

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: Kimberly_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: E12977799 thru E12977813

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.

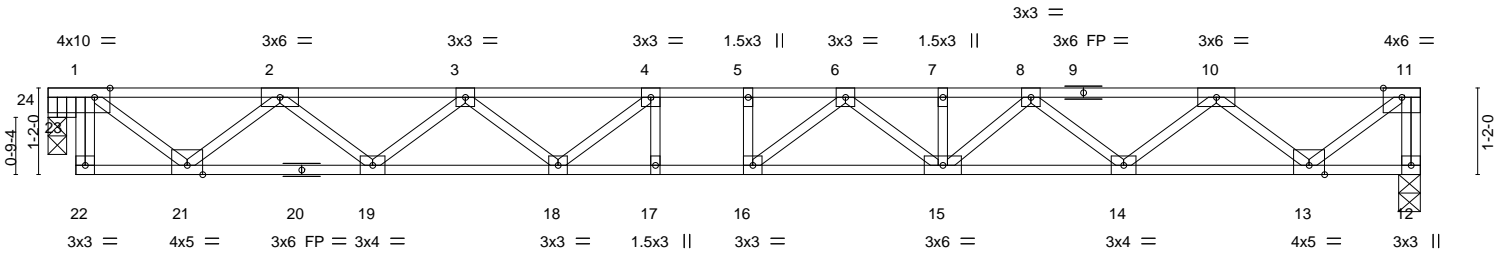
Job Kimberly_FL	Truss F01	Truss Type Floor	Qty 1	Ply 1	Lamco Custom Homes Job Reference (optional)	E12977799
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Builders FirstSource, Albemarle, NC 28001

8.220 s Nov 16 2018 MiTek Industries, Inc. Mon Apr 29 13:53:21 2019 Page 1
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Scale = 1:31.1



1-10-8	12-0-0	18-6-0
1-10-8	10-1-8	6-6-0
Plate Offsets (X,Y)--	[1:0-2-8,Edge], [24:0-0-12,0-1-10]	

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.66	Vert(LL) -0.26	16	>844	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.67	Vert(CT) -0.36	16	>611	240		
BCLL 0.0	Rep Stress Incr YES	WB 0.56	Horz(CT) 0.02	12	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-SH					Weight: 95 lb	FT = 20%F, 11%E

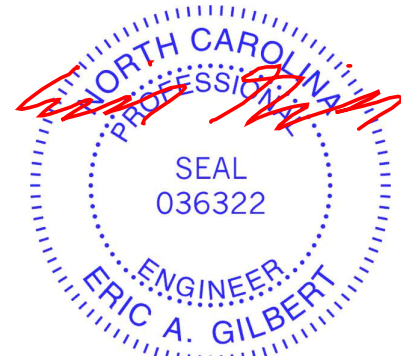
LUMBER-
TOP CHORD 2x4 SP No.1 (flat)
BOT CHORD 2x4 SP No.1 (flat)
WEBS 2x4 SP No.3 (flat)
OTHERS 2x4 SP No.3 (flat)

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) 12=799/0-3-8, 24=772/0-3-0

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 11-12=794/0, 1-2=-1141/0, 2-3=-2446/0, 3-4=-3206/0, 4-5=-3465/0, 5-6=-3465/0, 6-7=-3157/0, 7-8=-3157/0, 8-10=-2313/0, 10-11=-937/0
BOT CHORD 21-22=0/265, 19-21=0/1920, 18-19=0/2947, 17-18=0/3465, 16-17=0/3465, 15-16=0/3392, 14-15=0/2834, 13-14=0/1768
WEBS 11-13=0/1175, 1-21=0/1100, 10-13=-1083/0, 2-21=-1013/0, 10-14=0/708, 2-19=0/685, 8-14=-679/0, 3-19=-652/0, 8-15=0/430, 3-18=0/413, 6-15=-323/0, 4-18=-485/0, 6-16=-181/369, 1-24=-1150/0

- NOTES-**
- Unbalanced floor live loads have been considered for this design.
 - Bearing at joint(s) 24 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - CAUTION, Do not erect truss backwards.



April 30, 2019

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/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

Job Kimberly_FL	Truss F01E	Truss Type Floor Supported Gable	Qty 1	Ply 1	Lamco Custom Homes Job Reference (optional)	E12977800
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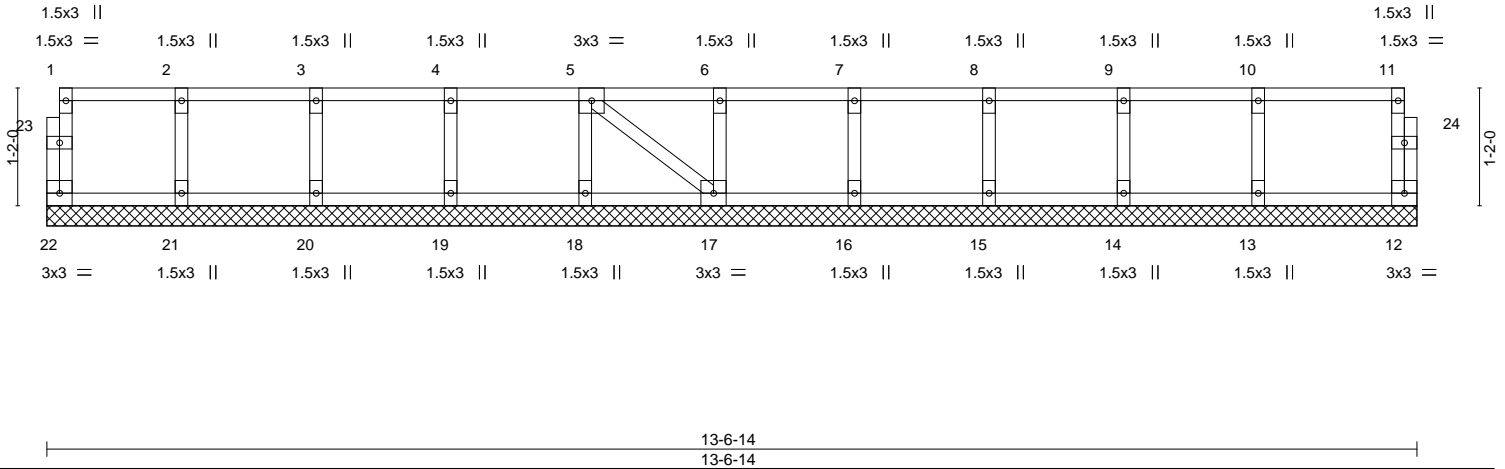
Builders FirstSource, Albemarle, NC 28001

8.220 s Nov 16 2018 MiTek Industries, Inc. Mon Apr 29 13:53:22 2019 Page 1
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0-1-8

0-1-8

Scale = 1:22.8



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 40.0	2-0-0	TC 0.07	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.01	Vert(LL) n/a - n/a 999		
BCLL 0.0	Lumber DOL 1.00	WB 0.04	Vert(CT) n/a - n/a 999		
BCDL 5.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.00 12 n/a n/a		
	Code IRC2015/TPI2014			Weight: 59 lb	FT = 20%F, 11%E

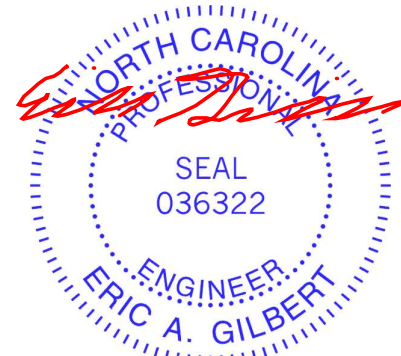
LUMBER-
 TOP CHORD 2x4 SP No.1(flat)
 BOT CHORD 2x4 SP No.1(flat)
 WEBS 2x4 SP No.3(flat)
 OTHERS 2x4 SP No.3(flat)

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. All bearings 13-6-14.
 (lb) - Max Grav All reactions 250 lb or less at joint(s) 22, 12, 21, 20, 19, 18, 17, 16, 15, 14, 13

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

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) 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.



April 30, 2019

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/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.

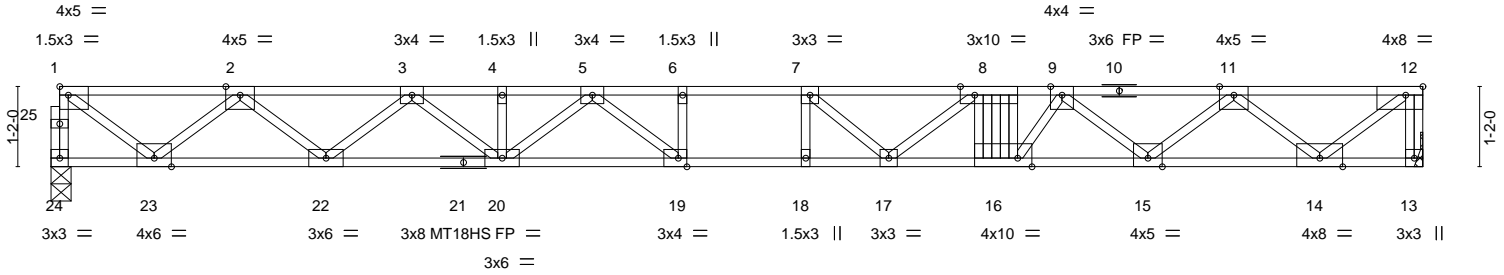
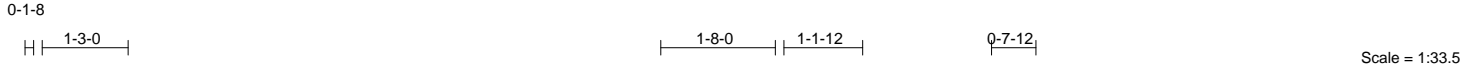


818 Soundside Road
 Edenton, NC 27932

Job Kimberly_FL	Truss F01G	Truss Type Floor Girder	Qty 1	Ply 1	Lamco Custom Homes Job Reference (optional)	E12977801
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Builders FirstSource, Albemarle, NC 28001

8.220 s Nov 16 2018 MiTek Industries, Inc. Mon Apr 29 13:53:24 2019 Page 1
ID:hOicKMitwqziZH2QbN9YLozeyKu-h?p5PII?eISz4OlZpOmRjOR3zgx_snHPneBEoxzLr1P



2-9-0	5-3-0	6-6-0	12-2-4	12-2-8	13-9-0	14-8-8	17-2-8	19-11-8
2-9-0	2-6-0	1-3-0	5-8-4	0-0-4	1-6-8	0-11-8	2-6-0	2-9-0

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [8:0-2-8,Edge], [12:0-3-0,Edge], [16:0-2-8,Edge], [19:0-1-8,Edge]

LOADING (psf)	SPACING-	1-7-3	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 40.0	Plate Grip DOL	1.00	TC 0.95	Vert(LL)	-0.41	18	>573	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.83	Vert(CT)	-0.57	18	>417	240	MT18HS	244/190
BCLL 0.0	Rep Stress Incr	NO	WB 0.77	Horz(CT)	0.08	13	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-SH							
									Weight: 107 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1 (flat)	TOP CHORD Structural wood sheathing directly applied or 4-3-12 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1 (flat) *Except* 13-21: 2x4 SP 2400F 2.0E (flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 (flat)	

REACTIONS. (lb/size) 24=955/0-3-8, 13=1073/Mechanical

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

TOP CHORD 1-24=950/0, 12-13=-1066/0, 1-2=-1148/0, 2-3=-2910/0, 3-4=-4163/0, 4-5=-4163/0, 5-6=-4958/0, 6-7=-4958/0, 7-8=-4917/0, 8-9=-4702/0, 9-11=-3324/0, 11-12=-1296/0

BOT CHORD 22-23=0/2170, 20-22=0/3616, 19-20=0/4601, 18-19=0/4958, 17-18=0/4958, 16-17=0/4755, 15-16=0/4165, 14-15=0/2456

WEBS 12-14=0/1626, 1-23=0/1392, 11-14=-1511/0, 2-23=-1331/0, 11-15=0/1129, 2-22=0/963, 9-15=-1095/0, 3-22=-919/0, 9-16=0/811, 3-20=0/699, 8-17=-53/418, 5-20=-581/0, 7-17=-466/303, 5-19=-59/750, 6-19=-267/0, 8-16=-608/0, 7-18=-256/138

- NOTES-**
- Unbalanced floor live loads have been considered for this design.
 - All plates are MT20 plates unless otherwise indicated.
 - Refer to girder(s) for truss to truss connections.
 - Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

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

Uniform Loads (plf)
Vert: 13-24=-8, 1-12=-80

Concentrated Loads (lb)
Vert: 8=-300



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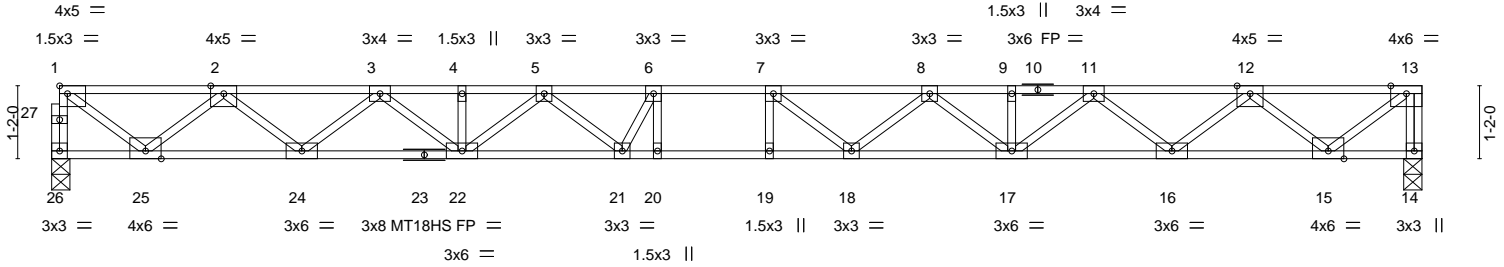
Job Kimberly_FL	Truss F02	Truss Type Floor	Qty 5	Ply 1	Lamco Custom Homes Job Reference (optional)	E12977802
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Builders FirstSource, Albemarle, NC 28001

8.220 s Nov 16 2018 MiTek Industries, Inc. Mon Apr 29 13:53:25 2019 Page 1
ID:hOiCkMitwqziZH2QbN9YLozeyKu-9BNUd5mdO3aqiYKIN6HgFc_IU4JebG0Z0IwoKzLr1O



Scale = 1:36.9



6-6-0	9-1-8	12-9-8	12-11-0	15-5-0	21-11-0
6-6-0	2-7-8	3-8-0	0-1-8	2-6-0	6-6-0

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

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.64	Vert(LL) -0.47	19	>554	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.68	Vert(CT) -0.64	19	>403	240	MT18HS	244/190
BCLL 0.0	Rep Stress Incr YES	WB 0.68	Horz(CT) 0.08	14	n/a	n/a		
BCDL 5.0	Code IRC2015/TP12014	Matrix-SH						
							Weight: 112 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 5-2-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat) *Except* 14-23: 2x4 SP 2400F 2.0E(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

REACTIONS. (lb/size) 26=948/0-3-8, 14=953/0-3-8

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-26=-943/0, 13-14=-946/0, 1-2=-1139/0, 2-3=-2881/0, 3-4=-4126/0, 4-5=-4126/0, 5-6=-4788/0, 6-7=-4920/0, 7-8=-4763/0, 8-9=-4119/0, 9-11=-4119/0, 11-12=-2882/0, 12-13=-1137/0
 BOT CHORD 24-25=0/2151, 22-24=0/3585, 21-22=0/4543, 20-21=0/4920, 19-20=0/4920, 18-19=0/4920, 17-18=0/4568, 16-17=0/3586, 15-16=0/2152
 WEBS 13-15=0/1426, 1-25=0/1382, 12-15=-1322/0, 2-25=-1317/0, 12-16=0/950, 2-24=0/950, 11-16=-916/0, 3-24=-917/0, 11-17=0/681, 3-22=0/691, 8-17=-574/0, 5-22=-531/0, 8-18=0/404, 5-21=0/492, 7-18=-500/157, 6-21=-603/179, 6-20=-235/353

- NOTES-
- 1) Unbalanced floor live loads have been considered for this design.
 - 2) All plates are MT20 plates unless otherwise indicated.
 - 3) Required 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - 4) CAUTION, Do not erect truss backwards.

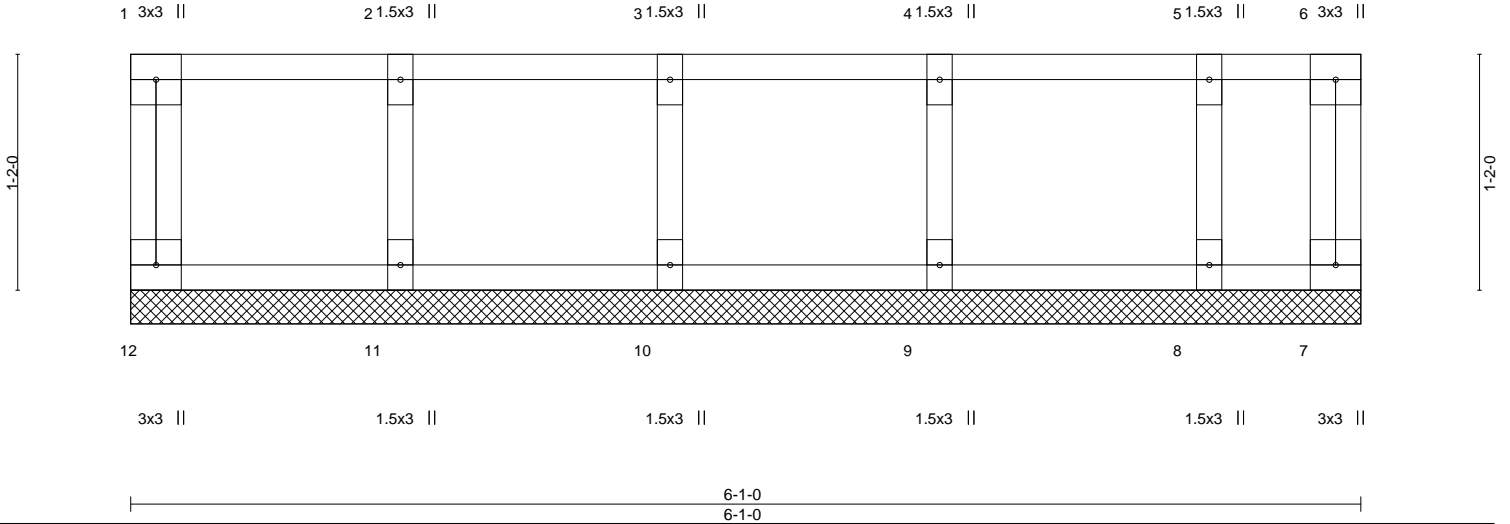


Job Kimberly_FL	Truss F02E	Truss Type Floor Supported Gable	Qty 1	Ply 1	Lamco Custom Homes Job Reference (optional)	E12977803
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Builders FirstSource, Albemarle, NC 28001

8.220 s Nov 16 2018 MiTek Industries, Inc. Mon Apr 29 13:53:26 2019 Page 1
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Scale = 1:11.4



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.06	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.01	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr YES	WB 0.03	Horz(CT)	0.00	7	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-R					Weight: 29 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(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. All bearings 6-1-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 12, 7, 11, 10, 9, 8

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

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) 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.



April 30, 2019

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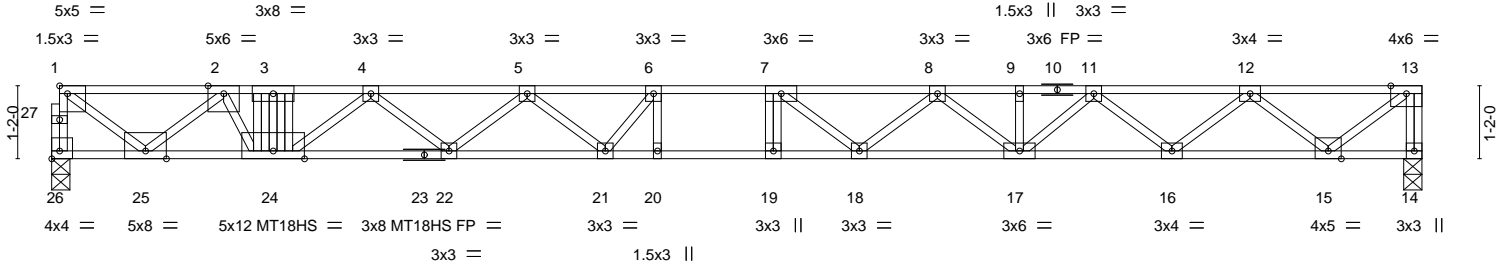
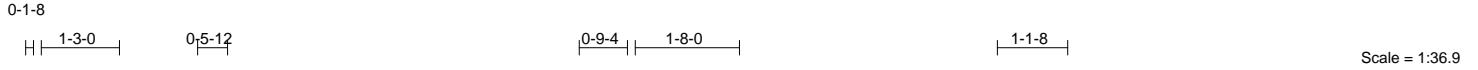


818 Soundside Road
Edenton, NC 27932

Job Kimberly_FL	Truss F02G	Truss Type FLOOR GIRDER	Qty 1	Ply 1	Lamco Custom Homes Job Reference (optional)	E12977804
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Builders FirstSource, Albemarle, NC 28001

8.220 s Nov 16 2018 MiTek Industries, Inc. Mon Apr 29 13:53:27 2019 Page 1
ID:hOiCkMitwqziZH2QbN9YLozeyKu-6aVE1notwqgYxsU8UXK8L13fGuyO37HrTcPuPGzLr1M



3-6-8	8-10-4	15-5-0	21-11-0
3-6-8	5-3-12	6-6-12	6-6-0

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [26:Edge,0-1-8]								
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.62	Vert(LL) -0.43	20	>603	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.85	Vert(CT) -0.59	20	>438	240	MT18HS	244/190
BCLL 0.0	Rep Stress Incr NO	WB 0.89	Horz(CT) 0.08	14	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-SH						
							Weight: 118 lb	FT = 20%F, 11%E

LUMBER-	BRACING-	
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD	Structural wood sheathing directly applied or 5-11-7 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat) *Except* 14-23: 2x4 SP 2400F 2.0E(flat)	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)		

REACTIONS. (lb/size) 26=1215/0-3-8, 14=687/0-3-8

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

TOP CHORD 1-26=-1211/0, 13-14=-683/0, 1-2=-1530/0, 2-3=-3697/0, 3-4=-3684/0, 4-5=-4187/0, 5-6=-4307/0, 6-7=-4216/0, 7-8=-3846/0, 8-9=-3156/0, 9-11=-3156/0, 11-12=-2159/0, 12-13=-835/0

BOT CHORD 24-25=0/2908, 22-24=0/4032, 21-22=0/4331, 20-21=0/4216, 19-20=0/4216, 18-19=0/4216, 17-18=0/3563, 16-17=0/2725, 15-16=0/1582

WEBS 13-15=0/1047, 1-25=0/1861, 12-15=-973/0, 2-25=-1794/0, 12-16=0/751, 2-24=0/1285, 11-16=-736/0, 4-24=-420/0, 11-17=0/574, 4-22=0/256, 8-17=-520/0, 8-18=0/455, 7-18=-644/0, 6-20=-293/119, 6-21=-261/397, 3-24=-773/0

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
 - 2) All plates are MT20 plates unless otherwise indicated.
 - 3) Required 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - 4) CAUTION, Do not erect truss backwards.
 - 5) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 775 lb down at 3-6-8 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: 14-26=-5, 1-13=-47

Concentrated Loads (lb)
Vert: 3=-775(F)

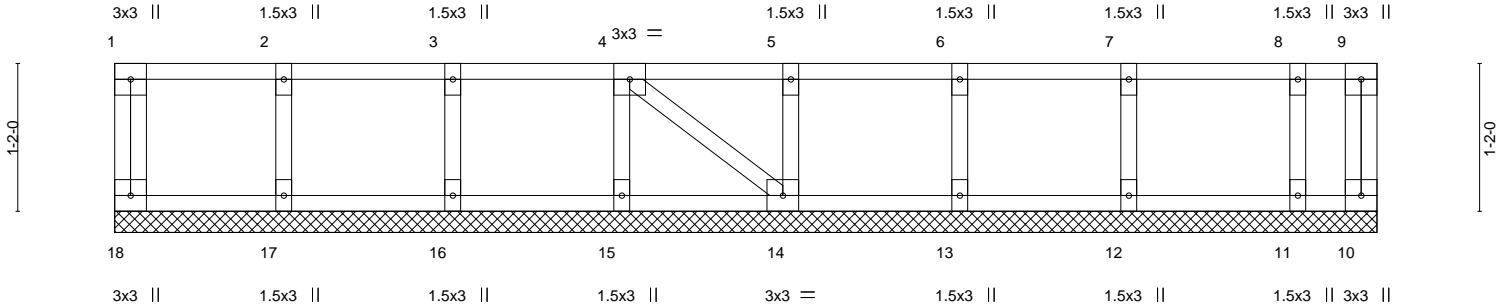


Job Kimberly_FL	Truss F03E	Truss Type Floor Supported Gable	Qty 1	Ply 1	Lamco Custom Homes Job Reference (optional)	E12977806
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Builders FirstSource, Albemarle, NC 28001

8.220 s Nov 16 2018 MiTek Industries, Inc. Mon Apr 29 13:53:30 2019 Page 1
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Scale = 1:18.2



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.06	Vert(LL)	n/a	-	n/a	L/d	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	n/a	-	n/a	L/d	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	12	n/a	n/a			
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-P								Weight: 47 lb	FT = 20%F, 11%E

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 9-11-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 9-11-8.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 18, 10, 17, 16, 15, 14, 13, 12, 11

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

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) 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.



April 30, 2019

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/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.

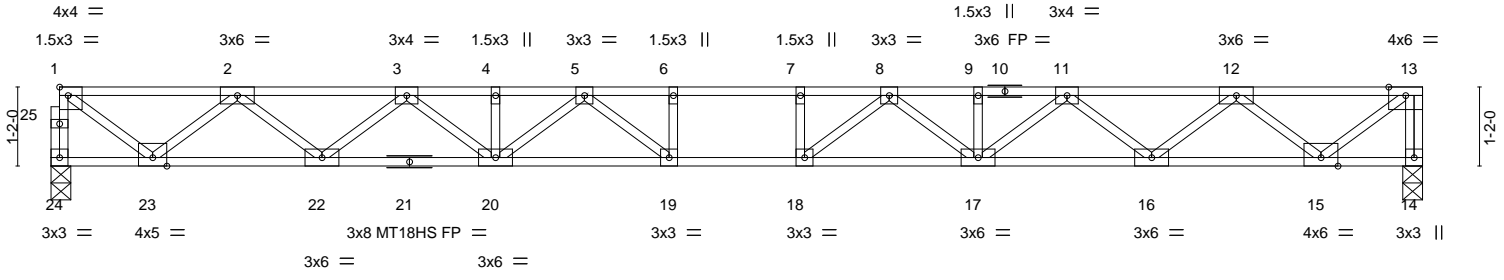
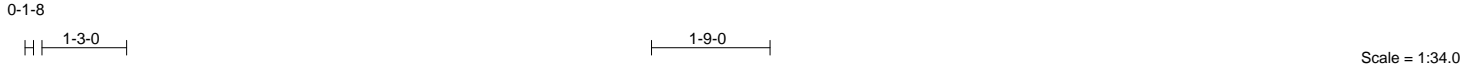


818 Soundside Road
Edenton, NC 27932

Job Kimberly_FL	Truss F04	Truss Type Floor	Qty 5	Ply 1	Lamco Custom Homes Job Reference (optional)	E12977807
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Builders FirstSource, Albemarle, NC 28001

8.220 s Nov 16 2018 MiTek Industries, Inc. Mon Apr 29 13:53:31 2019 Page 1
ID:hOiCkMitwqziZH2QbN9YLozeyKu-_Lklt8rO_vK_QTnvjMO4vIDM1VKE??OROEN6Y1zLr1l



6-6-0	9-1-8	13-9-0	20-3-0
6-6-0	2-7-8	4-7-8	6-6-0

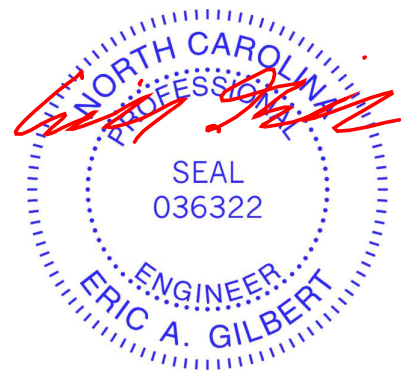
Plate Offsets (X,Y)-- [1:Edge,0-1-8]							
LOADING (psf)	SPACING-	1-7-3	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 40.0	Plate Grip DOL	1.00	TC 0.51	Vert(LL)	-0.37	18-19	>648
TCDL 10.0	Lumber DOL	1.00	BC 0.80	Vert(CT)	-0.51	18-19	>472
BCLL 0.0	Rep Stress Incr	YES	WB 0.62	Horz(CT)	0.08	14	n/a
BCDL 5.0	Code IRC2015/TPI2014		Matrix-SH				
							PLATES
							MT20
							MT18HS
							Weight: 103 lb
							FT = 20%F, 11%E

LUMBER-	BRACING-	
TOP CHORD 2x4 SP No.1 (flat)	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1 (flat)	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 (flat)		

REACTIONS. (lb/size) 24=874/0-3-8, 14=879/0-3-8

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-24=-870/0, 13-14=-873/0, 1-2=-1043/0, 2-3=-2609/0, 3-4=-3678/0, 4-5=-3678/0, 5-6=-4185/0, 6-7=-4185/0, 7-8=-4185/0, 8-9=-3679/0, 9-11=-3679/0, 11-12=-2609/0, 12-13=-1041/0
 BOT CHORD 22-23=0/1967, 20-22=0/3226, 19-20=0/3995, 18-19=0/4185, 17-18=0/3995, 16-17=0/3225, 15-16=0/1969
 WEBS 1-23=0/1265, 2-23=-1203/0, 2-22=0/835, 3-22=-803/0, 3-20=0/578, 5-20=-414/0, 5-19=-120/549, 13-15=0/1306, 12-15=-1208/0, 12-16=0/834, 11-16=-802/0, 11-17=0/579, 8-17=-414/0, 8-18=-120/549

- NOTES-**
- Unbalanced floor live loads have been considered for this design.
 - All plates are MT20 plates unless otherwise indicated.
 - Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - CAUTION, Do not erect truss backwards.



Job Kimberly_FL	Truss F05B	Truss Type Floor	Qty 1	Ply 1	Lamco Custom Homes Job Reference (optional)	E12977808
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Builders FirstSource, Albemarle, NC 28001

8.220 s Nov 16 2018 MiTek Industries, Inc. Mon Apr 29 13:53:32 2019 Page 1
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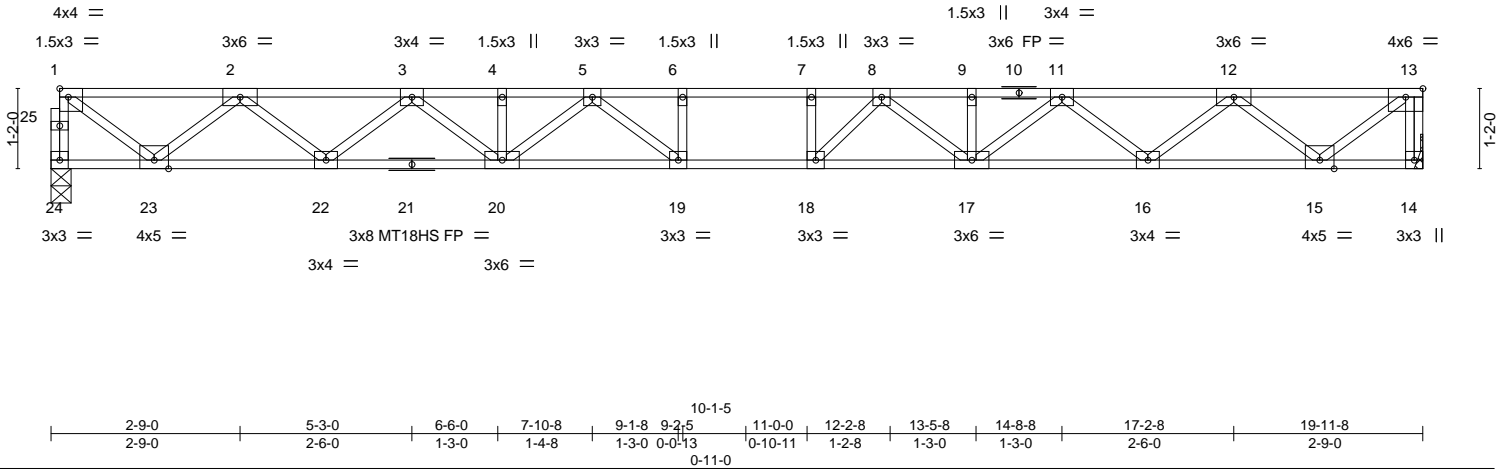
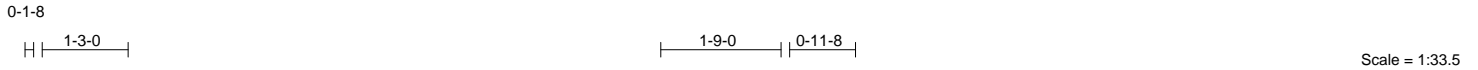


Plate Offsets (X,Y)-- [1:Edge,0-1-8]		LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.52	Vert(LL)	-0.35	19	>673	480	MT20	244/190	Weight:	102 lb	FT = 20%F, 11%E
TCDL	10.0	Lumber DOL	1.00	BC	0.79	Vert(CT)	-0.48	19	>490	240	MT18HS	244/190			
BCLL	0.0	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.08	14	n/a	n/a					
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-SH											

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.1 (flat)	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.1 (flat)	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3 (flat)		

REACTIONS. (lb/size) 24=862/0-3-8, 14=867/Mechanical

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-24=-857/0, 13-14=-861/0, 1-2=-1026/0, 2-3=-2561/0, 3-4=-3600/0, 4-5=-3600/0, 5-6=-4062/0, 6-7=-4062/0, 7-8=-4062/0, 8-9=-3599/0, 9-11=-3599/0, 11-12=-2562/0, 12-13=-1024/0
 BOT CHORD 22-23=0/1935, 20-22=0/3163, 19-20=0/3900, 18-19=0/4062, 17-18=0/3899, 16-17=0/3162, 15-16=0/1937
 WEBS 7-18=-281/31, 1-23=0/1244, 2-23=-1183/0, 2-22=0/815, 3-22=-784/0, 3-20=0/558, 5-20=-395/0, 5-19=-134/515, 13-15=0/1285, 12-15=-1188/0, 12-16=0/814, 11-16=-780/0, 11-17=0/558, 8-17=-421/0, 8-18=-122/531

- NOTES-**
- Unbalanced floor live loads have been considered for this design.
 - All plates are MT20 plates unless otherwise indicated.
 - Refer to girder(s) for truss to truss connections.
 - Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - CAUTION, Do not erect truss backwards.



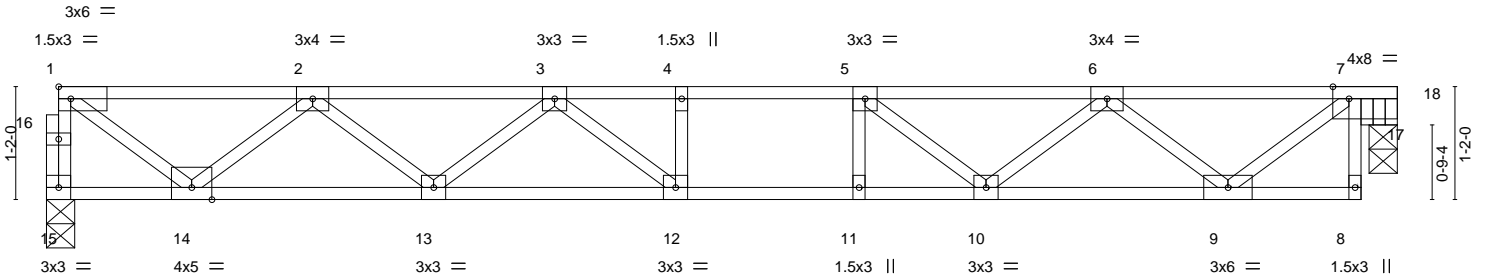
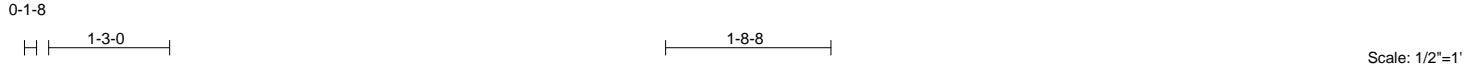
April 30, 2019

<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>ENGINEERING BY TRENCO A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job Kimberly_FL	Truss F07	Truss Type Floor	Qty 3	Ply 1	Lamco Custom Homes Job Reference (optional)	E12977809
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Builders FirstSource, Albemarle, NC 28001

8.220 s Nov 16 2018 MiTek Industries, Inc. Mon Apr 29 13:53:33 2019 Page 1
ID:hOiCkMitwqziZH2QbN9YLozeyKu-wksVlqseWWaifnXlRnRYaJfXJ20Tx1ksYsDcwzLr1G



2-9-0	5-3-0	5-11-3	6-6-0	6-10-3	7-9-3	7-10-11	9-8-8	12-2-8	13-11-8
2-9-0	2-6-0	0-8-3	0-6-13	0-4-3	0-11-0	0-1-8	1-9-13	2-6-0	1-9-0

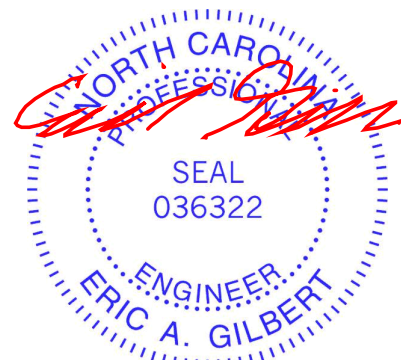
Plate Offsets (X,Y)-- [7:0-2-0,Edge], [18:0-0-12,0-1-10]									
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.67	Vert(LL)	-0.13	12-13	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.65	Vert(CT)	-0.18	12-13	>907		
BCLL 0.0	Rep Stress Incr	YES	WB 0.48	Horz(CT)	0.02	18	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-SH						
								Weight: 69 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1 (flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1 (flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 (flat) *Except* 7-8: 2x4 SP No.2 (flat)	
OTHERS 2x4 SP No.3 (flat)	

REACTIONS. (lb/size) 15=742/0-3-8, 18=725/0-3-8

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-15=-735/0, 1-2=-840/0, 2-3=-1966/0, 3-4=-2398/0, 4-5=-2398/0, 5-6=-2003/0, 6-7=-929/0
 BOT CHORD 13-14=0/1579, 12-13=0/2308, 11-12=0/2398, 10-11=0/2398, 9-10=0/1629
 WEBS 1-14=0/1016, 2-14=-962/0, 2-13=0/504, 3-13=-445/0, 3-12=-114/388, 7-9=0/977, 6-9=-911/0, 6-10=0/499, 5-10=-600/0, 7-18=-958/0

- NOTES-**
- Unbalanced floor live loads have been considered for this design.
 - The Fabrication Tolerance at joint 7 = 7%, joint 7 = 7%
 - Bearing at joint(s) 18 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - CAUTION, Do not erect truss backwards.



April 30, 2019

<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.</p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>ENGINEERING BY TRENCO A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job Kimberly_FL	Truss F08	Truss Type Floor	Qty 4	Ply 1	Lamco Custom Homes Job Reference (optional)	E12977810
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Builders FirstSource, Albemarle, NC 28001

8.220 s Nov 16 2018 MiTek Industries, Inc. Mon Apr 29 13:53:33 2019 Page 1
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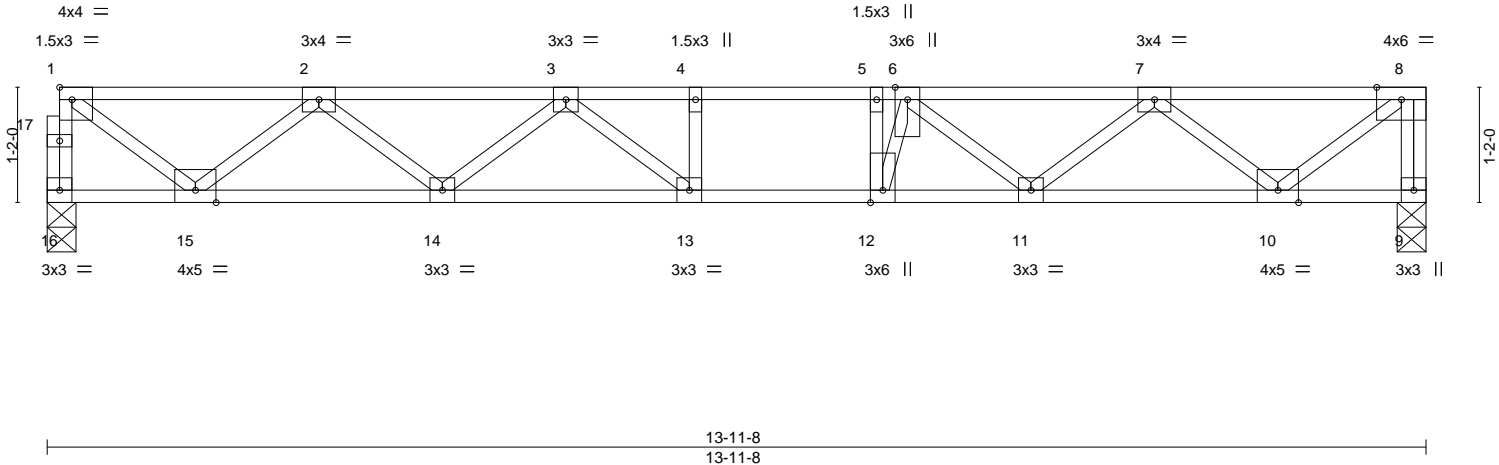
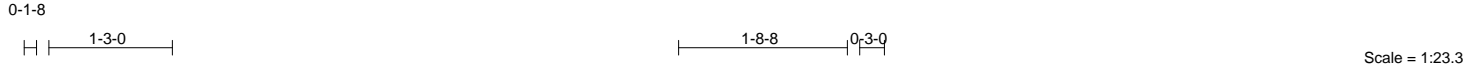


Plate Offsets (X,Y)--	[1:Edge,0-1-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.43	Vert(LL) -0.12	13	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.56	Vert(CT) -0.17	13-14	>984	240		
BCLL 0.0	Rep Stress Incr YES	WB 0.51	Horz(CT) 0.03	9	n/a	n/a		
BCDL 5.0	Code IRC2015/TP12014	Matrix-SH					Weight: 71 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1 (flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1 (flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 (flat)	

REACTIONS. (lb/size) 16=748/0-3-8, 9=754/0-3-8

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-16=-741/0, 8-9=-749/0, 1-2=-848/0, 2-3=-1988/0, 3-4=-2439/0, 4-5=-2439/0, 5-6=-2439/0, 6-7=-1979/0, 7-8=-850/0
 BOT CHORD 14-15=0/1594, 13-14=0/2337, 12-13=0/2439, 11-12=0/2360, 10-11=0/1593
 WEBS 1-15=0/1026, 2-15=-971/0, 2-14=0/513, 3-14=-455/0, 3-13=-92/390, 8-10=0/1066, 7-10=-968/0, 7-11=0/502, 6-11=-496/0, 5-12=-518/100, 6-12=-140/653

- NOTES-
- Unbalanced floor live loads have been considered for this design.
 - Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - CAUTION, Do not erect truss backwards.



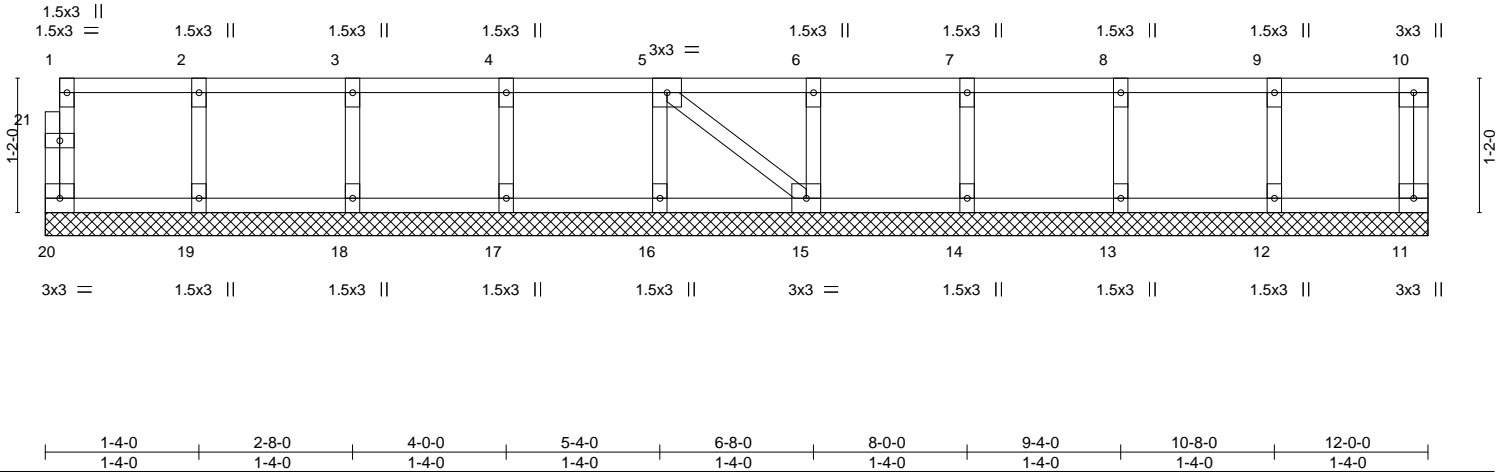
Job Kimberly_FL	Truss F09E	Truss Type GABLE	Qty 1	Ply 1	Lamco Custom Homes Job Reference (optional)	E12977811
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Builders FirstSource, Albemarle, NC 28001

8.220 s Nov 16 2018 MiTek Industries, Inc. Mon Apr 29 13:53:34 2019 Page 1
ID:hOiCkMitwqziZH2QbN9YLozeyKu-OwQtVAtGHqjZHwWUPVyn7Vr_HiYGCvLt4Ccm9MzLr1F

0-1-8

Scale = 1:20.0



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 40.0	Plate Grip DOL	1.00	TC 0.06	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-SH						Weight: 54 lb	FT = 20%F, 11%E

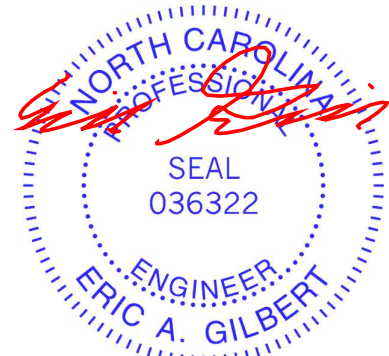
LUMBER-
 TOP CHORD 2x4 SP No.1(flat)
 BOT CHORD 2x4 SP No.1(flat)
 WEBS 2x4 SP No.3(flat)
 OTHERS 2x4 SP No.3(flat)

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. All bearings 12-0-0.
 (lb) - Max Grav All reactions 250 lb or less at joint(s) 20, 11, 19, 18, 17, 16, 15, 14, 13, 12

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

- NOTES-**
- Gable requires continuous bottom chord bearing.
 - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - Gable studs spaced at 1-4-0 oc.
 - Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - CAUTION, Do not erect truss backwards.



April 30, 2019

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818 Soundside Road
 Edenton, NC 27932

Job Kimberly_FL	Truss F10	Truss Type Floor	Qty 5	Ply 1	Lamco Custom Homes Job Reference (optional)	E12977812
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Builders FirstSource, Albemarle, NC 28001

8.220 s Nov 16 2018 MiTek Industries, Inc. Mon Apr 29 13:53:35 2019 Page 1
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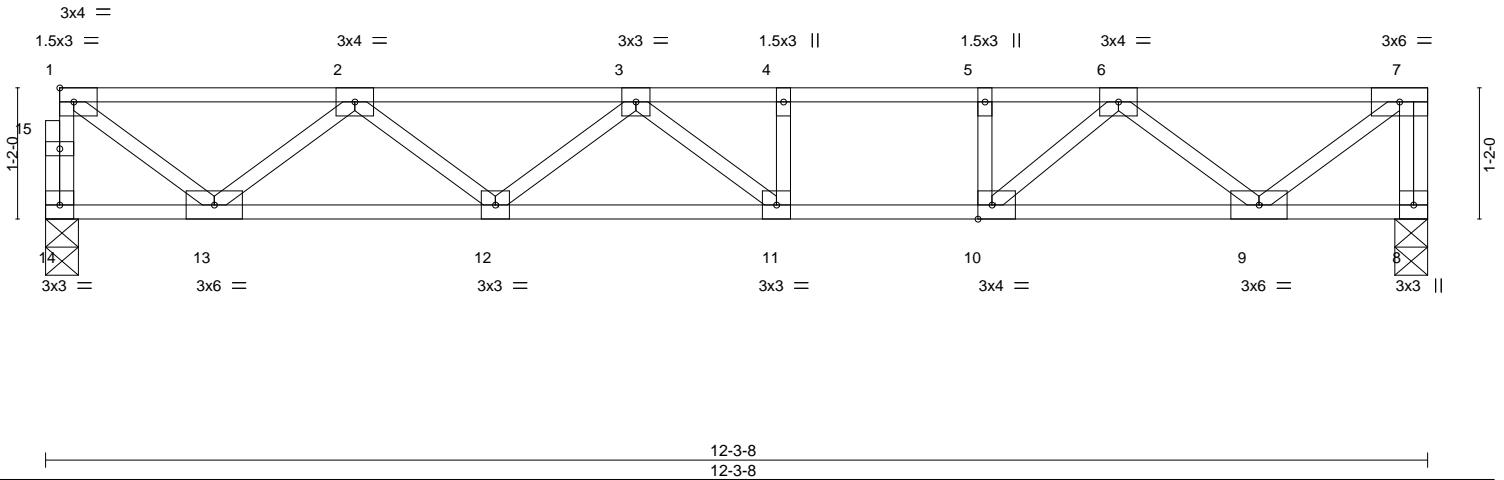
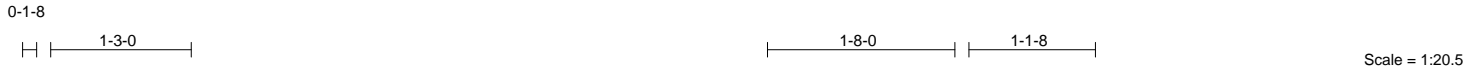


Plate Offsets (X,Y)--		[10:0-1-8,Edge]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.55	Vert(LL)	-0.12 11-12	>999	480	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.63	Vert(CT)	-0.17 11-12	>858	240		
BCLL 0.0	Rep Stress Incr	YES	WB 0.42	Horz(CT)	0.02 8	n/a	n/a		
BCDL 5.0	Code IRC2015/TP12014		Matrix-SH					Weight: 63 lb	FT = 20%F, 11%E

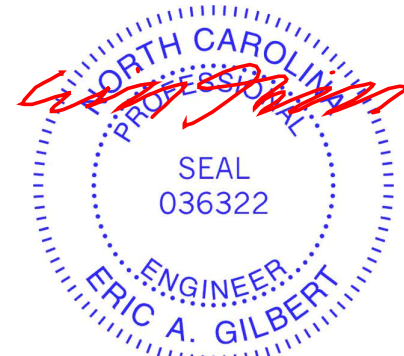
LUMBER-
 TOP CHORD 2x4 SP No.1 (flat)
 BOT CHORD 2x4 SP No.1 (flat)
 WEBS 2x4 SP No.3 (flat)

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

REACTIONS. (lb/size) 14=656/0-3-8, 8=662/0-3-8

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-14=-648/0, 7-8=-644/0, 1-2=-724/0, 2-3=-1661/0, 3-4=-1793/0, 4-5=-1793/0, 5-6=-1793/0, 6-7=-700/0
 BOT CHORD 12-13=0/1365, 11-12=0/1884, 10-11=0/1793, 9-10=0/1362
 WEBS 1-13=0/874, 2-13=-835/0, 2-12=0/385, 3-12=-291/0, 7-9=0/878, 6-9=-861/0, 6-10=0/695, 5-10=-320/0

NOTES-
 1) Unbalanced floor live loads have been considered for this design.
 2) 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.
 3) CAUTION, Do not erect truss backwards.



April 30, 2019

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/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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

Job Kimberly_FL	Truss F11	Truss Type Floor	Qty 2	Ply 1	Lamco Custom Homes Job Reference (optional)	E12977813
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Builders FirstSource, Albemarle, NC 28001

8.220 s Nov 16 2018 MiTek Industries, Inc. Mon Apr 29 13:53:35 2019 Page 1
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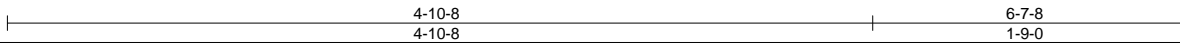
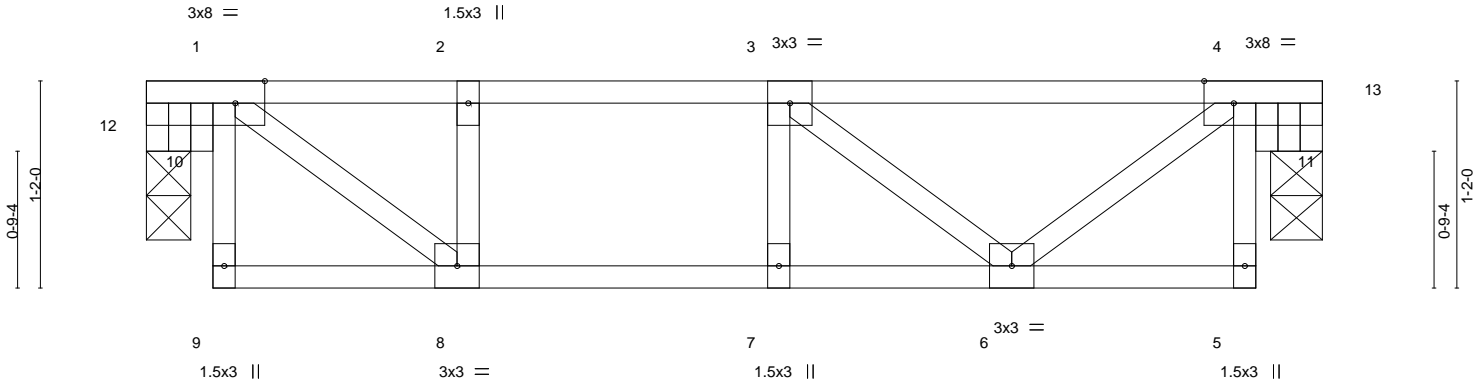


Plate Offsets (X,Y)-- [1:0-2-0,Edge], [4:0-2-0,Edge], [12:0-0-12,0-1-10], [13:0-0-12,0-1-10]

LOADING (psf)	SPACING-	1-7-3	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL	1.00	TC 0.62	Vert(LL)	-0.03	7	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.00	BC 0.25	Vert(CT)	-0.03	7	>999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.20	Horz(CT)	0.01	13	n/a		
BCDL 5.0	Code	IRC2015/TPI2014	Matrix-P					Weight: 33 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP No.1 (flat)
BOT CHORD 2x4 SP No.1 (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) 12=251/0-3-0, 13=255/0-3-8

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-384/0, 2-3=-384/0, 3-4=-268/0
BOT CHORD 7-8=0/384, 6-7=0/384
WEBS 1-8=0/429, 1-12=-305/0, 4-13=-402/0

- NOTES-**
- Unbalanced floor live loads have been considered for this design.
 - Bearing at joint(s) 12, 13 considers parallel to grain value using ANSII/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 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.



April 30, 2019

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

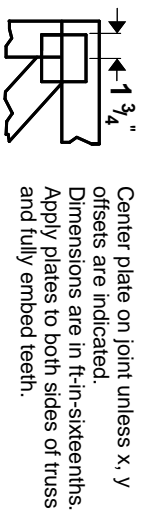
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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/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.



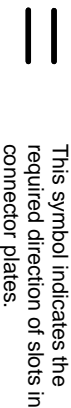
818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



For 4 x 2 orientation, locate plates 0- $\frac{1}{16}$ " from outside edge of truss.



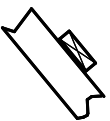
* Plate location details available in **MITrak 20/20 software or upon request.**

PLATE SIZE

4 X 4

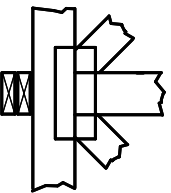
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

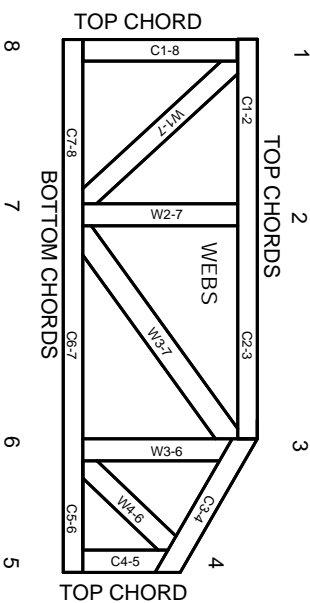


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

Lumber design values are in accordance with ANSI/TP1 section 6.3 These truss designs rely on lumber values established by others.

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MITek Engineering Reference Sheet: Mill-7473 rev. 10/03/2015



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 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/TP1 1 Quality Criteria.