ENGINEERING BY TRENCO
A MiTek Affiliate

Re: Master
   A&G/Camden/Lot57/KenlanFarms/Lillington

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

Pages or sheets covered by this seal: E15158284 thru E15158299

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

North Carolina COA: C-0844

NORTH CAROLINA
PROFESSIONAL
SEAL
036322
ERIC A. GILBERT
ENGINEER

December 2,2020

Gilbert, Eric

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

Job	Truss	Truss Type	Qty	Ply	A&G/Camden/Lot57/KenlanFarms/Lillington	
MASTER	A03	Common	6	1		E15158284
					Job Reference (optional)	

Builders FirstSource (Albermarle),   Albemarle, NC - 28001,   8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 2 08:01:53 2020 Page 1
ID:X87q8Dmm5MnjRaLGAgDs0yzEGbe-Tf3BJnfMkt0K87aeS7BCB6mDubgBJfoVGhSdqsyD3ai

Scale = 1:60.2
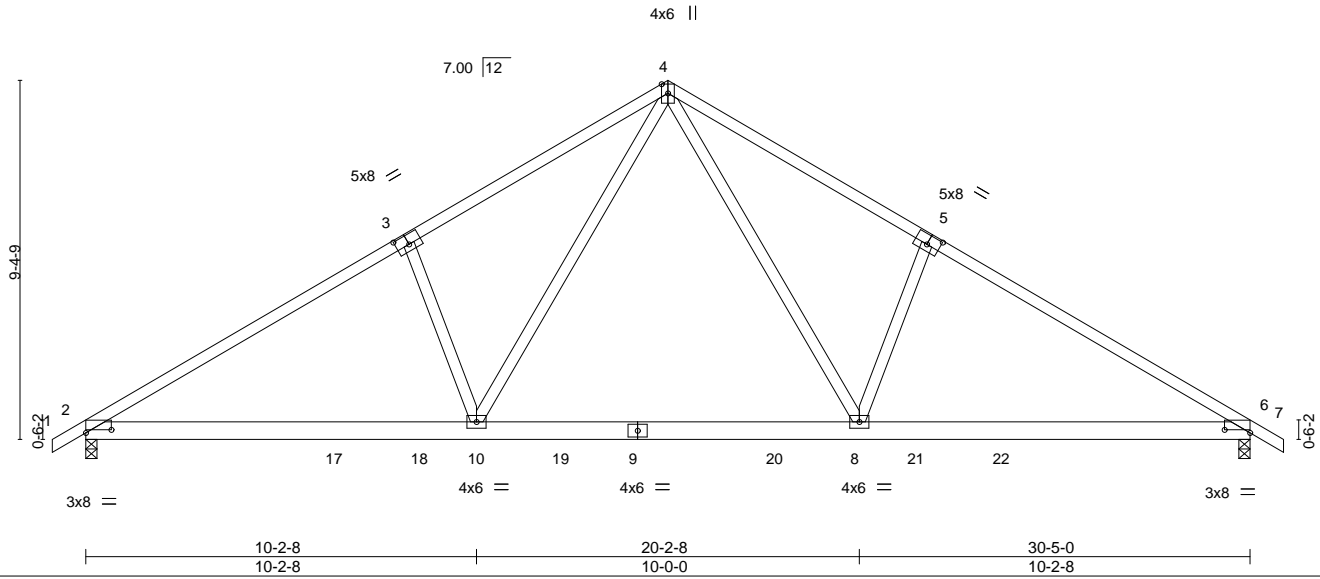
Plate Offsets (X,Y)--   [2:0-8-0,0-1-0], [3:0-4-0,0-3-0], [5:0-4-0,0-3-0], [6:0-8-0,0-1-0]

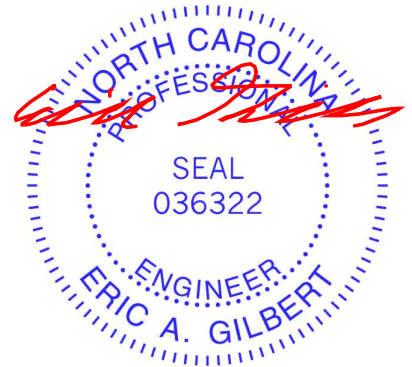| LOADING (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.14	8-10	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.22	8-10	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.04	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS		Wind(LL)	0.11	10-13	>999	240	Weight: 171 lb	FT = 20%

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

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

REACTIONS.   (size)   2=0-3-8, 6=0-3-8
Max Horz   2=-267(LC 10)
Max Uplift   2=-235(LC 12), 6=-235(LC 13)
Max Grav   2=1339(LC 19), 6=1339(LC 20)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-1999/459, 3-4=-1882/554, 4-5=-1883/554, 5-6=-1999/459
BOT CHORD   2-10=-313/1814, 8-10=-78/1190, 6-8=-252/1614
WEBS   4-8=-245/950, 5-8=-471/335, 4-10=-245/949, 3-10=-471/335

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=235, 6=235.
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.

December 2,2020

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

Job	Truss	Truss Type	Qty	Ply	A&G/Camden/Lot57/KenlanFarms/Lillington	
MASTER	A04	Common	3	1		E15158285
					Job Reference (optional)	

Builders FirstSource (Albermarle),　　　Albemarle, NC - 28001,　　　　　　　　　　　8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 2 08:01:55 2020 Page 1
ID:X87q8Dmm5MnjRaLGAgDs0yzEGbe-P1BxkSgdGUH2NQk1aYDgGXsaaPLPnZGok?xkvkyD3ag

Scale: 3/16"=1'

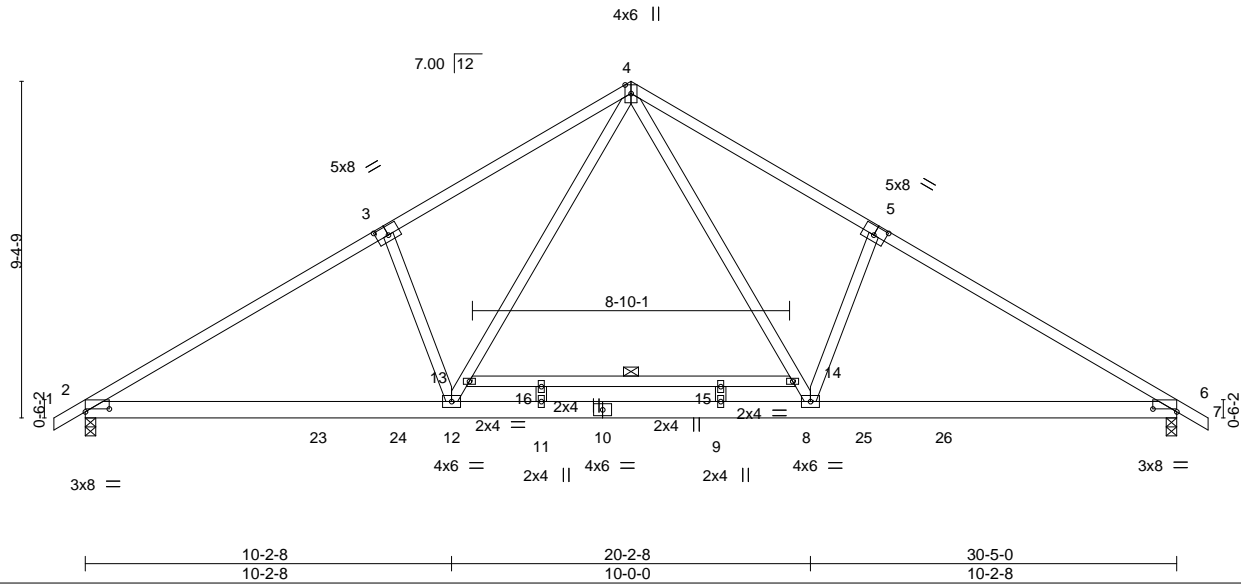Plate Offsets (X,Y)--　　[2:0-8-0,0-1-0], [3:0-4-0,0-3-0], [5:0-4-0,0-3-0], [6:0-8-0,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.56	Vert(LL)	-0.10	8-22	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.23	9-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.04	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS		Wind(LL)	0.11	12-19	>999	240	Weight: 186 lb	FT = 20%

LUMBER-
TOP CHORD　2x4 SP No.2
BOT CHORD　2x6 SP No.2
WEBS　　　　2x4 SP No.3 *Except*
13-14: 2x4 SP No.2

BRACING-
TOP CHORD　　Structural wood sheathing directly applied.
BOT CHORD　　Rigid ceiling directly applied.
WEBS　　　　　1 Row at midpt　　　　13-14

REACTIONS.　　(size)　2=0-3-8, 6=0-3-8
　　　　　　　　Max Horz　2=-267(LC 10)
　　　　　　　　Max Uplift　2=-135(LC 12), 6=-135(LC 13)
　　　　　　　　Max Grav　2=1369(LC 1), 6=1369(LC 1)

FORCES.　(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD　　2-3=-2099/249, 3-4=-1933/345, 4-5=-1933/345, 5-6=-2099/249
BOT CHORD　　2-12=-133/1839, 11-12=0/1301, 9-11=0/1301, 8-9=0/1301, 6-8=-72/1715
WEBS　　　　　4-14=-127/971, 8-14=-148/917, 5-8=-470/340, 12-13=-148/917, 4-13=-126/970,
3-12=-470/340

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed;
MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed;C-C for members and forces &
MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 200.0lb AC unit load placed on the bottom chord, 15-2-8 from left end, supported at two points, 5-0-0 apart.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
2=135, 6=135.
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.

December 2,2020

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Job	Truss	Truss Type	Qty	Ply	A&G/Camden/Lot57/KenlanFarms/Lillington	
MASTER	A04A	COMMON	1	1		E15158286
					Job Reference (optional)	

Builders FirstSource (Albermarle),   Albemarle, NC - 28001,   8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 2 08:01:59 2020 Page 1
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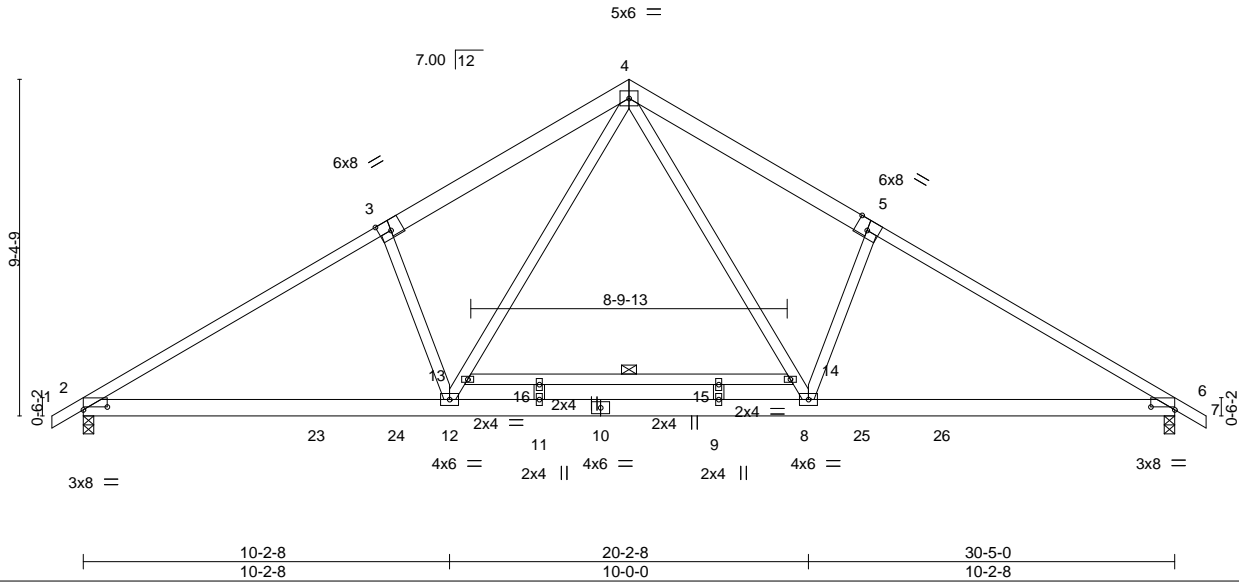
Plate Offsets (X,Y)--   [2:0-8-0,0-1-0], [3:0-4-0,Edge], [5:0-4-0,Edge], [6:0-8-0,0-1-0]

LOADING (psf)	SPACING-	2-3-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC	0.56	Vert(LL)	-0.10	8-22	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.21	9-11	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB	0.56	Horz(CT)	0.05	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS		Wind(LL)	0.12	12-19	>999	240	Weight: 199 lb	FT = 20%

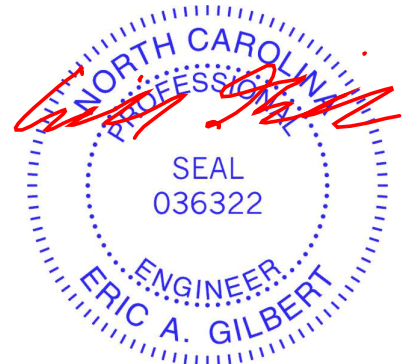**LUMBER-**
TOP CHORD   2x6 SP No.2 *Except*
              1-3,5-7: 2x4 SP SS
BOT CHORD   2x6 SP No.2
WEBS   2x4 SP No.3 *Except*
              13-14: 2x4 SP No.2

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 3-9-14 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS   1 Row at midpt   13-14

REACTIONS.   (size)   2=0-3-8, 6=0-3-8
               Max Horz   2=-297(LC 10)
               Max Uplift   2=-165(LC 12), 6=-165(LC 13)
               Max Grav   2=1528(LC 1), 6=1528(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-2336/308, 3-4=-2160/424, 4-5=-2160/424, 5-6=-2336/308
BOT CHORD   2-12=-170/2045, 11-12=0/1450, 9-11=0/1450, 8-9=0/1450, 6-8=-103/1907
WEBS   4-14=-174/1084, 8-14=-194/1029, 5-8=-524/390, 12-13=-195/1030, 4-13=-173/1084,
            3-12=-524/390

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed;
   MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed;C-C for members and forces &
   MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 200.0lb AC unit load placed on the bottom chord, 15-2-8 from left end, supported at two points, 5-0-0 apart.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
   2=165, 6=165.

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Builders FirstSource (Albermarle),   Albemarle, NC - 28001,   8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 2 08:02:02 2020 Page 1
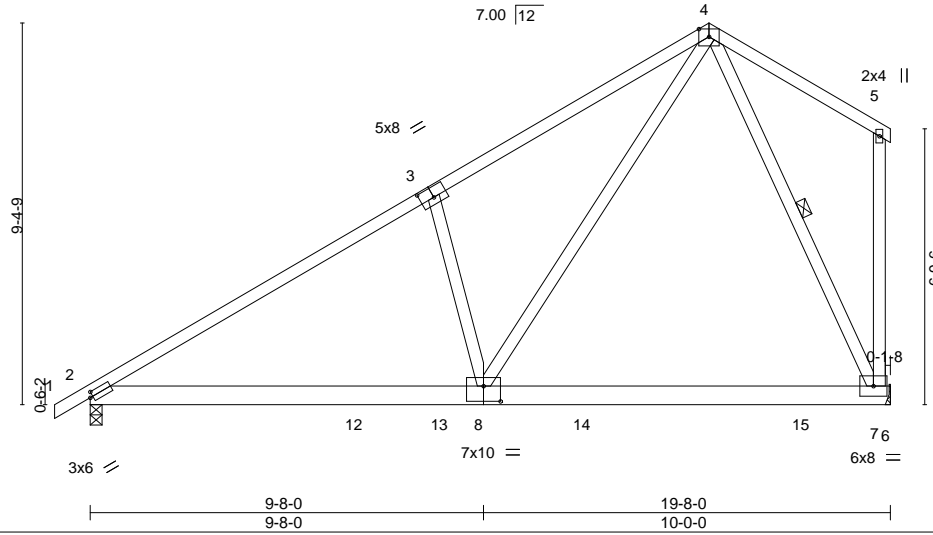ID:X87q8Dmm5MnjRaLGAgDs0yzEGbe-iO6bCsm0ce93jVmNUWrJ2?enjDmEwhjqLb7ceqyD3aZ

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

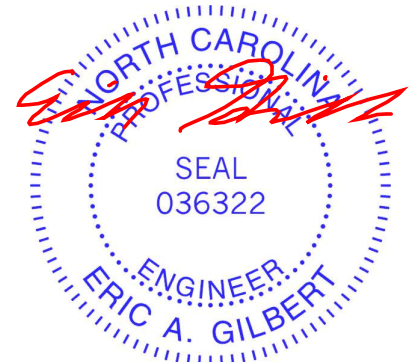| LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	-0.12	7-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.19	7-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.58	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS		Wind(LL)	0.09	8-11	>999	240	Weight: 127 lb	FT = 20%

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied, except end verticals.
BOT CHORD   Rigid ceiling directly applied.
WEBS   1 Row at midpt   4-7

REACTIONS.   (size)   2=0-3-8, 7=Mechanical
              Max Horz 2=352(LC 12)
              Max Uplift 2=-145(LC 12), 7=-190(LC 12)
              Max Grav 2=880(LC 19), 7=901(LC 19)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-1138/175, 3-4=-1071/302
BOT CHORD   2-8=-330/1004, 7-8=-100/333
WEBS   3-8=-491/346, 4-8=-271/1044, 4-7=-751/245

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed;
   MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed ; end vertical left exposed;C-C for members
   and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) 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=145, 7=190.
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.

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Builders FirstSource (Albermarle),   Albemarle, NC - 28001,   8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 2 08:02:05 2020 Page 1
ID:X87q8Dmm5MnjRaLGAgDs0yzEGbe-7znjrtouvZXeazVy9eP0geGJ6RtY793G1YMGF9yD3aW

Scale = 1:55.1

Plate Offsets (X,Y)--   [6:0-2-0,0-0-0], [7:0-2-8,0-2-4], [7:0-0-0,0-1-12], [11:0-3-0,Edge], [15:Edge,0-3-8]

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	0.50	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.00	1	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	-0.00	15	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 161 lb	FT = 20%

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.
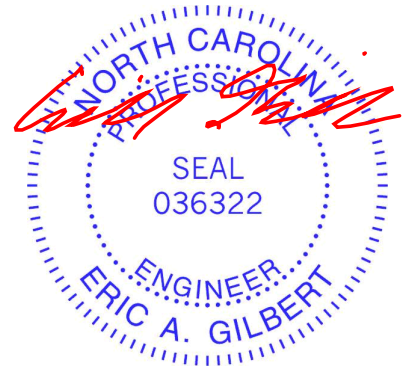WEBS   1 Row at midpt   10-18, 12-17

REACTIONS.   All bearings 19-8-0.
(lb) -   Max Horz   2=359(LC 11)
Max Uplift   All uplift 100 lb or less at joint(s) 15, 2, 18, 19, 20, 21, 23, 24, 25, 17, 16
Max Grav   All reactions 250 lb or less at joint(s) 15, 2, 18, 19, 20, 21, 23, 24, 25, 17, 16

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-375/344, 3-4=-304/283, 4-5=-253/237

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 2, 18, 19, 20, 21, 23, 24, 25, 17, 16.

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Job	Truss	Truss Type	Qty	Ply	A&G/Camden/Lot57/KenlanFarms/Lillington	
MASTER	A15	Common Supported Gable	1	1		E15158289
					Job Reference (optional)	

Builders FirstSource (Albermarle),   Albemarle, NC - 28001,   8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 2 08:02:07 2020 Page 1
ID:X87q8Dmm5MnjRaLGAgDs0yzEGbe-3LvUGZq9RAnLpGfKH3RUl3MlsEaab3WZUsrNK2yD3aU

Scale = 1:57.6

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	0.00	18	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	19	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.01	18	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 222 lb	FT = 20%

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS   1 Row at midpt   10-26

REACTIONS.   All bearings 30-5-0.
    (lb) - Max Horz 2=-267(LC 10)
            Max Uplift   All uplift 100 lb or less at joint(s) 2, 28, 29, 30, 31, 32, 25, 24, 23, 22, 21 except 33=-118(LC 12),
                         20=-116(LC 13)
            Max Grav   All reactions 250 lb or less at joint(s) 2, 26, 28, 29, 30, 31, 32, 25, 24, 23, 22, 21, 18 except
                         33=273(LC 19), 20=271(LC 20)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed;
   MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed;C-C for members and forces &
   MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry
   Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 28, 29, 30, 31,
   32, 25, 24, 23, 22, 21 except (jt=lb) 33=118, 20=116.

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Edenton, NC 27932

Builders FirstSource (Albermarle),   Albemarle, NC - 28001,   8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 2 08:02:08 2020 Page 1
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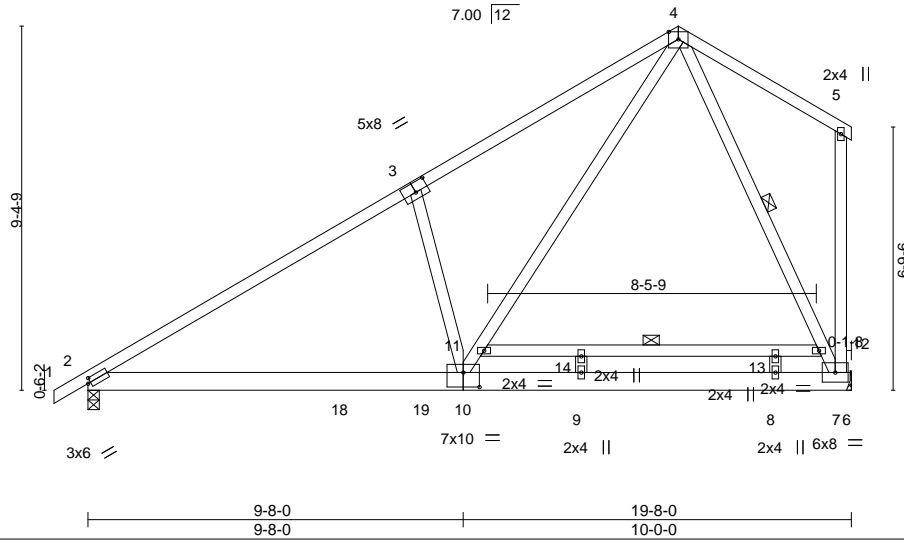-0-10-8   8-5-5   15-2-8   19-8-0
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Scale = 1:59.4

7.00 ⌐12

5x6 ═
5x8 ═
3x6 ═
7x10 ═
6x8 ═
2x4 ∥
2x4 ═
2x4 ∥

9-4-9
9-9-6

8-5-9

9-8-0   19-8-0
9-8-0   10-0-0

Plate Offsets (X,Y)--   [2:0-0-14,0-1-8], [3:0-4-0,0-3-0], [10:0-5-0,0-4-8]

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	0.56	Vert(LL)	-0.07	10-17	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.18	8-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.56	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS		Wind(LL)	0.09	10-17	>999	240	Weight: 142 lb	FT = 20%

LUMBER-
TOP CHORD   2x4 SP No.2
BOT CHORD   2x6 SP No.2
WEBS   2x4 SP No.3 *Except*
            11-12: 2x4 SP No.2

BRACING-
TOP CHORD   Structural wood sheathing directly applied, except end verticals.
BOT CHORD   Rigid ceiling directly applied.
WEBS   1 Row at midpt   4-7, 11-12

REACTIONS.   (size)   2=0-3-8, 7=Mechanical
            Max Horz   2=352(LC 12)
            Max Uplift 2=-102(LC 12), 7=-33(LC 12)
            Max Grav   2=884(LC 19), 7=937(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-1157/74, 3-4=-1075/203
BOT CHORD   2-10=-244/1008, 9-10=-72/433, 8-9=-72/433, 7-8=-72/433
WEBS   3-10=-487/349, 10-11=-174/995, 4-11=-158/1054, 4-12=-753/198, 7-12=-860/158

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed;
   MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed;C-C for members and forces & MWFRS for
   reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 200.0lb AC unit load placed on the bottom chord, 15-2-8 from left end, supported at two points, 5-0-0 apart.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb)
   2=102.
8) 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
036322
ERIC A. GILBERT
ENGINEER

December 2,2020

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

Job	Truss	Truss Type	Qty	Ply	A&G/Camden/Lot57/KenlanFarms/Lillington	
MASTER	B01	Scissor Structural	1	1		E15158291
					Job Reference (optional)	

Builders FirstSource (Albemarle),   Albemarle, NC - 28001,   8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 2 08:02:10 2020 Page 1
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0-10-8   5-2-0   4-10-8   4-10-8   5-2-0   0-10-8

5x6 ═

Scale = 1:56.9

10.00 ⎡12

9-1-8

6x8 ═

4-0-12

0-9-2

5.00 ⎡12

0-9-2

3x6 ═

3x6 ═

10-0-8   20-1-0
10-0-8   10-0-8
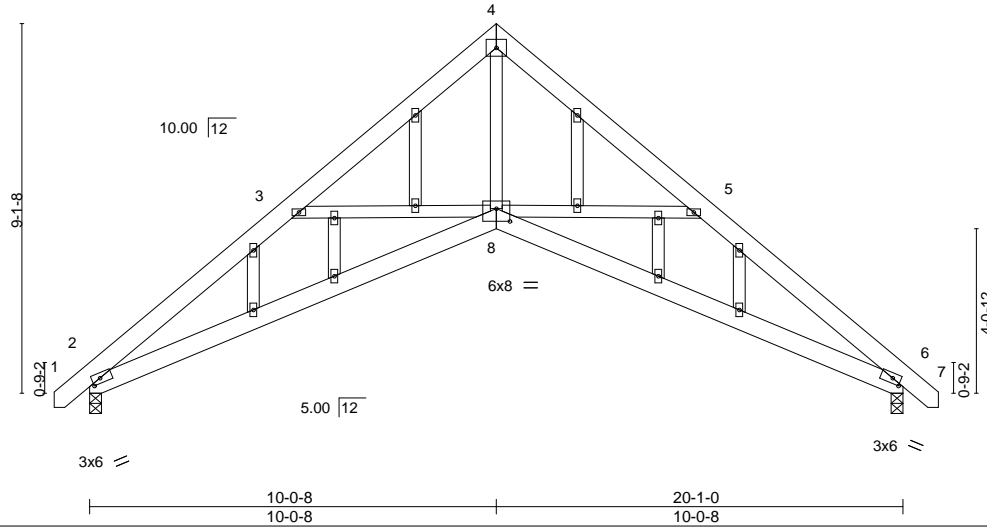
Plate Offsets (X,Y)--   [2:0-2-7,0-1-8], [6:0-2-7,0-1-8], [8:0-4-0,0-3-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	-0.06	8-23	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.14	8-23	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.11	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS		Wind(LL)	0.05	8	>999	240	Weight: 156 lb	FT = 20%

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

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

REACTIONS.   (size)   2=0-3-8, 6=0-3-8
                Max Horz 2=256(LC 11)
                Max Uplift 2=-140(LC 12), 6=-140(LC 13)
                Max Grav 2=848(LC 1), 6=848(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-1685/388, 3-4=-1304/176, 4-5=-1304/212, 5-6=-1685/371
BOT CHORD   2-8=-385/1526, 6-8=-190/1356
WEBS   4-8=-92/1237, 5-8=-431/370, 3-8=-435/349

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed;
   MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed;C-C for members and forces &
   MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry
   Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) 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 where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members.
8) Bearing at joint(s) 2, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify
   capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
   2=140, 6=140.
10) 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.

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December 2,2020

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Job	Truss	Truss Type	Qty	Ply	A&G/Camden/Lot57/KenlanFarms/Lillington	
MASTER	B02	Scissor	1	1		E15158292
					Job Reference (optional)	

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 2 08:02:12 2020 Page 1
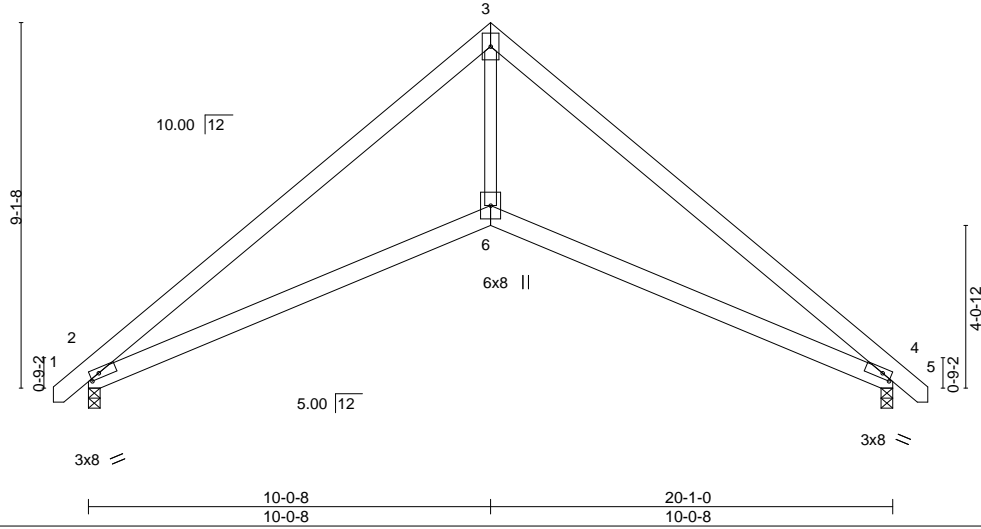ID:X87q8Dmm5MnjRaLGAgDs0yzEGbe-QJjNJGuHGiQew1XI3c1fS63ViFB6GFFIe8Y8?FyD3aP
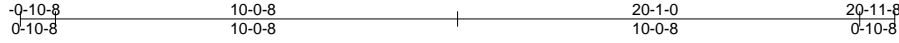
-0-10-8   10-0-8   20-1-0   20-11-8
0-10-8   10-0-8   10-0-8   0-10-8

5x8 ||

Scale = 1:57.5

10.00 [12]

9-1-8

5.00 [12]

6x8 ||

4-0-12

3x8 =

3x8 =

10-0-8   20-1-0
10-0-8   10-0-8

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

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	0.47	Vert(LL)	-0.08	6-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.16	6-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.07	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS		Wind(LL)	0.12	6-9	>999	240	Weight: 125 lb	FT = 20%

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

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

REACTIONS.   (size) 2=0-3-8, 4=0-3-8
Max Horz 2=256(LC 11)
Max Uplift 2=-140(LC 12), 4=-140(LC 13)
Max Grav 2=848(LC 1), 4=848(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-1490/204, 3-4=-1490/258
BOT CHORD   2-6=-99/1223, 4-6=-90/1214
WEBS   3-6=0/1131

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Bearing at joint(s) 2, 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=140, 4=140.
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.

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Job	Truss	Truss Type	Qty	Ply	A&G/Camden/Lot57/KenlanFarms/Lillington	
MASTER	B03	Scissor	6	1		E15158293
					Job Reference (optional)	

Builders FirstSource (Albermarle),   Albemarle, NC - 28001,   8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 2 08:02:14 2020 Page 1
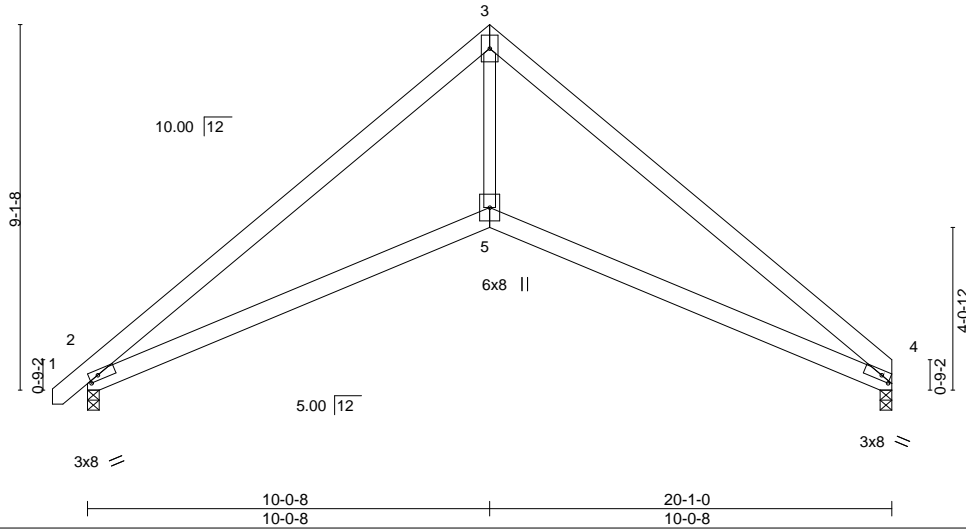ID:X87q8Dmm5MnjRaLGAgDs0yzEGbe-Mhq7kyvYoKgM9LhhB137XX8r83tUk9kb5S1E48yD3aN

Scale = 1:57.5

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

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	0.48	Vert(LL)	-0.08	5-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.17	5-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.07	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS		Wind(LL)	0.12	5-11	>999	240	Weight: 123 lb	FT = 20%

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

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

REACTIONS.   (size)   4=0-3-8, 2=0-3-8
Max Horz 2=250(LC 11)
Max Uplift 4=-121(LC 13), 2=-141(LC 12)
Max Grav 4=803(LC 1), 2=849(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-1493/232, 3-4=-1493/272
BOT CHORD   2-5=-123/1207, 4-5=-114/1198
WEBS   3-5=-7/1119

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed;
   MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed;C-C for members and forces &
   MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members.
5) Bearing at joint(s) 4, 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify
   capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
   4=121, 2=141.
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.

December 2,2020

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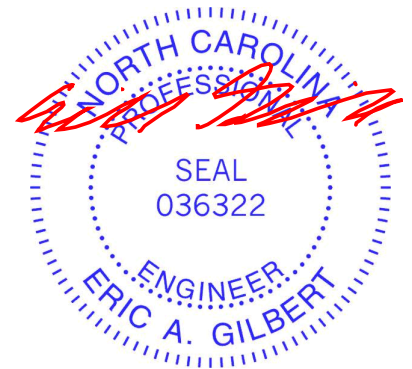| Job	Truss	Truss Type	Qty	Ply	A&G/Camden/Lot57/KenlanFarms/Lillington	
MASTER	B13	Common Girder	1	**2**	Job Reference (optional)	E15158294

Builders FirstSource (Albermarle),   Albemarle, NC - 28001,
8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 2 08:02:15 2020 Page 1
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5-0-2 / 10-0-8 / 15-0-14 / 20-1-0
5-0-2 / 5-0-6 / 5-0-6 / 5-0-2

5x6 ‖

Scale = 1:58.8

10.00 ⌐12

4x6 ⫽

4x6 ⟍
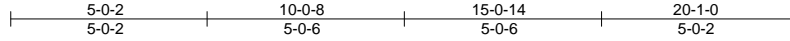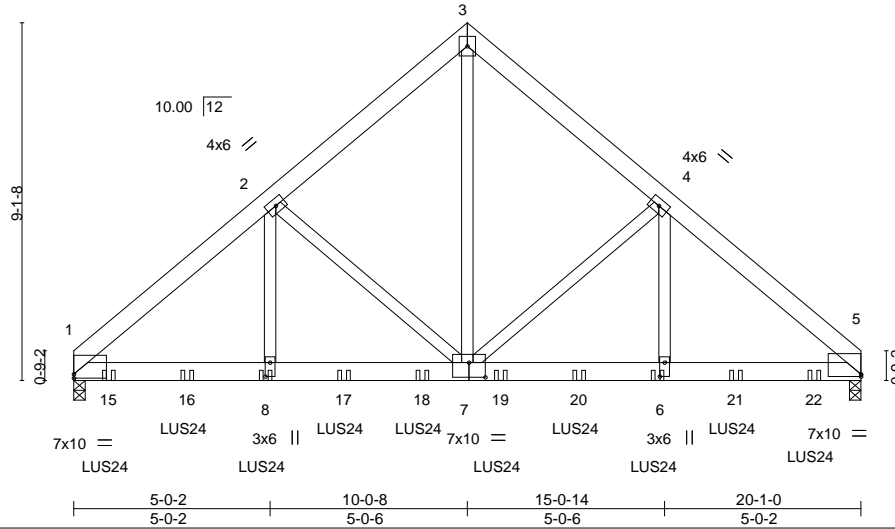
Plate Offsets (X,Y)--   [1:0-0-0,0-1-4], [5:Edge,0-0-12], [6:0-4-4,0-1-8], [7:0-5-0,0-4-8], [8:0-4-4,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	0.10	7-8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.13	7-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.60	Horz(CT)	0.04	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MS							Weight: 304 lb	FT = 20%

LUMBER-
TOP CHORD   2x6 SP No.2
BOT CHORD   2x6 SP No.2
WEBS   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.   (size)   1=0-3-8, 5=0-3-8
Max Horz 1=238(LC 5)
Max Uplift 1=-2322(LC 8), 5=-2026(LC 9)
Max Grav 1=4813(LC 2), 5=4839(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   1-2=-5604/2691, 2-3=-3835/1931, 3-4=-3865/1943, 4-5=-5618/2566
BOT CHORD   1-8=-2119/4256, 7-8=-2119/4256, 6-7=-1894/4272, 5-6=-1894/4272
WEBS   3-7=-2301/4557, 4-7=-1853/912, 4-6=-872/2083, 2-7=-1789/1058, 2-8=-1036/2088

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
   Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-8-0 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=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=2322, 5=2026.
8) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-10-12 from the left end to 14-10-12 to connect truss(es) to back face of bottom chord.
9) Use Simpson Strong-Tie LUS24 (4-SD9112 Girder, 2-SD9212 Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 16-10-12 from the left end to 18-10-12 to connect truss(es) to back face of bottom chord.
10) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
       Vert: 1-3=-60, 3-5=-60, 9-12=-20

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Job	Truss	Truss Type	Qty	Ply	A&G/Camden/Lot57/KenlanFarms/Lillington
MASTER	B13	Common Girder	1	**2**	E15158294
					Job Reference (optional)

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 6=-760(B) 8=-760(B) 15=-761(B) 16=-760(B) 17=-760(B) 18=-760(B) 19=-760(B) 20=-760(B) 21=-917(B) 22=-917(B)

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Builders FirstSource (Albermarle),   Albemarle, NC - 28001,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 2 08:02:16 2020 Page 1
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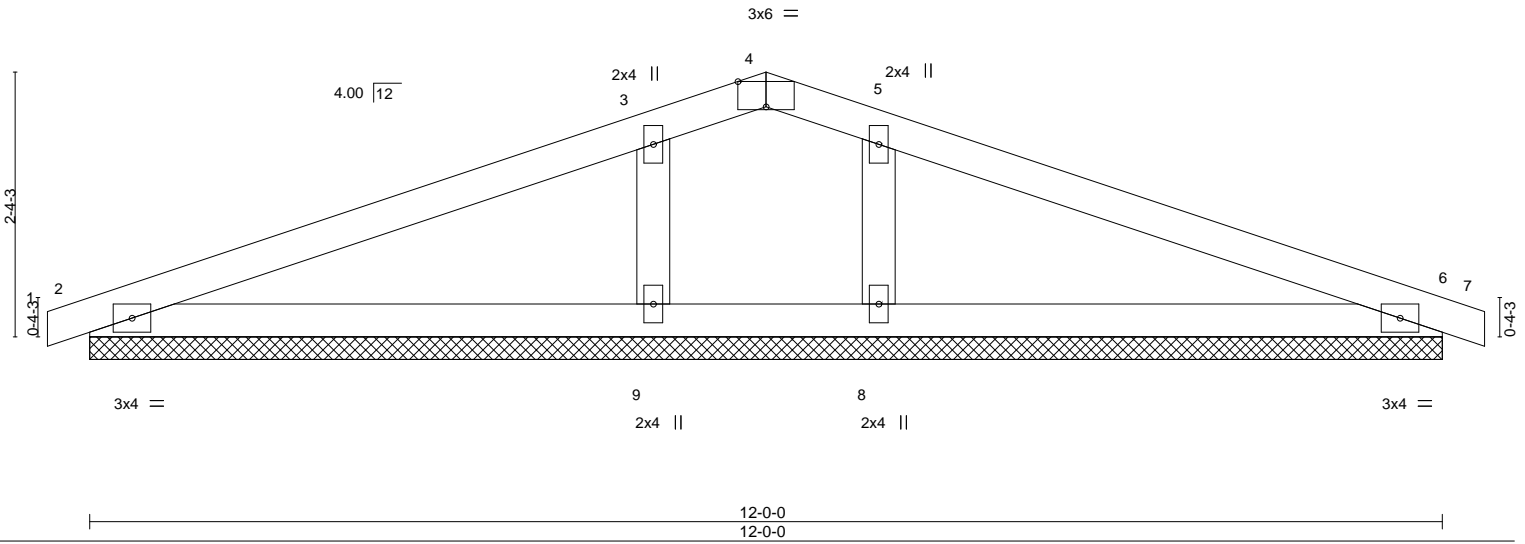
Plate Offsets (X,Y)--   [4:0-3-0,Edge]

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	0.33	Vert(LL)	0.01	7	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	0.01	7	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 42 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 10-0-0 oc purlins.
BOT CHORD   Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.   All bearings 12-0-0.
    (lb) - Max Horz 2=-41(LC 17)
            Max Uplift   All uplift 100 lb or less at joint(s) 2, 6 except 9=-132(LC 12), 8=-127(LC 13)
            Max Grav   All reactions 250 lb or less at joint(s) 2, 6 except 9=389(LC 23), 8=389(LC 24)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS   3-9=-295/194, 5-8=-295/194

NOTES-   (9)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed;
   MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed;C-C for members and forces &
   MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry
   Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6 except (jt=lb)
   9=132, 8=127.
9) This manufactured truss is designed as an individual building component. The suitability and use of this component for any
   particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

December 2,2020

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

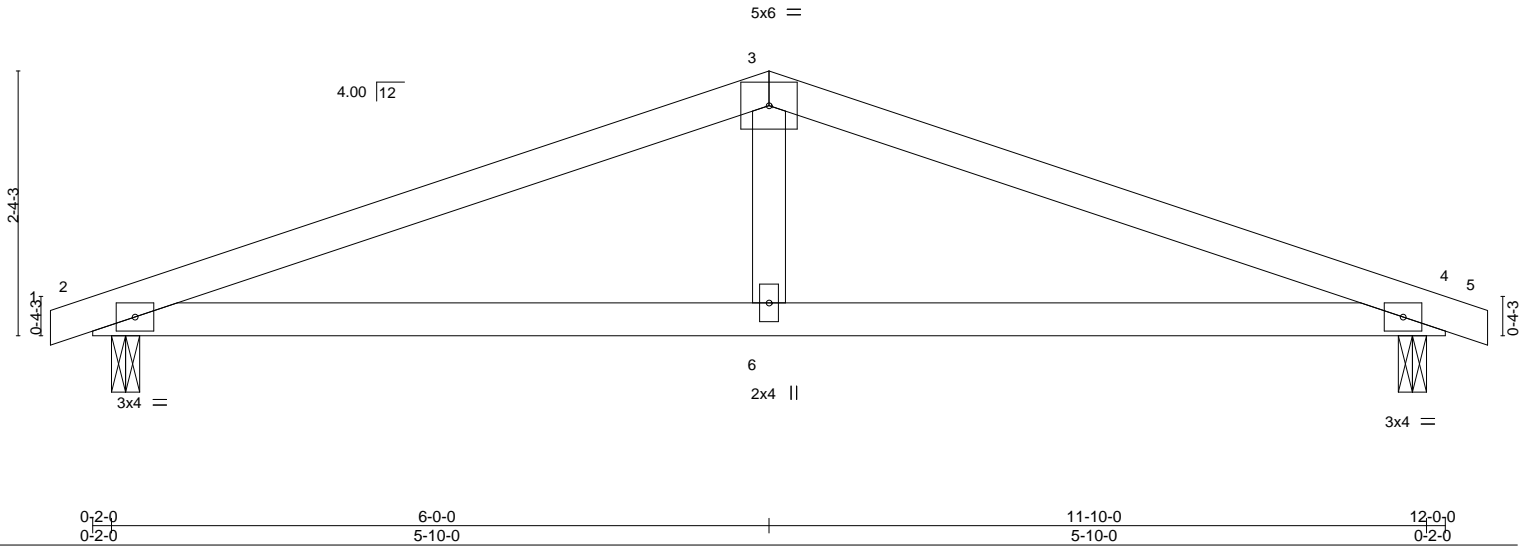| Job	Truss	Truss Type	Qty	Ply	A&G/Camden/Lot57/KenlanFarms/Lillington	
MASTER	CP02	Common	3	1		E15158296
					Job Reference (optional)	

Builders FirstSource (Albermarle),   Albemarle, NC - 28001,   8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 2 08:02:18 2020 Page 1
ID:X87q8Dmm5MnjRaLGAgDs0yzEGbe-ET4eZKy2rYAney?SQt83iNJZfgE2g29A04?SDvyD3aJ

Scale = 1:20.4

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	0.38	Vert(LL)	0.09	6-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.09	6-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS							Weight: 41 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.
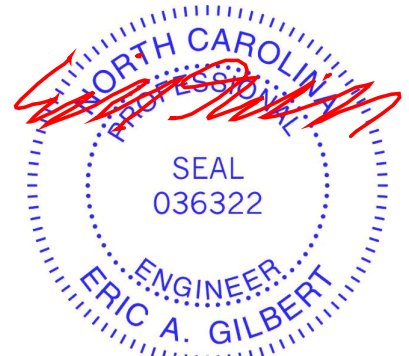
REACTIONS.   (size)   2=0-3-0, 4=0-3-0
Max Horz 2=-41(LC 13)
Max Uplift 2=-244(LC 8), 4=-244(LC 9)
Max Grav 2=503(LC 1), 4=503(LC 1)

FORCES.   (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD   2-3=-902/994, 3-4=-902/994
BOT CHORD   2-6=-877/826, 4-6=-877/826
WEBS   3-6=-334/267

NOTES-   (7)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed;
   MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; porch left and right exposed;C-C
   for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
   2=244, 4=244.
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.
7) This manufactured truss is designed as an individual building component. The suitability and use of this component for any
   particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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Job	Truss	Truss Type	Qty	Ply	A&G/Camden/Lot57/KenlanFarms/Lillington	
MASTER	J01	GABLE	1	1		E15158297
					Job Reference (optional)	

Builders FirstSource (Albemarle),   Albemarle, NC - 28001,   8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 2 08:02:18 2020 Page 1
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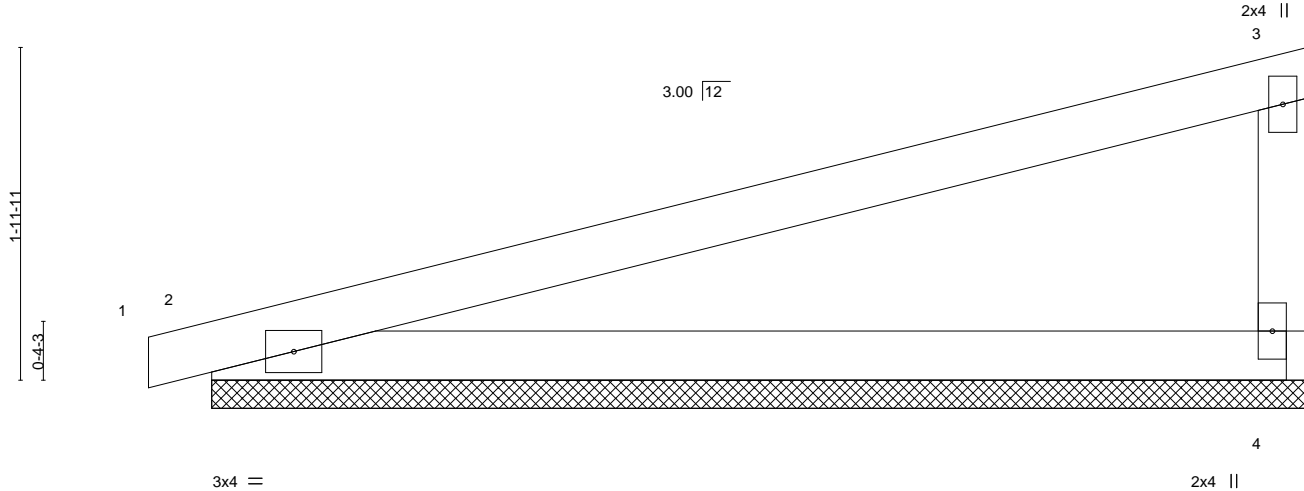
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	-0.01	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	0.01	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 22 lb	FT = 20%

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

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

REACTIONS.   (size)   4=6-6-0, 2=6-6-0
              Max Horz 2=78(LC 9)
              Max Uplift 4=-69(LC 12), 2=-79(LC 8)
              Max Grav 4=254(LC 1), 2=277(LC 1)

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

NOTES-   (8)
1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed;
   MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed;C-C for members and forces &
   MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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 2-0-0 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 where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
8) This manufactured truss is designed as an individual building component. The suitability and use of this component for any
   particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

December 2,2020

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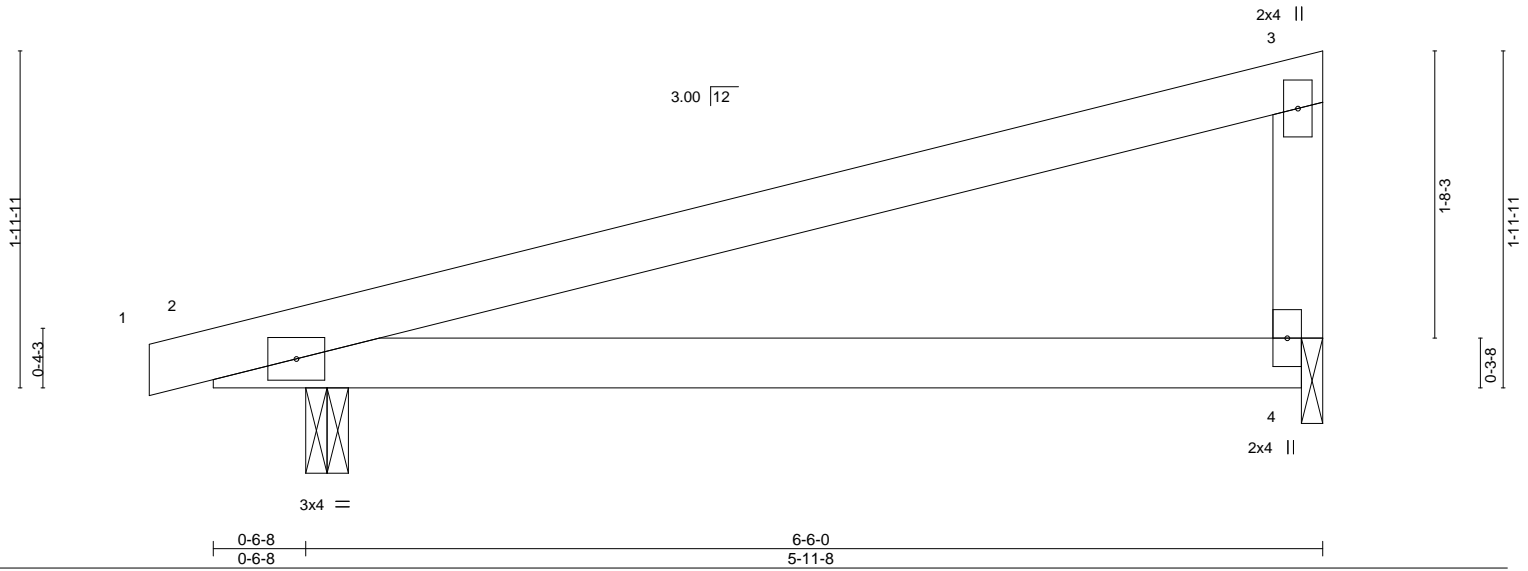| Job	Truss	Truss Type	Qty	Ply	A&G/Camden/Lot57/KenlanFarms/Lillington	
MASTER	J02	Monopitch	10	1		E15158298
					Job Reference (optional)	

Builders FirstSource (Albemarle), Albemarle, NC - 28001, 8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 2 08:02:19 2020 Page 1
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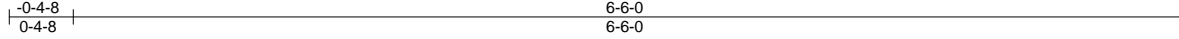
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6-6-0 / 6-6-0

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2x4 ||

3.00 |12

2x4 ||

0-6-8 / 0-6-8

6-6-0 / 5-11-8

3x4 =

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)	0.14	4-9	>547	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.10	4-9	>734	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS							Weight: 22 lb	FT = 20%

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

BRACING-
TOP CHORD   Structural wood sheathing directly applied, except end verticals.
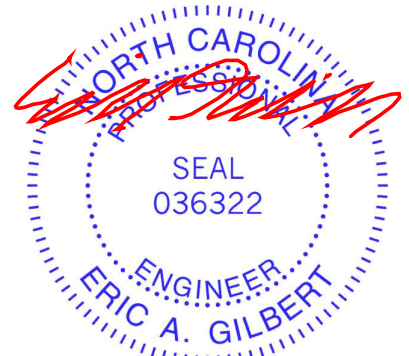BOT CHORD   Rigid ceiling directly applied.

REACTIONS.   (size)   2=0-3-0, 4=0-1-8
              Max Horz 2=76(LC 8)
              Max Uplift 2=-154(LC 8), 4=-128(LC 8)
              Max Grav 2=303(LC 1), 4=228(LC 1)

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

NOTES-   (8)
1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed;
   MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed ; end vertical left exposed; porch left
   exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members.
4) 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) except (jt=lb)
   2=154, 4=128.
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.
8) This manufactured truss is designed as an individual building component. The suitability and use of this component for any
   particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

NORTH CAROLINA
PROFESSIONAL
SEAL
036322
ERIC A. GILBERT
ENGINEER

December 2,2020

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Job	Truss	Truss Type	Qty	Ply	A&G/Camden/Lot57/KenlanFarms/Lillington	
MASTER	J03	Monopitch Structural Gable	1	1		E15158299
					Job Reference (optional)	

Builders FirstSource (Albermarle),   Albemarle, NC - 28001,   8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 2 08:02:20 2020 Page 1
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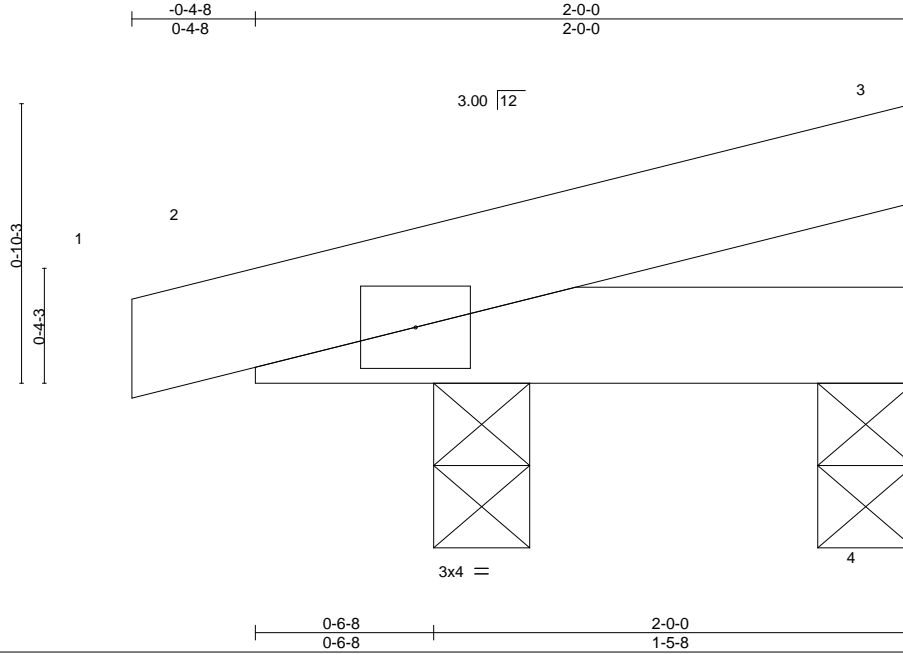
SUPPORT END BY OTHERS.

3x4 =

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	9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.00	9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MP		Wind(LL)	0.00	9	>999	240	Weight: 7 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 2-0-0 oc purlins.
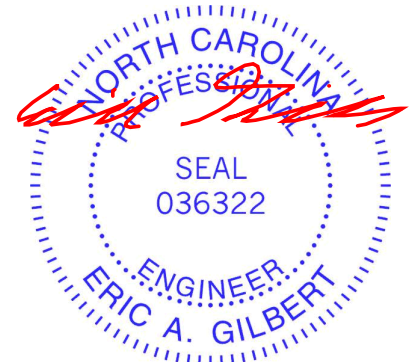BOT CHORD   Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.   (size)   4=0-3-8, 2=0-3-8
          Max Horz 4=26(LC 8)
          Max Uplift 4=-16(LC 9), 2=-48(LC 8)
          Max Grav 4=39(LC 1), 2=143(LC 1)

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

NOTES-   (7)
1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed;
   MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed ; end vertical left exposed;C-C for members
   and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry
   Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable studs spaced at 2-0-0 oc.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
   will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
7) This manufactured truss is designed as an individual building component. The suitability and use of this component for any
   particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

NORTH CAROLINA
PROFESSIONAL
SEAL
036322
ENGINEER
ERIC A. GILBERT

December 2,2020

ENGINEERING BY
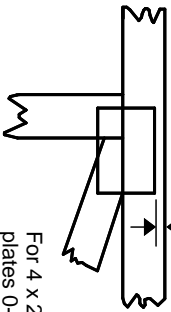**TRENCO**
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Edenton, NC 27932

Symbols

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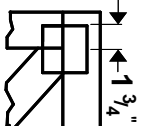
Center plate on joint unless x, y offsets are indicated.
Dimensions are in ft-in-sixteenths.
Apply plates to both sides of truss and fully embed teeth.

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

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

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.
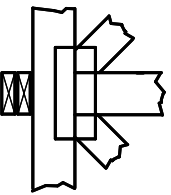
PLATE SIZE

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.
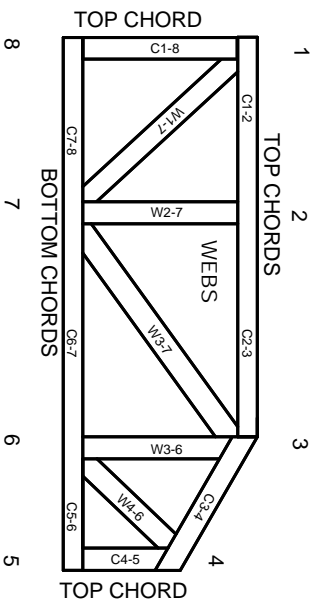
BEARING

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

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

TOP CHORD

1 2 3 TOP CHORDS

C1-8   C1-2   C2-3   C3-4

W1-7   W2-7   W3-7   W4-6

C7-8   C6-7   C5-6   C4-5

BOTTOM CHORDS

WEBS

W3-6

8 7 6 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.

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