

**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

thruE10634003

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	7
LGUHOMES	F1E	Floor Supported Gable	1	1	E10833998	

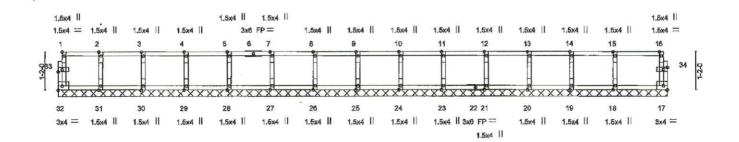
Builders FirstSource, Albemarle, NC 28001

7.640 s Apr 19 2016 MITek Industries, Inc. Mon Jun 12 12:12:36 2017 Page 1 ID:DO?ru4b2DX75jRW9yxkgi6znuDx-DXnch1W8JD?drsYCrlpEdg12fx6OGBDuSk2Wmnz72A9

048

0-118

Scale = 1:32.7



						18-11-8						
Plate Of	fsets (X,Y)—	1:Edge,0-0-12], [33:0-1-	8.0-0-121. [34	:0-1-8,0-0-12	2]					-		
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	In	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.10	Vert(LL)	n/a		n/a	999	MT20	244/190
TCDL	10.0 .	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999	1	
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(TL)	0.00	17	n/a	n/a		
BCDL	5.0	Code IRC2009/T	PI2007	(Matr	ix)						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=60/18-11-8, 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, 26=147/18-1 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, 14-16=-14/0, 15-16=-14/0 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, 26-27=0/14, 25-26=0/14, 26-27=0

**BOT CHORD** 

22-23=0/14, 21-22=0/14, 20-21=0/14, 19-20=0/14, 18-19=0/14, 17-18=0/14 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-

WEBS

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 MIL-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. Bracking indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracking is always required for stability and to prevent collegase with possible personal injury and properly damage. For general guidance regarding the tabheation, slorage, delivery, crection and bracking of incases and truss systems, see ANSI/PIT Quality Criteria, DSB-89 and BCSI Building Component Safety information available from Truss Piete Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job	Truss	Truss Type	Qty	Ply	Avery Floor	٦
LGI_HOMES	F2	Floor	1	1	E10633997	-

Builders FirstSource, Albemarle , NC 28001

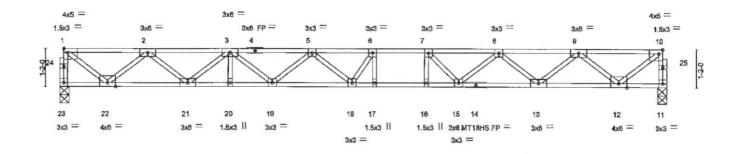
7.640 s Apr 19 2016 MITek Industries, Inc. Mon Jun 12 12:12:37 2017 Page 1 ID:DO?ru4b2DX75jRW9yxkgl6znuDx-hjL?uNXn4X7TT07OO?KTAue3MKHP?U41hOn4JDz72A8

0-1-8

H 1-3-0

0-7-12 1-6-0 0-11-4

0-11-8 Scale = 1:32.8



ł						18-11-8 18-11-8					
Plate Off	sets (X,Y)-	[1:Edge.0-1-8], [10:0-1-8	3,Edgel								
LOADIN	** **	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defl	Ľď	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.68	Vert(LL)	-0.38 17-18	>591	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.74	Vert(TL)	-0.59 17-18	>378	240	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.70	Horz(TL)	0.08 11	n/a	n/a	000000000000000000000000000000000000000	
BCDL	5.0	Code IRC2009/T	PI2007	(Matr	rix)	1				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, 7-6=-4114/0, 8-9=-3004/0, 9-10=-1210/0 22-23=0/61, 21-22=0/279, 20-21=0/3735, 19-20=0/3735, 18-19=0/4512, 17-18=0/4514, 16-17=0/4514, 15-16=0/4514, BOT CHORD

14-15=0/3686, 13-14=0/3686, 12-13=0/2283, 11-12=0/61 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=-760/0

### NOTES.

WEBS

- Unbalanced floor live loads have been considered for this design.
   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) 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,



🛕 WARRENO - Verlly design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MH-7473 rev. 18/03/2016 BEFORE USE. A WARRING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE ME-1471 FW. 18/03/2016 BET-ONE USE. Design watil for use only with MiTekle connectors. This design is based only upon parameters shown, and is or an including designer must verify the applicability of design parameters and properly incorporate this design into the everall building design. Bracing included is to prevent bucking of including utruss web and/or chord member only. Additional temporary and permanent bracing is always required for stability and to prevent outlines with possible personal rijury and property damage. For general guidance regarding the abdication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSITTHI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N, Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Avery Floor
LGI_HOMES	F3	Floor	4	1	E10833998  Job Reference (options)

Builders FirstSource. Albemarle, NC 28001

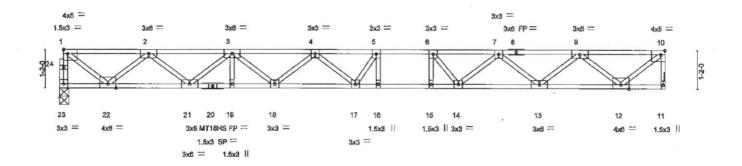
7.840 s Apr 19 2018 MITek Industries, Inc. Mon Jun 12 12:12:37 2017 Page 1 ID:DO?ru4b2DX75jRW@yxkgi6znuDx-hjl.?uNXn4X7TT07OO?KTAue3WKDL?U91hOn4JDz72A8

0-1-8

HI 1-3-0

0-7-12 1-6-0 0-9-4

Scale = 1:32.4



	1-6-0	4-0-0 2-6-0	6-7-8 2-7-8	- 1	9-1-5 2-5-0	9-10-12 10-7-12 0-9-4 0-9-0			14-9-8 2-8-0	17-3-8	18-8-0
Plate Of	ffsets (X,Y)-	[1:Edge,0-1-8], [10:0-1-8	B.Edge]								
LOADIN	IG (psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grlp DOL	1.00	TC	0.67	Vert(LL)	-0.37 16-17	>606	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	1.00	Vert(TL)	-0.57 16-17	>388	240	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.69	Horz(TL)	0.08 11	n/a	n/a		
BCDL	5.0	Code IRC2009/T	PI2007	(Matrix	()					Weight: 94 lb	FT = 20%F, 11%E

LUMBER-

TOP CHORD 2x4 SP No.2(flat)

BOT CHORD 2x4 SP No.2(flat) \*Except\*

WEBS 2x4 SP No.3(flat)

11-20: 2x4 SP DSS(flat)

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-8-15 oc purlins, except

end verticals.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

2-2-0 oc bracing: 19-21.

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

FORCES. (Ib) - Maximum Compression/Maximum Tension

TOP CHORD 23-24=-1005/0, 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

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, BOT CHORD

14-15=0/4387, 13-14=0/3594, 12-13=0/2208, 11-12=0/0

5-18:-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

## WEBS NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) The Fabrication Tolerance at joint 20 = 11%
- 4) Refer to girder(s) for truss to truss connections.
- 5) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss,
- 6) 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.
- 7) CAUTION, Do not erect truss backwards.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE M8-7473 rev. 10/03/2015 BEFORE USE.

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AMARKING - Verify design paremeters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MINTATS rev. Takestors and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MINTATS and the component, not because the component of the component o

818 Soundside Road Edenton, NC 27932

16673 16673 STRZYTY ZHIS VILLE

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attached to walls at their outer ends or restrained by other means. 4) Required 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each frues with 3-10d (0.131" X 3") nails. Strongbacks to be

4-20=-13/418, 6-20=-462/186, 11-13=0/1337, 10-13=-1272/0, 10-14=0/913, 9-14=-912/0, 9-15=0/9, 9-16=0/679, 5-18=-217/229, 6-18=-217/229, 1-26=0/1337, 2-26=-1272/0, 2-24=0/913, 3-24=-912/0, 3-23=0/8, 3-22=0/679, 4-22=-635/0

26-28=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,

35/0=61-21,0802/0=41-61,3646/0=41-15=0/3496,14-15=0/3080,12-13=0/2080,12-13=0/3080

3) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss. 2) All plates are MT20 plates unless otherwise indicated.

7-16=-636/0, 7-17=-13/418, 6-17=-462/185

1) Unbalanced floor live loads have been considered for this design.

NOTES-

WEBS

вот сново

P-6"-4640/0, 6-7"-4545/0, 7-8=-3949/0, 8-9=-3949/0, 9-10=-2781/0, 10-11=-1102/0

LOP CHORD

26-27=-916/0, 1-27=-914/0, 12-28=-916/0, 11-28=-914/0, 1-2=-1102/0, 2-3=-2781/0, 3-4=-3949/0, 4-5=-4545/0

FORCES. (Ib) - Maximum Compression/Maximum Tension

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

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

TOP CHORD 2x4 SP No.2(flat)

TC

вот сноя

Structural wood sheathing directly applied or 5-3-6 oc putilins, except	OP CHORD
0/11 10/07 - 11 - 70/01 11/0	

Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

2-2-0 oc bracing: 18-19,

end verticals.

aaamii i	-6				DINOVAL					
BCLL TCLL TCDL TCDL TCDL	(leq) 9 0.04 0.01 0.0 0.0 0.3	SPACING- Plate Grip DOL Rep Stress Incr Rep Stress Incr Code IRC2009/TR	6-7-1 00.1 00.1 83Y 7002I	MB 0.64 TC 0.96 (Metrix)	DEFL. Ver(TL) Horz(TL)	(bot) ni -0.48 18-19 -0.76 18-19 	Ndefl 525< 8/n	6/U 6/P 6/V 6/V	PLATES MT20 MT20 Weight: 109 lb	GRIP 244/190 FT = 20%F, 11%E FT = 20%F,
MICIAC	(Jed) 5)	SPACING	6-2-1	165	1344	10 -	n-1-11			

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [11:0-1-8,Edge] 9-5-L7

= 6×6	= 8x4	= 8x6	Exë.t :	= exe	= exe	a.r II	8x8.f =	ExE	= 97 SH8FTM 8x8 = 5x8	II Exa.t	= exe	= 8x4	= exe
15	13	Þŀ	91	91	YF 81	L	48	50	55 51	23	54	25	SS
92 8Z 11 = 5X9 1 = 5X9 1	01 = 9x6		8 = 9×6	= cxc = qq 8xc 8 7	= £x	9 =	g g		= exe	E = 976	= 0 <sub>0</sub> e 2 2		= 8x4, = 6x3,r = 75,0

21-2-0 0-9-1 - tr-2-d

H 1-3-0

8-L-0

dol

Scale = 1:36.9

ID: DOJUM PSDXY SJRW9yx kgl8znuDx-9wvN6JXPmFK 49layja ij 57EUKZC ky IBw2Xdnz 7 ZA7

Lob Reference (optional) 7,840 a Apr 19 2016 MaTek Industries, Inc. Mon Jun 12 12:12:36 2017 Page 1 Albemarie, NC 28001 Builders FirstSource, 15 FLOOR LG HOMES E10933888 Avery Floor OFA Truss Type

Job	Truss	Truss Type	Qty	Ply	Avery Floor	
LGI_HOMES	F6E	Floor Supported Gable	1	1		E10834000
Builders FirstSource.	Albemarie , NC 28001				Job Reference (optional)	

1500 Karistan Rev (Uprincing)
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0-11-8

Scale = 1:36.8

0-1-8

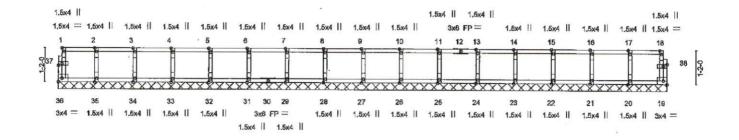


Plate Offsets (X,Y) [	1:Edge,0-0-12], (37:0-1-8,0-0-12], (38	:0-1-8.0-0-121	21-3-8						
LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0 BCDL 5.0	SPACING-         2-0-0           Plate Grip DOL         1.00           Lumber DOL         1.00           Rep Stress Incr         YES           Code IRC 2009/TP I2007	CSI. TC 0.08 BC 0.01 WB 0.03 (Matrix)	DEFL. Vert(LL) Vert(TL) Horz(TL)	in n/a n/a 0.00	(loc) - - 19	l/defi n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 88 lb	GRIP 244/190 FT = 20%F, 11%E
BOT CHORD 2x4 SP WEBS 2x4 SP	No.2(flat) No.2(flat) No.3(flat) No.3(flat)		BRACING- TOP CHOR BOT CHOR	RD	end ve	rticals.			-0 oc purlins, except

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, 36 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, 16-38=-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

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, 10-28=-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-

**WEBS** 

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 stude 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,



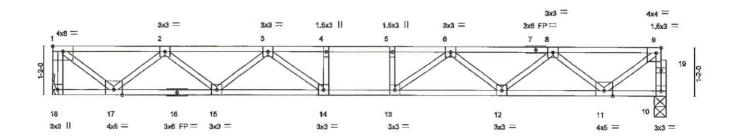
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE Mil-7472 rev. 16/03/2015 BEFORE USE.

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. Bracking included is to prevent buckling or individual truss web and/or chord members only. Additional temporary and permanent bracking is shrays required for stability and to prevent bucklapse with possible paraonal injury and property damage. For general gutdance regarding the fabrication, storage, delivery, erection and bracking of trusses and truss systems, see ANSATPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job	Truss	Truss Type	Qty	Ply	Avery Floor
LGLHOMES	F6	Floor	3	1	E10634001
Builders FirstSource, Albert	narie , NC 28001	ID:	DO?ru4b2	7.8	Job Reference (optional) 40 s Apr 19 2016 MITek Industries, Inc. Mon Jun 12 12:12:39 2017 Page 1 9yxkgl6znuDx-d6TtJ3Y1c8NBUHmWQNxFJfTU8xuTPvK8iGAN8z72A6
1-3-0		1-4-4	1-4-4	-1	0 <sub>117</sub> 8

Scale = 1:25.6



TES GRIP 20 244/190
ght: 76 lb FT = 20%F, 11%
G

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

FORCES. (lb) - Maximum Compression/Maximum Tension

 $1-18 \pm 802/0, \ 10-19 \pm -797/0, \ 9-19 \pm -796/0, \ 1-2 \pm 920/0, \ 2-3 \pm 2187/0, \ 3-4 \pm 2826/0, \ 4-5 \pm 2826/0, \ 5-6 \pm 2826/0, \ 6-7 \pm 2186/0, \ 7-8 \pm 2186/0, \ 8-9 \pm 922/0, \ 10-19 \pm 10-$ 

TOP CHORD BOT CHORD

17-18=-0/0, 16-17=0/1734, 15-16=0/1734, 14-15=0/2608, 13-14=0/2828, 12-13=0/2608, 11-12=0/1731, 10-11=0/48
4-14=-217/0, 6-13=-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, WEBS

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.
- "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") nalls. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.



WARNING - Verity design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MIL-7473 rev. 10/03/2018 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 property 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 demage. 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, Alexandric, VA 22314.



818 Soundside Roa Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Avery Floor
L.GI_HOMES	F7	Floor	е	1	Job Reference (cotional)

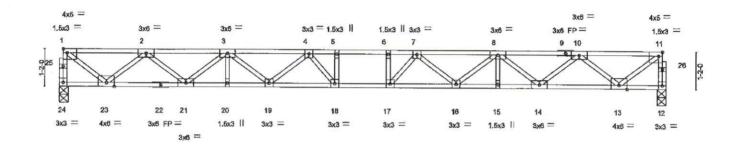
Builders FirstSource. Albemarie NC 28001 | Jubb Reference (optional)
7.846 s.pt ris 2016 MiTok Industries, inc. Mon Jun 12 12:12:40:2017 Page 1
|D:DO?ru4b2DX75]RW9yxkgl6znuDx-5117XPZfNSV2KTsz48uAoWCZXYGuCpgUNL0kwYz72A5

0-1-B

H 1-3-0

1-6-0 0-10-0

0-1-8 Scale = 1:33.2



Dieta Of	Tanta (V V)	M-Edm- 0 4 01 144-0 4 0	Fdaal		51/11/2000	19-2-0					
Plate Of	sets (X,Y)	[1:Edge.0-1-8], [11:0-1-8	.Edge			T					
LOADIN		SPACING-	2-0-0	CSL		DEFL.	in (loc	) I/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.75	Vert(LL)	-0.40 17-1	8 >570	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.88	Vert(TL)	-0.62 17-1	8 >365	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.71	Horz(TL)	0.10 1		n/a	1	
BCDL	5.0	Code IRC2009/T	PI2007	(Matr		(, ,		_		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)

2x4 SP No.3(flat) WEBS

BRACING-

TOP CHORD

Structural wood sheathing directly applied or 4-6-12 oc purlins, except

BOT CHORD

Rigid celling directly applied or 10-0-0 oc bracing.

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

FORCES. (Ib) - Maximum Compression/Maximum Tension

TOP CHORD

24-25=-1029/0, 1-25=-1029/0, 1-2-26=-1029/0, 11-26=-1027/0, 1-2=-1225/0, 2-3=-3046/0, 3-4=-4210/0, 4-5=-4680/0, 5-8=-4680/0, 6-7=-4680/0, 7-8=-4210/0, 8-9=-3046/0, 9-10=-3046/0, 10-11=-1225/0

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, BOT CHORD

15-16=0/3794, 14-15=0/3794, 13-14=0/2308, 12-13=0/82

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-

WERS

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 pc 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.



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MIT-7473 rev. 10/03/2015 BEFORE USE. Design valid for use only with MITokic connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building design runst verify the applicability of design parameters and properly incorporate this design into the overall building design. Earling 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 fusues and truss systems, see

Ansitrift Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Guile 312, Alexandria, VA 22314.



Job Truss Truss Type Qty Avery Floor E10834003 Floor Job Reference (optional)
7.840 s Apr 19 2016 MiTek Industries, Inc. Mon Jun 12 12:12:49 2017 Page 1
ID:DO?ru4b2DX75jRW9yxkgi8znuDx-5l17XPZfNSV2KTsz48uAoWCjEYSkCz7UNL0kwYz72A5 Builders FiretSoumo marla NC 28001 1 3x3 = 2 1.5x3 II 3 1.5x3 II 4 3x3 = 1-3-0 Scale = 1:8.7 3x3 = 3x3 = 3x3 = 1.5x3 || LOADING (psf) SPACING-DEFL l/defi in PLATES 1 /d GRIP TCH 40 0 Plate Grip DOL 1.00 TC 0.12 Vert(LL) -0.00 >999 480 244/190 MT20 TCDL 10.0 1.00 Lumber DOL BC 0.12 Vert(TL) -0.01 >999 240 BCLL 0.0 Rep Stress Incr YES WB 0.10 Horz(TL) n/a 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) BOT CHORD 2x4 SP No.2(flat) TOP CHORD Structural wood sheathing directly applied or 3-6-12 oc purlins, except end verticals. WERS 2x4 SP No.3(flat) BOT CHORD Rigid cailing directly applied or 10-0-0 oc bracing. 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, 3-6=-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 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nalls. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MIT-7473 rev., 16/03/2015 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. Bracking indicated is to prevent buckling of Individual truss web and/or chord members only. Additional lamporary and permanent bracking is always required for stability and to prevent buckling on the stability and properly design. For general guidance regarding the fabrication, storage, defivery, erection and bracking of trusses and truss systems, see

ANSITY Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Piste Institute, 218 N. Lee Street, Surie 312, Alexandria, VA 22314.

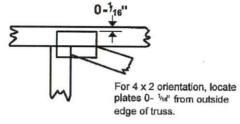


## **Symbols**

#### PLATE LOCATION AND ORIENTATION



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



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:**

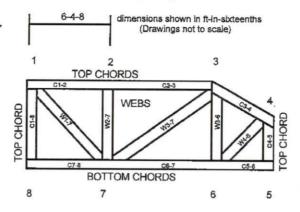
ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.

DSB-89: BCSI:

Design Standard for Bracing. 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

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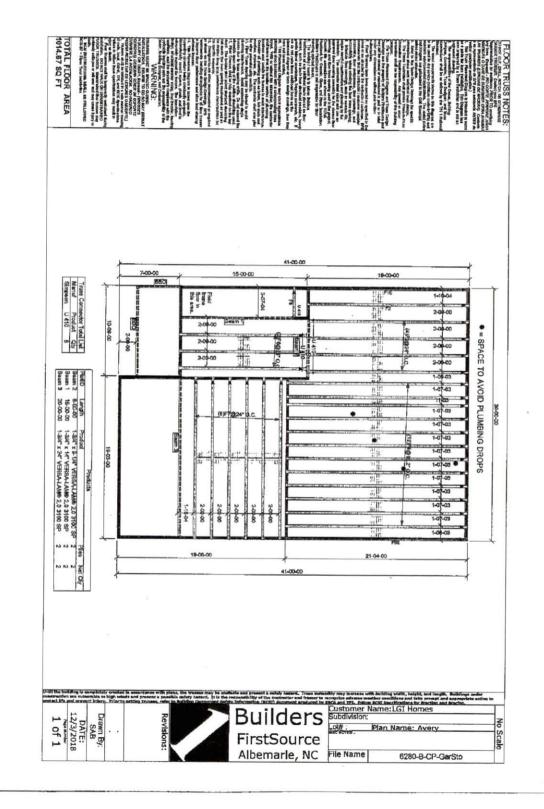
MiTek Engineering Reference Sheet: MII-7473 rev. 10/03/2015



# ▲ 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 BCSL
- 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.
- 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

thruE10798405

My license renewal date for the state of North Carolina is

December 31, 2017.

North Carolina COA: C-0844

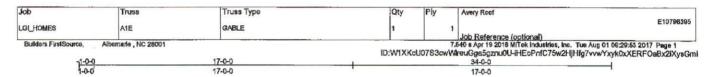
Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.



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.



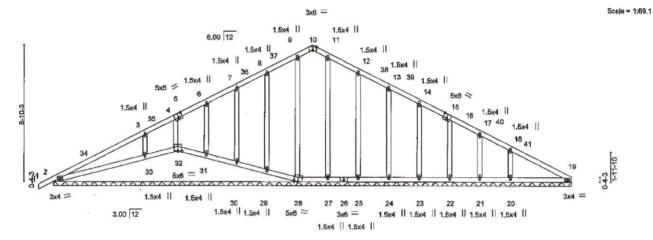


Plate Offsets (X.Y) 15:0	8-1-14 -2-12,0-3-4], [10:0-3-0,Edge		-10-6 -3-41, [32:0-3	3-0.0-0-01			17-11-	12		1	
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0	SPACING- Plate Grip DOL Lumber DOL	2-0-0 1.15 1.15 YES	CSI. TC BC WB	0.42 0.28 0.17	DEFL. Vert(LL) Vert(TL) Horz(TL)	-0.00 0.04 0.01	(loc) 1 1	l/defl n/r n/r n/r	L/d 120 120 n/a	PLATES MT20	GRIP 244/190
BCLL 0.0 1	Code IRC2009/	TPI2007	(Mat	rix)		71.000.00				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 BOT CHORD

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

REACTIONS. (lb/size) 2=284/34-0-0, 32=-13/34-0-0, 28=143/34-0-0, 29=166/34-0-0, 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=86/34-0-0, 20=327/34-0-0, 19=138/34-0-0

16-0-4

Max Horz 2=111(LC 9)

Max Uplift 2=-57(LC 10), 32=-16(LC 15), 29=-34(LC 11), 30=-15(LC 11), 31=-31(LC 10), 33=-144(LC 10), 25=-36(LC 11),

24=-16(LC 10), 23=-18(LC 10), 22=-24(LC 11), 21=-22(LC 11), 20=-99(LC 11)

Max Grav 2=264(LC 1), 32=62(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, 4-35=-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

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=-226/127

#### NOTES.

WEBS

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=25ff; 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) Truss designed for wind loads in the plane of the truss only. For stude exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) 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 (fiat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1

5) Unbalanced snow loads have been considered for this design.

- 6) 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.
- 7) Gable requires continuous bottom chord bearing.

8) Gable studs spaced at 2-0-0 oc.

9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

10) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

Coptinued on page 2

WARMING - Varify design parameters and READ NOTES ON THIS AND INCLUDED MITEX REFERENCE PAGE MIN-7473 rev. 10/93/2015 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 varify the applicability of dealign parameters and properly incorporate this design into the overtal building design. Bracking inclosated is to prevent bucking of individual itsus web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapses with possible personal injury, and property dramage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPH Quality Criteria, DSB-89 and BGSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suile 312, Alexandria, VA 22314.





818 Soundalde Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Avery Roof	
LGI_HOMES	A1E	GABLE	1	1	λ	E10798395
Builders FirstSource, Alber	naria , NC 28001				Job Reference (optional) 340 s Apr 19 2016 Milek Industries, Inc. Tue Apr 01 09:29:53 2017	Dana 9

7.640 s Apr 19 2016 MTek Industries, Inc. Tue Aug 01 09:29:53 2017 Page 2
ID:WIXKcU07S3cwWreuGga5gznu0U-iHEoPnfG75w2HjHfg7vvwYxyk0xXERFOeBx2lXyeGml

#### 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.
- 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.

WARMING - Verify design perameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MM-7473 rev. 10/03/2018 BEFORE USE.

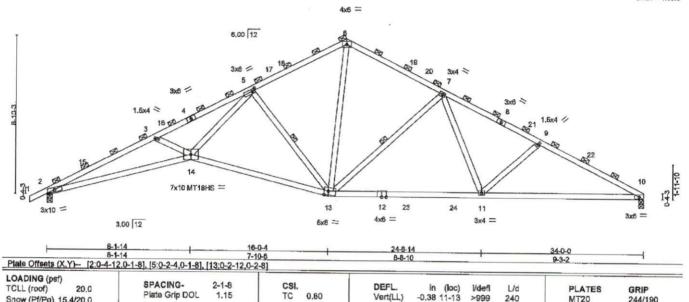
Design valid for use only with hitTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



818 Soundskie Road Edenton, NC 27932

Job		Truss	T	russ Type		Qty	Ply	Avery Roof	
LG_HOMES		A2	R	OOF SPECIAL		2		1	E10798396
Builders FirstSource,	6-2-		11-7-5	1	17-0-0	ID:W1XKol 22-5-1	J0753cwV	Job Reference (optional) 7.840 * Apr 19 2016 MTek Industri VireuGga5gznu0U-BToAc7gqtf	es, Inc. Tue Aug 01 09:29:54 2017 Page 1 P3vvtarEqQ8SIU1QQ6rzmuXprhbEzyaGmh 34-0-0
1-0-0	6-2-	10	5-4-11		5-4-11	5-5-13	ß.	6-5-13	6-0-5

Scale = 1:60.0



LUMBER-

TCDL

BCLL.

BCDL

Snow (Pf/Pg) 15,4/20.0

TOP CHORD 2x4 SP No.1 \*Except\*

10.0

10.0

0.0 \*

1-4: 2x4 SP DSS, 8-10: 2x4 SP No.2

Plate Grip DOL

Rep Stress Inci

Code IRC2009/TPI2007

Lumber DOL

1.15

1.15

NO

BOT CHORD 2x4 SP No.2 \*Except\*

2-14: 2x4 SP DSS, 10-12: 2x4 SP No.1 2x4 SP No.3 \*Except\*

WEBS

5-14: 2x4 SP No.2

BRACING-

WEBS

BOT CHORD

TOP CHORD 2-0-0 oc purlins (2-5-11 max.)

Vert(LL)

Vert(TL)

Horz(TL)

(Switched from sheeted: Spacing > 2-0-0).

Rigid ceiling directly applied or 10-0-0 oc bracing.

-0.86 13-14

10

0.37

1 Row at midpt 5-13, 7-13

>999

>469

240

180

n/a

MT20

MT18HS

Weight: 171 lb

244/190

244/190

FT = 20%

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=-5090/471, 3-16=-4750/387, 4-16=-4690/396, 4-5=-4676/416, 5-17=-1850/273,

17-18=-1793/281, 6-18=-1767/300, 6-19=-1615/291, 19-20=-1639/272, 7-20=-1698/263, 7-8=-2484/299, 8-21=-2501/273,

TC 0.80

BC

WB 0.66

(Matrix)

0.98

9-21=-2565/271, 9-22=-2754/325, 10-22=-2837/307 2-14=-374/4593, 13-14=-151/2486, 12-13=-100/2013, 12-23=-100/2013, 23-24=-100/2013, 11-24=-100/2013, BOT CHORD

3-14=-305/195, 5-14=-125/2687, 5-13=-1350/209, 6-13=-124/1199, 7-13=-776/149, 7-11=0/580, 9-11=-336/178

# WEBS

- 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 course Lumber DOL=1.45) | Catagons III; Exp B; Bartishly Exp B; Partishly Exp B; Par
- 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.

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 BCDI. = 10.0psf.

  9) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 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 heets" Member end fixity model was used in the analysis and design of this truss.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

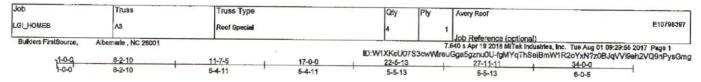
SEAL 16673

A STRI A STRI

WARNING - Verity design parameters and READ NOTES ON THIS AND INCLUDED MITTER REFERENCE PAGE MIL-7473 rev. 16/03/2016 BEFORE USE.

Design valid for use only with MITTERS 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. Bracking indicated is to prevent bucking of individual truss web and/or chord members only. Additional femporary and permanent bracing is always required for stability and to prevent bucking so with possible personal injury and property dumage. For general guidence regarding the fabrication, storage, delivery, erections and bracking of trusses and fruss systems, see ANSIPTH Quality Criteria, DSB-89 and BG8I Building Component Safety information available from Truss Plate Institute, 218 N, Lee Street, Suite 312, Alexandria, VA 22314.





Scale: 3/16"=1"

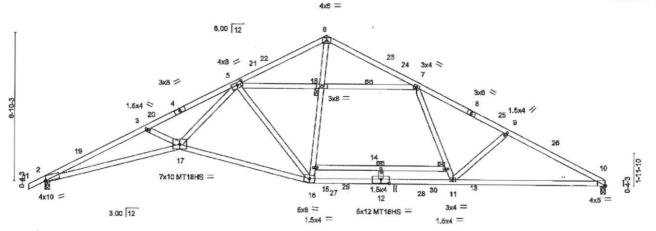


Plate Offsets (X,Y) [2:0-0-1		(6-0-4 7-10-8 (dge), [12:0-6-0,0-3-0]	20-4-9 4-4-5	24-8-14 4-4-5	1	34-0-0 9-3-2		1
LOADING (psf) TCLL (roof) 20.0 Snow (Pl/Pg) 15.4/20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2009/TPI2007	CSI. TC 0.86 BC 0.83 WB 0.95 (Matrix)	DEFL. Vert(LL) Vert(TL) Horz(TL)	in (loc) -0.60 14-15 -1.11 12-16 0.40 10	Vdefl >679 >365 n/a	L/d 240 180 n/a	PLATES MT20 MT18HS Weight: 187 lb	GRIP 244/190 244/190 FT = 20%

BRACING-

WEBS

JOINTS

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No.2 \*Except\*

1-4: 2x4 SP DSS

BOT CHORD 2x4 SP DSS \*Except\*

16-17: 2x4 SP No.1, 13-15: 2x4 SP No.2 2x4 SP No.3 \*Except\* WEBS

5-17: 2x4 SP No.2

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
2-17=-206/5156, 16-17=-46/2958, 16-27=0/2460, 12-27=0/2460, 12-28=0/2460, 11-28=0/2460, 10-11=-80/2941, 16-29=-17/0, 14-30=-17/0, 13-30=-17/0 BOT CHORD

3-17=-249/187, 5-17=-42/2916, 5-16=-811/125, 15-16=-118/398, 15-18=-2/562, 6-18=0/625, 7-13=0/780, 11-13=0/653,

9-11=-293/172, 7-18=-1778/199, 5-18=-1763/195, 12-14=-115/0

#### NOTES-

WEBS

- 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(7) 7-0-0 to 20-4-13 zone; cartillever 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 ANSI/TPI 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 heals" Member end fixity model was used in the analysis and design of this truss.

SEAL 16673

VGINEE

August 1,2017 August 1,2017

Structural wood sheathing directly applied or 2-0-6 oc purlins.

Rigid celling directly applied or 10-0-0 oc bracing. Except:

7-18

6-0-0 oc bracing: 13-15

1 Brace at Jt(s): 18, 13

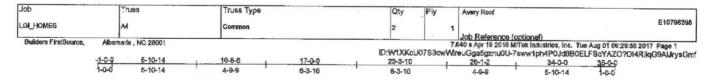
1 Row at midnt

🛦 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/00/2015 BEFORE USE. Design wall for use only with MITeMP connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building component, not a truss system. Before use, the building designer must varify the applicability of design parameters and properly incorporate this design into the overall building design. Bracking 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 Griteria, DSB-69 and BCSI Building Component Safaty Information available from Truss Plate Institute, 218 N. Lee Street, Suita 312, Alexandria, VA 22314.



Edenton, NC 27932



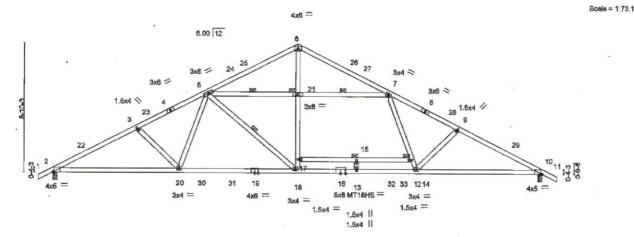


Plate Offsets (X,Y) [2:0-1-0,	8-9-4 Edge], [10:0-1-4,Edge]	B-2-12	4-1-6	4-1-6		8-9-4		
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2009/TPI2007	CSI. TC 0.74 BC 0.68 WB 0.57 (Matrix)	DEFL. Vert(LL) Vert(TL) Horz(TL)		oc) l/defl 15 >975 15 >546 10 n/a	L/d 240 180 n/a	PLATES MT20 MT18HS Weight: 193 lb	GRIP 244/190 244/190 FT = 20%

BRACING-

WEBS

**JOINTS** 

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No.2

BOT CHORD 2x4 SP DSS \*Except\*

14-17: 2x4 SP No.2 WEBS

2x4 SP No.3

REACTIONS. (lb/size) 2=1743/0-3-8, 10=1851/0-3-8

Max Horz 2=99(LC B)

Max Uplift 2=-122(LC 10), 10=-99(LC 11)

FORCES. (lb) - Maximum Compression/Maximum Tension

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 TOP CHORD

24-25=-1155/35, 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=0/28

2-20=-84/2787, 20-30=-9/2472, 30-31=-9/2472, 19-31=-9/2472, 18-19=-9/2472, 16-18=0/2619, 13-16=0/2619, BOT CHORD

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,

3-20=-253/148, 5-21=-1711/204, 7-21=-1719/207, 13-15=-141/0

#### NOTES-

1) 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

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) 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.

10) "Semi-rigid pitchbreeks with fixed heels" Member end fixity model was used in the analysis and design of this truss



Structural wood sheathing directly applied or 2-4-8 oc purlins.

5-18, 5-21, 7-21

Rigid ceiling directly applied or 10-0-0 oc bracing. Except:

6-0-0 oc bracing: 14-17

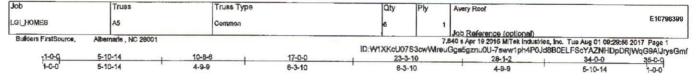
1 Brace at Jt(s): 21, 14

1 Row at midpt

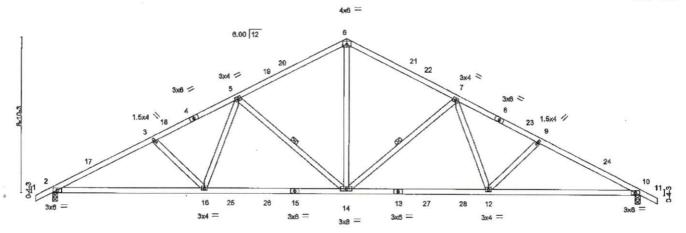
🛕 WARHING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTER REFERENCE PAGE MIT-7473 1911, 10/03/2015 BEFORE USE. Design valid for use only with MiTekte connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building designer must verify the applicability of design parameters and properly incorporate this design into the overall building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Branching indicated is to prevent buckling of infividual truss web another or horizon the overall elemporary 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

ANSITTRI Quality Criteria, DSB-89 and BC6| Building Component
Safety information available from Truss Plats Institute, 218 N, Lee Street, Suite 312, Alexandria, VA 22314.





Scale = 1:60,9



	8-9-4 8-9-4	17-0-0 6-2-12	25-2-12 8-2-12	34-0-0 8-9-4	1
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2009/TPI2007	CSI, TC 0.78 BC 0.92 WB 0.46 (Matrix)	DEFL. In (loc) Vdefl Vert(LL) -0.21 14-16 >999 Vert(TL) -0.47 14-16 >864 Horz(TL) 0.15 10 n/a	L/d PLATES 240 MT20 180 n/e Weight: 175 lb	GRIP 244/190 FT = 20%

BRACING-TOP CHORD

WEBS

**BOT CHORD** 

LUMBER-

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

2x4 SP No.3

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=-1656/249, 6-20=-1646/267, 6-21=-1646/267, 21-22=-1656/249, 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 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, **BOT CHORD** 

27-28=-94/1994, 12-28=-94/1994, 10-12=-159/2337

6-14=81/1109, 7-14=700/146, 7-12=-2/464, 9-12=-267/147, 5-14=-700/148, 5-16=-2/464, 3-16=-267/147

## WEBS 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=26ft; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

7) \* This truss has been designed for a live load of 20,0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10,0psf.

8) 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.

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



Structural wood sheathing directly applied or 2-2-0 oc purlins.

7-14, 5-14

Rigid celling directly applied or 2-2-0 oc bracing.

1 Row at midpt

🛕 WARNING - Varlfy dealgn perameters and READ NOTES ON THIS AND INCLUDED MITTER REFERENCE PAGE MIT-7473 rev., 10/03/2015 BEFORE USE. WARRING - Varity design parameters and READ NOTES ON THIS AND INCLUDED MITTER REFERENCE PAGE MIN-1473 rev. 1405/2015 BEFORE USE.

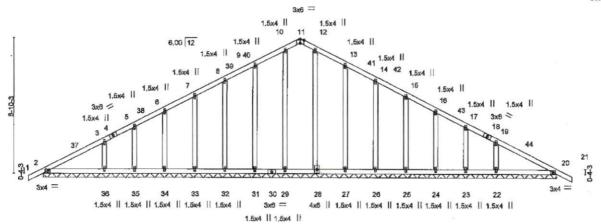
Design veild for use only with MTIes® connecters. This design is based only upon parameters shown, end is for an individual building component, not a true system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracking includated is to prevent building of individual trues who and/or chord members. Additional temporary and perament bracking is always required for stability and to prevent collapse with possible personal injury and properly damage. For general guidance regarding the fablication, storage, delivery, erection and bracking of trueses and trues systems, see

ANSISTELL QUARTER OFFICE AND ADDITIONAL OFFICE AND ADDITIONAL OFFICE ADDITIONAL OFFI ADDITIONAL OFFI



Job Truss Truss Type Qty F40798400 LGI\_HOMES A6E Common Supported Gable Job Reference (optional) 7.640 s Apr 19 2016 MiTek Industries, Inc. Tue Aug 01 09:29:57 2017 Page 1 Puriders FirstSource arle . NC 28001 ID:W1XKcU07S3cwWfreuGga5gznu0U-b2TlF8llAKRUmLbQvzzr4O6ledM7AFDzVpvGrtysGme 1-0-0 34-0-0 35-0-0 17-0-0

Scale = 1:69.7



LOADING (psf) TCLL (roof) 20.0	SPACING- Plate Grip DO	2-0-0 1.15	CSI.	0.17	DEFL. Verl(LL)	In 0.00	(loc) 21	Vdeft	L/d 120	PLATES MT20	GRIP
Snow (Pt/Pg) 15.4/20.0	Lumber DOI	1.15	BC	0.17	Vert(TL)	0.00	21	n/r	120	M120	244/190
TCDL 10.0 BCLL 0.0	* Rep Stress Inc	r YES	WB	0.17	Horz(TL)	0.01	20	n/a	n/a		
BCDL 10.0	Code IRC2009	#/1P1200/	(Mati	rix)						Weight: 211 lb	FT = 20

34-0-0

LUMBER-TOP CHORD 2x4 SP No.2

BOT CHORD 2x4 SP No.2 OTHERS 2x4 SP No.3 BRACING-

TOP CHORD BOT CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. Rigid celling 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, 27-28=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 10-29=-138/0, 9-31=-157/153, 8-32=-120/77, 7-33=-118/81, 6-34=-129/89, 5-35=-80/58, 3-36=-218/187, 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-

WEBS

- 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 (tow-rise) gable and 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
- 3) Truss designed for wind loads in the plane of the truss only. For study exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-05; Pr=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

5) Unbalanced snow loads have been considered for this design.

- 6) 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.
- 7) Gable requires continuous bottom chord bearing.

8) Gable studs spaced at 2-0-0 oc.

- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

Edenton, NC 27932

SEAL 16673

VGINEE THE AUGUST 1,2017

August 1,2017

A WARNING - Verity design paren elers and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE. Design valid for use only with MTex® 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 buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and 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, crection and bracing of trusses and truss systems, see

ANSUTPIT Quality Criteria, DSB-99 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

-							
	Job	Truss	Truss Type	Qty	Ply	Avery Roof	
	LGLHOMES	ABE	Common Supported Gable	1	1		798400
	P. II.I FL 16				2010	Job Reference (optional)	

Builders FirstSource, Albemarte NC 28001

| I.Job Reference (optional) 7.940 s Apr 19 2016 Mirek Industries, Inc. Tue Aug 01 06:29;58 2017 Page 2 |D:W1XKcU07S3cwWireuGga5gznu0U-3F1hSUjKxdZLNUAcTgUddbetO1hMyiT7kTipNikysGmd

#### NOTES-

11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 ib uplift at joint 2, 37 ib uplift at joint 31, 16 ib uplift at joint 32, 19 ib uplift at joint 33, 22 ib uplift at joint 34, 29 ib uplift at joint 35, 84 ib uplift at joint 36, 38 ib uplift at joint 27, 15 ib uplift at joint 26, 19 ib uplift at joint 25, 22 ib uplift at joint 24, 29 ib 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.

WARking - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MIT-7472 rev. 19/03/2015 BEFORE USE.

Design valid for use only with MITek® compectors. 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 properly despect. 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.



Job Truss Truss Type Qty E10798401 GI HOMES as Monopilch Supported Gable Job Reference (optional)
7.640 s Apr 19 2016 MITek Industries, Inc. Tue Aug 01 09:29:58 2017 Page 1 rle NC 28001 ID:W1XKcU07S3cwWfreuGga5gznu0U-3F1hSUJKxdZLNUAcTgU4dbeiT1ZzvkA7kTfpNkysGmd -1-0-0 1-0-0 6-11-8

Scale = 1:15.7

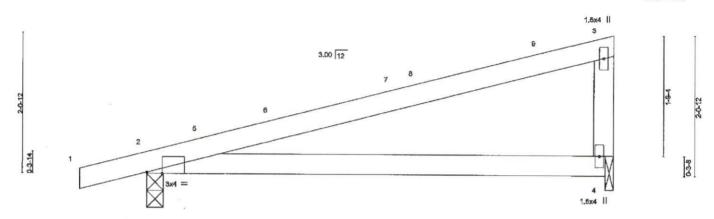


Plate Offsets (X,Y)- [2:0-2-12	2,Edgel		6-11-8						
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Strass Incr YES Code IRC2009/TPI2007	CSI. TC 0.87 BC 0.58 WB 0.00 (Matrix)	DEFL. Verl(LL) Verl(TL) Horz(TL)	In -0.12 -0.30 0.00	(loc) 2-4 2-4	Vdefi >669 >268 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 25 lb	GRIP 244/190 FT = 20%

LUMBER-

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

6-11-8

TOP CHORD **BOT CHORD** 

Structural wood sheathing directly applied or 2-2-1 oc purlins, except

end verticals.

Rigid celling 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. (Ib) - 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=-195/216

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 stude 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,

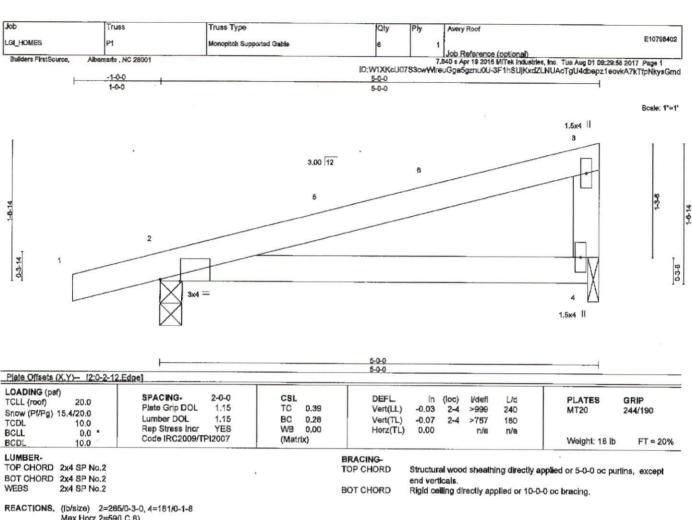
10) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.

- 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.



MARNING - Verify design perameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2016 BEFORE USE. Design valid for use only with MiTeldo connectors. This design is based only upon parameters are not seen and seed and seen and s





Max Horz 2=59(LC 8)

Max Uplift 2=-80(LC 8), 4=-37(LC 11)

FORCES. (lb) - Maximum Compression/Maximum Tension

1-2=0/13, 2-5=-56/0, 5-6=-49/0, 3-6=-48/27, 3-4=-134/169

BOT CHORD

#### NOTES-

- 1) 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 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
- Truss designed for wind loads in the plane of the truss only. For stude 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; 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.
- B) \* 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 WCLUDED MITEK REFERENCE PAGE Mit-7473 rev. 14/03/2015 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 rindividual 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 demage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of twisses and truss systems, ase

Anisi.TPI1 Quality Criteria, DSB-83 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Safety 312, Alexandria, VA 22314.



on. NC 27932

Job Truss Type Avery Roof F10798403 LGI HOMES VI GABLE Job Reference (optional)

7.640 a Apr 19 2016 MiTek Industries, Inc. Tue Aug 01 09:29:59 2017 Page 1

ID:WIXKcU07S3cwWireuGga5gznu0U-XRb3gqkyixhC?elp107J9pB4lR2eeBzGy70MwAysGmc Builders FirstSource Albemarie . NC 28001 5-11-7 5-11-7 Scale = 1:24,6 3x4 = 1.5x4 || 1.5x4 || 7.00 12 1.5x4 || 1.5x4 || 11 1,5x4 || 3x4 % 3x4 > 1.5x4 || 1.5x4 || 1.5x4 || 11-10-14 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. DEFI in l/def 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 0.0 \* Horz(TL) 0.00 n/a n/a BCLL Code IRC2009/TPI2007 (Matrix) Weight: 47 lb FT = 20% BCDI 10.0 LUMBER-BRACING-

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

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

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=-99/44, 2-11=-149/97, 5-9=-99/42, 6-8=-149/96

#### 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) 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.; Ct=1.1
- 4) Unbalanced snow loads have been considered for this design.

Gable requires continuous bottom chord bearing.

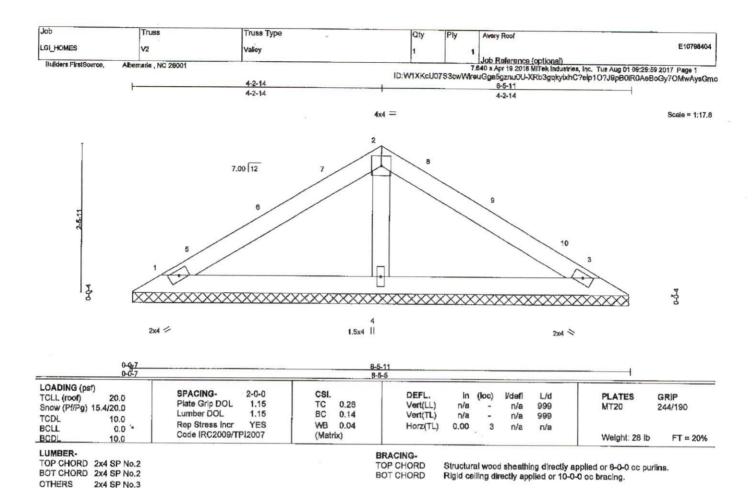
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at it(s) 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 analysts and design of this truss,



🛕 WARNING - Verily design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MIL-7473 rev. 16/03/2015 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an inclividual 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 bucking of individual truss web and/or short members only. Additional temporary and permanent bracing to always required for stability and to prevent bucking designer but thus web and/or short members only. Additional temporary and permanent bracing to always required for stability and to prevent bucking designer but have a supported to the proper of the property damage. For general guidance regarding the fabrication, storage, delivery, exection and bracing of trusses and truss systems, see

ANSITTPI Quality Criteria, DSB-89 and BCSI Building Component Safety information available from Truss Plate Institute, 218 N. Lee Sireet, Suite 312, Alexandria, VA 22314.





REACTIONS. (lb/size) 1=155/8-4-14, 3=155/8-4-14, 4=282/8-4-14

Max Horz 1=-62(LC 8)

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; TCDL=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) 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) 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 it(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 JI(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.



A WARMING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE. ANAMONS - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MIN-7473 FW. 10/03/2016 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters show, 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. Bracking 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 ocliages with possible personal injury and property damage. For general guidence regarding the dathoration, storage, delivery, erection and bracing of trusses and truss systems, see

ANSITTPI Quality Orderia, DSB-89 and BCSI Building Component Safety information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Aexandria, VA 22314.



818 Soundside Num. Edenton, NC 27932

Linh Truss Type Avery Roof LGI HOMES V3 E10798405 Job Reference (optional)
7.640 s Apr 19 2016 MiTek Industries, Inc. Tue Aug 01 09:30:00 2017 Page 1
ID:W1XKcU07S3cwWireuGga5gznu0U-?d9RtAkbTFp3doK?a5XYl0jEQrLWNegQBn8wSdyeGmb narie . NC 28001 5-0-9 2-8-5 3x4 7.00 12 -6-11 60,4 2x4 = 2x4 > Plate Offsets (X,Y)- [2:0-2-0,Edge] LOADING (psf) SPACING-2-0-0 DEFL. TCLL (roof) 20.0 in (loc) **V**defl PLATES GRIP Plate Grip DOL 1.15 0.07 Vert(LL) Snow (Pf/Pg) 15.4/20.0 n/a n/a 999 MT20 244/190 Lumber DOL 1.15 0,20 Vert(TL) TCDL 10.0 n/a n/a 999 Rep Stress Incr YES WB 0.00 Horz(TL) 0.00 **BCII** 0.0 \* 3 n/a n/a Code IRC2009/TPI2007 (Matrix) BCDL 10.0 Weight: 14 lb FT = 20% BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS. (lb/s/ze) 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-

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) 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
- 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.

Gable requires continuous bottom chord bearing.

- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) 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.
- 8) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.



Structural wood sheathing directly applied or 5-0-9 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

A WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE. Design valid for use only with MITeldo connectors. This date in MILLIDEO MITER REFERENCE PAGE MILITATY rev. 10/03/2015 BEFORE USE. Design valid for use only with MITeldo connectors. This design is beased only upon parameters shown, and is for an including 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 designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Beroing indicated is to prevent bucking of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent occlapse with possible personal injury and properly demags. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSUTTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Piate Institute, 218 N, Lee Street, Suite 312, Alexandria, VA 22314.

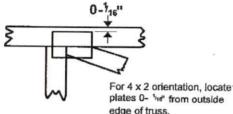


## **Symbols**

#### 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.



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:

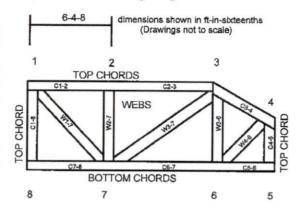
ANSI/TPI1: National Design Specification for Metal

Plate Connected Wood Truss Construction.

DSB-89: BCSI: Design Standard for Bracing. 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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## **General Safety Notes**

# Failure to Follow Could Cause Property Damage or Personal Injury

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
- 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.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- 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.
- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPl 1.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- 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.
- Do not cut or after truss member or plate without prior approval of an engineer.
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.

