

Trenco 818 Soundside Rd Edenton, NC 27932

Re: Ash\_FL

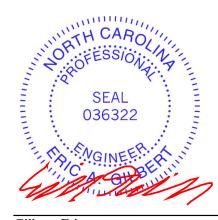
Lamco Custom Homes

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: E12977411 thru E12977425

My license renewal date for the state of North Carolina is December 31, 2019.

North Carolina COA: C-0844



April 30,2019

Gilbert, Eric

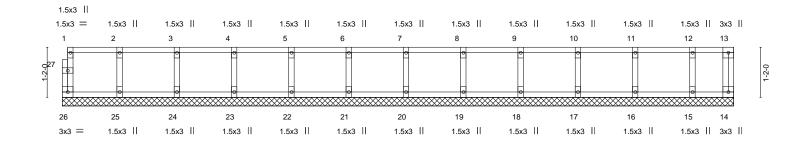
**IMPORTANT NOTE:** Truss Engineer's responsibility is solely for design of individual trusses based upon design parameters shown on referenced truss drawings. Parameters have not been verified as appropriate for any use. Any location identification specified is for file reference only and has not been used in preparing design. Suitability of truss designs for any particular building is the responsibility of the building designer, not the Truss Engineer, per ANSI/TPI-1, Chapter 2.

Job	Truss	Truss Type	Qty	Ply	Lamco Custom Homes
					E12977411
Ash_FL	F1	Floor Supported Gable	1	1	11.54
					Job Reference (optional)

Run: 8.200 s Nov 3 2018 Print: 8.220 s Mar 22 2019 MiTek Industries, Inc. Mon Apr 29 15:41:14 2019 Page ID:GgN1wbXHPg6COW?w\_rAWmsz1jWL-8F9ieSlqkjkbaFo7m1nRB7ljDbfFI\_Ork9P5XbzLqKZ

0-1\_8

Scale = 1:26.8



	15-7-8 15-7-8								
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 IRC2015/TPI2014	CSI. TC 0.08 BC 0.01 WB 0.03 Matrix-R	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 14	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 66 lb	<b>GRIP</b> 244/190 FT = 20%F, 11%E

**BRACING-**

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) 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) 26=53/15-7-8, 14=40/15-7-8, 25=147/15-7-8, 24=147/15-7-8, 23=147/15-7-8, 22=147/15-7-8, 21=147/15-7-8, 20=147/15-7-8, 19=147/15-7-8, 21 18=147/15-7-8, 17=145/15-7-8, 16=152/15-7-8, 15=120/15-7-8

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD 26-27=-49/0, 1-27=-49/0, 13-14=-34/0, 1-2=-7/0, 2-3=-7/0, 3-4=-7/0, 4-5=-7/0, 5-6=-7/0, 6-7=-7/0, 7-8=-7/0, 8-9=-7/0, 9-10=-7/0, 10-11=-7/0, 11-12=-7/0, 12-13=-7/0

**BOT CHORD** 25-26=0/7, 24-25=0/7, 23-24=0/7, 22-23=0/7, 21-22=0/7, 20-21=0/7, 19-20=0/7, 18-19=0/7, 17-18=0/7, 16-17=0/7,

15-16=0/7. 14-15=0/7

WEBS 2-25=-132/0, 3-24=-134/0, 4-23=-133/0, 5-22=-133/0, 6-21=-133/0, 7-20=-133/0, 8-19=-133/0, 9-18=-134/0, 10-17=-132/0,

11-16=-138/0, 12-15=-112/0

### 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) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.
- 6) CAUTION, Do not erect truss backwards.

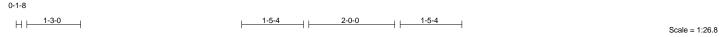
LOAD CASE(S) Standard

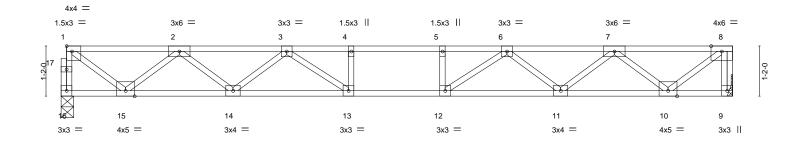




[	Job	Truss	Truss Type	Qty	Ply	Lamco Custom Homes
	Ash FL	E2	Floor		1	E12977412
ľ	ASII_FL	rz	Floor	0	'	Job Reference (optional)

Run: 8.200 s Nov 3 2018 Print: 8.220 s Mar 22 2019 MiTek Industries, Inc. Mon Apr 29 15:41:15 2019 Page 1 ID:GgN1wbXHPg6COW?w\_rAWmsz1jWL-cRj4romSV0sSCPNJKllgkKrmZ?n61l5?zp8f31zLqKY





1-6-0 1-6-0	4-0-0 2-6-0	6-8-4 6-9-12 7- 2-8-4 0-1-8 1-		11-7-8 2-8-4	14-1-8 2-6-0	15-7-8
Plate Offsets (X,Y)	[1:Edge,0-1-8]					
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 IRC2015/TPI2014	CSI. TC 0.62 BC 0.93 WB 0.58 Matrix-S	DEFL. in Vert(LL) -0.20 · Vert(CT) -0.26 · Horz(CT) 0.05		PLATES MT20 Weight: 78 lb	<b>GRIP</b> 244/190 FT = 20%F, 11%E

LUMBER-BRACING-

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

2x4 SP No.3(flat)

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except

end verticals.

**BOT CHORD** Rigid ceiling directly applied or 2-2-0 oc bracing.

**REACTIONS.** (lb/size) 16=839/0-3-8, 9=846/Mechanical

FORCES. (lb) - Maximum Compression/Maximum Tension

 $16-17 = -834/0, \ \dot{1}-17 = -833/0, \ 8-9 = -839/0, \ 1-2 = -971/0, \ 2-3 = -2322/0, \ 3-4 = -3077/0, \ 4-5 = -3077/0, \ 5-6 = -3077/0, \ 6-7 = -2323/0, \ 7-8 = -969/0$ TOP CHORD

**BOT CHORD**  $15 - 16 = 0/50,\ 14 - 15 = 0/1824,\ 13 - 14 = 0/2786,\ 12 - 13 = 0/3077,\ 11 - 12 = 0/2786,\ 10 - 11 = 0/1826,\ 9 - 10 = 0/00$ WEBS

 $4-13=-259/0,\ 5-12=-259/0,\ 1-15=0/1175,\ 2-15=-1111/0,\ 2-14=0/648,\ 3-14=-605/0,\ 3-13=0/620,\ 8-10=0/1215,\ 7-10=-1116/0,\ 7-11=0/646,\ 6-11=-603/0,\ 6-12=0/620,\ 8-10=0/1215,\ 7-10=-1116/0,\ 7-11=0/646,\ 6-11=-603/0,\ 6-12=0/620,\ 8-10=0/1215,\ 7-10=-1116/0,\ 7-11=0/646,\ 6-11=-603/0,\ 6-12=0/620,\ 8-10=0/1215,\ 7-10=-1116/0,\ 7-11=0/646,\ 6-11=-603/0,\ 6-12=0/620,\ 8-10=0/1215,\ 7-10=-1116/0,\ 7-11=0/646,\ 6-11=-603/0,\ 6-12=0/620,\ 8-10=0/1215,\ 7-10=-1116/0,\ 7-11=0/646,\ 6-11=-603/0,\ 6-12=0/620,\ 8-10=0/1215,\ 7-10=-1116/0,\ 7-11=0/646,\ 6-11=-603/0,\ 6-12=0/620,\ 8-10=0/1215,\ 7-10=-1116/0,\ 7-11=0/646,\ 8-10=0/1215,\ 8-10=0/1$ 

### NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Refer to girder(s) for truss to truss connections.
- 3) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.

### LOAD CASE(S) Standard





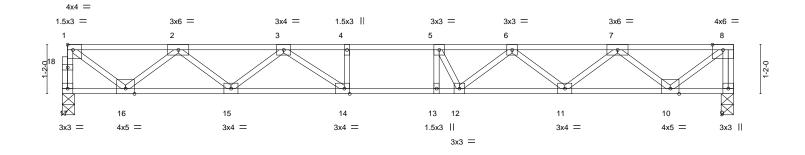
Ash_FL F3 Floor 1 1 1	-	Job	Truss	Truss Type	Qty	Ply	Lamco Custom Homes
		A-1- EI	F0.	Elece			E1297741
Lob Reference (ontional)	ľ	ASn_FL	F3	FIGOR	1	1	Job Reference (optional)

0-1-8

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Scale = 1:27.3





15-11-0							
15-11-0							
Plate Offsets (X, Y	) [1:Edge,0-1-8], [14:0-1-8,Edge]						
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 0.57	Vert(LL) -0.20 13 >952 480 MT20 244/190				
TCDL 10.0	Lumber DOL 1.00	BC 0.87	Vert(CT) -0.27 13-14 >694 360				
BCLL 0.0	Rep Stress Incr YES	WB 0.59	Horz(CT) 0.05 9 n/a n/a				
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S	Weight: 80 lb FT = 20%	%F, 11%E			

LUMBER-**BRACING-**

TOP CHORD 2x4 SP No.2(flat) TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except BOT CHORD 2x4 SP No.1(flat) end verticals.

2x4 SP No.3(flat) **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 17=855/0-3-8, 9=862/0-3-8

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD  $17-18 = -850/0, \ 1-18 = -849/0, \ 8-9 = -855/0, \ 1-2 = -992/0, \ 2-3 = -2378/0, \ 3-4 = -3194/0, \ 4-5 = -3194/0, \ 5-6 = -3111/0, \ 6-7 = -2383/0, \ 7-8 = -989/0, \ 1-18 = -849/0, \ 1-18 =$ **BOT CHORD**  $16-17=0/51,\ 15-16=0/1863,\ 14-15=0/2866,\ 13-14=0/3194,\ 12-13=0/3194,\ 11-12=0/2870,\ 10-11=0/1865,\ 9-10=0/01966,\ 10-11=0/1866,\ 10-11=$ 

**WEBS** 4-14-239/0, 5-13-248/221, 1-16=0/1202, 2-16=-1134/0, 2-15=0/670, 3-15=-635/0, 3-14=0/640, 8-10=0/1241, 7-10=-1140/0, 7-11=0/674, 6-11=-634/0, 2-10=0/1241, 7-10

6-12=0/469, 5-12=-494/165

### NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.
- 4) CAUTION, Do not erect truss backwards.

### LOAD CASE(S) Standard



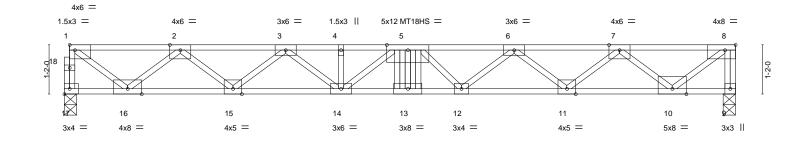


Job	Truss	Truss Type	Qty	Ply	Lamco Custom Homes
Ash_FL	EA	Floor Girder	1	1	E12977414
ASII_I E	1 4	i looi Gildei	ľ	'	Job Reference (optional)

Run: 8.200 s Nov 3 2018 Print: 8.220 s Mar 22 2019 MiTek Industries, Inc. Mon Apr 29 15:41:16 2019 Page ID:GgN1wbXHPg6COW?w\_rAWmsz1jWL-4eHS28n4GK\_JqYyVuSpvGYOsYOBkmhm8CTuCbUzLqKX

Scale = 1:27.3





	8-1-12 8-1-12		9-5-0	·	15-11-0 6-6-0
Plate Offsets (X,Y) [1:	Edge,0-1-8], [8:0-3-0,Edge]		1-5-4		0-0-0
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         NC           Code IRC2015/TPI2014	TC 0.92 BC 0.65 WB 0.87	<b>DEFL.</b> in Vert(LL) -0.27 Vert(CT) -0.37 Horz(CT) 0.06	(loc) I/defl L/d 13 >691 480 13 >502 360 9 n/a n/a	PLATES GRIP MT20 244/190 MT18HS 244/190 Weight: 88 lb FT = 20%F, 11%E

LUMBER-**BRACING-**

TOP CHORD 2x4 SP No.1(flat) TOP CHORD Structural wood sheathing directly applied or 4-4-14 oc purlins, except BOT CHORD 2x4 SP 2400F 2.0E(flat)

end verticals

2x4 SP No.3(flat) **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 17=1197/0-3-8, 9=1220/0-3-8

FORCES. (lb) - Maximum Compression/Maximum Tension

 $17 - 18 = -1191/0, \ 1 - 18 = -1189/0, \ 8 - 9 = -1211/0, \ 1 - 2 = -1440/0, \ 2 - 3 = -3647/0, \ 3 - 4 = -5233/0, \ 4 - 5 = -5233/0, \ 5 - 6 = -5264/0, \ 3 - 4 = -5233/0, \ 4 - 5 = -5233/0, \ 5 - 6 = -5264/0, \ 5 - 6 =$ TOP CHORD

6-7=-3714/0, 7-8=-1457/0

**BOT CHORD**  $16-17=0/71,\ 15-16=0/2720,\ 14-15=0/4542,\ 13-14=0/5876,\ 12-13=0/5876,\ 11-12=0/4637,\ 10-11=0/2759,\ 9-10=0/00,\ 10-11=0/2759,\ 10-11=0/2$ WEBS 8-10=0/1828, 1-16=0/1747, 7-10=-1694/0, 2-16=-1666/0, 7-11=0/1243, 2-15=0/1207, 6-11=-1202/0, 3-15=-1166/0,

6-12=0/816, 3-14=0/882, 4-14=-99/0, 5-13=0/1, 5-14=-770/0, 5-12=-790/0

### NOTES-

- 1) All plates are MT20 plates unless otherwise indicated.
- 2) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.
- 4) CAUTION, Do not erect truss backwards.
- 5) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 700 lb down at 8-1-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 6) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

### LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 9-17=-10 1-8=-100

Concentrated Loads (lb)

Vert: 5=-700(F)



🗥 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 MTI-sky 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

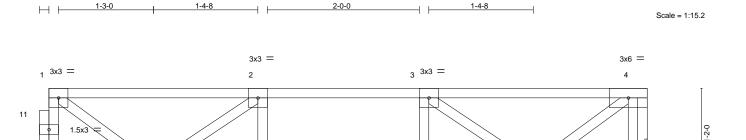
ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component
Safety Information, available from Truse Plate petitive 218 N. Lea Street, Site 312, Alexandria, VA. 22314. fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Qua Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.





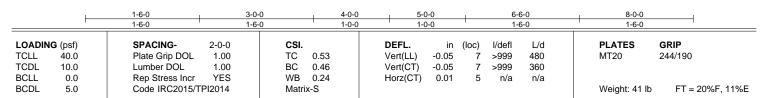
0-1-8

Job Reference (optional)
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7

1.5x3 ||



LUMBER-

TOP CHORD 2x4 SP No.2(flat) 2x4 SP No.2(flat)

3x3 =

BOT CHORD 2x4 SP No.3(flat) **BRACING-**TOP CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins, except

<sub>6</sub>3x3 =

5

3x3 ||

end verticals.

**BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing

REACTIONS. (lb/size) 10=420/0-3-8, 5=426/Mechanical

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD 10-11=-414/0, 1-11=-414/0, 4-5=-420/0, 1-2=-401/0, 2-3=-793/0, 3-4=-399/0

<sub>9</sub>3x3 =

**BOT CHORD** 9-10=0/25, 8-9=0/793, 7-8=0/793, 6-7=0/793, 5-6=0/0

WEBS 2-8=-61/99, 3-7=-64/97, 1-9=0/480, 2-9=-485/0, 4-6=0/500, 3-6=-487/0

### NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Refer to girder(s) for truss to truss connections.
- 3) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

8

1.5x3 ||

- 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  ${\rm \bar{t}}{\rm heir}$  outer ends or restrained by other means.
- 5) CAUTION. Do not erect truss backwards.

LOAD CASE(S) Standard





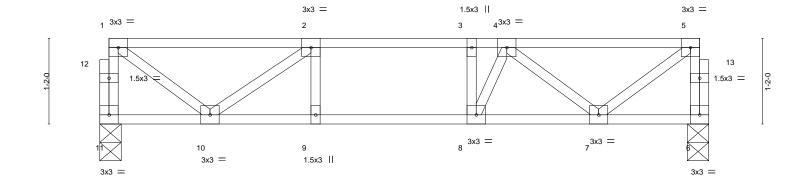


Job Reference (optional)

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Scale = 1:15.7



	1-6-0 1-6-0	3-0-0 1-6-0	4-0-0 1-0-0	5-0-0 1-0-0	5 <sub>1</sub> 1-8 0-1-8		6-9- 1-8-	-	8-3-8 1-6-0	
LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0 BCDL 5.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Inci Code IRC2015	1.00 YES	CSI. TC 0.50 BC 0.38 WB 0.25 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.04 -0.04 0.01	(loc) 7-8 8 6	l/defl >999 >999 n/a	L/d 480 360 n/a	PLATES MT20 Weight: 43 lb	<b>GRIP</b> 244/190 FT = 20%F, 11%E

LUMBER-

TOP CHORD 2x4 SP No.2(flat)

BOT CHORD 2x4 SP No.2(flat) 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) 11=436/0-3-8, 6=436/0-3-8

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD 11-12=-432/0, 1-12=-431/0, 6-13=-429/0, 5-13=-428/0, 1-2=-427/0, 2-3=-833/0, 3-4=-833/0, 4-5=-435/0

BOT CHORD  $10\text{-}11\text{=}0/26,\,9\text{-}10\text{=}0/833,\,8\text{-}9\text{=}0/833,\,7\text{-}8\text{=}0/815,\,6\text{-}7\text{=}0/26$ 

WEBS 2-9=-41/71, 3-8=-200/57, 1-10=0/512, 2-10=-502/0, 5-7=0/523, 4-7=-494/0, 4-8=-94/300

### NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.

LOAD CASE(S) Standard



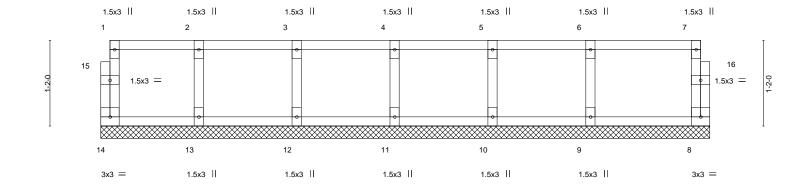


,	Job	Truss	Truss Type	Qty	Ply	Lamco Custom Homes
			Fi 0		١.	E1297741
- 1	Ash_FL	F/	Floor Supported Gable	1	1	11.57
L						Job Reference (optional)

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0-1-8 0<sub>1</sub>1-8

Scale = 1:15.7



			8-3-8			
LOADING (psf) TCLL 40.0	SPACING- 2-0-0 Plate Grip DOL 1.00	<b>CSI.</b> TC 0.10	<b>DEFL.</b> Vert(LL) r	in (loc) n/a -	l/defl L/d n/a 999	PLATES GRIP MT20 244/190
TCDL 10.0 BCLL 0.0	Lumber DOL 1.00 Rep Stress Incr YES	BC 0.02 WB 0.03		n/a - 00 8	n/a 999 n/a n/a	
BCDL 5.0	Code IRC2015/TPI2014	Matrix-R				Weight: 36 lb FT = 20%F, 11%E

LUMBER-**BRACING-**

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

REACTIONS. (lb/size) 14=61/8-3-8, 8=73/8-3-8, 13=137/8-3-8, 12=149/8-3-8, 11=147/8-3-8, 10=142/8-3-8, 9=163/8-3-8

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD  $14-15=-54/0,\ 1-15=-53/0,\ 8-16=-67/0,\ 7-16=-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,\$ 

**BOT CHORD** 13-14=0/14, 12-13=0/14, 11-12=0/14, 10-11=0/14, 9-10=0/14, 8-9=0/14

**WEBS** 2-13=-127/0, 3-12=-135/0, 4-11=-134/0, 5-10=-130/0, 6-9=-147/0

### 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) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.

### LOAD CASE(S) Standard



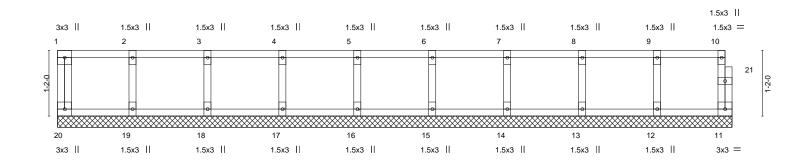


Job	Truss	Truss Type	Qty	Ply	Lamco Custom Homes
					E12977418
Ash_FL	F8	Floor Supported Gable	1	1	
					Job Reference (optional)

Run: 8.200 s Nov 3 2018 Print: 8.220 s Mar 22 2019 MiTek Industries, Inc. Mon Apr 29 15:41:18 2019 Page  $ID: GgN1wbXHPg6COW?w\_rAWmsz1jWL-10ODTqoKnxE13s6u?trNMyTPGC1EEoORfnNJgMzLqKV\\$ 

0-1-8

Scale = 1:20.5



	12-0-0									
12-0-0										
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 0.08	Vert(LL) n/a - n/a 999	MT20 244/190						
TCDL 10.0	Lumber DOL 1.00	BC 0.01	Vert(CT) n/a - n/a 999							
BCLL 0.0	Rep Stress Incr YES	WB 0.03	Horz(CT) 0.00 11 n/a n/a							
BCDL 5.0	Code IRC2015/TPI2014	Matrix-R		Weight: 52 lb FT = 20%F, 11%E						

LUMBER-**BRACING-**

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

REACTIONS. (lb/size) 20=63/12-0-0, 11=57/12-0-0, 19=143/12-0-0, 18=148/12-0-0, 17=146/12-0-0, 16=147/12-0-0, 15=147/12-0-0, 14=146/12-0-0, 13=148/12-0-0, 15=147/12-0-0, 15 12=142/12-0-0

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-20=-57/0, 11-21=-51/0, 10-21=-51/0, 1-2=-10/0, 2-3=-10/0, 3-4=-10/0, 4-5=-10/0, 5-6=-10/0, 6-7=-10/0, 7-8=-10/0,

8-9=-10/0. 9-10=-10/0

**BOT CHORD**  $19-20=0/10,\ 18-19=0/10,\ 17-18=0/10,\ 16-17=0/10,\ 15-16=0/10,\ 14-15=0/10,\ 13-14=0/10,\ 12-13=0/10,\ 11-12=0/10$ **WEBS**  $2-19=-130/0,\ 3-18=-134/0,\ 4-17=-133/0,\ 5-16=-133/0,\ 6-15=-133/0,\ 7-14=-133/0,\ 8-13=-134/0,\ 9-12=-130/0$ 

### NOTES-

**OTHERS** 

1) Gable requires continuous bottom chord bearing.

2x4 SP No.3(flat)

- 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) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.
- 6) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



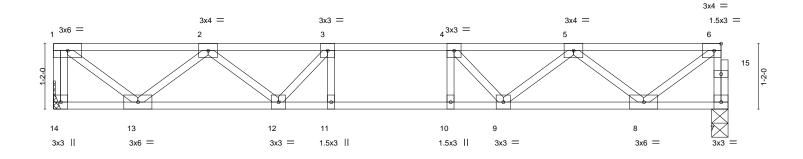


Job	Truss	Truss Type	Qty	Ply	Lamco Custom Homes	
						E12977419
Ash_FL	F9	Floor	8	1		
					Job Reference (optional)	

Run: 8.200 s Nov 3 2018 Print: 8.220 s Mar 22 2019 MiTek Industries, Inc. Mon Apr 29 15:41:19 2019 Page ID:GgN1wbXHPg6COW?w\_rAWmsz1jWL-VDybhApyYFMuh0g4ZbMcuA0V7cBTz9YauR6sCozLqKU

J 0-10-8 1-3-0 0-1-8

Scale = 1:20.5



1-6-0 1-6-0	4-0-0 2-6-0	5-0-0   6-0-0 1-0-0   1-0-0		8-0-0 1-0-0	10-6-0 2-6-0		12-0-0 1-6-0
Plate Offsets (X,Y)	[6:0-1-8,Edge]						
LOADING (psf) TCLL 40.0	SPACING- 2-0-0 Plate Grip DOL 1.00	<b>CSI.</b> TC 0.39	DEFL. Vert(LL)	in (loc) -0.08 10	l/defl L/d >999 480	PLATES MT20	<b>GRIP</b> 244/190
TCDL 10.0 BCLL 0.0	Lumber DOL 1.00 Rep Stress Incr YES	BC 0.71 WB 0.42	Vert(CT) Horz(CT)	-0.11 10 0.02 7	>999 360 n/a n/a	WITZO	244/130
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S	, ,			Weight: 61 lb	FT = 20%F, 11%E

LUMBER-

TOP CHORD 2x4 SP No.2(flat)

BOT CHORD 2x4 SP No.2(flat) 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) 14=646/Mechanical, 7=640/0-3-8

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD  $1-14 = -641/0, \ 7-15 = -636/0, \ 6-15 = -635/0, \ 1-2 = -704/0, \ 2-3 = -1595/0, \ 3-4 = -1788/0, \ 4-5 = -1595/0, \ 5-6 = -706/0$ 

**BOT CHORD**  $13-14 = -0/0,\ 12-13 = 0/1318,\ 11-12 = 0/1788,\ 10-11 = 0/1788,\ 9-10 = 0/1788,\ 8-9 = 0/1315,\ 7-8 = 0/38$ 

**WEBS** 3-11=-104/132, 4-10=-105/131, 1-13=0/883, 2-13=-799/0, 2-12=0/405, 3-12=-420/0, 6-8=0/852, 5-8=-793/0, 5-9=0/406, 4-9=-420/0, 6-8=0/852, 5-8=-793/0, 5-9=0/406, 4-9=-420/0, 6-8=0/852, 5-8=-793/0, 5-9=0/406, 4-9=-420/0, 6-8=0/852, 5-8=-793/0, 5-9=0/406, 4-9=-420/0, 6-8=0/852, 5-8=-793/0, 5-9=0/406, 4-9=-420/0, 6-8=0/852, 5-8=-793/0, 5-9=0/406, 4-9=-420/0, 6-8=0/852, 5-8=-793/0, 5-9=0/406, 4-9=-420/0, 6-8=0/852, 5-8=-793/0, 5-9=0/406, 4-9=-420/0, 6-8=0/852, 5-8=-793/0, 5-9=0/406, 4-9=-420/0, 6-8=0/852, 5-8=-793/0, 5-9=0/406, 4-9=-420/0, 6-8=0/852, 5-8=-793/0, 5-9=0/406, 4-9=-420/0, 6-8=0/852, 5-8=-793/0, 5-9=0/406, 4-9=-420/0, 6-8=0/852, 5-8=-793/0, 5-9=0/406, 4-9=-420/0, 6-8=0/852, 5-8=-793/0, 5-9=0/406, 4-9=-420/0, 6-8=0/852, 5-8=-793/0, 5-9=0/406, 4-9=-420/0, 6-8=0/852, 5-8=-793/0, 5-9=0/406, 4-9=-420/0, 6-8=0/852, 5-8=-793/0, 5-9=0/406, 5-9=0/

### NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Refer to girder(s) for truss to truss connections.
- 3) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.

### LOAD CASE(S) Standard





Job	Truss	Truss Type	Qty	Ply	Lamco Custom Homes
Ash_FL	F10	Floor	1	1	E12977420
ASII_I E	1 10	FIGUI			Job Reference (optional)

Run: 8.200 s Nov 3 2018 Print: 8.220 s Mar 22 2019 MiTek Industries, Inc. Mon Apr 29 15:41:19 2019 Page 1 ID:GgN1wbXHPg6COW?w\_rAWmsz1jWL-VDybhApyYFMuh0g4ZbMcuA0VhcA2z9KauR6sCozLqKU

0-10-8 1-3-0 0-1-8

Scale = 1:21.0

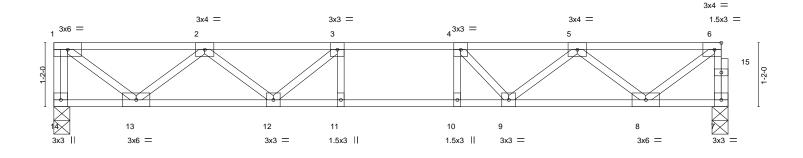


Plate Offsets (X,Y) [6	5-3-8 5-3-8 :0-1-8,Edge]	6-3 1-0	3-8   7-3-8 0-0   1-0-0	2-3-8 -0-0	<del></del>
LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0 BCDL 5.0	SPACING- 2-0-0 Plate Grip DOL 1.00 Lumber DOL 1.00 Rep Stress Incr YES Code IRC2015/TPI2014	CSI. TC 0.42 BC 0.81 WB 0.43 Matrix-S	DEFL. in (loc) Vert(LL) -0.10 11-12 Vert(CT) -0.13 11-12 Horz(CT) 0.02 7		<b>GRIP</b> -44/190 FT = 20%F, 11%E

LUMBER-

TOP CHORD 2x4 SP No.2(flat) BOT CHORD 2x4 SP No.2(flat)

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) 14=662/0-3-8, 7=656/0-3-8

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD  $1-14 = -656/0, \ 7-15 = -652/0, \ 6-15 = -651/0, \ 1-2 = -728/0, \ 2-3 = -1645/0, \ 3-4 = -1881/0, \ 4-5 = -1655/0, \ 5-6 = -726/0$ 

**BOT CHORD**  $13-14=0/0,\ 12-13=0/1365,\ 11-12=0/1881,\ 10-11=0/1881,\ 9-10=0/1881,\ 8-9=0/1353,\ 7-8=0/39$ 

WEBS  $3-11=-108/106,\ 4-10=-94/158,\ 1-13=0/913,\ 2-13=-830/0,\ 2-12=0/393,\ 3-12=-436/0,\ 6-8=0/878,\ 5-8=-816/0,\ 5-9=0/433,\ 4-9=-466/0,\ 5-9=0/433,\ 4-9=0/433,\ 4-9=0/433,\ 4-9=0/433,\ 4-9=0/433,\$ 

### NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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  ${\rm \bar{t}}{\rm heir}$  outer ends or restrained by other means.
- 4) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard





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 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

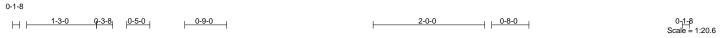
ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information

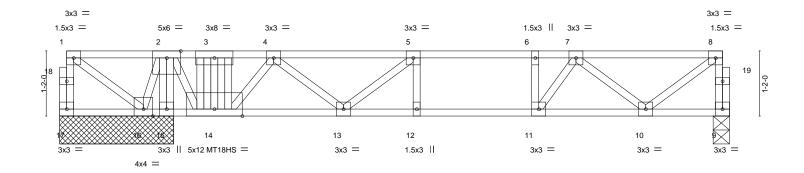
available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job	Truss	Truss Type	Qty	Ply	Lamco Custom Homes	
Ash_FL	E11	Floor Girder	1	1		E12977421
ASILI E	' ' '	l loof Gilder		'	Job Reference (optional)	

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1-6-0		5-1-0	6-5-8 7-5-8	8-5-8 8-7-0	10-6-0	12-0-0
1-6-0		2-3-12	1-4-8 1-0-0	1-0-0 0-1-8	1-11-0	1-6-0
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 NO Code IRC2015/TPI2014	CSI. TC 0.44 BC 0.39 WB 0.47 Matrix-S	DEFL.         in           Vert(LL)         -0.04           Vert(CT)         -0.05           Horz(CT)         0.01	(loc) I/defi L/d 11 >999 480 11 >999 360 9 n/a n/a	PLATES MT20 MT18HS Weight: 70 I	<b>GRIP</b> 244/190 244/190 b FT = 20%F, 11%E

LUMBER-BRACING-

TOP CHORD 2x4 SP No.2(flat) TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except BOT CHORD 2x4 SP No.2(flat) end verticals

2x4 SP No.3(flat) **BOT CHORD WEBS** Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (lb/size) 17=-461/2-0-8, 9=466/0-3-8, 15=1452/2-0-8, 16=72/2-0-8

Max Uplift17=-518(LC 4)

Max Grav 9=467(LC 4), 15=1494(LC 7), 16=89(LC 8)

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD 17-18=0/526, 1-18=0/525, 9-19=-461/0, 8-19=-460/0, 1-2=0/762, 2-3=-19/377, 3-4=-19/378, 4-5=-618/0, 5-6=-947/0,

6-7=-947/0. 7-8=-475/0

**BOT CHORD** 16-17=-32/0, 15-16=-956/0, 14-15=-954/0, 13-14=0/273, 12-13=0/947, 11-12=0/947, 10-11=0/883, 9-10=0/28

**WEBS**  $5-12=-23/54, \, 6-11=-164/0, \, 2-15=-1393/0, \, 1-16=-933/0, \, 2-16=0/520, \, 5-13=-421/0, \, 4-13=0/449, \, 8-10=0/571, \, 7-10=-531/0, \, 1-16=-933/0, \, 1-16=-$ 

7-11=0/263, 3-14=-274/0, 4-14=-735/0, 2-14=0/997

### NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 518 lb uplift at joint 17.
- 4) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.
- 6) CAUTION, Do not erect truss backwards.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 250 lb down at 2-9-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

### LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 9-17=-10, 1-8=-100 Concentrated Loads (lb)

Vert: 3=-250(F)



April 30,2019



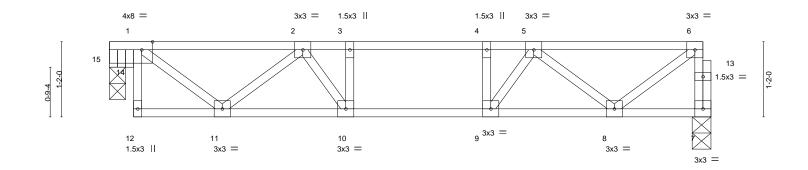
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lamco Custom Homes	
						E12977422
Ash_FL	F12	Floor	1	1		
					Job Reference (optional)	

Run: 8.200 s Nov 3 2018 Print: 8.220 s Mar 22 2019 MiTek Industries, Inc. Mon Apr 29 15:41:21 2019 Page 1  $ID: GgN1wbXHPg6COW?w\_rAWmsz1jWL-Rb4L6srD4sccwKqTh?P4zb5iOPzER56tLlbzHhzLqKS$ 

1-3-0 0-8-0

Scale = 1:17.9



		1-9-0	1 3	3-8-0	3 <sub>7</sub> 9-8	4-9-8	5-9-8 5-11 <sub>T</sub> 0	7-10-0	9-4-0	
		1-9-0	1.	-11-0	0-1-8	1-0-0	1-0-0 0-1-8	1-11-0	1-6-0	1
Plate Offs	sets (X,Y)	[1:0-2-0,Edge], [15:0-0-12	2,0-1-10]							
LOADING	- (nof)	SPACING-	200	CCI		DEEL	:n (las)	1/4-61 1/4	DLATEC	CDID
LOADING	· /		2-0-0	CSI.		DEFL.	in (loc)	I/defl L/d		GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.98	Vert(LL)	-0.04 10-11	>999 480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.38	Vert(CT)	-0.05 10-11	>999 360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.29	Horz(CT	0.01 7	n/a n/a		
BCDL	5.0	Code IRC2015/TF	PI2014	Matrix	k-S	,	,		Weight: 47 lb	FT = 20%F, 11%E

LUMBER-

TOP CHORD 2x4 SP No.2(flat)

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

**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) 7=490/0-3-8, 15=469/0-3-0

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD  $12-14=0/9,\ 1-14=0/9,\ 7-13=-483/0,\ 6-13=-482/0,\ 1-2=-573/0,\ 2-3=-1035/0,\ 3-4=-1035/0,\ 4-5=-1035/0,\ 5-6=-504/0,\ 1-2=-573/0,\ 1$ 

11-12=0/140, 10-11=0/960, 9-10=0/1035, 8-9=0/940, 7-8=0/29 **BOT CHORD** 

WEBS  $3-10=-213/0,\ 4-9=-234/0,\ 1-11=0/553,\ 2-11=-503/0,\ 2-10=-2/319,\ 6-8=0/606,\ 5-8=-567/0,\ 5-9=0/358,\ 1-15=-706/0,\ 1-11=0/553,\ 1$ 

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Bearing at joint(s) 15 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 3) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.

### LOAD CASE(S) Standard





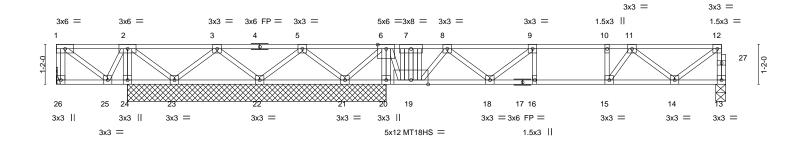
Job Truss Truss Type Qty amco Custom Homes E12977423 Ash\_FL F13 Floor Girder Job Reference (optional) s Mar 22 2019 MiTek Industries, Inc. Mon Apr 29 15:41:22 2019 Page

Builders FirstSource, Albemarle , NC 28001

Nov 3 2018 Print: 8,220 s I ID:GgN1wbXHPg6COW?w\_rAWmsz1jWL-voekJBrrrAkTYTPfEjwJWoe0Upl6AVj1aPLWp7zLqKR

1-3-0 0-5-8 1-1-0 0-3-8 0-9-0 0-8-0

Scale = 1:33.8



														10-2-0	
1	1-6-0	2-1-0	3-5-8	5-10-8	5-1 <sub>1</sub> -8	8-5-8	1	9-8-0	10-4-12	12-8-8	1	14-1-0	15-1-0	16-1-0 11 18-1-8	19-7-8
	1-6-0	0-7-0	1-4-8	2-5-0	0-1-0	2-6-0	1	1-2-8	0-8-12	2-3-12		1-4-8	1-0-0	1-0-0 0-1-8 1-11-0	1-6-0
LOADIN	NG (psf)		SPACING	- 2-	0-0	CSI.			DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0		Plate Grip	DOL 1	.00	TC	0.45		Vert(LL)	-0.04	15	>999	480	MT20	244/190
TCDL	10.0		Lumber Do	OL 1	.00	BC	0.40		Vert(CT)	-0.05	15	>999	360	MT18HS	244/190
BCLL	0.0		Rep Stress	s Incr	NO	WB	0.46		Horz(CT)	0.01	13	n/a	n/a		
BCDL	5.0		Code IRC	2015/TPI20	14	Matri	x-S							Weight: 110 lb	FT = 20%F, 11%E

LUMBER-**BRACING-**

TOP CHORD 2x4 SP No.2(flat) TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except BOT CHORD 2x4 SP No.2(flat) end verticals.

2x4 SP No.3(flat) **BOT CHORD** 

**WEBS** Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (lb/size) 26=79/Mechanical, 13=458/0-3-8, 24=233/7-7-0, 20=1342/7-7-0, 23=160/7-7-0, 22=172/7-7-0, 21=-69/7-7-0

Max Uplift22=-52(LC 4), 21=-195(LC 4)

Max Grav 26=80(LC 3), 13=459(LC 4), 24=235(LC 3), 20=1360(LC 7), 23=172(LC 3), 22=270(LC 3), 21=119(LC 8)

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-26=-74/0, 13-27=-453/0, 12-27=-453/0, 1-2=-3/0, 2-3=0/52, 3-4=0/126, 4-5=0/126, 5-6=0/491, 6-7=0/455, 7-8=0/457,

8-9=-566/0, 9-10=-913/0, 10-11=-913/0, 11-12=-466/0

**BOT CHORD** 25-26=0/0, 24-25=-4/0, 23-24=-3/2, 22-23=-11/90, 21-22=-221/41, 20-21=-936/0, 19-20=-956/0, 18-19=0/238,

17-18=0/913, 16-17=0/913, 15-16=0/913, 14-15=0/862, 13-14=0/27

**WEBS** 9-16=-14/58, 10-15=-151/0, 2-24=-228/0, 6-20=-1320/0, 1-25=0/4, 2-25=0/13, 2-23=-65/0, 3-23=-178/0, 3-22=-249/0,

5-22=-158/200, 5-21=-431/0, 6-21=0/590, 9-18=-445/0, 8-18=0/463, 12-14=0/560, 11-14=-515/0, 11-15=0/237,

7-19=-266/0, 8-19=-746/0, 6-19=0/961

### NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 52 lb uplift at joint 22 and 195 lb uplift at ioint 21.
- 5) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 250 lb down at 10-4-12 on top chord. The design/selection of such connection device(s) is the responsibility of others
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

### LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 13-26=-10, 1-12=-100 Concentrated Loads (lb)

Vert: 7=-250(F)



MARNING - 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 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 in-jury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see 

ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Qua Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job	Truss	Truss Type	Qty	Ply	Lamco Custom Homes
					E12977424
Ash_FL	F14	Floor	1	1	I-b Defenses (estimal)
					Job Reference (optional)

1-3-0 0-7-4

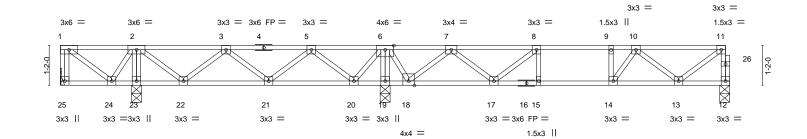
Run: 8.200 s Nov 3 2018 Print: 8.220 s Mar 22 2019 MiTek Industries, Inc. Mon Apr 29 15:41:23 2019 Page ID:GgN1wbXHPg6COW?w\_rAWmsz1jWL-N\_C6WXsTcUsK9d\_roQRY30AB7DeVv?KAp344LazLqKQ

Structural wood sheathing directly applied or 6-0-0 oc purlins, except

Rigid ceiling directly applied or 6-0-0 oc bracing.

2-0-0 0-9-8 0-6-12 0-8-0 0-1-8

Scale = 1:33.8



					10-2-6
<sub>1</sub> 1-6-0 <sub>1</sub> 2-2	2-12 3-7-4 6-1-4	8-7-4   9-6-4	10-2-8 1 12-8-8	14-1-0   15-1-0   16	6-1-0 <sub>  1</sub> 18-1-8 <sub> </sub> 19-7-8 <sub> </sub>
1-6-0 0-8	3-12 1-4-8 2-6-0	2-6-0 0-11-	0 0-8-4 2-6-0	1-4-8 1-0-0 1-	-0-0 0-1-8 1-11-0 1-6-0
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 0.39	Vert(LL) -0.04 13-14	, 4 >999 480	MT20 244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.39	Vert(CT) -0.05 13-14	4 >999 360	
BCLL 0.0	Rep Stress Incr YES	WB 0.31	Horz(CT) 0.01 12	2 n/a n/a	
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S	(0.1)		Weight: 104 lb FT = 20%F, 11%E

**BRACING-**

TOP CHORD

**BOT CHORD** 

end verticals.

LUMBER-

TOP CHORD 2x4 SP No.2(flat)

BOT CHORD 2x4 SP No.2(flat)

2x4 SP No.3(flat) **WEBS** 

REACTIONS. (lb/size) 25=11/Mechanical, 12=451/0-3-8, 23=526/0-3-8, 19=1136/0-3-8

Max Uplift25=-118(LC 6)

Max Grav 25=132(LC 5), 12=462(LC 5), 23=670(LC 3), 19=1138(LC 4)

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-25=-126/124, 12-26=-457/0, 11-26=-456/0, 1-2=-47/169, 2-3=-88/0, 3-4=-359/205, 4-5=-359/205, 5-6=0/578, 6-7=0/589, 1-26=-457/0, 11-26=-456/0, 1-26=-457/0, 11-26=-456/0, 1-26=-457/0, 11-26=-456/0, 1-26=-457/0, 11-26=-456/0, 1-26=-457/0, 11-26=-456/0, 1-26=-457/0, 11-26=-456/0, 1-26=-457/0, 11-26=-456/0, 1-26=-457/0, 11-26=-456/0, 1-26=-457/0, 11-26=-456/0, 1-26=-457/0, 11-26=-456/0, 1-26=-457/0, 11-26=-456/0, 1-26=-457/0, 11-26=-456/0, 1-26=-457/0, 11-26=-4

7-8=-589/0, 8-9=-927/0, 9-10=-927/0, 10-11=-470/0

**BOT CHORD** 24-25=0/0, 23-24=-264/63, 22-23=-256/64, 21-22=-76/385, 20-21=-366/301, 19-20=-914/0, 18-19=-919/0, 17-18=-47/242,

16-17=0/927, 15-16=0/927, 14-15=0/927, 13-14=0/871, 12-13=0/27

WEBS 8-15=-9/67, 9-14=-143/10, 2-23=-649/0, 6-19=-1106/0, 1-24=-212/59, 2-24=-27/163, 2-22=-76/433, 3-22=-387/105,

3-21=-194/0, 5-21=0/237, 5-20=-604/0, 6-20=0/521, 8-17=-464/0, 7-17=0/475, 7-18=-823/0, 6-18=0/642, 11-13=0/565,

10-13=-522/0, 10-14=-13/223

### NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Refer to girder(s) for truss to truss connections.
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 118 lb uplift at joint 25.
- 4) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.
- 6) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



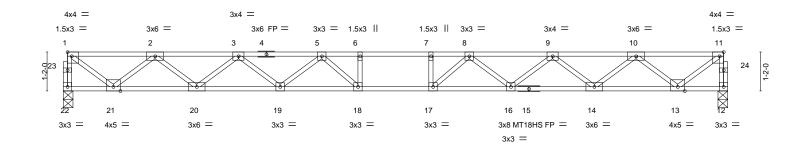


,	Job	Truss	Truss Type	Qty	Ply	Lamco Custom Homes
			-		١.	E12977425
4	Ash_FL	F15	Floor	12	1	Joh Reference (entional)
L						Job Reference (optional)

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0-1-8 H | 1-3-0

1-1-0



	1-6-0	4-0-0	6-6-0			9-11-8 1 <sub>1</sub> 1-8	11-1-0	13-5-0	_	15-11-0	18-5-0	19-11-0
Plate Of	1-6-0 fsets (X,Y)	2-6-0 [1:Edge,0-1-8], [11:0-1-8	2-6-0 3,Edge]		-4-0 0-	-1-8 1-0-0	1-0-0 0-1-8	2-4-0	· ·	2-6-0	2-6-0	1-6-0
LOADIN TCLL	<b>G</b> (psf) 40.0	SPACING- Plate Grip DOL	1-7-3 1.00	CS TC	0.69		DEFL. Vert(LL)	in (loc) -0.37 17-18	l/defl >632	L/d 480	PLATES MT20	<b>GRIP</b> 244/190
TCDL BCLL	10.0	Lumber DOL Rep Stress Incr	1.00 YES	BC WE	0.88 0.59		Vert(CT) Horz(CT)	-0.51 17-18 0.08 12	>460 n/a	360 n/a	MT18HS	244/190
BCDL	5.0	Code IRC2015/T	PI2014	Ma	rix-S						Weight: 98 lb	FT = 20%F, 11%E

LUMBER-

TOP CHORD 2x4 SP No.2(flat)

BOT CHORD 2x4 SP No.1(flat) \*Except\*

12-15: 2x4 SP No.2(flat)

**WEBS** 2x4 SP No.3(flat) **BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-6-4 oc purlins, except

end verticals.

**BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 22=860/0-3-8, 12=860/0-3-8

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD  $22-23=-855/0,\ 1-23=-854/0,\ 12-24=-855/0,\ 11-24=-854/0,\ 1-2=-1022/0,\ 2-3=-2560/0,\ 3-4=-3537/0,\ 4-5=-3537/0$ 

5-6=-4037/0, 6-7=-4037/0, 7-8=-4037/0, 8-9=-3537/0, 9-10=-2560/0, 10-11=-1022/0

**BOT CHORD** 21-22=0/51, 20-21=0/1927, 19-20=0/3168, 18-19=0/3883, 17-18=0/4037, 16-17=0/3883, 15-16=0/3168, 14-15=0/3168,

13-14=0/1927, 12-13=0/51

**WEBS** 6-18=-256/23, 7-17=-256/23, 1-21=0/1239, 2-21=-1178/0, 2-20=0/823, 3-20=-792/0, 3-19=0/480, 5-19=-450/0, 3-19=0/480, 3-19=

5-18=-134/532, 11-13=0/1239, 10-13=-1178/0, 10-14=0/823, 9-14=-791/0, 9-16=0/480, 8-16=-451/0, 8-17=-134/531

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.

LOAD CASE(S) Standard



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

WAKNING - Verify design parameters and READ NOTES ON THIS AND INCLODED WITER REPERENCE PAGE WIT-14/3 rev. INVOICED BEFORE USE.

Design valid for use only with MTREW, connectors. This design is based only upon parameters shown, and is for an individual building ocomponent, 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 quidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPH Quality Criteria, DSB-89 and BCSI Building Component Settle Vision 312, Alexandria, VA. 23314. fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Qua Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

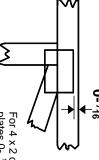


## **Symbols**

# PLATE LOCATION AND ORIENTATION



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



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

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

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

### PLATE SIZE

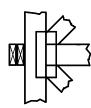
to slots. Second dimension is the length parallel to slots. width measured perpendicular The first dimension is the plate

# LATERAL BRACING LOCATION



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

### **BEARING**



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

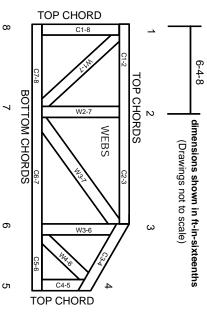
## Industry Standards:

National Design Specification for Metal

DSB-89: ANSI/TPI1:

Guide to Good Practice for Handling **Building Component Safety Information** Design Standard for Bracing. Connected Wood Trusses. Installing & Bracing of Metal Plate Plate Connected Wood Truss Construction.

# 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

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

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

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

# General Safety Notes

## Damage or Personal Injury Failure to Follow Could Cause Property

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Ņ Truss bracing must be designed by an engineer. For bracing should be considered may require bracing, or alternative Tor I wide truss spacing, individual lateral braces themselves
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- designer, erection supervisor, property owner and all other interested parties. Provide copies of this truss design to the building
- Cut members to bear tightly against each other

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- 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.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

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- 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 camber for dead load deflection responsibility of truss fabricator. General practice is to
- 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
- 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.
- Do not cut or alter 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 project engineer before use. environmental, health or performance risks. Consult with
- 19. Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- 20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.