ENGINEERING BY TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 25356
   Banah Homes/Craig

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

Pages or sheets covered by this seal: I42485417 thru I42485431

My license renewal date for the state of North Carolina is   December 31, 2020.

North Carolina COA: C-0844

NORTH CAROLINA
PROFESSIONAL
SEAL
044925
SCOTT M. SEVIER
ENGINEER

August 19,2020

Sevier, Scott

IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO.   Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.
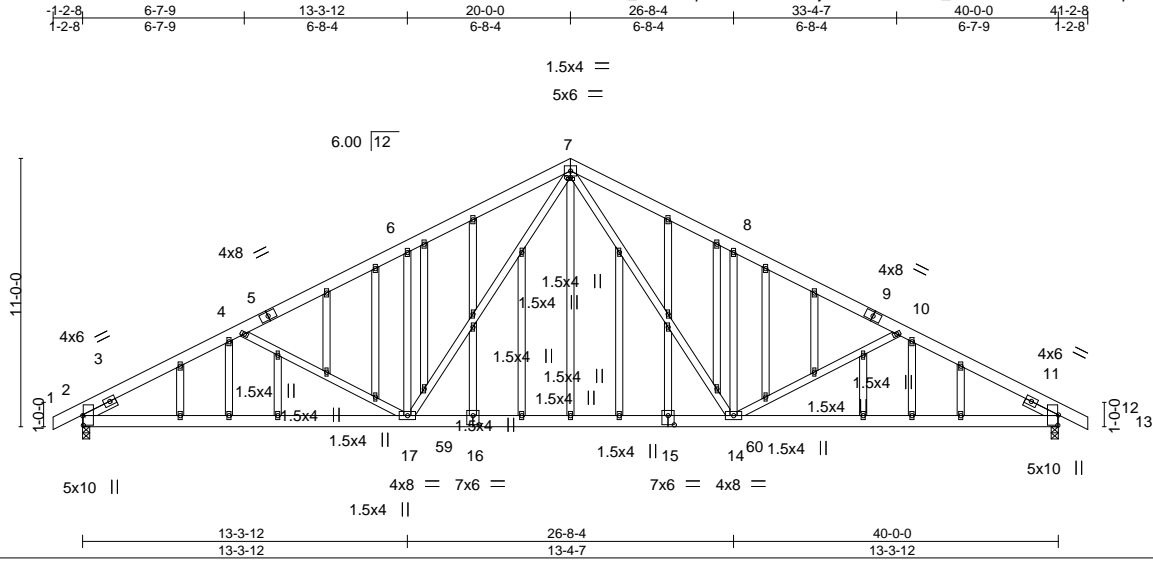
C&R Building Supply, AUTRYVILLE, .

7.640 s Aug 16 2017 MiTek Industries, Inc. Wed Aug 19 10:27:44 2020 Page 1
ID:ocmhZ_Q8k?Rqcz5MumD?vezbjhA-_W2EGML12ck2rcUUjiLMHPzx8ygzTed0F79rTQymJMD

Dimensions (top): -1-2-8 / 6-7-9 / 13-3-12 / 20-0-0 / 26-8-4 / 33-4-7 / 40-0-0 / 41-2-8
1-2-8 / 6-7-9 / 6-8-4 / 6-8-4 / 6-8-4 / 6-8-4 / 6-7-9 / 1-2-8

Scale = 1:79.4

Dimensions (bottom): 13-3-12 / 26-8-4 / 40-0-0
13-3-12 / 13-4-7 / 13-3-12

Plate Offsets (X,Y)-- [2:0-4-12,0-0-5], [7:0-2-0,0-0-0], [12:0-5-2,0-0-5], [15:0-3-0,0-4-8], [16:0-3-0,0-4-8]

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	0.54	Vert(LL)	-0.49	14-17	>973	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.71	14-17	>680	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.43	Horz(CT)	0.08	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		(Matrix-S)		Wind(LL)	0.09	14-17	>999	240	Weight: 414 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 SP No.1
BOT CHORD   2x6 SP No.1
WEBS   2x4 SP No.3 *Except*
             7-17,7-14: 2x4 SP No.2
OTHERS   2x4 SP No.3
SLIDER   Left 2x4 SP No.3 1-6-0, Right 2x4 SP No.3 1-6-0

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

REACTIONS. (lb/size)   2=1672/0-3-8, 12=1673/0-3-8
Max Horz 2=-199(LC 6)
Max Uplift 2=-74(LC 8), 12=-74(LC 8)
Max Grav 2=1711(LC 13), 12=1711(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-1180/0, 3-4=-2785/136, 4-5=-2523/77, 5-6=-2477/108, 6-7=-2588/212,
             7-8=-2588/212, 8-9=-2477/108, 9-10=-2523/77, 10-11=-2786/136, 11-12=-1180/0
BOT CHORD   2-17=-30/2523, 17-59=0/1673, 16-59=0/1673, 15-16=0/1673, 15-60=0/1673, 14-60=0/1673,
             12-14=-30/2374
WEBS   6-17=-458/153, 8-14=-458/153, 4-17=-308/113, 7-17=-52/1224, 7-14=-52/1223,
             10-14=-308/113

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=40ft; eave=5ft; Cat. II; Exp B; enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
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 studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
8) One H2.5 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 12. This connection is for uplift only and does not consider lateral forces.
9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) 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.

North Carolina Professional Engineer Seal - Scott M. Sevier - SEAL 044925

August 19,2020

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

Scale = 1:94.5

Plate Offsets (X,Y)--   [2:0-4-12,0-0-5], [7:0-2-0,0-0-0], [12:0-5-2,0-0-5], [15:0-3-0,0-4-8], [16:0-3-0,0-4-8]

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	0.54	Vert(LL)	-0.49	14-17	>973	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.71	14-17	>680	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.43	Horz(CT)	0.08	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		(Matrix-S)		Wind(LL)	0.09	14-17	>999	240	Weight: 414 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 SP No.1
BOT CHORD   2x6 SP No.1
WEBS   2x4 SP No.3 *Except*
             7-17,7-14: 2x4 SP No.2
OTHERS   2x4 SP No.3
SLIDER   Left 2x4 SP No.3 1-6-0, Right 2x4 SP No.3 1-6-0

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

REACTIONS.   (size)   2=0-3-8, 12=0-3-8
                  Max Horz 2=-199(LC 6)
                  Max Uplift 2=-74(LC 8), 12=-74(LC 8)
                  Max Grav 2=1711(LC 13), 12=1711(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-4=-2785/136, 4-6=-2523/108, 6-7=-2588/212, 7-8=-2588/212, 8-10=-2523/108,
             10-12=-2786/136
BOT CHORD   2-17=-30/2523, 14-17=0/1673, 12-14=-30/2374
WEBS   6-17=-458/153, 8-14=-458/153, 4-17=-308/113, 7-17=-52/1224, 7-14=-52/1223,
             10-14=-308/113

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=40ft; eave=5ft; Cat.
   II; Exp B; enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
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 studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
8) One H2.5 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 12. This connection is for uplift only and does not consider lateral forces.
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.

NORTH CAROLINA
PROFESSIONAL
Scott Sevier
SEAL
044925
ENGINEER
SCOTT M. SEVIER

August 19,2020

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

Job	Truss	Truss Type	Qty	Ply	Banah Homes/Craig	
25356	GE02	GABLE	1	1		I42485419
					Job Reference (optional)	

C&R Building Supply, AUTRYVILLE

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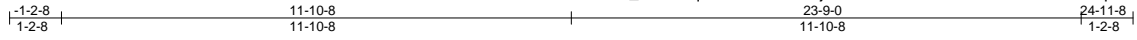
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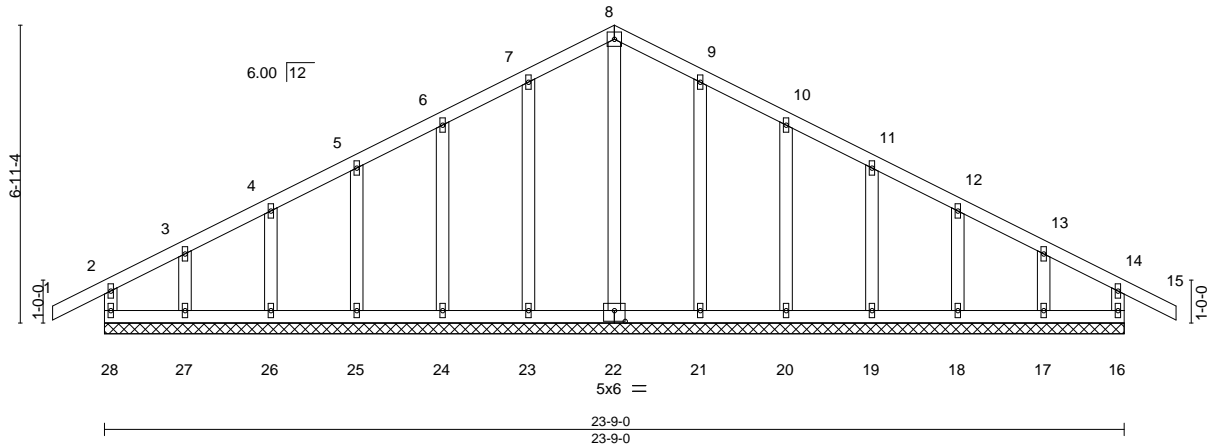
Plate Offsets (X,Y)--   [22:0-3-0,0-3-0]

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	0.09	Vert(LL)	-0.00	15	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.01	15	n/r	120		
BCLL 0.0 *	Rep Stress Incr	NO	WB	0.10	Horz(CT)	-0.00	16	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		(Matrix)							Weight: 141 lb	FT = 20%

LUMBER-
TOP CHORD   2x4 SP 2400F 2.0E
BOT CHORD   2x4 SP 2400F 2.0E
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.
BOT CHORD   Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.   All bearings 23-9-0.
(lb) - Max Horz 28=-132(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 28, 16, 23, 24, 25, 26, 27, 21, 20, 19, 18, 17
Max Grav   All reactions 250 lb or less at joint(s) 28, 16, 22, 23, 24, 25, 26, 27, 21, 20, 19, 18, 17

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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
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 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
10) N/A

11) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

SEAL
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SCOTT M. SEVIER

August 19,2020

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Banah Homes/Craig	
25356	GE03	GABLE	1	1		I42485420
					Job Reference (optional)	

C&R Building Supply,   AUTRYVILLE   7.640 s Aug 16 2017 MiTek Industries, Inc. Wed Aug 19 09:10:59 2020 Page 1
ID:ocmhZ_Q8k?Rqcz5MumD?vezbjhA-YR97YPevZvRUoO0ZvkRGH3l3XeAk02ZBKB8fLrymKUA

-1-2-8   7-5-10   14-11-4   16-1-12
1-2-8   7-5-10   7-5-10   1-2-8

4x4 =

Scale = 1:36.3

14-11-4
14-11-4
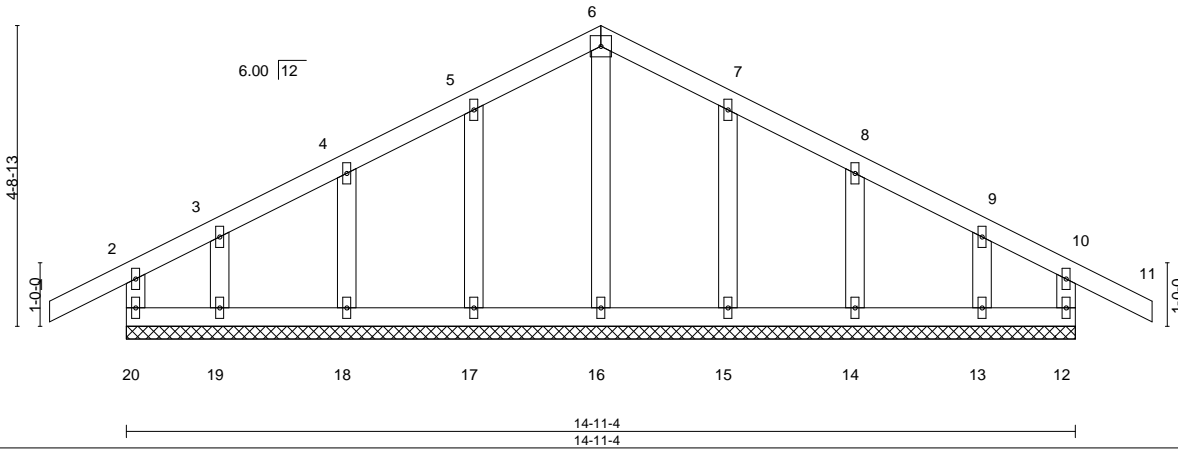
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	-0.01	11	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.01	11	n/r	120		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.05	Horz(CT)	-0.00	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		(Matrix)							Weight: 79 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 10-0-0 oc purlins, except end verticals.
BOT CHORD   Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.   All bearings 14-11-4.
     (lb) -   Max Horz   20=-95(LC 6)
          Max Uplift   All uplift 100 lb or less at joint(s) 20, 12, 17, 18, 19, 15, 14, 13
          Max Grav   All reactions 250 lb or less at joint(s) 20, 12, 16, 17, 18, 19, 15, 14, 13

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=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
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 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
10) N/A
11) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

August 19,2020

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TRENCO
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Job	Truss	Truss Type	Qty	Ply	Banah Homes/Craig	
25356	GE04	GABLE	1	1		I42485421
					Job Reference (optional)	

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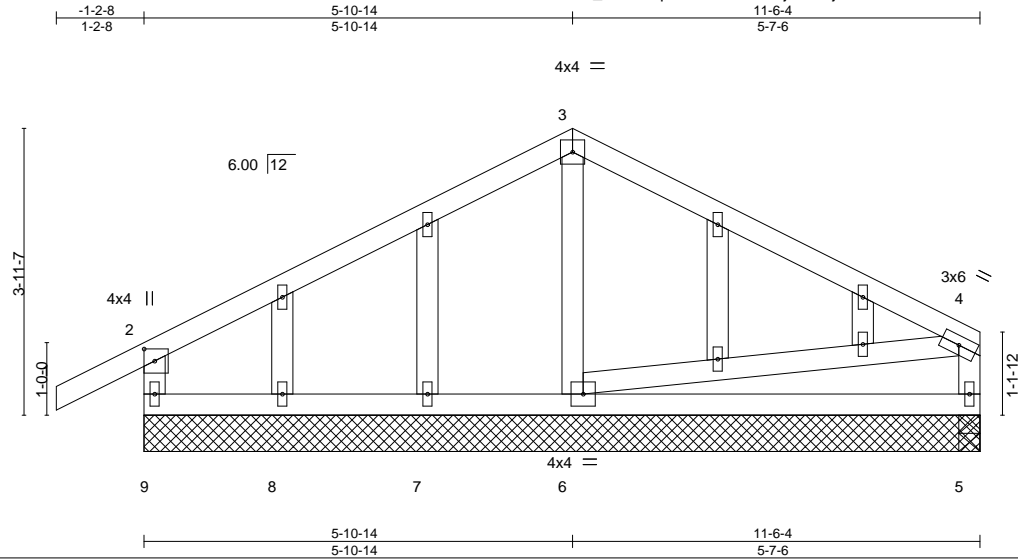
Scale: 3/8"=1'

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

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	0.48	Vert(LL)	-0.02	5-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.04	5-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		(Matrix)		Wind(LL)	-0.00	6	>999	240	Weight: 63 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 6-0-0 oc purlins, except
             end verticals.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.   All bearings 11-6-4.
   (lb) - Max Horz 9=83(LC 7)
           Max Uplift All uplift 100 lb or less at joint(s) 5 except 9=-109(LC 8)
           Max Grav All reactions 250 lb or less at joint(s) 7, 8 except 9=348(LC 17), 5=282(LC 1), 5=282(LC 1), 6=307(LC
                     14)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-9=-343/124

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat.
   II; Exp B; enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60
   plate grip DOL=1.60
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 1.5x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between
   the bottom chord and any other members.
8) N/A

9) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Banah Homes/Craig	
25356	J01	JACK	12	1		I42485422
					Job Reference (optional)	

C&R Building Supply,   AUTRYVILLE   7.640 s Aug 16 2017 MiTek Industries, Inc. Wed Aug 19 09:11:01 2020 Page 1
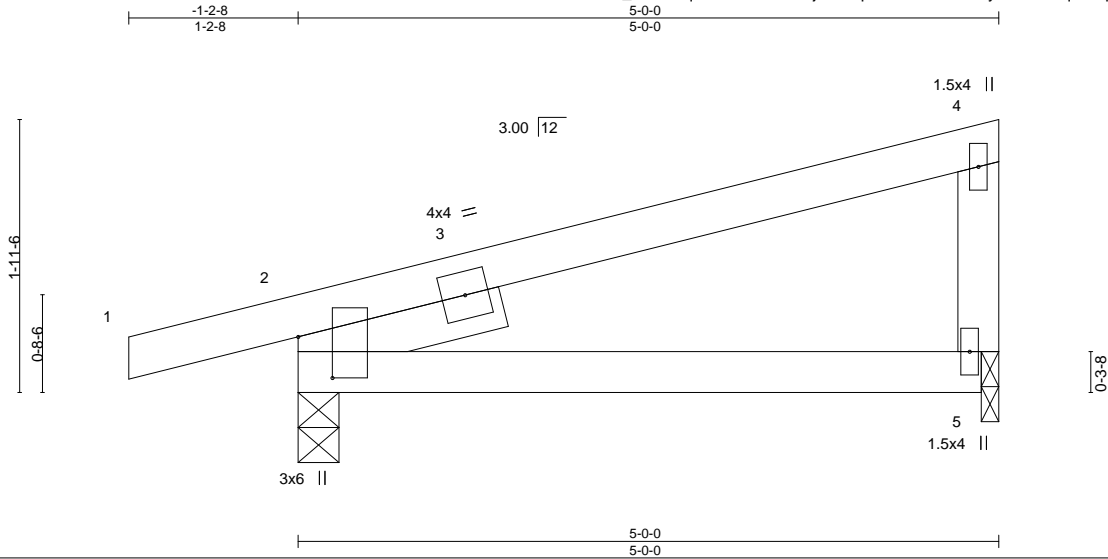ID:ocmhZ_Q8k?Rqcz5MumD?vezbjhA-UqHuz5fA5WhC1i9y19UkMUqNYSp3UySUnVdmPjymKU8

Scale = 1:16.4

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

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	5-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.05	5-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		(Matrix-S)		Wind(LL)	0.02	5-8	>999	240	Weight: 21 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.3 1-6-0

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

REACTIONS.   (size)   2=0-3-8, 5=0-1-8
Max Horz 2=45(LC 4)
Max Uplift 2=-40(LC 4), 5=-11(LC 4)
Max Grav 2=276(LC 1), 5=185(LC 1)

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

NOTES-
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
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) 5 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) 5.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 5.
7) 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.

SEAL
044925
SCOTT M. SEVIER

August 19,2020

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TRENCO
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Banah Homes/Craig	
25356	T01	FAN	2	1		I42485423
					Job Reference (optional)	

C&R Building Supply, AUTRYVILLE

7.640 s Aug 16 2017 MiTek Industries, Inc. Wed Aug 19 09:11:02 2020 Page 1
ID:ocmhZ_Q8k?Rqcz5MumD?vezbjhA-y0rGBRgosqp3fsk8as?zvhNVes1SDJLe09NJyAymKU7

Scale = 1:93.0

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

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	0.47	Vert(LL)	-0.49	14-17	>973	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.71	14-17	>680	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.08	12	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		(Matrix-S)		Wind(LL)	0.09	14-17	>999	240	Weight: 288 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 SP No.1
BOT CHORD   2x6 SP No.1
WEBS   2x4 SP No.3 *Except*
             7-17,7-14: 2x4 SP No.2
SLIDER   Left 2x4 SP No.3 1-6-0, Right 2x4 SP No.3 1-6-0

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

REACTIONS.   (size)   2=0-3-8, 12=0-3-8
             Max Horz 2=-199(LC 6)
             Max Uplift 2=-74(LC 8), 12=-74(LC 8)
             Max Grav 2=1711(LC 13), 12=1711(LC 14)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-4=-2785/136, 4-6=-2523/108, 6-7=-2588/212, 7-8=-2588/212, 8-10=-2523/108,
             10-12=-2786/136
BOT CHORD   2-17=-30/2523, 14-17=0/1673, 12-14=-30/2374
WEBS   6-17=-458/153, 8-14=-458/153, 4-17=-308/113, 7-17=-52/1224, 7-14=-52/1223,
             10-14=-308/113

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=40ft; eave=5ft; Cat.
   II; Exp B; enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60
   plate grip DOL=1.60
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) One H2.5 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 12. This
   connection is for uplift only and does not consider lateral forces.
6) 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.

August 19,2020

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

Job	Truss	Truss Type	Qty	Ply	Banah Homes/Craig	
25356	T01A	FAN	20	1		I42485424
					Job Reference (optional)	

C&R Building Supply,   AUTRYVILLE

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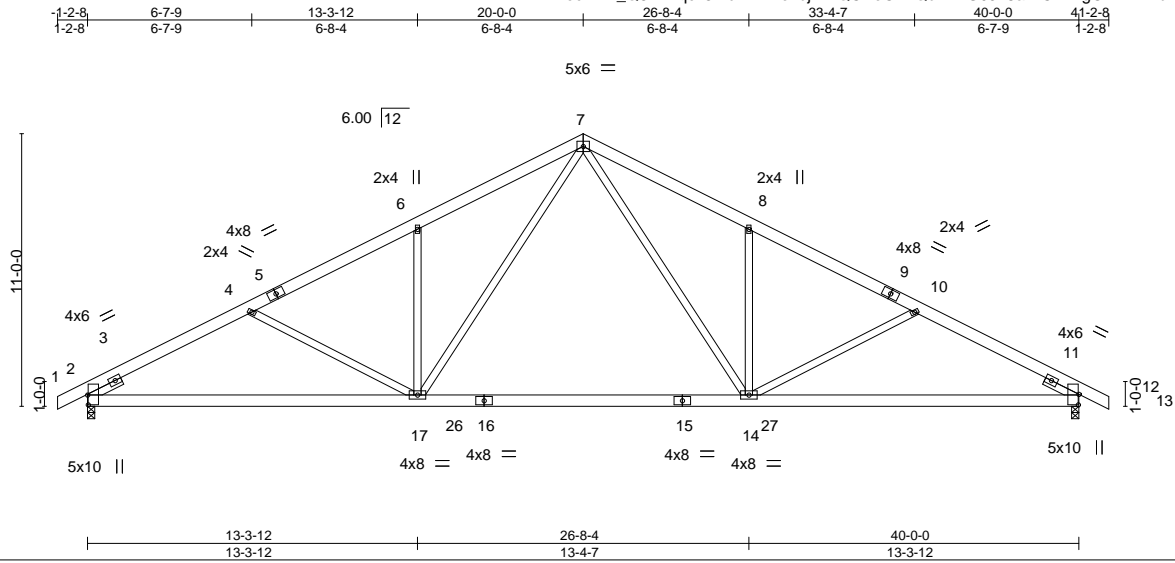ID:ocmhZ_Q8k?Rqcz5MumD?vezbjhA-QCPeOnhQd7xwG0JL8aWCRvvgOFNhxmbnFp6tUcymKU6

Scale = 1:93.0

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

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	0.47	Vert(LL)	-0.49	14-17	>973	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.71	14-17	>680	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.08	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		(Matrix-S)		Wind(LL)	0.09	14-17	>999	240	Weight: 288 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 SP No.1
BOT CHORD   2x6 SP No.1
WEBS   2x4 SP No.3 *Except*
            7-17,7-14: 2x4 SP No.2
SLIDER   Left 2x4 SP No.3 1-6-0, Right 2x4 SP No.3 1-6-0

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

REACTIONS.   (size)   2=0-3-8, 12=0-3-8
            Max Horz 2=-199(LC 6)
            Max Uplift 2=-74(LC 8), 12=-74(LC 8)
            Max Grav 2=1711(LC 13), 12=1711(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-4=-2785/136, 4-6=-2523/108, 6-7=-2588/212, 7-8=-2588/212, 8-10=-2523/108,
            10-12=-2786/136
BOT CHORD   2-17=-30/2523, 14-17=0/1673, 12-14=-30/2374
WEBS   6-17=-458/153, 8-14=-458/153, 4-17=-308/113, 7-17=-52/1224, 7-14=-52/1223,
            10-14=-308/113

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=40ft; eave=5ft; Cat. II; Exp B; enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
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) One H2.5 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 12. This connection is for uplift only and does not consider lateral forces.
6) 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.

August 19,2020

ENGINEERING BY
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Job	Truss	Truss Type	Qty	Ply	Banah Homes/Craig	
25356	T02	COMMON	5	1		I42485425
					Job Reference (optional)	

C&R Building Supply,   AUTRYVILLE

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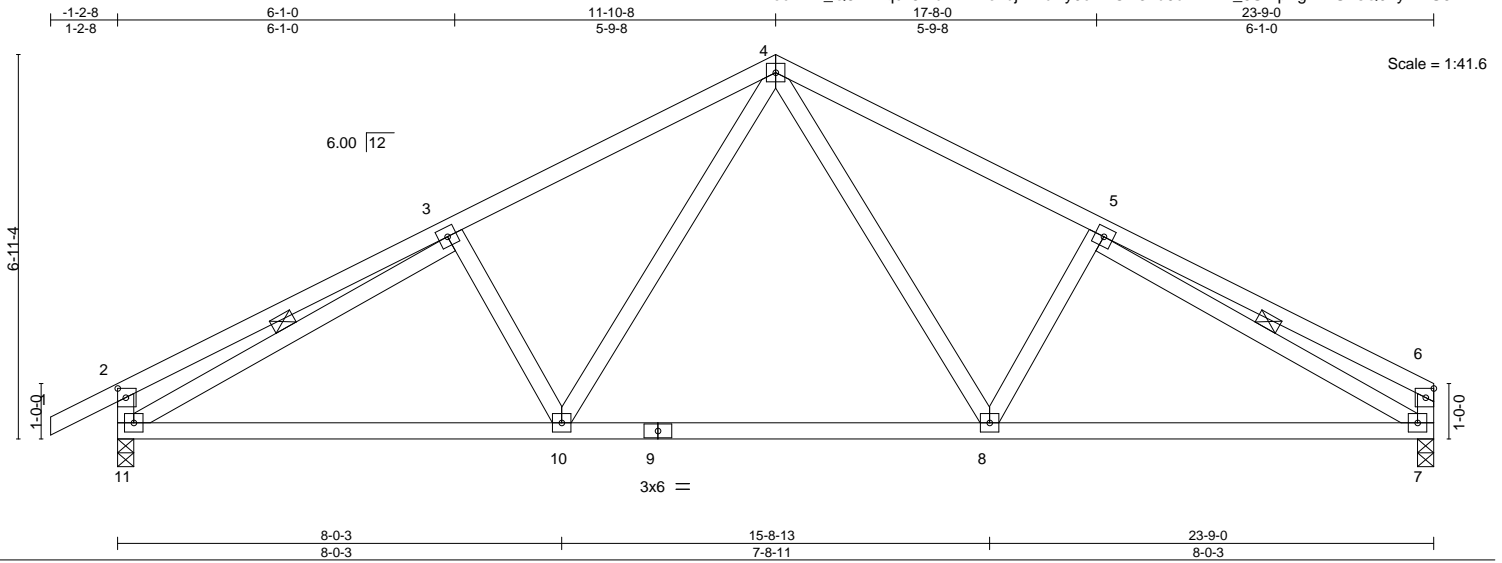ID:ocmhZ_Q8k?Rqcz5MumD?vezbjhA-uPy0c7i2OR3nu9uXiH1R_6SrffpTgEIwUTsQ02ymKU5

Dimensions (top): -1-2-8 / 6-1-0 / 11-10-8 / 17-8-0 / 23-9-0
1-2-8 / 6-1-0 / 5-9-8 / 5-9-8 / 6-1-0

Scale = 1:41.6

6.00 [12]

6-11-4

1-0-0

Joints: 2, 3, 4, 5, 6, 7, 8, 9, 10, 11

3x6 =

Dimensions (bottom): 8-0-3 / 15-8-13 / 23-9-0
8-0-3 / 7-8-11 / 8-0-3

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

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	0.50	Vert(LL)	-0.17	8-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.24	8-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		(Matrix-S)		Wind(LL)	0.03	8-10	>999	240	Weight: 132 lb	FT = 20%

LUMBER-
TOP CHORD   2x4 SP No.2
BOT CHORD   2x4 SP 2400F 2.0E
WEBS   2x4 SP No.3

BRACING-
TOP CHORD   Structural wood sheathing directly applied, except end verticals.
BOT CHORD   Rigid ceiling directly applied.
WEBS   1 Row at midpt   3-11, 5-7

REACTIONS.   (size)   11=0-3-8, 7=0-3-8
         Max Horz 11=130(LC 7)
         Max Uplift 11=-62(LC 8), 7=-23(LC 8)
         Max Grav 11=1027(LC 13), 7=953(LC 14)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-409/57, 3-4=-1335/105, 4-5=-1342/107, 5-6=-411/55, 2-11=-407/94, 6-7=-318/54
BOT CHORD   10-11=-2/1278, 8-10=0/919, 7-8=-5/1220
WEBS   4-8=-4/537, 5-8=-259/115, 4-10=-1/527, 3-11=-1129/22, 5-7=-1141/25

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 4x4 MT20 unless otherwise indicated.
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) One H2.5 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 11 and 7. This connection is for uplift only and does not consider lateral forces.
7) 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.

NORTH CAROLINA PROFESSIONAL ENGINEER
SCOTT M. SEVIER
SEAL
044925

August 19,2020

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Job	Truss	Truss Type	Qty	Ply	Banah Homes/Craig	
25356	T03	COMMON	1	1		I42485426
					Job Reference (optional)	

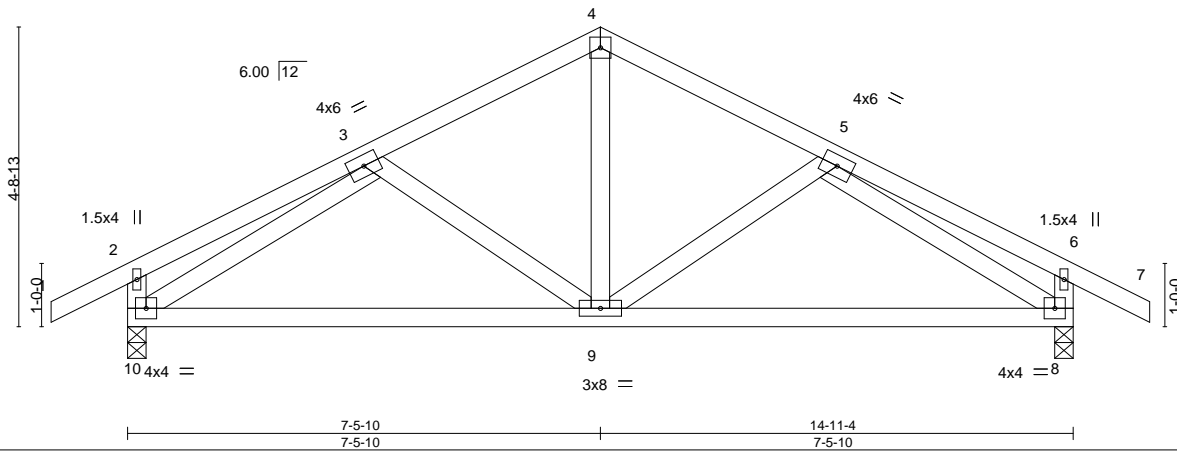C&R Building Supply,   AUTRYVILLE   7.640 s Aug 16 2017 MiTek Industries, Inc. Wed Aug 19 09:11:05 2020 Page 1
ID:ocmhZ_Q8k?Rqcz5MumD?vezbjhA-MbWPpTig9lBeWJTjG?YgXK?2H36yPj64i6bzYVymKU4

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 IRC2015/TPI2014

CSI.
TC 0.38
BC 0.49
WB 0.24
(Matrix-S)

DEFL.

	in	(loc)	l/defl	L/d
Vert(LL)	-0.05	9-10	>999	360
Vert(CT)	-0.11	9-10	>999	240
Horz(CT)	0.01	8	n/a	n/a
Wind(LL)	0.01	9	>999	240

PLATES   **GRIP**
MT20   244/190

Weight: 84 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 Rigid ceiling directly applied.

REACTIONS. (size) 10=0-3-8, 8=0-3-8
Max Horz 10=-95(LC 6)
Max Uplift 10=-52(LC 8), 8=-52(LC 8)
Max Grav 10=667(LC 1), 8=667(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-616/46, 4-5=-616/46, 2-10=-264/64, 6-8=-264/64
BOT CHORD 9-10=0/598, 8-9=0/598
WEBS 4-9=0/332, 3-10=-578/49, 5-8=-578/49

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
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) One H2.5 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 10 and 8. This connection is for uplift only and does not consider lateral forces.
6) 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.

August 19,2020

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Job	Truss	Truss Type	Qty	Ply	Banah Homes/Craig	
25356	T03A	COMMON	2	1		I42485427
					Job Reference (optional)	

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	0.38	Vert(LL)	-0.05	8-9	>999	360		MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.11	7-8	>999	240			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.01	7	n/a	n/a			
BCDL	10.0	Code IRC2015/TPI2014		(Matrix-S)		Wind(LL)	0.01	8	>999	240		Weight: 82 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   Rigid ceiling directly applied.

REACTIONS.   (size)   9=0-3-8, 7=0-3-8
Max Horz   9=-93(LC 6)
Max Uplift   9=-14(LC 8), 7=-53(LC 8)
Max Grav   9=582(LC 1), 7=671(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-623/48, 3-4=-622/48, 5-7=-264/64
BOT CHORD   8-9=0/618, 7-8=0/604
WEBS   3-8=0/335, 2-9=-565/50, 4-7=-584/50

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
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) One H2.5 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 9 and 7. This connection is for uplift only and does not consider lateral forces.
6) 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.

August 19,2020

TRENCO
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Edenton, NC 27932

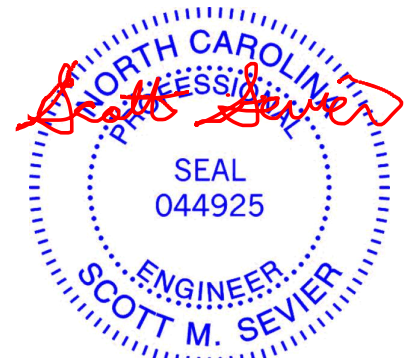| Job	Truss	Truss Type	Qty	Ply	Banah Homes/Craig	
25356	T04	COMMON	4	1		I42485428
					Job Reference (optional)	

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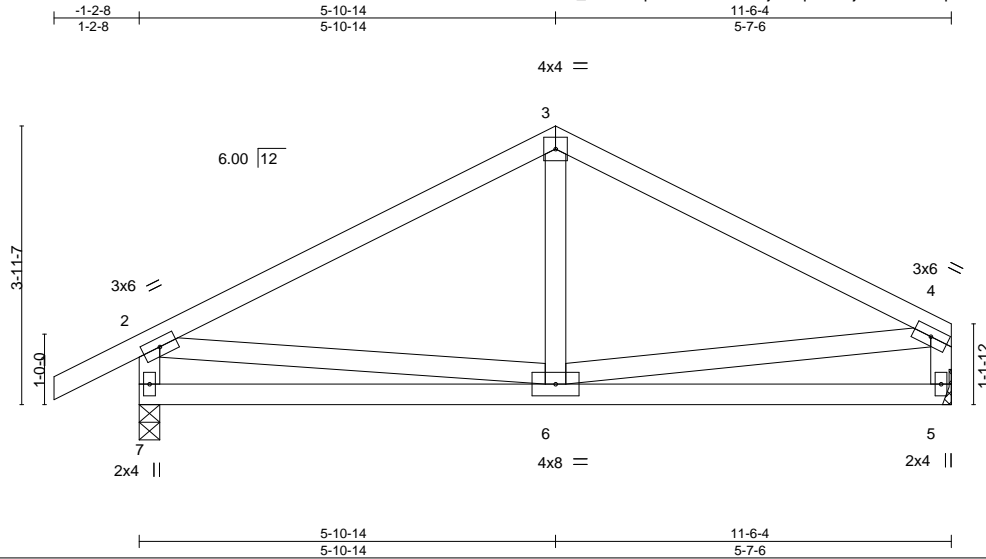
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d		PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	-0.02	6-7	>999	360		MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.05	6-7	>999	240			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	5	n/a	n/a			
BCDL	10.0	Code IRC2015/TPI2014		(Matrix-S)		Wind(LL)	0.00	6	>999	240		Weight: 61 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   Rigid ceiling directly applied.

REACTIONS.   (size)   7=0-3-8, 5=Mechanical
            Max Horz   7=83(LC 7)
            Max Uplift   7=-50(LC 8), 5=-10(LC 8)
            Max Grav   7=535(LC 1), 5=444(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-512/37, 3-4=-503/36, 4-5=-392/39, 2-7=-480/82

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5.
7) One H2.5 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 7. This connection is for uplift only and does not consider lateral forces.
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.

August 19,2020

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Job	Truss	Truss Type	Qty	Ply	Banah Homes/Craig	
25356	T05	MONO TRUSS	1	1		I42485429
					Job Reference (optional)	

C&R Building Supply,   AUTRYVILLE

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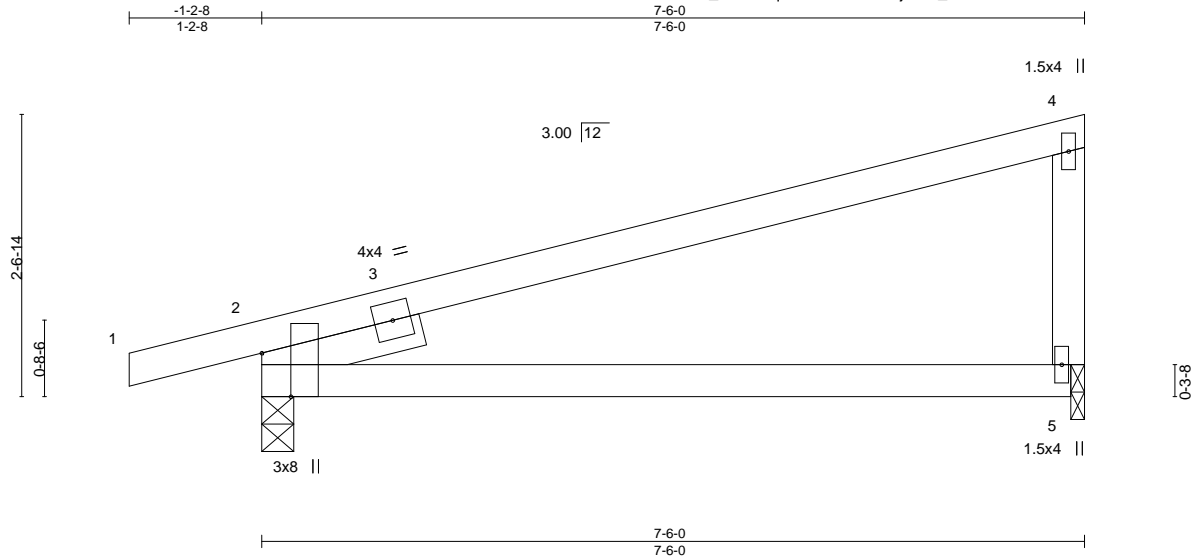
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Plate Offsets (X,Y)--   [2:0-4-12,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.11	5-8	>810	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.26	5-8	>339	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.05	2	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		(Matrix-S)		Wind(LL)	0.08	5-8	>999	240	Weight: 30 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.3 1-6-0

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

REACTIONS.   (size)   2=0-3-8, 5=0-1-8
Max Horz 2=62(LC 4)
Max Uplift 2=-40(LC 4), 5=-18(LC 4)
Max Grav 2=373(LC 1), 5=288(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-4=-400/39

NOTES-
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
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) 5 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) 5.
6) One H2.5 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 5. This connection is for uplift only and does not consider lateral forces.
7) 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.

August 19,2020

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Banah Homes/Craig	I42485430
25356	T05A	MONO TRUSS	3	1	Job Reference (optional)	

C&R Building Supply,   AUTRYVILLE

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ID:ocmhZ_Q8k?Rqcz5MumD?vezbjhA-nACXRUIZSgZCNnCIx76N8ydTlG7ac6vWO4qe9pymKU1

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.11	5-8	>810	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.26	5-8	>339	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.05	2	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		(Matrix-S)		Wind(LL)	0.08	5-8	>999	240	Weight: 30 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.3 1-6-0

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

REACTIONS.   (size)   2=0-3-8, 5=0-1-8
Max Horz 2=62(LC 4)
Max Uplift 2=-40(LC 4), 5=-18(LC 4)
Max Grav 2=373(LC 1), 5=288(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-4=-400/39

NOTES-
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
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) 5 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) 5.
6) One H2.5 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 5. This connection is for uplift only and does not consider lateral forces.
7) 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.

August 19,2020

ENGINEERING BY
TRENCO
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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Banah Homes/Craig	
25356	T06	MONO TRUSS	1	1		I42485431
					Job Reference (optional)	

C&R Building Supply, AUTRYVILLE
7.640 s Aug 16 2017 MiTek Industries, Inc. Wed Aug 19 09:11:08 2020 Page 1
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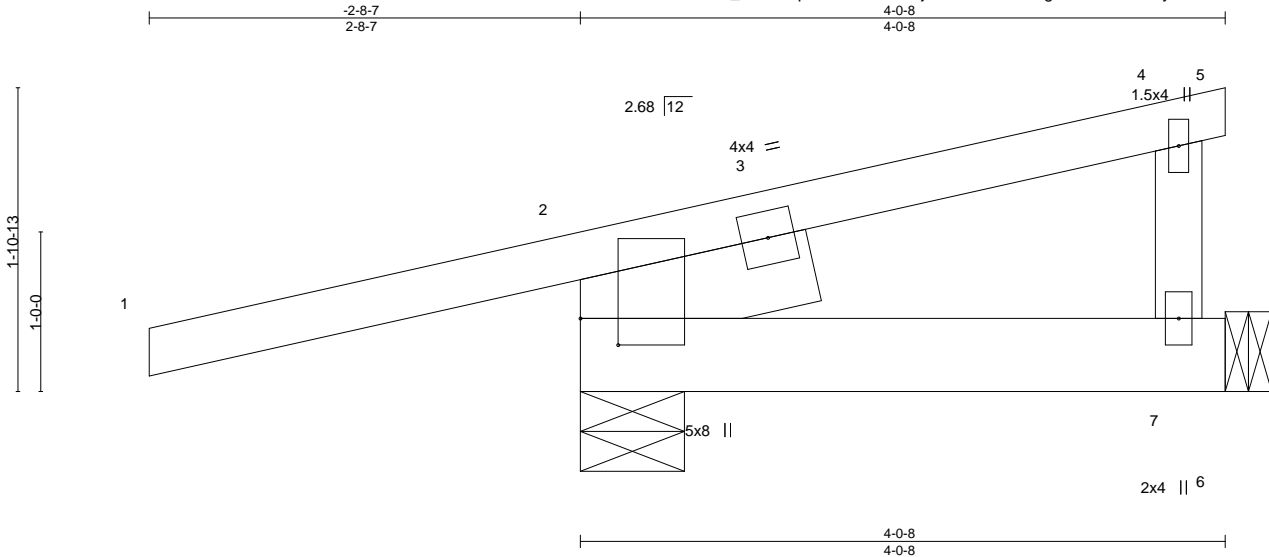
Scale = 1:14.4

Plate Offsets (X,Y)-- [2:0-2-0,0-2-13]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	0.00	12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	0.00	12	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.01	Horz(CT)	-0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		(Matrix-M)		Wind(LL)	-0.00	12	>999	240	Weight: 25 lb	FT = 20%

LUMBER-
TOP CHORD   2x4 SP No.2
BOT CHORD   2x6 SP No.1
WEBS   2x4 SP No.2
SLIDER   Left 2x6 SP No.1 1-6-0

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 4-0-8 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.   (size)   2=0-7-13, 7=Mechanical
Max Horz 2=52(LC 4)
Max Uplift 2=-124(LC 4)
Max Grav 2=405(LC 1), 7=94(LC 3)

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

NOTES-
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
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) Refer to girder(s) for truss to truss connections.
5) One H2.5 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
6) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

August 19,2020

ENGINEERING BY
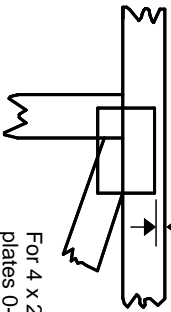TRENCO
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Symbols

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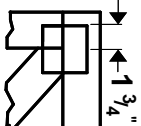
Center plate on joint unless x, y offsets are indicated.
Dimensions are in ft-in-sixteenths.
Apply plates to both sides of truss and fully embed teeth.

$1\frac{3}{4}"$

$0-\frac{1}{16}"$

For 4 x 2 orientation, locate plates 0- $\frac{1}{16}"$ 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.**
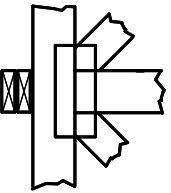
PLATE SIZE

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.
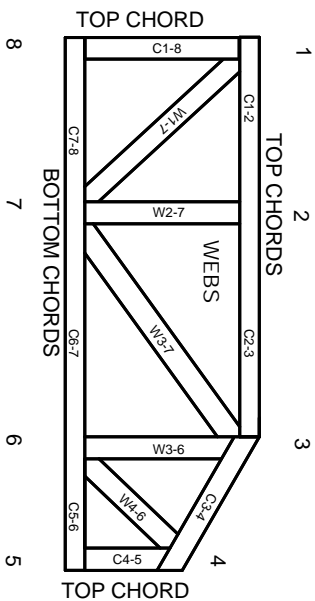
BEARING

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

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

6-4-8

TOP CHORD

1 2 3

TOP CHORDS

C1-8   C1-2
C7-8   W1-7   C2-3
8   BOTTOM CHORDS   WEBS
W2-7
C6-7   W3-7
7   6   5   W3-6
C5-6   W4-6   C3-4
C4-5
TOP CHORD
4

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.

21. The design does not take into account any dynamic or other loads other than those expressly stated.