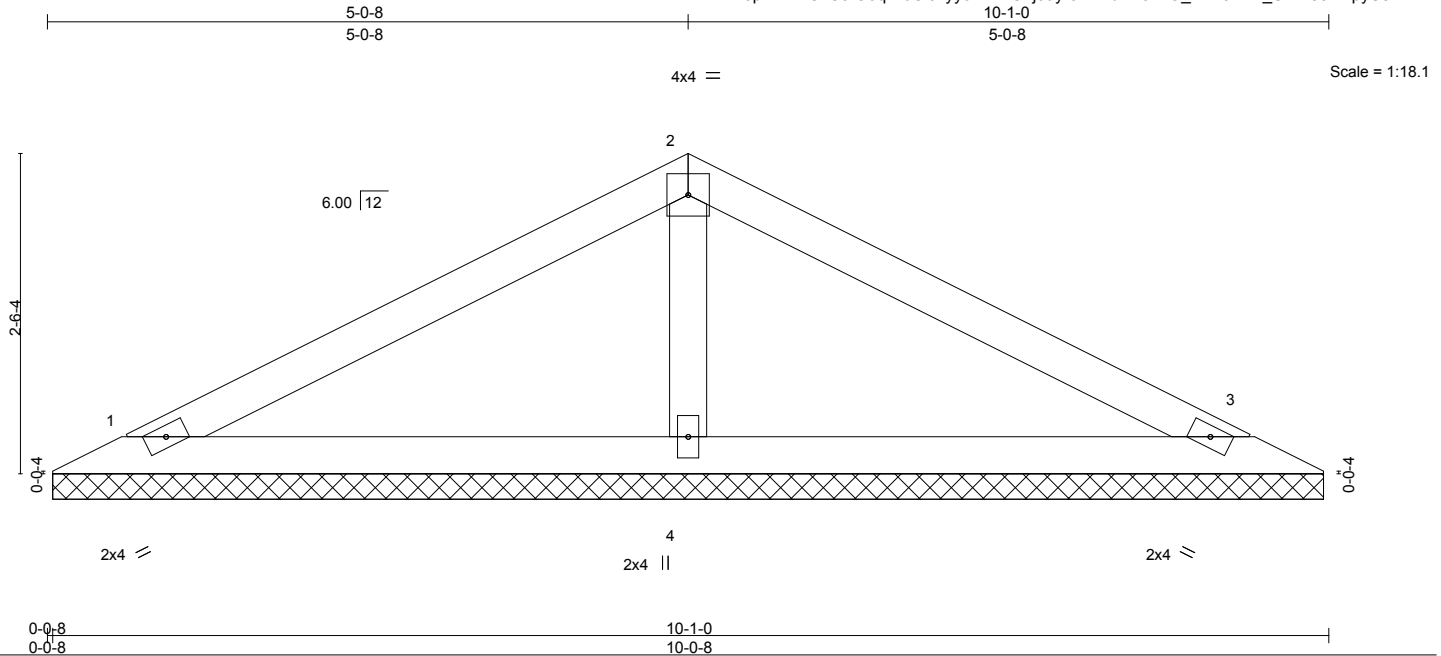
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2012/TPI2007		Matrix-S							Weight: 32 lb	FT = 20%

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

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

REACTIONS. (lb/size)   1=161/10-0-0, 3=161/10-0-0, 4=384/10-0-0
Max Horz 1=30(LC 14)
Max Uplift 1=-26(LC 10), 3=-32(LC 11), 4=-13(LC 10)
Max Grav 1=163(LC 21), 3=163(LC 22), 4=384(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS   2-4=-255/113

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) V(IRC2012)=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed;
   MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces &
   MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
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 with a clearance greater than 6-0-0
   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) 1, 3.
7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 4. This
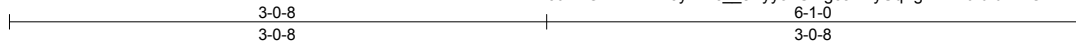   connection is for uplift only and does not consider lateral forces.

October 10,2018

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Edenton, NC 27932

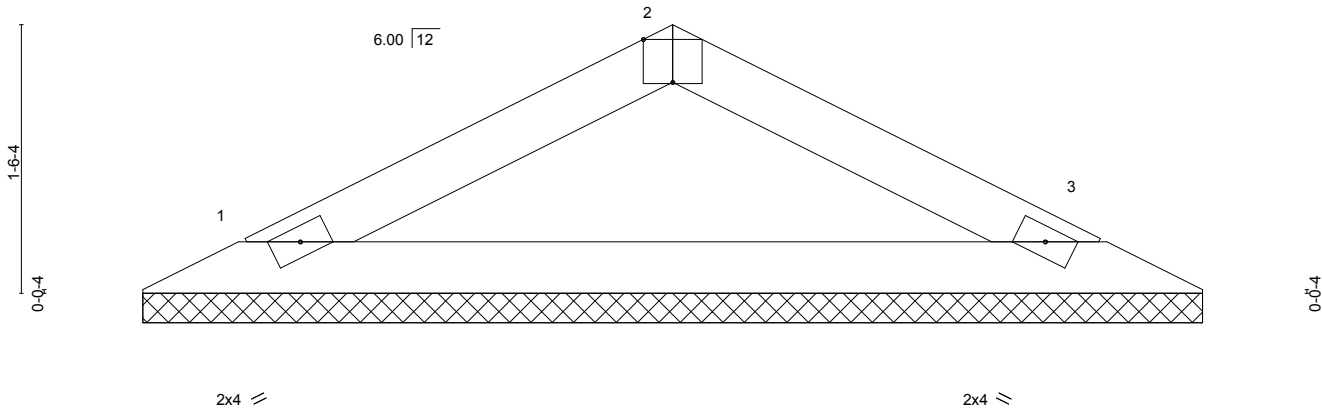| Job	Truss	Truss Type	Qty	Ply	Lot-72-CLK/2317-Jasper-A2/RF	
18101894	VJ3	Valley Truss	1	1		I34930359
					Job Reference (optional)	

The Building Center Inc., Gastonia, NC 28052   8.220 s Sep 24 2018 MiTek Industries, Inc. Wed Oct 10 09:42:23 2018 Page 1
ID:X0u1ROVrkWHW0yPTrc__eByyo1C-vgc5EEyUqZgKF7wufdIdWZOmVRVojxKgzWOm4GyUs2k
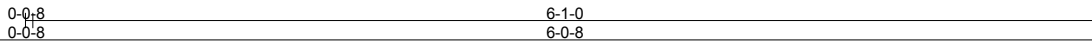
3-0-8

6-1-0

3-0-8

3-0-8

3x4 =

Scale = 1:13.0

6.00 ⌐12

1-6-4

0-0-4

1

2

3

0-0-4

2x4 ⫽

2x4 ⫽

0-0-8

6-1-0

0-0-8

6-0-8

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2012/TPI2007		Matrix-P							Weight: 17 lb	FT = 20%

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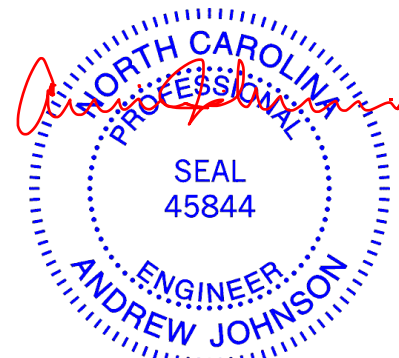TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP No.2

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. (lb/size)   1=193/6-0-0, 3=193/6-0-0
Max Horz 1=17(LC 14)
Max Uplift 1=-18(LC 10), 3=-18(LC 11)

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 7-10; Vult=115mph (3-second gust) V(IRC2012)=91mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed;
   MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces &
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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 with a clearance greater than 6-0-0
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6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

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ENGINEERING BY
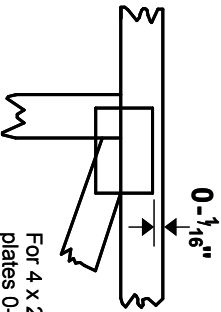TRENCO
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Symbols

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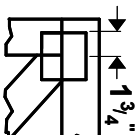
Center plate on joint unless x, y offsets are indicated.
Dimensions are in ft-in-sixteenths.
Apply plates to both sides of truss and fully embed teeth.

1 3/4"

0- 1/16"

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.
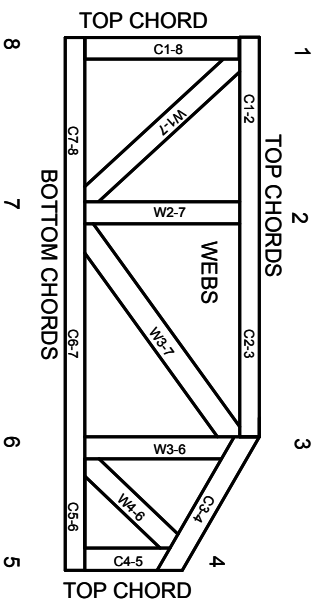
BEARING

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

Numbering System

6-4-8 dimensions shown in ft-in-sixteenths
(Drawings not to scale)

```
        TOP CHORD
1              C1-8
                        C1-2
2   TOP CHORDS                 C2-3
              WEBS
3                              C2-4
8       C7-8  W2-7
7              C6-7   W3-7
6              W3-6   W4-6
5       C5-6                C2-4
4              C4-5
        TOP CHORD
      BOTTOM CHORDS
8  7  6  5
```

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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⚠ 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 T or 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.

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