

Trenco

818 Soundside Rd
Edenton, NC 27932

Re: LGI_Homes
Avery Floor

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: E10633996 thru E10634003

My license renewal date for the state of North Carolina is December 31, 2017.

North Carolina COA: C-0844

Lumber design values are in accordance with ANSI/TPI 1 section 6.3
These truss designs rely on lumber values established by others.



June 12, 2017

Strzyzewski, Marvin

IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdictions(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 Trenco. Any project specific information included is for Trenco's customer's file reference purpose only, and was not taken into account in the preparation of these designs. 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 the design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

Job	Truss	Truss Type	Qty	Ply	Avery Floor	E10533086
LGI_HOMES	F1E	Floor Supported Gable	1	1		

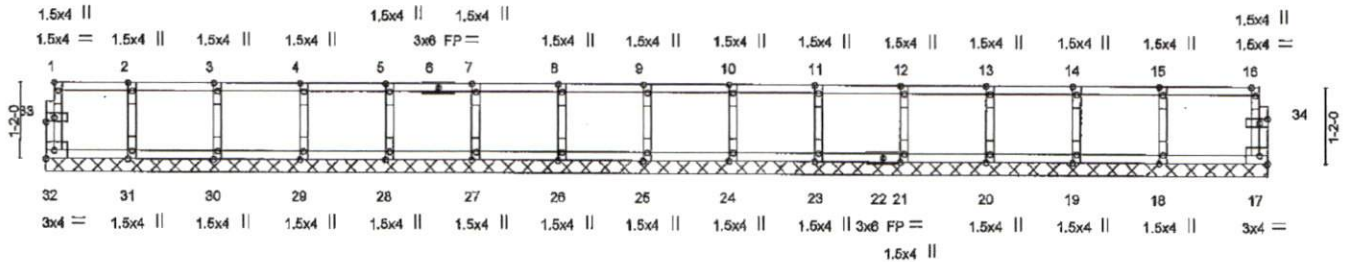
Builders FirstSource, Albemarle, NC 28001

7.640 s Apr 15 2016 MITek Industries, Inc. Mon Jun 12 12:12:38 2017 Page 1
 ID: DO?ru4b2DX75jRW9yXgI6znuDx-DXnch1WBjD7drsYCrpEdg12fx8OGBDuSk2VWmz72AS

0-1/8

0-1/8

Scale = 1:32.7



18-11-8
18-11-8

Plate Offsets (X,Y)-- [1:Edge,0-0-12], [33:0-1-8,0-0-12], [34:0-1-8,0-0-12]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	Vdefl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.10	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.02	Vert(TL)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(TL)	0.00	17	n/a		
BCDL 5.0	Code IRC2009/TPI2007		(Matrix)					Weight: 79 lb	FT = 20%F, 11%E

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

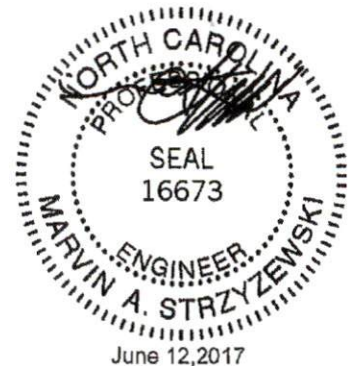
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 32=80/18-11-8, 17=72/18-11-8, 31=138/18-11-8, 30=149/18-11-8, 29=146/18-11-8, 28=147/18-11-8, 27=147/18-11-8, 26=147/18-11-8, 25=147/18-11-8, 24=147/18-11-8, 23=147/18-11-8, 21=146/18-11-8, 20=148/18-11-8, 19=142/18-11-8, 18=163/18-11-8

FORCES. (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 32-33=-53/0, 1-33=-52/0, 17-34=-67/0, 16-34=-66/0, 1-2=-14/0, 2-3=-14/0, 3-4=-14/0, 4-5=-14/0, 5-6=-14/0, 6-7=-14/0, 7-8=-14/0, 8-9=-14/0, 9-10=-14/0, 10-11=-14/0, 11-12=-14/0, 12-13=-14/0, 13-14=-14/0, 14-15=-14/0, 15-16=-14/0
 BOT CHORD 31-32=0/14, 30-31=0/14, 29-30=0/14, 28-29=0/14, 27-28=0/14, 26-27=0/14, 25-26=0/14, 24-25=0/14, 23-24=0/14, 22-23=0/14, 21-22=0/14, 20-21=0/14, 19-20=0/14, 18-19=0/14, 17-18=0/14
 WEBS 2-31=128/0, 3-30=-135/0, 4-29=-133/0, 5-28=-133/0, 7-27=-133/0, 8-26=-133/0, 9-25=-133/0, 10-24=-133/0, 11-23=-133/0, 12-21=-133/0, 13-20=-134/0, 14-19=-129/0, 15-18=-147/0

NOTES-

- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.
- Recommend 2x8 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-99 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

ENGINEERING BY
TRENCO
 AMITek Affiliate

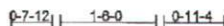
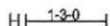
818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Avery Floor	E10633997
LGL_HOMES	F2	Floor	1	1		

Builders FirstSource, Albemarle, NC 28001

7,640 s Apr 19 2016 MITek Industries, Inc. Mon Jun 12 12:12:37 2017 Page 1
 ID:DO?ru4b2DX75jRW9yxkg6znuDx-hjL7uNXn4X7TT07007KT'Aua3MKHP?U41hOn4JDz72AB

0-1-8



0-1-8
Scale = 1:32.8

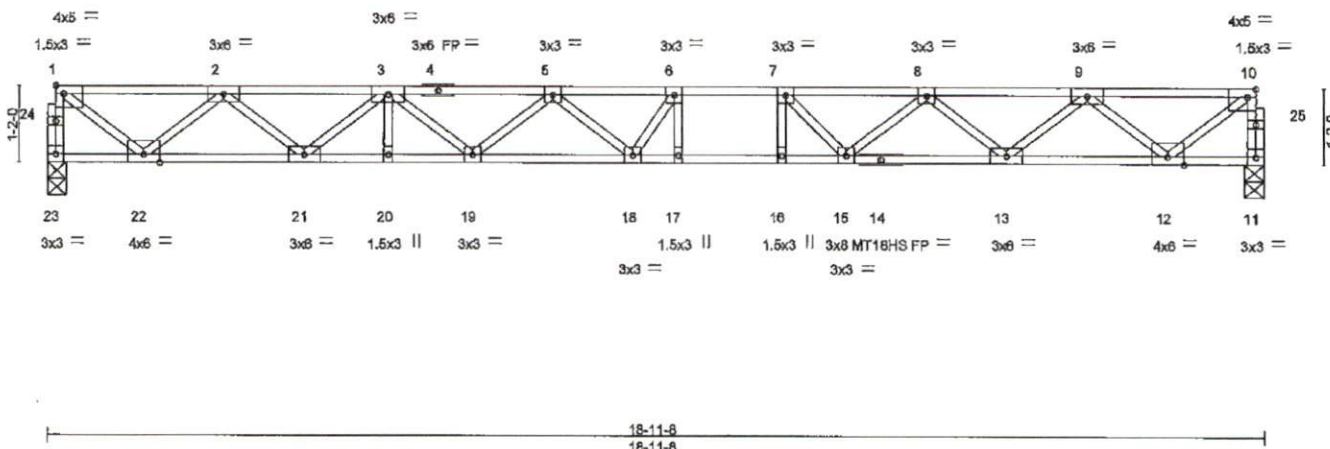


Plate Offsets (X,Y) = [1:Edge,0-1-8], [10:0-1-8,Edge]

LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 40.0	2-0-0	TC 0.68	In (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.74	Vert(LL) -0.38 17-18 >591 480	MT18HS	244/190
BCLL 0.0	Lumber DOL 1.00	WB 0.70	Vert(TL) -0.59 17-18 >378 240		
BCDL 5.0	Rep Stress Incr YES	(Matrix)	Horz(TL) 0.08 11 n/a n/a		
	Code IRC2009/TP12007			Weight: 96 lb	FT = 20%F, 11%E

LUMBER-

TOP CHORD 2x4 SP No.2(flat)
 BOT CHORD 2x4 SP DSS(flat) *Except*
 11-14: 2x4 SP No.1(flat)
 WEBS 2x4 SP No.3(flat)

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-7-14 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

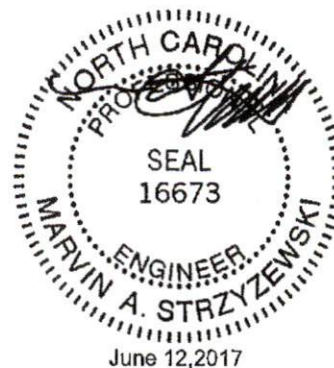
REACTIONS. (lb/size) 23=1023/0-3-8, 11=1023/0-3-8

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD 23-24=-1017/0, 1-24=-1016/0, 11-25=-1016/0, 10-25=-1015/0, 1-2=-1210/0, 2-3=-3001/0, 3-4=-4141/0, 4-5=-4141/0, 5-6=-4570/0, 6-7=-4514/0, 7-8=-4114/0, 8-9=-3004/0, 9-10=-1210/0
 BOT CHORD 22-23=0/61, 21-22=0/2279, 20-21=0/3735, 19-20=0/3735, 18-19=0/4512, 17-18=0/4514, 16-17=0/4514, 15-16=0/4514, 14-15=0/3686, 13-14=0/3686, 12-13=0/2283, 11-12=0/61
 WEBS 6-17=-390/149, 7-16=-104/336, 1-22=0/1467, 2-22=-1392/0, 2-21=0/940, 3-21=-937/0, 3-20=0/16, 3-19=0/519, 5-19=-483/0, 5-18=-127/332, 6-18=-335/406, 10-12=0/1467, 9-12=-1397/0, 9-13=0/940, 8-13=-888/0, 8-15=0/630, 7-15=-780/0

NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) *Semi-rigid pitchbreaks with fixed heels* Member and fixity model was used in the analysis and design of this truss.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSITP1 Quality Criteria, DSB-89 and BCSI Building Component Safety information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

ENGINEERING BY
TRENCO
 A MITek Affiliate

818 Soundside Road
 Edenboro, NC 27632

Job LGI_HOMES	Truss F3	Truss Type Floor	Qty 4	Ply 1	Avery Floor E10633988
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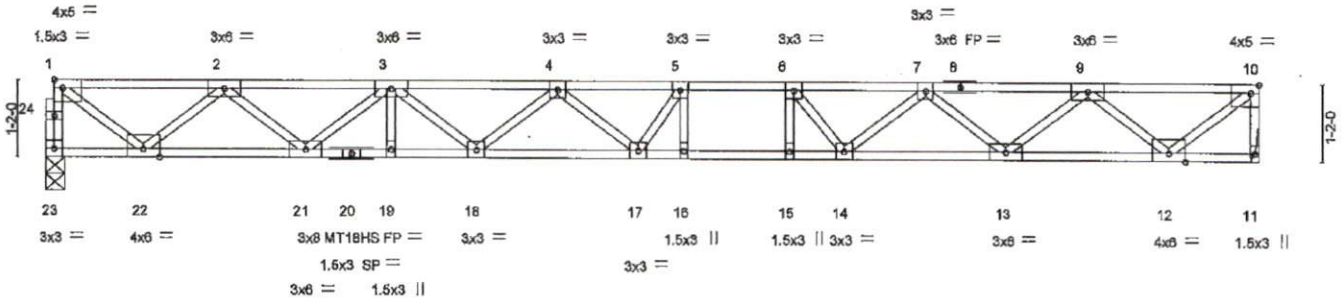
Builders FirstSource, Albemarle, NC 28001

7.840 s Apr 19 2016 MTEK Industries, Inc. Mon Jun 12 12:12:37 2017 Page 1
 ID:DO?ru4b2DX75JRW8yXkgj6znuDx-hjL7uNXn4X7TT07OO?KTAAu3WVKDL7U91bOn4JDz72A8

0-1-8



Scale = 1:32.4



1-8-0	4-0-0	6-7-8	8-1-8	9-10-12	10-7-12	11-4-12	12-3-8	14-9-8	17-3-8	18-8-0
1-8-0	2-6-0	2-7-8	2-6-0	0-9-4	0-8-0	0-8-0	0-10-12	2-8-0	2-6-0	1-4-8

LOADING (psf)		SPACING-	2-0-0	CSI	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.37	16-17	>606	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	1.00				MT18HS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.69					
BCDL	5.0	Code	IRC2009/TPI2007	(Matrix)						
									Weight: 94 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2(flat)	TOP CHORD Structural wood sheathing directly applied or 4-8-15 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2(flat) *Except* 11-20: 2x4 SP DSS(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 2-2-0 oc bracing: 19-21.
WEBS 2x4 SP No.3(flat)	

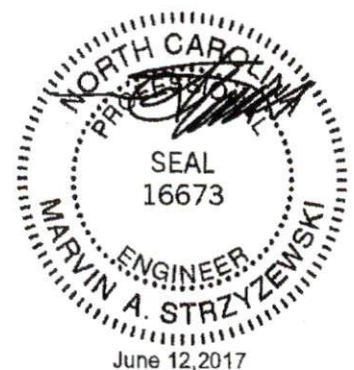
REACTIONS. (lb/size) 23=1010/0-3-8, 11=1016/Mechanical

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD	23-24=1006/0, 1-24=1003/0, 10-11=1008/0, 1-2=1194/0, 2-3=2956/0, 3-4=4063/0, 4-5=4462/0, 5-6=4387/0, 6-7=4026/0, 7-8=2921/0, 8-9=2921/0, 9-10=1141/0
BOT CHORD	22-23=0/60, 21-22=0/2248, 20-21=0/3671, 19-20=0/3671, 18-19=0/3671, 17-18=0/4420, 16-17=0/4387, 15-16=0/4387, 14-15=0/4387, 13-14=0/3594, 12-13=0/2208, 11-12=0/0
WEBS	5-16=400/127, 6-15=97/380, 1-22=0/1447, 2-22=1373/0, 2-21=0/922, 3-21=912/0, 3-19=0/12, 3-18=0/501, 4-18=465/0, 4-17=138/314, 5-17=304/418, 10-12=0/1456, 9-12=1389/0, 9-13=0/928, 7-13=876/0, 7-14=0/642, 6-14=763/0

NOTES-

- Unbalanced floor live loads have been considered for this design.
- All plates are MT20 plates unless otherwise indicated.
- The Fabrication Tolerance at joint 20 = 11%
- Refer to girder(s) for truss to truss connections.
- "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.
- Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/02/2015 BEFORE USE.
 Design valid for use only with MITEK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSITPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

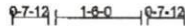
ENGINEERING BY
TRENCO
 A Mitek Affiliate
 818 Soundside Road
 Eden, NC 27632

Job LG_HOMES	Truss F4	Truss Type FLOOR	Qty 12	Ply 1	Avery Floor E10833999
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Builders FirstSource, Albemarle, NC 28001

Job Reference (optional)
7.640 e Apr 19 2016 MITEK Industries, Inc. Mon Jun 12 12:36 2017 Page 1
ID:DO7ru4b2DX75jRW8yXkg16znuDx-9wvN6jXPrFK48kaylsj57EUKZCky1Bw2Xcfrf72A9

0-1-8



0-1-8
Scale = 1:38.9

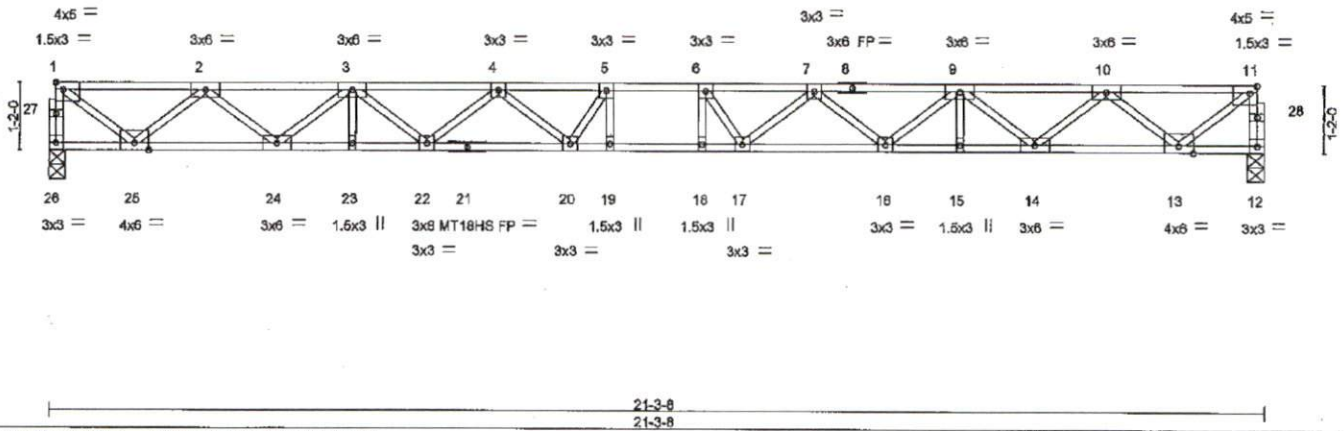


Plate Offsets (X,Y) - [1:Edge,0-1-8], [11:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 40.0	1-7-3	TC 0.85	in (loc) Vdef L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.96	Vert(LL) -0.48 18-19 >525 480	MT18HS	244/190
BCLL 0.0	Lumber DOL 1.00	WB 0.64	Vert(TL) -0.75 18-19 >335 240		
BCDL 5.0	Rep Stress Incr YES	(Matrix)	Horz(TL) 0.11 12 n/a n/a		
	Code IRC2009/TPI2007			Weight: 109 lb	FT = 20%F, 11%E

LUMBER-

TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-3-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 18-18.

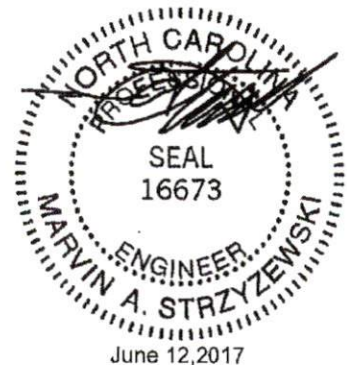
REACTIONS. (lb/size) 26=920/0-3-8, 12=920/0-3-8

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD 26-27=-916/0, 1-27=-914/0, 12-28=-918/0, 11-28=-914/0, 1-2=-1102/0, 2-3=-2781/0, 3-4=-3949/0, 4-5=-4545/0, 5-6=-4840/0, 6-7=-4545/0, 7-8=-3949/0, 8-9=-3949/0, 9-10=-2781/0, 10-11=-1102/0
BOT CHORD 25-26=0/55, 24-25=0/2080, 23-24=0/3495, 22-23=0/3495, 21-22=0/4360, 20-21=0/4360, 19-20=0/4640, 18-19=0/4640, 17-18=0/4640, 16-17=0/4360, 15-16=0/3495, 14-15=0/3495, 13-14=0/2080, 12-13=0/55
WEBS 5-19=-217/229, 6-18=-217/229, 1-25=0/1337, 2-25=-1272/0, 2-24=0/913, 3-24=-912/0, 3-23=0/9, 3-22=0/579, 4-22=-535/0, 4-20=-13/418, 5-20=-462/185, 11-13=0/1337, 10-13=-1272/0, 10-14=0/913, 9-14=-912/0, 9-15=0/9, 9-16=0/579, 7-16=-535/0, 7-17=-13/418, 6-17=-462/185

NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.
- 4) Required 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



WARNING - Vary design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MH-7473 rev. 10/3/2015 BEFORE USE.

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ENGINEERING BY
TRENCO
A MITEK Affiliate

818 Soundside Road
Edenport, NC 27632

Job	Truss	Truss Type	Qty	Ply	Avery Floor	E10634000
LGI_HOMES	F&E	Floor Supported Gable	1	1		

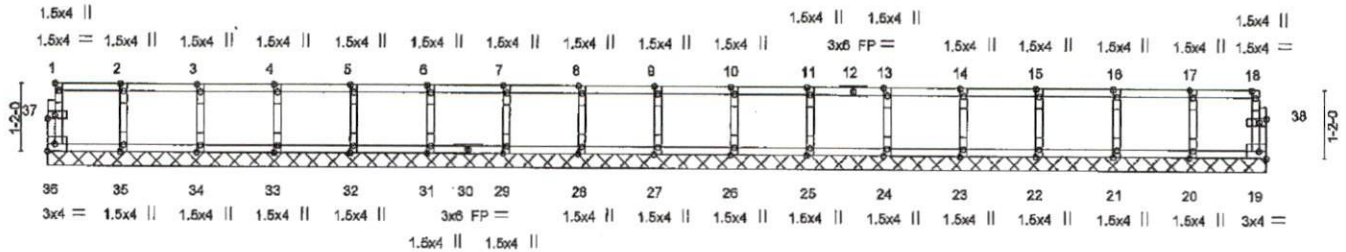
Builders FirstSource, Albemarle, NC 28001

7.640 e Apr 19 2016 MTEK Industries, Inc. Mon Jun 12 12:12:39 2017 Page 1
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0-1/8"

0-1/8"

Scale = 1:36.8



21-3-8
21-3-8

Plate Offsets (X,Y)-- [1:Edge,0-0-12], [37:0-1-8,0-0-12], [38:0-1-8,0-0-12]

LOADING (psf)	SPACING-	2-0-0	CSI	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.08	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.01	Vert(TL)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(TL)	0.00	19	n/a		
BCDL 5.0	Code IRC2009/TPI2007		(Matrix)						
								Weight: 88 lb	FT = 20%F, 11%E

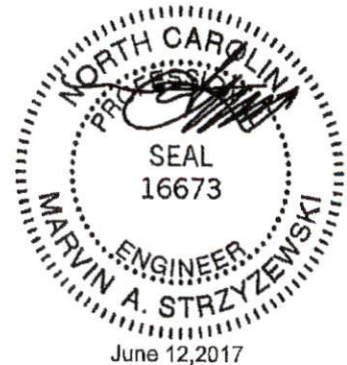
LUMBER-
 TOP CHORD 2x4 SP No.2(flat)
 BOT CHORD 2x4 SP No.2(flat)
 WEBS 2x4 SP No.3(flat)
 OTHERS 2x4 SP No.3(flat)

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. (lb/size) 36=55/21-3-8, 19=54/21-3-8, 35=144/21-3-8, 34=148/21-3-8, 33=146/21-3-8, 32=147/21-3-8, 31=147/21-3-8, 29=147/21-3-8, 28=147/21-3-8, 27=147/21-3-8, 26=147/21-3-8, 25=147/21-3-8, 24=147/21-3-8, 23=147/21-3-8, 22=146/21-3-8, 21=148/21-3-8, 20=140/21-3-8

FORCES. (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 36-37=51/0, 1-37=50/0, 19-38=48/0, 18-38=48/0, 1-2=-9/0, 2-3=-9/0, 3-4=-9/0, 4-5=-9/0, 5-6=-9/0, 6-7=-9/0, 7-8=-9/0, 8-9=-9/0, 9-10=-9/0, 10-11=-9/0, 11-12=-9/0, 12-13=-9/0, 13-14=-9/0, 14-15=-9/0, 15-16=-9/0, 16-17=-9/0, 17-18=-9/0
 BOT CHORD 35-36=0/9, 34-35=0/9, 33-34=0/9, 32-33=0/9, 31-32=0/9, 30-31=0/9, 29-30=0/9, 28-29=0/9, 27-28=0/9, 26-27=0/9, 25-26=0/9, 24-25=0/9, 23-24=0/9, 22-23=0/9, 21-22=0/9, 20-21=0/9, 19-20=0/9
 WEBS 2-35=-131/0, 3-34=-134/0, 4-33=-133/0, 5-32=-133/0, 6-31=-133/0, 7-29=-133/0, 8-28=-133/0, 9-27=-133/0, 10-26=-133/0, 11-25=-133/0, 13-24=-133/0, 14-23=-133/0, 15-22=-133/0, 16-21=-135/0, 17-20=-128/0

- NOTES-
- 1) Gable requires continuous bottom chord bearing.
 - 2) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - 3) Gable studs spaced at 1-4-0 oc.
 - 4) *Semi-rigid pitchbreaks with fixed heels* Member end fixity model was used in the analysis and design of this truss.
 - 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MH-7473 rev. 10/03/2015 BEFORE USE.
 Design valid for use only with MITEK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSITPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

ENGINEERING BY
TRENCO
 A MITEK AFFILIATE
 618 Seundslee Road
 Eden, NC 27632

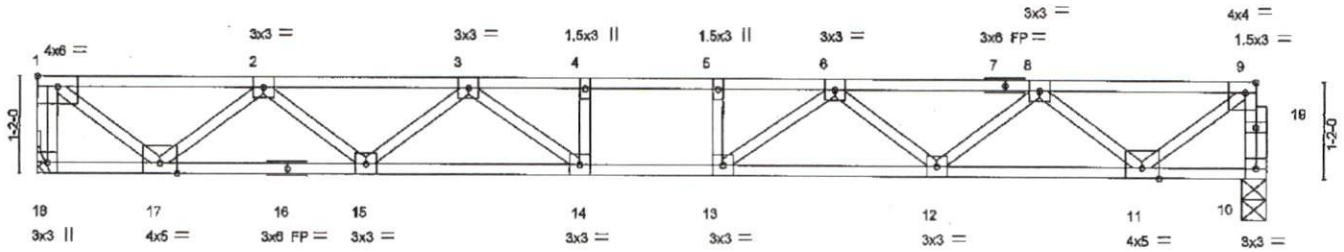
Job LGI HOMES	Truss F8	Truss Type Floor	Qty 3	Ply 1	Avery Floor E10634001
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Builders FirstSource, Albemarle, NC 28001

7.840 s Apr 19 2016 MITEK Industries, Inc. Mon Jun 12 12:12:39 2017 Page 1
ID:DO?ru4b2DX75jRW8yXkgl6znuDx-dETJ3Y1c8NBLHmWQNXfJTTUBXuTPvKBIGAN6z72A6



Scale = 1:25.6



14-11-8
14-11-8

Plate Offsets (X,Y) - [1:Edge,0-1-8], [9:0-1-8,Edge]

LOADING (psf)	SPACING - 2-0-0	CSI	DEFL. in (loc)	W/defl L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.44	Vert(LL) -0.16 13-14 >999 480		MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.80	Vert(TL) -0.25 13-14 >705 240			
BCLL 0.0	Rep Stress Incr YES	WB 0.55	Horz(TL) 0.05 10 n/a n/a			
BCDL 5.0	Code IRC2009/TPI2007	(Matrix)				
					Weight: 76 lb	FT = 20%F, 11%E

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

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. (lb/size) 18=809/Mechanical, 10=803/0-3-8

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-18=-802/0, 10-19=-797/0, 9-19=-796/0, 1-2=-920/0, 2-3=-2187/0, 3-4=-2826/0, 4-5=-2826/0, 5-6=-2826/0, 6-7=-2186/0, 7-8=-2186/0, 8-9=-922/0
 BOT CHORD 17-18=0/0, 16-17=0/1734, 15-16=0/1734, 14-15=0/2608, 13-14=0/2826, 12-13=0/2608, 11-12=0/1731, 10-11=0/48
 WEBS 4-14=-217/0, 5-13=-217/0, 1-17=0/1155, 2-17=-1059/0, 2-15=0/590, 3-15=-547/0, 3-14=-35/513, 9-11=0/1116, 8-11=-1053/0, 8-12=0/592, 6-12=-549/0, 6-13=-36/513

NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Refer to girder(s) for truss to truss connections.
- 3) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MITEK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

ENGINEERING BY
TRENCO
 A MITEK AFFILIATE

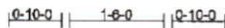
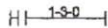
818 Soundside Road
 Edenton, NC 27832

Job LGL HOMES	Truss F7	Truss Type Floor	Qty 6	Ply 1	Avery Floor E10934002
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Builders FirstSource, Albemarle, NC 28001

7.640 s Apr 19 2018 Mitek Industries, Inc. Mon Jun 12 12:40 2017 Page 1
ID:DO?ru4b2DX76jRWByxkgI6znuDX-5117XPZINSV2KTsz4BuAoWCZYGuCpgUNL0kwYz72A5

0-1-8



0-1-8
Scale = 1:33.2

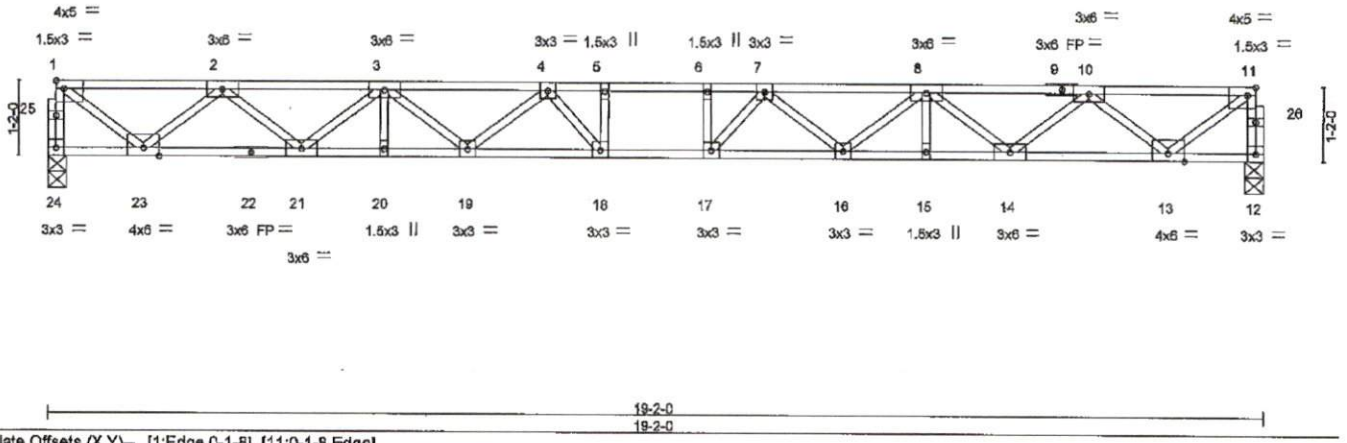


Plate Offsets (X,Y) - [1:Edge,0-1-8], [11:0-1-8,Edge]		19-2-0		19-2-0					
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	In (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.75	Vert(LL)	-0.40 17-18	>570	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.88	Vert(TL)	-0.62 17-18	>365	240		
BCLL 0.0	Rep Stress Incr	YES	WB 0.71	Horz(TL)	0.10 12	n/a	n/a		
BCDL 5.0	Code IRC2009/TPI2007		(Matrix)						
								Weight: 98 lb	FT = 20%F, 11%E

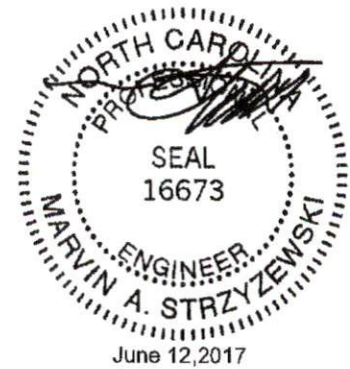
LUMBER-
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except*
12-22: 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-8-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 24=1034/0-3-8, 12=1034/0-3-8

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD 24-25=-1029/0, 1-25=-1028/0, 12-26=-1029/0, 11-26=-1027/0, 1-2=-1225/0, 2-3=-3046/0, 3-4=-4210/0, 4-5=-4680/0, 5-6=-4680/0, 6-7=-4680/0, 7-8=-4210/0, 8-9=-3046/0, 9-10=-3046/0, 10-11=-1225/0
BOT CHORD 23-24=0/62, 22-23=0/2308, 21-22=0/2308, 20-21=0/3794, 19-20=0/3794, 18-19=0/4584, 17-18=0/4680, 16-17=0/4584, 15-16=0/3794, 14-15=0/3794, 13-14=0/2308, 12-13=0/62
WEBS 5-18=-284/91, 6-17=-284/91, 1-23=0/1486, 2-23=-1409/0, 2-21=0/961, 3-21=-955/0, 3-20=-13/28, 3-19=0/532, 4-19=-509/0, 4-18=-225/528, 11-13=0/1485, 10-13=-1409/0, 10-14=0/961, 8-14=-954/0, 8-15=-13/28, 8-16=0/532, 7-16=-509/0, 7-17=-225/528

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) *Semi-rigid pitchbreaks with fixed heels* Member end fixity model was used in the analysis and design of this truss.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

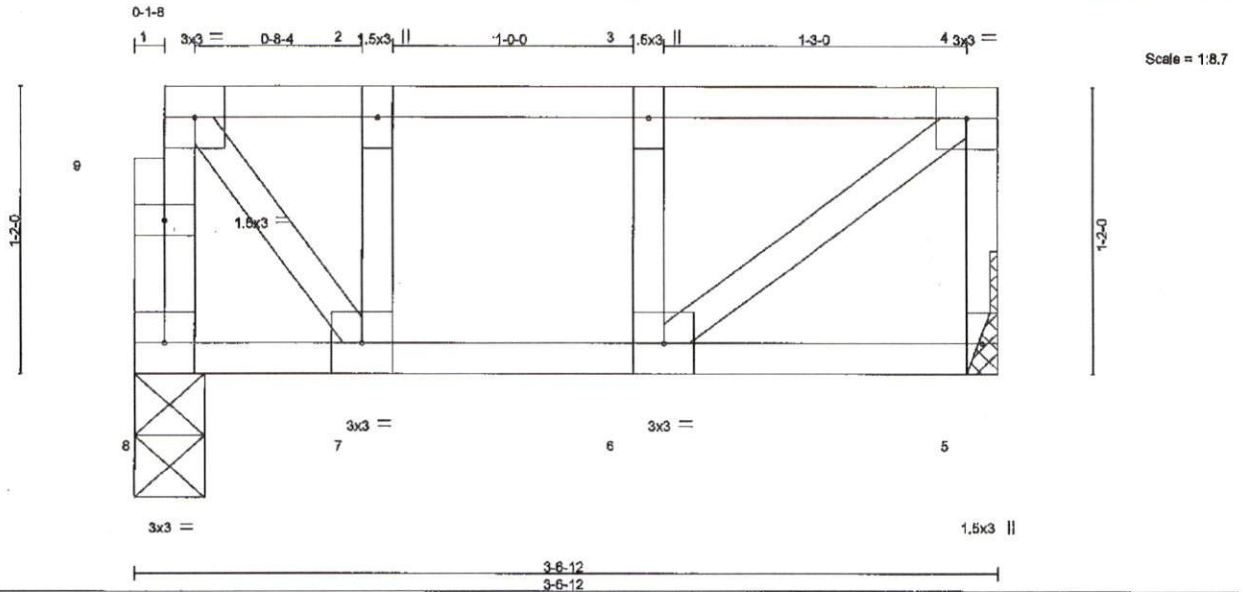


<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MM-7473 rev. 10/03/2016 BEFORE USE. Design valid for use only with Mitek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-69 and BCS1 Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>ENGINEERING BY TRENCO A Mitek Alliance 818 Soundside Road Edenton, NC 27932</p>
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Job LGI_HOMES	Truss F8	Truss Type Floor	Qty 1	Ply 1	Avery Floor Job Reference (optional)	E10634003
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Builders FirstSource, Albemarle, NC 28001

7.840 s Apr 19 2016 MITek Industries, Inc. Mon Jun 12 12:12:40 2017 Page 1
ID:DO?ru4b2DX75JRW9ydkG5znuDx-5117XPZINSV2KTsz48uAoWQJEYSkCz7UNL0kwYz72A5



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	In (loc)	V/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.12	Vert(LL)	-0.00	6	>999	MT20	244/190
TCGL 10.0	Lumber DOL	1.00	BC 0.12	Vert(TL)	-0.01	6	>999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.10	Horz(TL)	0.00	5	n/a		
BCDL 5.0	Code IRC2009/TPI2007		(Matrix)						
								Weight: 21 lb	FT = 20%F, 11%E

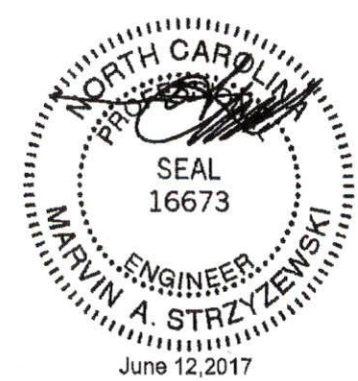
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2(flat)	TOP CHORD Structural wood sheathing directly applied or 3-6-12 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

REACTIONS. (lb/size) 8=179/0-3-8, 5=186/Mechanical

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD	8-9=-188/0, 1-9=-188/0, 4-5=-172/0, 1-2=-143/0, 2-3=-143/0, 3-4=-143/0
BOT CHORD	7-8=0/11, 6-7=0/143, 5-6=0/0
WEBS	4-6=0/180, 1-7=0/215, 2-7=-128/0, 3-8=-121/0

- NOTES-
- 1) Unbalanced floor live loads have been considered for this design.
 - 2) Refer to girder(s) for truss to truss connections.
 - 3) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.
 - 4) Recommend 2x8 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - 5) CAUTION, Do not erect truss backwards.

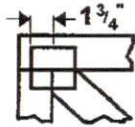


WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 rev. 10/03/2016 BEFORE USE.
 Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

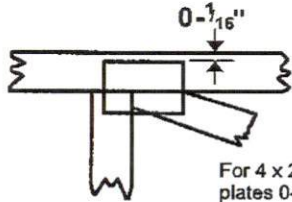
ENGINEERING BY
TRENCO
 A MITek Affiliate
 818 Soundside Road
 Edenon, NC 27632

Symbols

PLATE LOCATION AND ORIENTATION



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



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



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

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

PLATE SIZE

4 x 4

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

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING



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

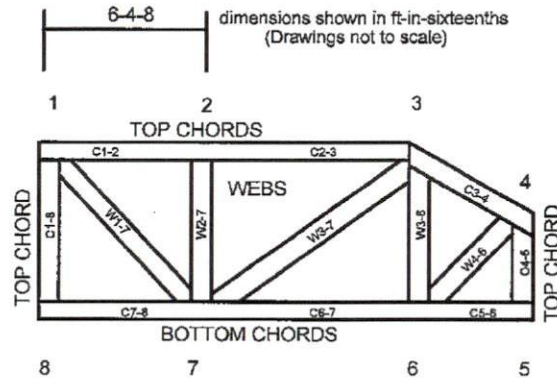
Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.

DSB-89: Design Standard for Bracing.

BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

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



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.

Trenco

818 Soundside Rd
Edenton, NC 27932

Re: LGI_Homes
Avery Roof

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: E10798395 thru E10798405

My license renewal date for the state of North Carolina is December 31, 2017.

North Carolina COA: C-0844

Lumber design values are in accordance with ANSI/TPI 1 section 6.3
These truss designs rely on lumber values established by others.



August 1, 2017

Strzyzewski, Marvin

IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdictions(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 Trenco. Any project specific information included is for Trenco's customer's file reference purpose only, and was not taken into account in the preparation of these designs. 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 the design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

Job	Truss	Truss Type	Qty	Ply	Avery Roof	E10798895
LGI_HOMES	A1E	GABLE	1			

Builders FirstSource, Albemarle, NC 28801

Job Reference (optional)
7.640 s Apr 19 2016 MITek Industras, Inc. Tue Aug 01 09:29:53 2017 Page 1
ID:W1XKcU07S3cwWfreuGga6gznu0U-IHEoPnFC75w2HjHfg7vwwYxyk0xXERFOaBx2IXysGml

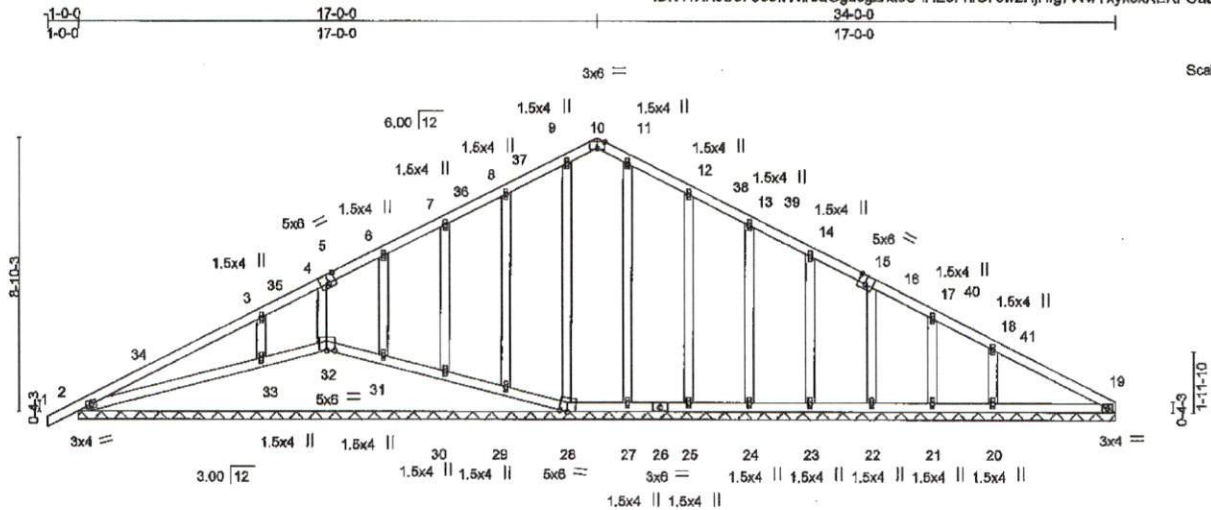


Plate Offsets (X,Y) - [5:0-2-12,0-3-4], [10:0-3-0,Edge], [15:0-2-12,0-3-4], [32:0-3-0,0-0-0]

LOADING (psf)	SPACING-	2-0-0	CSI,	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL	1.15	TC 0.42	Vert(LL)	-0.00	1	n/r	MT20	244/190
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.28	Vert(TL)	0.04	1	n/r		
TCDL 10.0	Rep Stress Incr	YES	WB 0.17	Horz(TL)	0.01	19	n/a		
BCLL 0.0 *	Code IRC2009/TPI2007		(Matrix)						
BCDL 10.0								Weight: 198 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 6-0-0 oc bracing: 32-33.

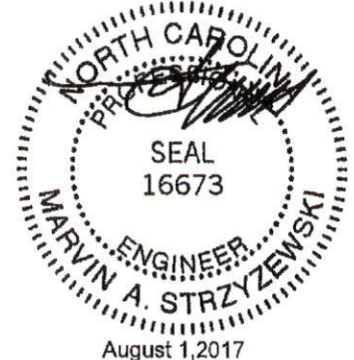
REACTIONS. (lb/size) 2=264/34-0-0, 32=13/34-0-0, 28=143/34-0-0, 29=168/34-0-0, 30=150/34-0-0, 31=201/34-0-0, 33=507/34-0-0, 27=154/34-0-0, 25=160/34-0-0, 24=161/34-0-0, 23=156/34-0-0, 22=178/34-0-0, 21=88/34-0-0, 20=327/34-0-0, 19=138/34-0-0
Max Horz 2=111(LC 9)
Max Up lift 2=57(LC 10), 32=16(LC 15), 29=34(LC 11), 30=15(LC 11), 31=31(LC 10), 33=144(LC 10), 26=36(LC 11), 24=16(LC 10), 23=18(LC 10), 22=24(LC 11), 21=22(LC 11), 20=89(LC 11)
Max Grav 2=264(LC 1), 32=82(LC 10), 28=168(LC 3), 29=198(LC 3), 30=150(LC 1), 31=201(LC 15), 33=507(LC 15), 27=180(LC 4), 25=197(LC 4), 24=161(LC 1), 23=156(LC 16), 22=178(LC 1), 21=88(LC 16), 20=327(LC 16), 19=138(LC 1)

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/22, 2-34=128/9, 3-34=111/79, 3-35=88/41, 4-5=66/50, 4-5=39/53, 5-6=39/64, 6-7=46/79, 7-36=43/100, 36-37=17/108, 8-37=5/110, 8-9=50/151, 9-10=42/139, 10-11=43/140, 11-12=51/151, 12-38=4/111, 38-39=16/108, 13-39=43/101, 13-14=43/78, 14-15=40/45, 15-16=44/35, 16-40=23/14, 17-40=40/5, 17-18=59/1, 18-41=93/48, 19-41=113/0
BOT CHORD 2-33=21/137, 32-33=21/130, 31-32=7/132, 30-31=3/133, 29-30=4/133, 28-29=3/134, 27-28=0/126, 26-27=0/126, 25-26=0/126, 24-25=0/126, 23-24=0/126, 22-23=0/126, 21-22=0/126, 20-21=0/126, 19-20=0/126
WEBS 9-28=136/0, 8-29=154/92, 7-30=113/45, 6-31=150/62, 4-32=18/17, 3-33=354/190, 11-27=138/0, 12-25=157/92, 13-24=120/48, 14-23=118/51, 16-22=130/57, 17-21=77/45, 18-20=228/127

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-05; 100mph; TCFL=6.0psf; BCFL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) 1-0-0 to 2-4-13, Interior(1) 2-4-13 to 17-0-0, Exterior(2) 17-0-0 to 20-4-13 zone; cantilever left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- TCLL: ASCE 7-05; Pr=20.0 psf (roof live load); Lumber DOL=1.15 Plate DOL=1.15; Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow); Lumber DOL=1.15 Plate DOL=1.15; Category II; Exp B; Partially Exp.; Ct=1.1
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-8-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.



Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MITEK connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI 1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

Job	Truss	Truss Type	Qty	Ply	Avery Roof
LGI_HOMES	A1E	GABLE	1	1	E10798395

Builders FirstSource, Albemarle, NC 28001

Job Reference (optional)
 7.840 s Apr 18 2016 MITek Industries, Inc. Tue Aug 01 09:29:53 2017 Page 2
 ID: W1XKcU07S3cwWreUGga5gznu0U-iHEoPnFC75w2H-jHfg7vwwYxykDxXERFOaBx2IXysGmi

NOTES-

- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 57 lb uplift at joint 2, 16 lb uplift at joint 32, 34 lb uplift at joint 29, 15 lb uplift at joint 30, 31 lb uplift at joint 31, 144 lb uplift at joint 33, 36 lb uplift at joint 25, 16 lb uplift at joint 24, 18 lb uplift at joint 23, 24 lb uplift at joint 22, 22 lb uplift at joint 21 and 99 lb uplift at joint 20.
- 12) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 32, 29, 30, 31, 33.
- 13) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 rev. 10/03/2015 BEFORE USE.
 Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSITP11 Quality Criteria, DSB-89 and BCB1 Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

ENGINEERING BY
TRENCO
 A MITek Affiliate
 818 Soundside Road
 Edenton, NC 27832

Job LGI_HOMES	Truss A2	Truss Type ROOF SPECIAL	Qty 2	Ply 1	Avery Roof	E10798396
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Builders FirstSource, Albemarle, NC 28001

Job Reference (optional)

7.640 e Apr 19 2016 MITek Industries, Inc. Tue Aug 01 09:29:54 2017 Page 1
ID: W1XKcU07S3owWreU-Gga5gznuOU-5ToAc7gqtP3vvtstEqQ8SNU1QQGrzmuXprhbEzysGmh



Scale = 1:60.0

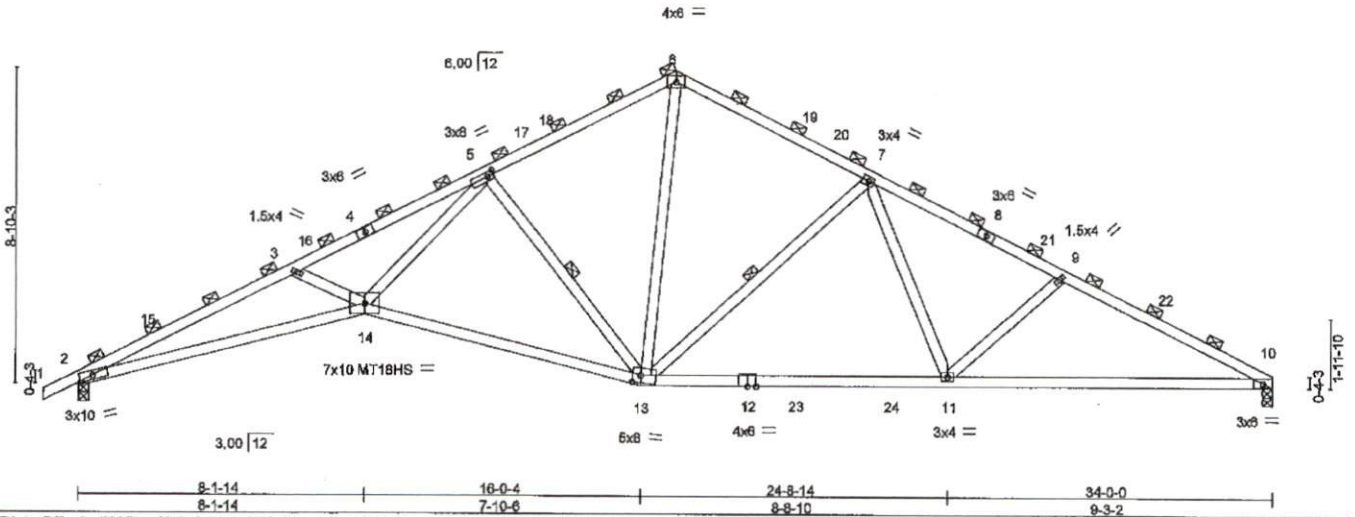


Plate Offsets (X,Y) - [2;0-4-12,0-1-8], [5;0-2-4,0-1-8], [13;0-2-12,0-2-8]

LOADING (psf)		SPACING-	2-1-8	CSI		DEFL.	In (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.38 11-13	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.98	Vert(TL)	-0.86 13-14	>469	180	MT18HS	244/190
TCDL	10.0	Rep Stress Incr	NO	WB	0.66	Horz(TL)	0.37 10	n/a	n/a		
BCLL	0.0 *	Code IRC2009/TPI2007		(Matrx)							
BCDL	10.0									Weight: 171 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1 *Except*
1-4: 2x4 SP DSS, 8-10: 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
2-14: 2x4 SP DSS, 10-12: 2x4 SP No.1
WEBS 2x4 SP No.3 *Except*
5-14: 2x4 SP No.2

BRACING-

TOP CHORD 2-0-0 oc purlins (2-5-11 max.)
(Switched from sheeted: Spacing > 2-0-0).
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-13, 7-13

REACTIONS.

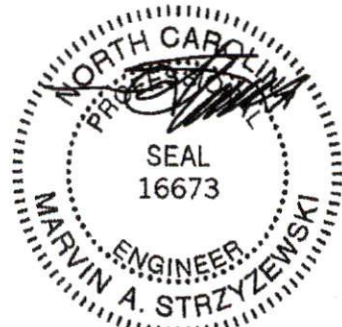
(lb/size) 2=1547/0-3-8, 10=1504/0-3-8
Max Horz 2=118(LC 9)
Max Uplift 2=168(LC 10), 10=117(LC 11)

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/26, 2-15=-5090/439, 3-15=-5006/471, 3-16=-4750/387, 4-16=-4690/396, 4-5=-4676/416, 5-17=-1850/273,
17-18=-1793/281, 8-18=-1767/300, 8-19=-1615/291, 19-20=-1639/272, 7-20=-1698/263, 7-8=-2484/299, 8-21=-2501/273,
9-21=-2565/271, 9-22=-2754/325, 10-22=-2837/307
BOT CHORD 2-14=-374/4593, 13-14=-151/2486, 12-13=-100/2013, 12-23=-100/2013, 23-24=-100/2013, 11-24=-100/2013,
10-11=-208/2468
WEBS 3-14=-305/195, 6-14=-125/2687, 5-13=-1350/209, 6-13=-124/1199, 7-13=-776/149, 7-11=0/580, 9-11=-338/178

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-05; 100mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) -1-0-0 to 2-4-13, Interior(1) 2-4-13 to 17-0-0, Exterior(2) 17-0-0 to 20-4-13 zone; cantilever left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-05; Pr=20.0 psf (roof live load); Lumber DOL=1.15 Plate DOL=1.15; Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow); Lumber DOL=1.15 Plate DOL=1.15; Category II; Exp B; Partially Exp.; Ct=1.1
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- Bearing at joint(s) 2 considers parallel to grain value using ANS/TP1 angle to grain formula. Building designer should verify capacity of bearing surface.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 10. This connection is for uplift only and does not consider lateral forces.
- "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 1, 2017

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 rev. 10/03/2015 BEFORE USE.
Design valid for use only with Mitek connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANS/TPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

ENGINEERING BY
TRENCO
A Mitek Affiliate
818 Soundside Road
Edenton, NC 27832

Job LGI_HOMES	Truss A3	Truss Type Roof Special	Qty 4	Ply 1	Avery Roof	E10788397
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Builders FirstSource, Albemarle, NC 29001

Job Reference (optional)
7.640 s Apr 19 2018 MITek Industries, Inc. Tue Aug 01 09:29:56 2017 Page 1
ID:W1XKcU07S3cwWlreUgGaSgznuOU-fgMYqThSeiBmWIR2oYxN7z0BjV99h2VQ9nPySgmg



Scale: 3/16"=1'

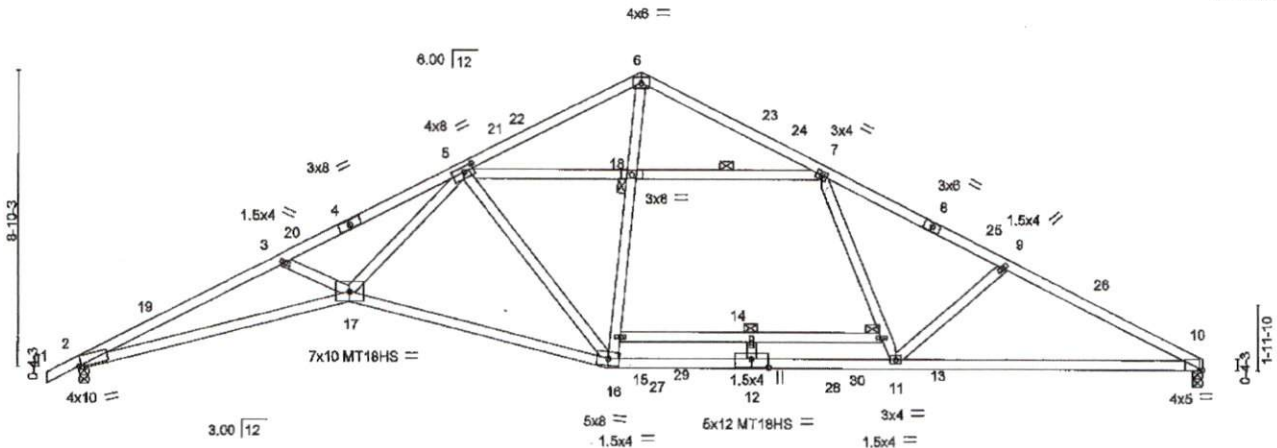


Plate Offsets (X,Y)-- [2:0-0-14,Edge], [5:0-3-10,0-1-12], [10:0-1-0,Edge], [12:0-6-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc) /defl L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.60 14-15 >679 240	MT20	244/190
Snow (P/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.83	Vert(TL)	-1.11 12-16 >365 180	MT18HS	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.95	Horz(TL)	0.40 10 n/a n/a		
BCLL	0.0	Code IRC2009/TP12007		(Matrix)					
BCDL	10.0							Weight: 187 lb	FT = 20%

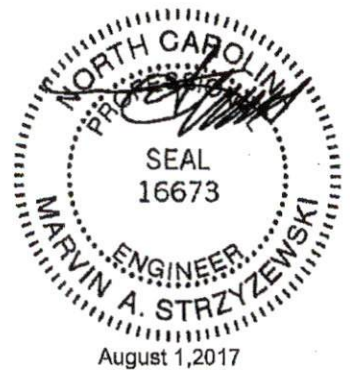
LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2 *Except* 1-4: 2x4 SP DSS	TOP CHORD	Structural wood sheathing directly applied or 2-0-6 oc purlins.
BOT CHORD	2x4 SP DSS *Except* 16-17: 2x4 SP No.1, 13-15: 2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 6-0-0 oc bracing: 13-15
WEBS	2x4 SP No.3 *Except* 5-17: 2x4 SP No.2	WEBS	1 Row at midpt 7-18
		JOINTS	1 Brace at Jt(s): 18, 13

REACTIONS. (lb/size) 2=1687/0-3-8, 10=1729/0-3-8
Max Horz 2=111(LC 9)
Max Uplift 2=119(LC 10), 10=50(LC 11)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/24, 2-19=-5710/253, 3-19=-5629/282, 3-20=-5413/203, 4-20=-5356/211, 4-5=-5348/229, 5-21=-1036/24,
21-22=-979/33, 6-22=-952/51, 6-23=-882/72, 23-24=-893/54, 7-24=-917/46, 7-8=-3050/149, 8-25=-3065/123,
9-25=-3125/121, 9-26=-3294/174, 10-26=-3388/157
BOT CHORD 2-17=-208/6155, 16-17=-46/2958, 16-27=0/2460, 12-27=0/2460, 12-28=0/2460, 11-28=0/2460, 10-11=-80/2941,
15-29=-17/0, 14-29=-17/0, 14-30=-17/0, 13-30=-17/0
WEBS 3-17=-249/187, 5-17=-42/2916, 5-16=-611/125, 15-16=-118/398, 15-18=-2/562, 6-18=0/625, 7-13=0/780, 11-13=0/853,
9-11=-293/172, 7-18=-1778/199, 5-18=-1763/195, 12-14=-115/0

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) 1-0-0 to 2-4-13, Interior(1) 2-4-13 to 17-0-0, Exterior(2) 17-0-0 to 20-4-13 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-05; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) All plates are MT20 plates unless otherwise indicated.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) Bearing at joint(s) 2 considers parallel to grain value using ANSITPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 10. This connection is for uplift only and does not consider lateral forces.
- 11) *Semi-rigid pitchbreaks with fixed heels* Member end fixity model was used in the analysis and design of this truss.

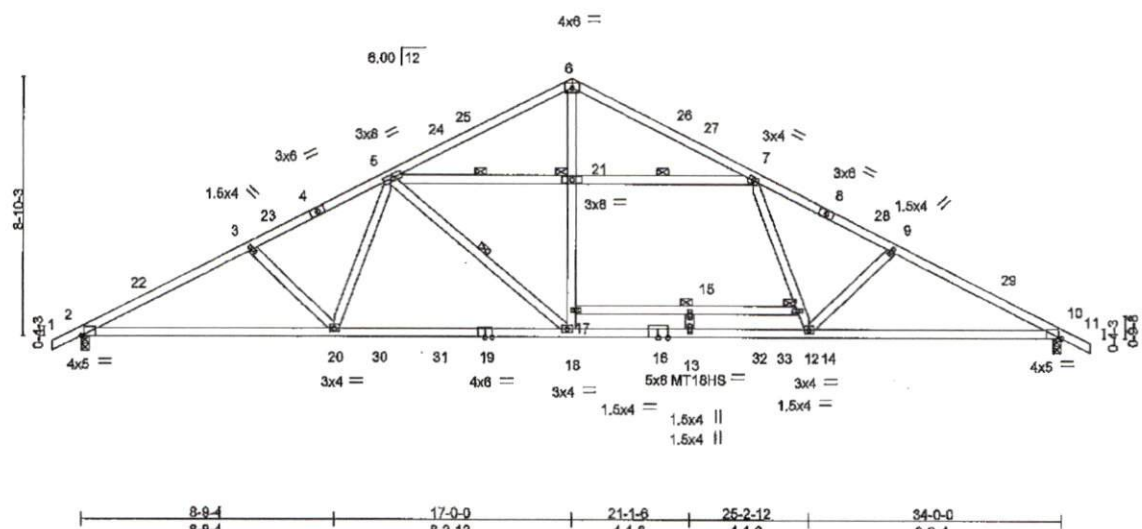


WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MH-7473 rev. 10/03/2016 BEFORE USE.
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ENGINEERING BY
TRENCO
A MITEK AFFILIATE
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Avery Roof	E10798398
LGL_HOMES	A4	Common	2	1		

Builders FirstSource, Albemarle, NC 28001
 Job Reference (optional):
 7.640 s Apr 19 2016 MITek Industries, Inc. Tue Aug 01 09:29:58 2017 Page 1
 ID: W1XKcU07S3cwWreUgGae5gznu0U-7sww1ph4P0Jd8B0ELFScYAZO?D14RitqG9AJrjsGmf



Scale = 1:73.1

Plate Offsets (X,Y)-- [2:0-1-0,Edge], [10:0-1-4,Edge]											
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	In (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.41	15	>975	240	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.68	Vert(TL)	-0.74	15	>546	180	244/190
TCDL	10.0	Rep Stress Incr	YES	WB	0.57	Horz(TL)	0.13	10	n/a	n/a	
BCLL	0.0	Code IRC2009/TP12007		(Matrix)							
BCDL	10.0										Weight: 193 lb FT = 20%

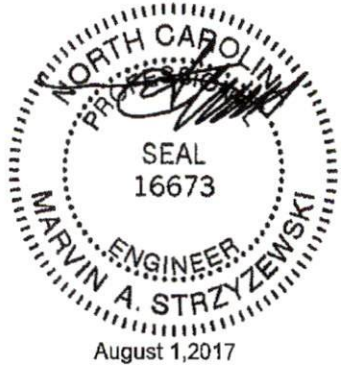
LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP DSS *Except*
 14-17; 2x4 SP No.2
 WEBS 2x4 SP No.3

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 2-4-6 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
 6-0-0 oc bracing: 14-17
 1 Row at midpt 5-18, 5-21, 7-21
 JOINTS 1 Brace at Jt(s): 21, 14

REACTIONS. (lb/size) 2=1743/0-3-8, 10=1851/0-3-8
 Max Horz 2=99(LC 8)
 Max Uplift 2=122(LC 10), 10=99(LC 11)

FORCES. (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/26, 2-22=3213/169, 3-22=3141/198, 3-23=2978/164, 4-23=2917/173, 4-5=2860/187, 5-24=1232/30,
 24-25=-1156/35, 6-25=-1136/53, 6-26=-1135/67, 26-27=-1136/49, 7-27=-1174/44, 7-8=-3138/131, 8-28=-3196/117,
 9-28=-3257/107, 9-29=-3409/143, 10-29=-3487/114, 10-11=0/26
 BOT CHORD 2-20=84/2787, 20-30=9/2472, 30-31=9/2472, 19-31=9/2472, 18-19=0/2619, 16-18=0/2619, 13-16=0/2619,
 13-32=0/2619, 12-32=0/2619, 10-12=-42/3025, 15-17=-7/14, 15-33=-7/14, 14-33=-7/14
 WEBS 17-18=0/545, 17-21=0/712, 6-21=0/762, 7-14=0/693, 12-14=0/589, 9-12=-240/152, 5-18=-146/562, 5-20=-7/437,
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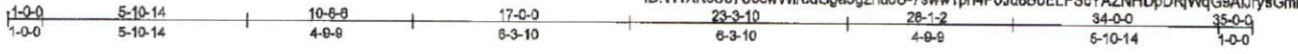
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-05; 100mph; TCCL=6.0psf; BCCL=5.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) 1-0-0 to 2-4-13. Interior(1) 2-4-13 to 17-0-0, Exterior(2) 17-0-0 to 20-4-13 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCCL: ASCE 7-05; Pr=20.0 psf (roof live load); Lumber DOL=1.15 Plate DOL=1.15; Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow); Lumber DOL=1.15 Plate DOL=1.15; Category II; Exp B; Partially Exp.; Ct=1.1
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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 BCCL = 10.0psf.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 10. This connection is for uplift only and does not consider lateral forces.
 - *Semi-rigid pitchbreaks with fixed heels* Member end fixity model was used in the analysis and design of this truss.



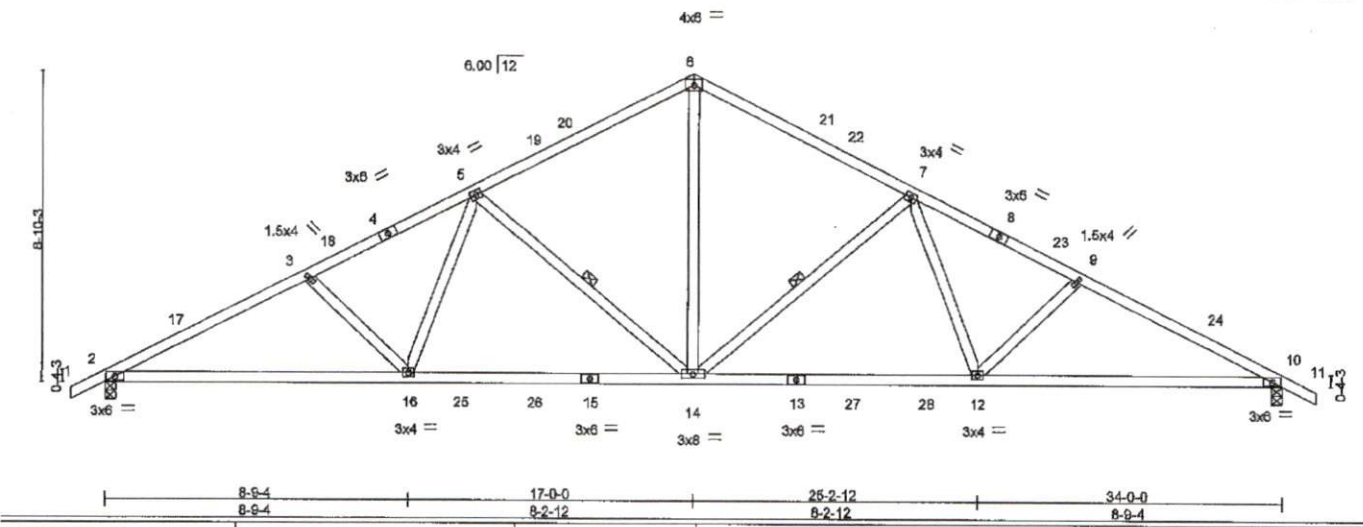
Job	Truss	Truss Type	Qty	Ply	Avery Roof	E10798399
LGI HOMES	A5	Common	6	1		

Builders FirstSource, Albemarle, NC 28001

Job Reference (optional)
 ID: W1XKcU07S3cwWfrcuGga5gznuOU-7www1ph4P0Jd880ELFSeYAZNHDPDRWqGBAUrysGmf
 7.640 s Apr 19 2016 Mitek Industries, Inc. Tue Aug 01 09:28:56 2017 Page 1



Scale = 1:60.9



LOADING (psf)	SPACING-	CSI	DEFL.	In (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.78	Vert(LL)	-0.21 14-16	>999	240	MT20	244/190
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.92	Vert(TL)	-0.47 14-16	>864	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.46	Horz(TL)	0.15 10	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	(Matrix)					Weight: 175 lb	FT = 20%
BCDL 10.0	Code IRC2009/TPI2007							

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
 WEBS 1 Row at midpt 7-14, 5-14

REACTIONS. (lb/size) 2=1502/0-3-8, 10=1502/0-3-8
 Max Horz 2=99(LC 9)
 Max Uplift 2=158(LC 10), 10=158(LC 11)

FORCES. (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/26, 2-17=-2705/247, 3-17=-2634/275, 3-18=-2466/242, 4-18=-2403/251, 4-5=-2347/266, 5-19=-1734/244, 19-20=-1858/249, 6-20=-1848/267, 6-21=-1848/267, 21-22=-1856/249, 7-22=-1734/244, 7-8=-2347/266, 8-23=-2403/251, 9-23=-2466/242, 9-24=-2634/275, 10-24=-2705/247, 10-11=0/26
 BOT CHORD 2-16=-153/2337, 16-25=-80/1994, 25-26=-80/1994, 15-26=-80/1994, 14-15=-80/1994, 13-14=-94/1994, 13-27=-94/1994, 27-28=-94/1994, 12-28=-94/1994, 10-12=-159/2337
 WEBS 6-14=-81/1109, 7-14=-700/146, 7-12=-2/464, 9-12=-267/147, 5-14=-700/146, 5-16=-2/464, 3-16=-267/147

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) 1-0-0 to 2-4-13, Interior(1) 2-4-13 to 17-0-0, Exterior(2) 17-0-0 to 20-4-13 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-05; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 10. This connection is for uplift only and does not consider lateral forces.
 - "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.



August 1, 2017

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 rev. 10/03/2016 BEFORE USE.
 Design valid for use only with MITEK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSITPPH Quality Criteria, D8B-89 and BCB Building Component Safety Information available from Truss Plate Institute, 216 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Avery Roof	E10798400
LGI_HOMES	AGE	Common Supported Gable	1	1		
Bulkers FirstSource, Albemarle, NC 28001		Job Reference (optional)				
		7.640 s Apr 19 2016 MITek Industries, Inc. Tue Aug 01 09:29:57 2017 Page 1				
		ID:W1XKcU07S3cwVreUgga5gznuOU-b2TIF8IAKRU/mLbQvzzr4O6ledM7AFDzVpvGrlyGme				

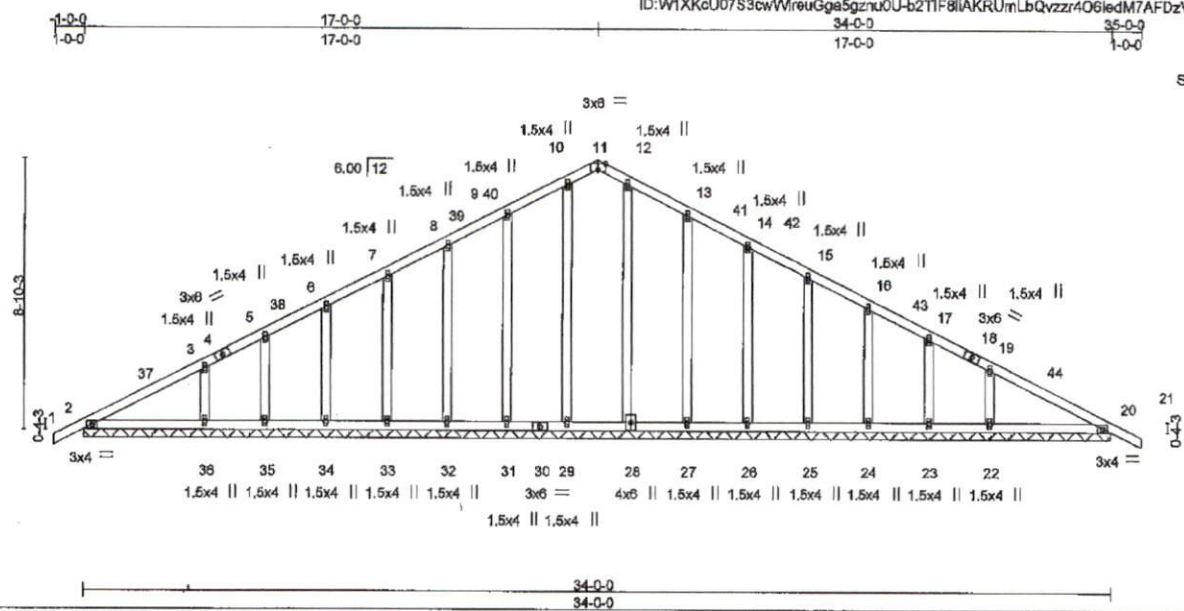


Plate Offsets (X,Y) - [1:0-3:0,Edge]		34'-0"		34'-0"	
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.17	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.11	Vert(LL) 0.00 21 n/r 120		
TCDL 10.0	Lumber DOL 1.15	WB 0.17	Vert(TL) 0.01 21 n/r 120		
BCLL 0.0 *	Rep Streas Incr YES	(Matrix)	Horz(TL) 0.01 20 n/a n/a		
BCDL 10.0	Code IRC2009/TPI2007			Weight: 211 lb	FT = 20%

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

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

REACTIONS. (lb/size) 2=208/34-0-0, 29=153/34-0-0, 31=160/34-0-0, 32=161/34-0-0, 33=156/34-0-0, 34=176/34-0-0, 35=96/34-0-0, 36=310/34-0-0, 28=152/34-0-0, 27=159/34-0-0, 26=161/34-0-0, 25=156/34-0-0, 24=176/34-0-0, 23=96/34-0-0, 22=310/34-0-0, 20=208/34-0-0

Max Horz 2=99(LC 9)
Max Uplift 2=19(LC 10), 31=37(LC 11), 32=16(LC 10), 33=19(LC 11), 34=22(LC 10), 35=29(LC 10), 36=84(LC 10), 27=38(LC 11), 26=15(LC 10), 25=19(LC 10), 24=22(LC 11), 23=29(LC 11), 22=84(LC 11), 20=28(LC 11)

Max Grav 2=208(LC 1), 29=180(LC 3), 31=197(LC 3), 32=161(LC 1), 33=156(LC 15), 34=176(LC 1), 35=96(LC 15), 36=310(LC 15), 28=178(LC 4), 27=195(LC 4), 26=161(LC 1), 25=156(LC 16), 24=176(LC 1), 23=96(LC 16), 22=310(LC 16), 20=208(LC 1)

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD
1-2=0/25, 2-37=152/8, 3-37=139/46, 3-4=83/30, 4-5=80/39, 5-38=61/43, 6-38=56/52, 6-7=45/74, 7-8=44/121, 8-39=44/157, 39-40=18/164, 9-40=6/166, 9-10=51/224, 10-11=44/208, 11-12=44/209, 12-13=50/227, 13-41=4/169, 41-42=16/167, 14-42=42/159, 14-15=42/124, 15-16=43/77, 16-43=27/27, 17-43=39/20, 17-18=66/0, 18-19=69/0, 19-44=141/47, 20-44=154/0, 20-21=0/25

BOT CHORD
2-36=0/193, 35-36=0/193, 34-35=0/193, 33-34=0/193, 32-33=0/193, 31-32=0/193, 30-31=0/193, 29-30=0/193, 28-29=0/193, 27-26=0/192, 26-27=0/192, 25-26=0/192, 24-25=0/192, 23-24=0/192, 22-23=0/192, 20-22=0/192

WEBS
10-29=138/0, 9-31=167/153, 8-32=120/77, 7-33=118/81, 6-34=129/89, 5-35=80/58, 3-36=218/167, 12-28=138/0, 13-27=157/153, 14-26=120/77, 15-25=118/81, 16-24=129/89, 17-23=80/58, 19-22=218/167

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-05; 100mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft. Cat. II; Exp B; enclosed; MWFRS (low-rise) gable end zone and C-C Corner(3) -1-0-0 to 2-4-13, Exterior(2) 2-4-13 to 17-0-0, Corner(3) 17-0-0 to 20-4-13 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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.
 - TCLL: ASCE 7-05; Pr=20.0 psf (roof live load); Lumber DOL=1.15 Plate DOL=1.15; Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow); Lumber DOL=1.15 Plate DOL=1.15; Category II; Exp B; Partially Exp.; Ct=1.1
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.



Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 rev. 10/03/2016 BEFORE USE. Design valid for use only with Mitek connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing Indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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Edenton, NC 27932

Job LGL_HOMES	Truss A&E	Truss Type Common Supported Gable	Qty 1	Ply 1	Avery Roof Job Reference (optional)	E10798400
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Builders FirstSource, Albemarle, NC 28001

7.840 s Apr 19 2018 MITek Industries, Inc. Tue Aug 01 09:29:58 2017 Page 2
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NOTES-

- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint 2, 37 lb uplift at joint 31, 16 lb uplift at joint 32, 19 lb uplift at joint 33, 22 lb uplift at joint 34, 29 lb uplift at joint 35, 84 lb uplift at joint 36, 38 lb uplift at joint 27, 15 lb uplift at joint 26, 19 lb uplift at joint 25, 22 lb uplift at joint 24, 29 lb uplift at joint 23, 84 lb uplift at joint 22 and 28 lb uplift at joint 20.
- 12) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MR-7473 rev. 10/02/2015 BEFORE USE.
Design valid for use only with Mitek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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A Mitek Affiliate

818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Avery Roof	E10798401
LOL_HOMES	G1	Monopitch Supported Gable	11	1		

Builders FirstSource, Albemarle, NC 28001

7.640 s Apr 19 2016 MITek Industries, Inc. Tue Aug 01 09:29:58 2017 Page 1
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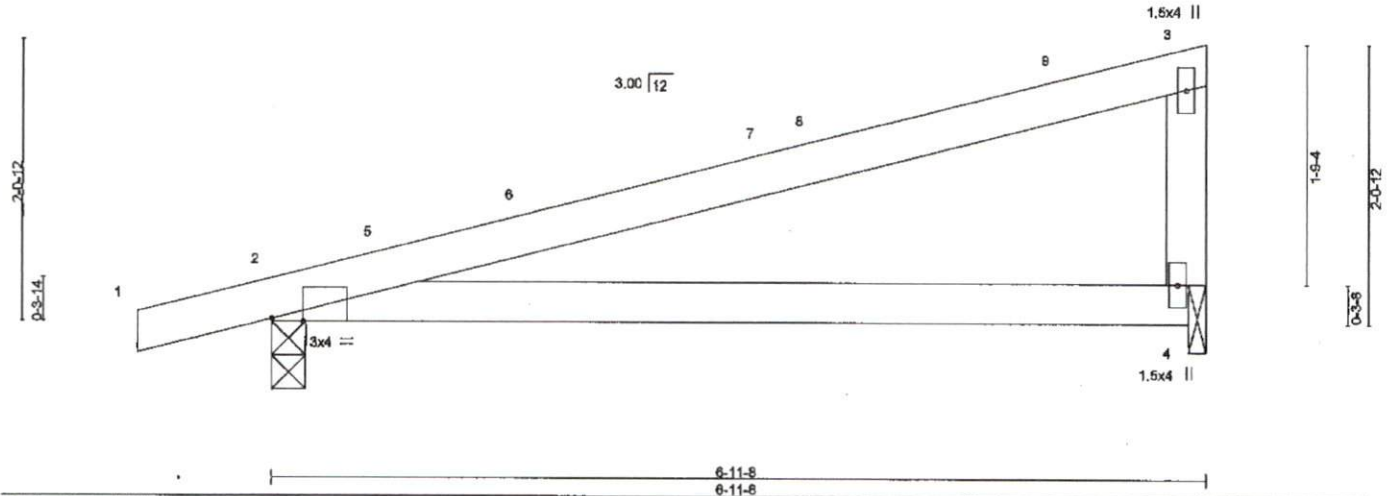


Plate Offsets (X,Y)-- (2:0-2-12,Edge)

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.87	Vert(LL)	-0.12	2-4	>669	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.58	Vert(TL)	-0.30	2-4	>268		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(TL)	0.00		n/a		
BCLL	0.0	Code IRC2009/TPI2007		(Matrix)						Weight: 25 lb	FT = 20%
BCDL	10.0										

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

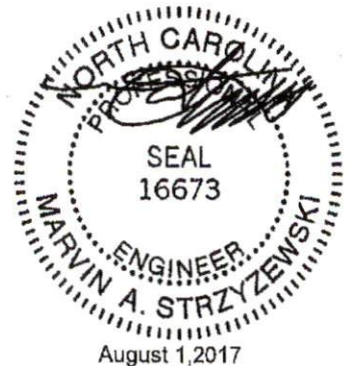
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 2-2-1 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=341/0-3-0, 4=262/0-1-8
 Max Horz 2=78(LC 8)
 Max Uplift 2=89(LC 10), 4=54(LC 11)

FORCES. (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/13, 2-5=-72/0, 5-6=68/0, 6-7=63/0, 7-8=63/4, 8-9=62/9, 3-9=-56/39, 3-4=185/216
 BOT CHORD 2-4=0/0

NOTES-

- 1) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (low-rise) gable end zone and C-C Corner(3) -1-0-0 to 2-0-0, Exterior(2) 2-0-0 to 6-9-12 zone; cantilever 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) TCLL: ASCE 7-05; Pr=20.0 psf (roof live load); Lumber DOL=1.15 Plate DOL=1.15; Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow); Lumber DOL=1.15 Plate DOL=1.15; Category II; Exp B; Partially Exp.; Ct=1.1; Min. flat roof snow load governs.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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) 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.
- 10) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at j(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.
- 12) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MW-7473 rev. 10/03/2015 BEFORE USE.
 Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-88 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

ENGINEERING BY
TRENCO
 A MITek Affiliates
 818 Soundside Road
 Edenton, NC 27932

Job LGI_HOMES	Truss P1	Truss Type Monopitch Supported Gable	Qty 6	Ply 1	Avery Roof	E10798402
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Builders FirstSource, Albemarle, NC 28001

7.640 s Apr 19 2016 MITek Industries, Inc. Tue Aug 01 09:29:58 2017 Page 1
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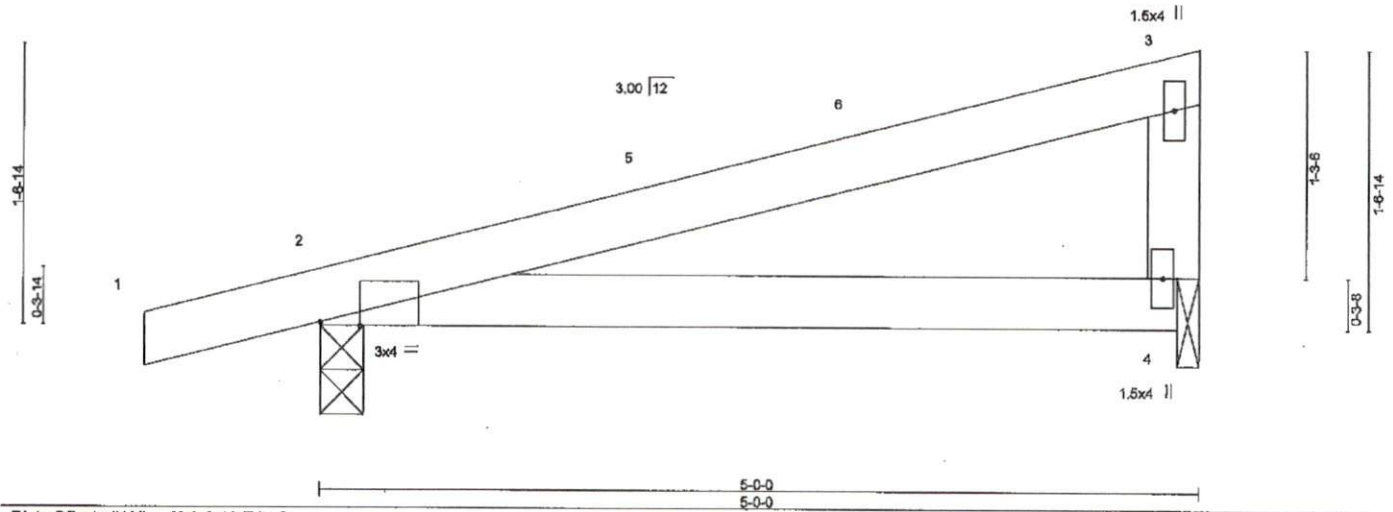


Plate Offsets (X,Y)- [2:0-2-12,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	In (loc)	I/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.03	2-4	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.26	Vert(TL)	-0.07	2-4	>757	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(TL)	0.00		n/a	n/a		
BCDL	0.0	Code IRC2009/TPI2007		(Matrix)								
BCDL	10.0										Weight: 18 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 5-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

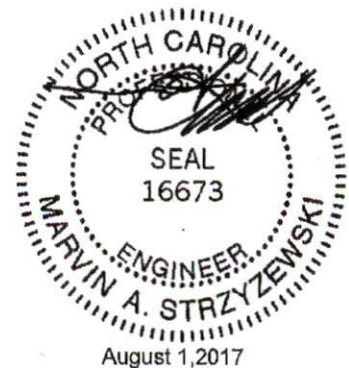
(lb/size) 2=265/0-3-0, 4=161/0-1-8
Max Horz 2=59(LC 8)
Max Uplift 2=80(LC 8), 4=37(LC 11)

FORCES.

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/13, 2-5=56/0, 5-6=49/0, 3-6=48/27, 3-4=134/169
BOT CHORD 2-4=0/0

NOTES-

- 1) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cal. II; Exp B; enclosed; MWFRS (low-rise) automatic zone and C-C Corner(3) -1-0-0 to 2-0-0, Exterior(2) 2-0-0 to 4-10-4 zone; cantilever 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) TCLL: ASCE 7-05; Pr=20.0 psf (roof live load); Lumber DOL=1.15 Plate DOL=1.15; Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow); Lumber DOL=1.15 Plate DOL=1.15; Category II; Exp B; Partially Exp.; Ct=1.1; Min. flat roof snow load governs.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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) 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.
- 10) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.
- 12) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MR-7473 rev. 10/03/2016 BEFORE USE.
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ENGINEERING BY
TRENCO
A Mitek Affiliate
818 Soundside Road
Edenton, NC 27832

Job	Truss	Truss Type	Qty	Ply	Avery Roof	E10798403
LG1_HOMES	V1	GABLE	1	1		
Builders FirstSource, Albemarle, NC 28001		Job Reference (optional)				
7.840 s Apr 19 2016 Mitek Industries, Inc. Tue Aug 01 09:28:59 2017 Page 1						
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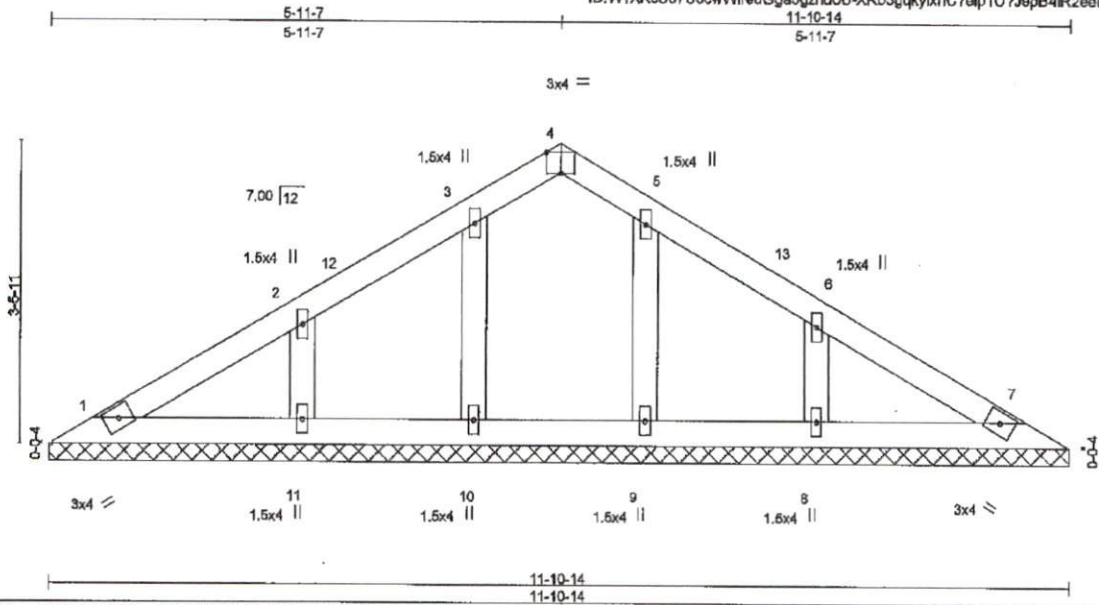


Plate Offsets (X,Y) - [4:0-2-0,Edge], [5:0-0-0,0-0-0], [6:0-0-0,0-0-0]												
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.04	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(TL)	0.00	7	n/a	n/a		
BCLL	0.0	Code IRC2009/TPI2007		(Matrix)							Weight: 47 lb	FT = 20%
BCDL	10.0											

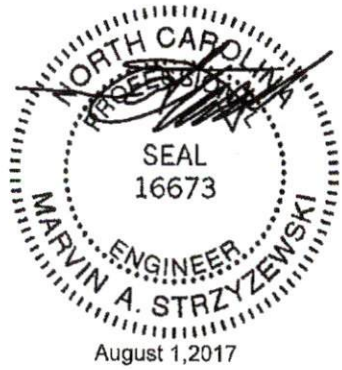
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

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

REACTIONS. (lb/size) 1=91/11-10-14, 7=91/11-10-14, 10=134/11-10-14, 11=208/11-10-14, 9=134/11-10-14, 8=208/11-10-14
Max Horz 1=91(LC 8)
Max Uplift 10=-19(LC 10), 11=-76(LC 10), 9=-14(LC 11), 8=-77(LC 11)
Max Grav 1=91(LC 1), 7=91(LC 1), 10=134(LC 1), 11=209(LC 14), 9=134(LC 1), 8=209(LC 15)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-76/41, 2-12=-61/22, 3-12=-27/33, 3-4=-50/42, 4-5=-50/41, 5-13=-26/21, 6-13=-61/12, 6-7=-63/23
BOT CHORD 1-11=-14/74, 10-11=-14/74, 9-10=-14/74, 8-9=-14/74, 7-8=-14/74
WEBS 3-10=-89/44, 2-11=-149/97, 5-9=-99/42, 6-8=-149/98

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-05; 100mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 5-11-7, Exterior(2) 5-11-7 to 8-11-7 zone; cantilever left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) TCLL: ASCE 7-05; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Cf=1.1
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) Gable requires continuous bottom chord bearing.
 - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at Jt(e) 10, 11, 9, and 8. This connection is for uplift only and does not consider lateral forces.
 - 9) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.



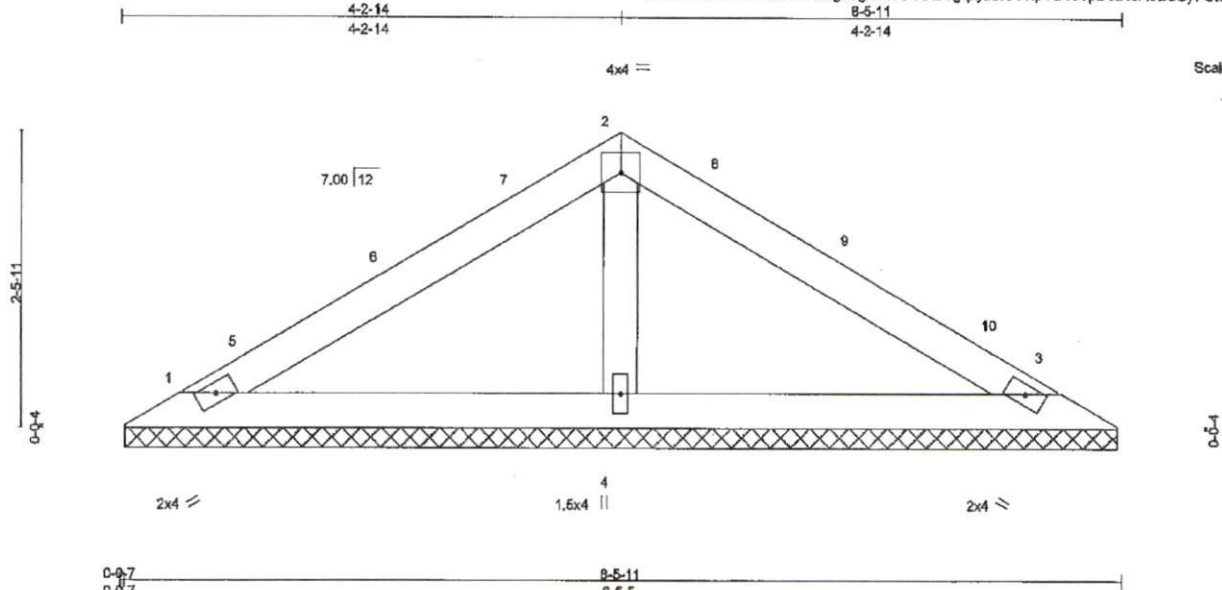
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 rev. 10/03/2016 BEFORE USE.
Design valid for use only with Mitek connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSITP1 Quality Criteria, DSB-88 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

ENGINEERING BY
TRENCO
A Mitek Alliance
818 Soundside Road
Edenton, NC 27832

Job LGI_HOMES	Truss V2	Truss Type Valley	Qty 1	Ply 1	Avery Roof	E10798404
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Builders FirstSource, Albemarle, NC 28001

7.640 e Apr 19 2016 MITek Industries, Inc. Tue Aug 01 09:29:59 2017 Page 1
 ID:W1XKcLJ07S3cwWreUgGa5gznuOU-XRb3gqkyixhC?elp1O7J9pB0iROAeBoGy7OMwAysGmc



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.26	In (loc) l/defl L/d	MT20	244/190
Snow (P/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.14	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.04	Vert(TL) n/a - n/a 999		
BCLL 0.0	Rep Stress Incr YES	(Matrix)	Horz(TL) 0.00 3 n/a n/a		
BCDL 10.0	Code IRC2009/TPI2007			Weight: 28 lb	FT = 20%

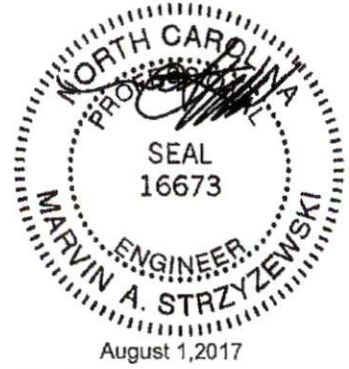
LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 OTHERS 2x4 SP No.3

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

REACTIONS. (lb/size) 1=155/8-4-14, 3=155/8-4-14, 4=282/8-4-14
 Max Horz 1=62(LC B)
 Max Uplift 1=43(LC 10), 3=46(LC 11), 4=11(LC 10)

FORCES. (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-5=-76/27, 5-6=-32/34, 6-7=-30/34, 2-7=-19/43, 2-8=-9/40, 8-9=-30/32, 9-10=-32/31, 3-10=-76/24
 BOT CHORD 1-4=-12/29, 3-4=-12/29
 WEBS 2-4=-190/68

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-05; 100mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 4-2-14, Exterior(2) 4-2-14 to 7-2-14 zone; cantilever left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) TCCL: ASCE 7-05; P=20.0 psf (roof live load); Lumber DOL=1.15 Plate DOL=1.15; Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow); Lumber DOL=1.15 Plate DOL=1.15; Category II; Exp B; Partially Exp.; Ct=1.1
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) Gable requires continuous bottom chord bearing.
 - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 8) One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at J(s) 1 and 3. This connection is for uplift only and does not consider lateral forces.
 - 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at J(s) 4. This connection is for uplift only and does not consider lateral forces.
 - 10) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.



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ENGINEERING BY
TRENCO
 A Mitek Affiliate
 618 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Avery Roof	E10798406
LGI_HOMES	V3	Valley	1	1		

Builders FirstSource, Albemarle, NC 28001

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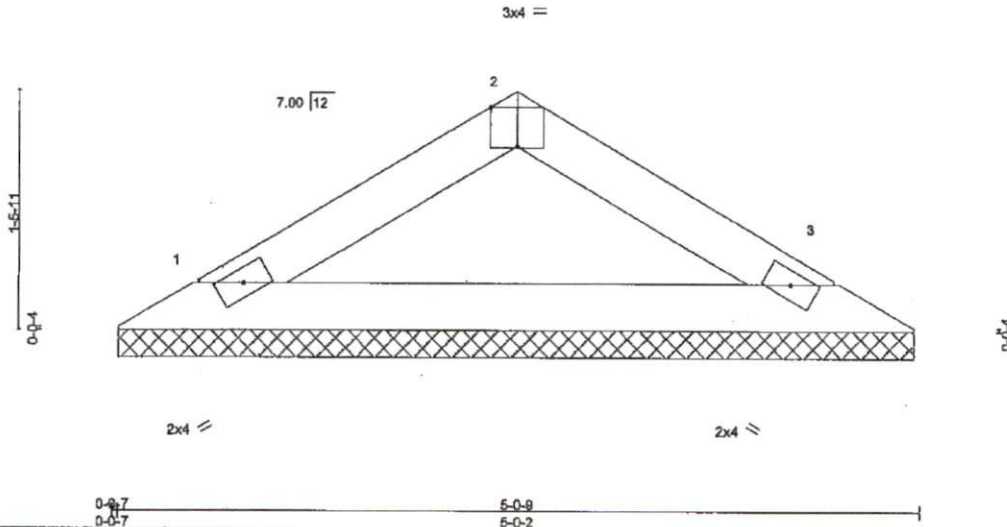


Plate Offsets (X,Y) - [2,0-2-0,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	In	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 2-0-0 1.15	TC 0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg) 15.4/20.0	Lumber DOL 1.15	BC 0.20	Vert(TL)	n/a	-	n/a	999		
TCDL 10.0	Rep Stress Incr YES	WB 0.00	Horz(TL)	0.00	3	n/a	n/a		
BCLL 0.0	Code IRC2009/TP12007	(Matrix)						Weight: 14 lb	FT = 20%
BCDL 10.0									

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

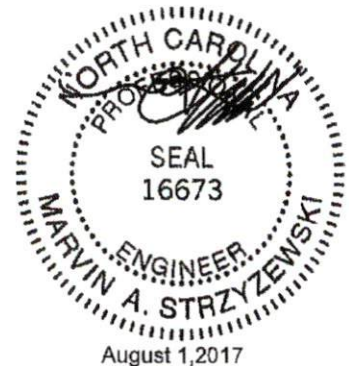
BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-0-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=159/4-11-11, 3=159/4-11-11
Max Horz 1=33(LC 6)
Max Uplift 1=28(LC 8), 3=28(LC 8)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-142/64, 2-3=-142/64
BOT CHORD 1-3=-27/102

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (low-rise) automatic zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-05; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1; Min. flat roof snow load governs.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * 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.
- One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 3. This connection is for uplift only and does not consider lateral forces.
- "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.

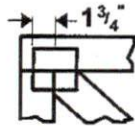


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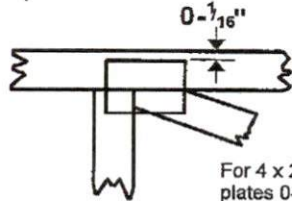
ENGINEERING BY
TRENCO
A MITEK Alliance
818 Soundside Road
Edenton, NC 27932

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.



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

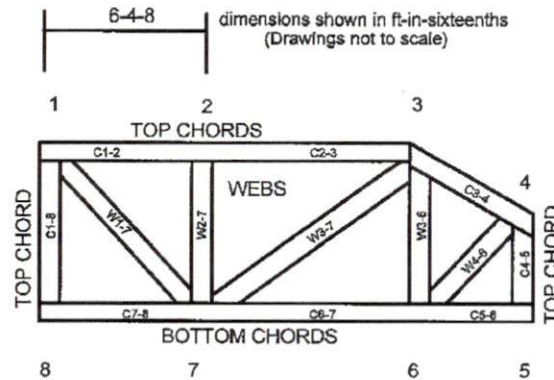


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP11: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

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



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.

