ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: Burke_FL
LGI 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: E12536145 thru E12536159

My license renewal date for the state of North Carolina is December 31, 2018.

North Carolina COA: C-0844

December 18,2018

Lassiter, Frank

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	LGI Homes
BURKE_FL	F1E	Floor Supported Gable	2	1	E12536145
					Job Reference (optional)

Builders FirstSource, Albemarle , NC 28001

8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Dec 18 12:45:23 2018 Page 1
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0-1-8

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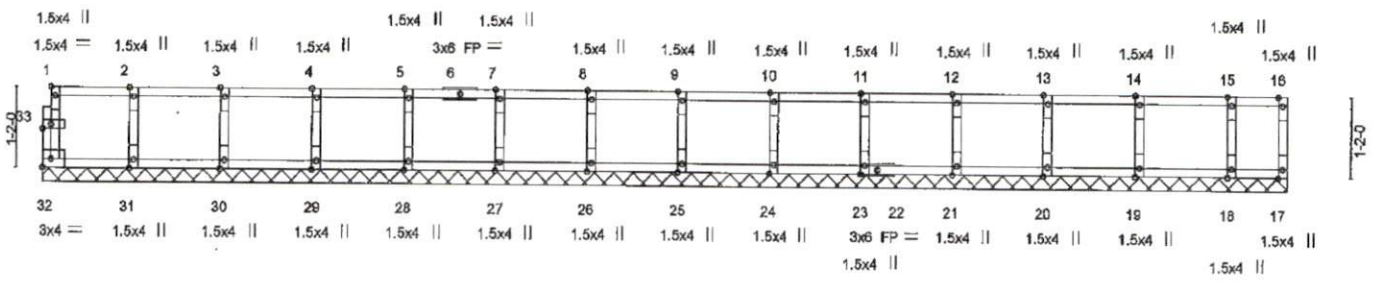

18-1-12
18-1-12

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	n/a	-	n/a	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	17	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-R							Weight: 75 lb	FT = 20%F, 11%E

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

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

REACTIONS. All bearings 18-1-12.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 32, 17, 31, 30, 29, 28, 27, 26, 25, 24, 23, 21, 20, 19, 18

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.
5) CAUTION, Do not erect truss backwards.

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Job	Truss	Truss Type	Qty	Ply	LGI Homes	
BURKE_FL	F2	Floor	8	1	Job Reference (optional)	E12536146

Builders FirstSource, Albemarle , NC 28001

8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Dec 18 12:45:24 2018 Page 1
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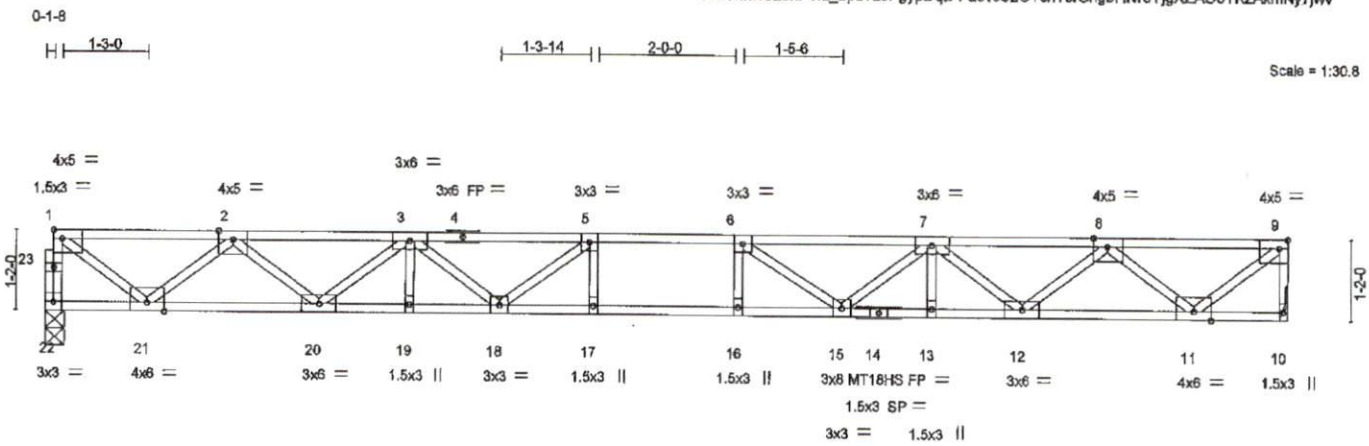


	1-6-0	4-0-0	6-7-8	8-0-14	9-0-14	10-0-14	11-7-12	14-3-4	16-9-4	18-1-12
	1-6-0	2-6-0	2-7-8	1-5-6	1-0-0	1-0-0	1-6-14	2-7-8	2-6-0	1-4-8

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	In	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.87	Vert(LL)	-0.31	16-17	>706	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.99	Vert(CT)	-0.42	16-17	>513	240	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.67	Horz(CT)	0.06	10	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-SH							Weight: 91 lb	FT = 20%F, 11%E

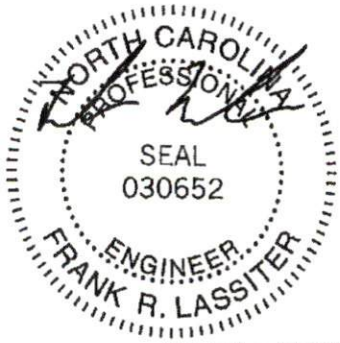
LUMBER-
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP 2400F 2.0E(flat) *Except*
10-14: 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
2-2-0 oc bracing: 13-15,12-13.

REACTIONS. (lb/size) 22=981/0-3-8, 10=988/Mechanical

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-22=-976/0, 9-10=-981/0, 1-2=-1155/0, 2-3=-2850/0, 3-5=-3874/0, 5-6=-4228/0, 6-7=-3856/0, 7-8=-2820/0, 8-9=-1104/0
BOT CHORD 20-21=0/2174, 19-20=0/3538, 18-19=0/3538, 17-18=0/4228, 16-17=0/4228, 15-16=0/4228, 13-15=0/3515, 12-13=0/3515, 11-12=0/2132
WEBS 1-21=0/1400, 2-21=-1326/0, 2-20=0/880, 3-20=-877/0, 3-18=0/487, 5-18=-716/3, 9-11=0/1410, 8-11=-1338/0, 8-12=0/896, 7-12=-886/0, 7-15=0/486, 6-15=-720/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) The Fabrication Tolerance at joint 14 = 11%
4) Refer to girder(s) for truss to truss connections.
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.



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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	LGI Homes
BURKE_FL	F3	Floor	5	1	E12536147

Job Reference (optional)

Builders FirstSource, Albemarle , NC 28001

8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Dec 18 12:45:24 2018 Page 1

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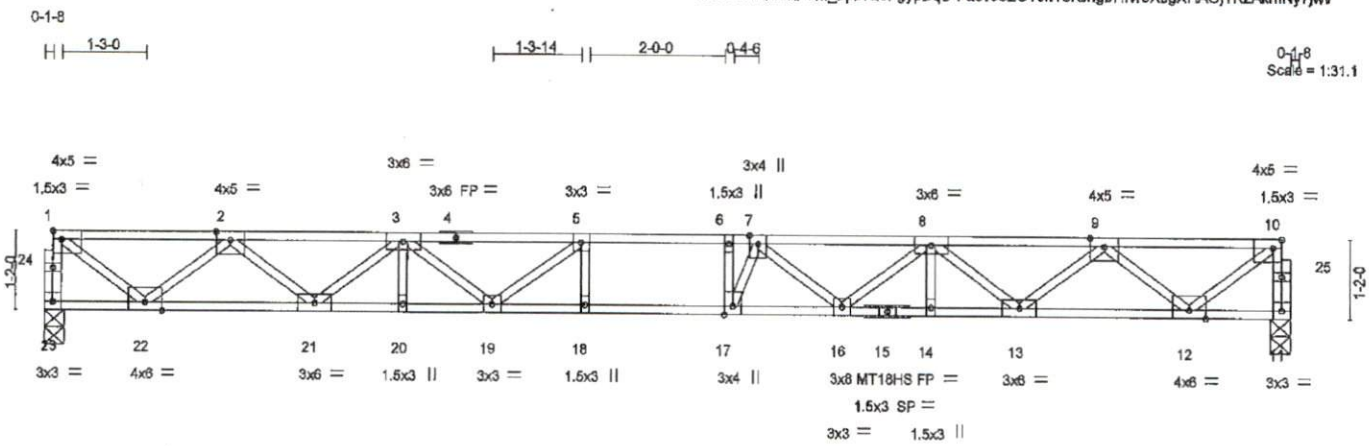


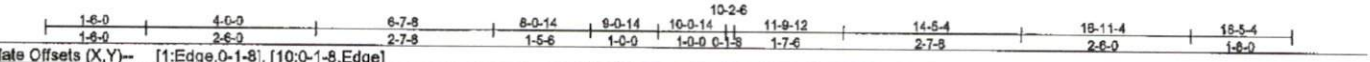


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [10:0-1-8,Edge]

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	0.96	Vert(LL)	-0.35	17-18	>633	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	1.00	Vert(CT)	-0.48	17-18	>459	240	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.66	Horz(CT)	0.08	11	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-SH							Weight: 94 lb	FT = 20%F, 11%E

LUMBER-

TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.1(flat) *Except*
11-15: 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 1-4-12 oc bracing.

REACTIONS. (lb/size) 23=994/0-3-8, 11=994/0-3-8

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

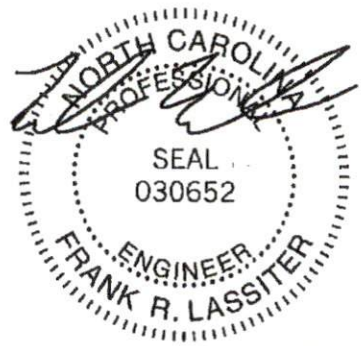
TOP CHORD 1-23=-989/0, 10-11=-989/0, 1-2=-1172/0, 2-3=-2898/0, 3-5=-3958/0, 5-6=-4323/0, 6-7=-4323/0, 7-8=-3961/0, 8-9=-2898/0, 9-10=-1173/0

BOT CHORD 21-22=0/2207, 20-21=0/3596, 19-20=0/3596, 18-19=0/4323, 17-18=0/4323, 16-17=0/4294, 14-16=0/3594, 13-14=0/3594, 12-13=0/2208

WEBS 6-17=-415/210, 1-22=0/1421, 2-22=-1347/0, 2-21=0/900, 3-21=-892/0, 3-19=0/530, 5-19=-699/0, 10-12=0/1421, 9-12=-1348/0, 9-13=0/898, 8-13=-889/0, 8-16=0/469, 7-16=-542/0, 7-17=-362/617

NOTES-

1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) The Fabrication Tolerance at joint 15 = 11%
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.



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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	LGI Homes
BURKE_FL	F4E	Floor Supported Gable	1	1	E12536148
					Job Reference (optional)

Builders FirstSource, Albemarle , NC 28001

8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Dec 18 12:45:25 2018 Page 1
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0-1-8

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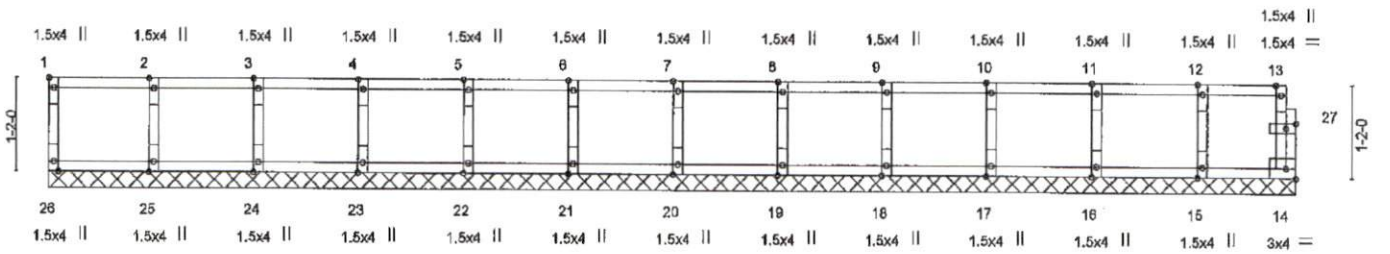

15-10-4
15-10-4

Plate Offsets (X,Y)-- [1:Edge,0-0-12], [27:0-1-8,0-0-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	n/a	-	n/a	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	14	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-R							Weight: 66 lb	FT = 20%F, 11%E

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 15-10-4.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 26, 14, 25, 24, 23, 22, 21, 20, 19, 18, 17, 16, 15

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.
5) CAUTION, Do not erect truss backwards.

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	LGI Homes	
BURKE_FL	F5	Floor	2	1	Job Reference (optional)	E12536149

Builders FirstSource, Albemarle , NC 28001 — 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Dec 18 12:45:26 2018 Page 1
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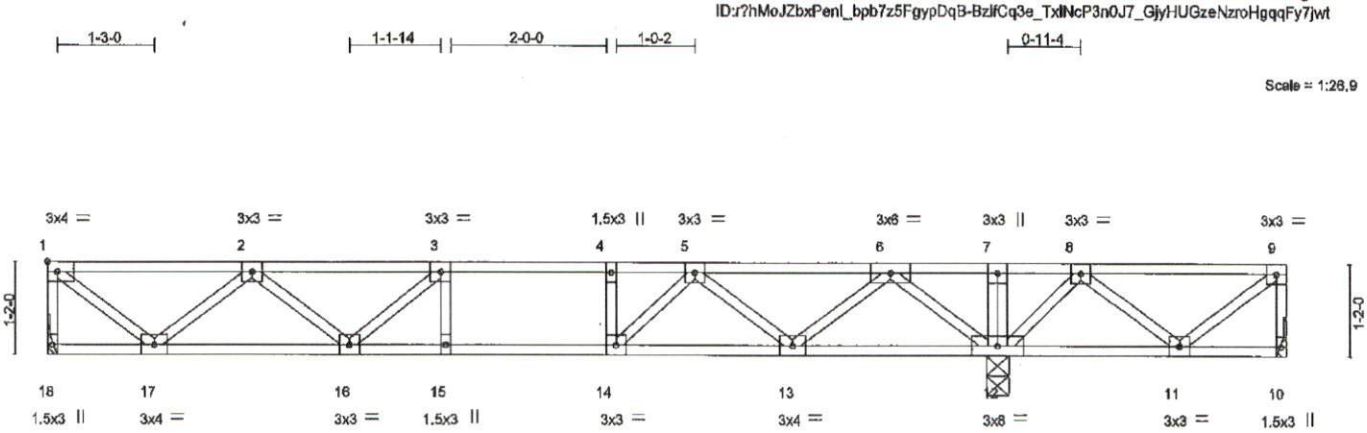


1-4-8	3-10-8	5-1-14	6-1-14	7-1-14	8-3-8	10-9-8	12-2-0	12-4-0	14-5-12	15-10-4
1-4-8	2-6-0	1-3-6	1-0-0	1-0-0	1-1-10	2-6-0	1-4-8	0-2-0	2-1-12	1-4-8

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	0.61	Vert(LL)	-0.10	15-16	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.80	Vert(CT)	-0.13	15-16	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.02	12	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-SH							Weight: 80 lb	FT = 20%F, 11%E

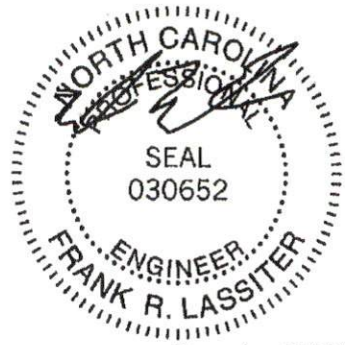
LUMBER-
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 12-13,11-12.

REACTIONS. (lb/size) 18=591/Mechanical, 10=-46/Mechanical, 12=1185/0-3-8
Max Uplift 10=-186(LC 3)
Max Grav 18=593(LC 3), 10=125(LC 4), 12=1185(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-18=-586/0, 1-2=-613/0, 2-3=-1374/0, 3-4=-1477/0, 4-5=-1477/0, 5-6=-606/0, 6-7=0/992, 7-8=0/992, 8-9=-20/266
BOT CHORD 16-17=0/1180, 15-16=0/1477, 14-15=0/1477, 13-14=0/1149, 11-12=-537/18
WEBS 4-14=-261/0, 1-17=0/783, 2-17=-738/0, 2-16=0/254, 6-12=-1127/0, 6-13=0/700, 5-13=-709/0, 5-14=0/536, 9-11=-340/25, 8-11=0/353, 8-12=-681/0

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 186 lb uplift at joint 10.
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.



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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	LGI Homes
BURKE_FL	F6	Floor	1	1	E12536150

Builders FirstSource, Albemarle , NC 28001

Job Reference (optional)

8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Dec 18 12:45:27 2018 Page 1
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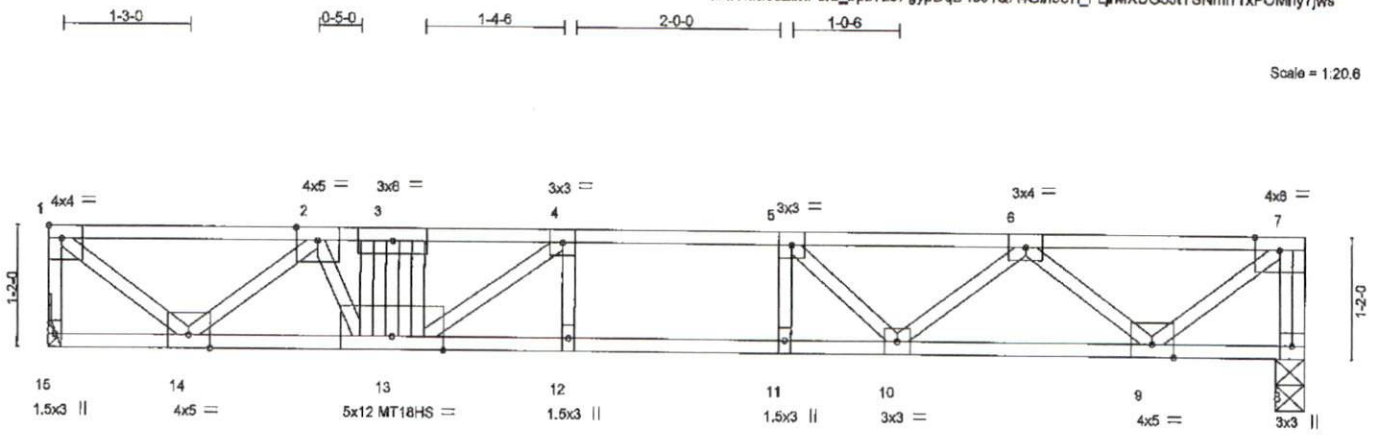

	3-4-4	5-1-14	6-1-14	7-1-14	12-3-12
	3-4-4	1-9-10	1-0-0	1-0-0	5-1-14

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

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	0.72	Vert(LL)	-0.15	12-13	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.97	Vert(CT)	-0.19	12-13	>762	240	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.60	Horz(CT)	0.03	8	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-SH							Weight: 68 lb	FT = 20%F, 11%E

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

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

REACTIONS. (lb/size) 15=896/Mechanical, 8=752/0-3-8

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-15=-886/0, 7-8=-749/0, 1-2=-983/0, 2-3=-2291/0, 3-4=-2283/0, 4-5=-2402/0, 5-6=-1989/0, 6-7=-843/0
BOT CHORD 13-14=0/1912, 12-13=0/2402, 11-12=0/2402, 10-11=0/2402, 9-10=0/1575
WEBS 3-13=-441/0, 7-9=0/1058, 6-9=-953/0, 6-10=0/572, 5-10=-698/0, 1-14=0/1255, 2-14=-1209/0, 2-13=0/649, 4-13=-509/145

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) 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.
6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 315 lb down at 3-4-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
7) 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: 8-15=-10, 1-7=-100
Concentrated Loads (lb)
Vert: 3=-315(F)

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	LGI Homes
BURKE_FL	F7	Floor	1	1	E12536151
					Job Reference (optional)

Builders FirstSource, Albemarle , NC 28001

8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Dec 18 12:45:28 2018 Page 1
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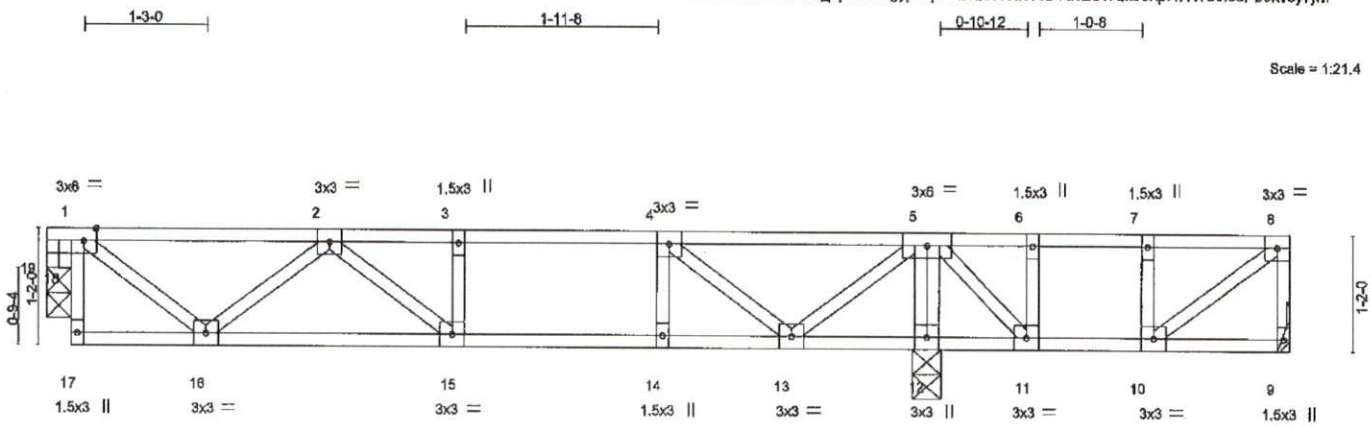


Plate Offsets (X,Y)— [1:0-1-8,Edge], [19:0-0-0,0-1-10]

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	0.65	Vert(LL)	-0.07	15-16	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.56	Vert(CT)	-0.09	15-16	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.01	9	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-SH							Weight: 65 lb	FT = 20%F, 11%E

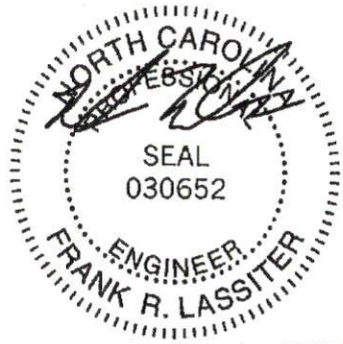
LUMBER-
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 12-13,11-12.

REACTIONS. (lb/size) 9=198/Mechanical, 12=683/0-3-8, 19=468/0-3-0
Max Grav 9=243(LC 7), 12=683(LC 1), 19=471(LC 10)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-532/0, 2-3=-979/0, 3-4=-979/0, 4-5=-516/0
BOT CHORD 15-16=0/902, 14-15=0/979, 13-14=0/979
WEBS 5-12=-676/0, 1-16=0/560, 5-13=0/575, 2-16=-482/0, 4-13=-612/0, 8-10=0/311, 5-11=0/259, 1-19=-562/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) Refer to girder(s) for truss to truss connections.
3) Bearing at joint(s) 19 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
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.



December 18,2018

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	Truss	Truss Type	Qty	Ply	LGI Homes	
BURKE_FL	F8	Floor	1	1	Job Reference (optional)	E12536152

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ID:r?hMoJZbxPenI_bpb7z5FgypDqB-8LtQdW5uW4BTdvZSvRMb3hpP7H5u6LV8Fb9xv8y7jwr

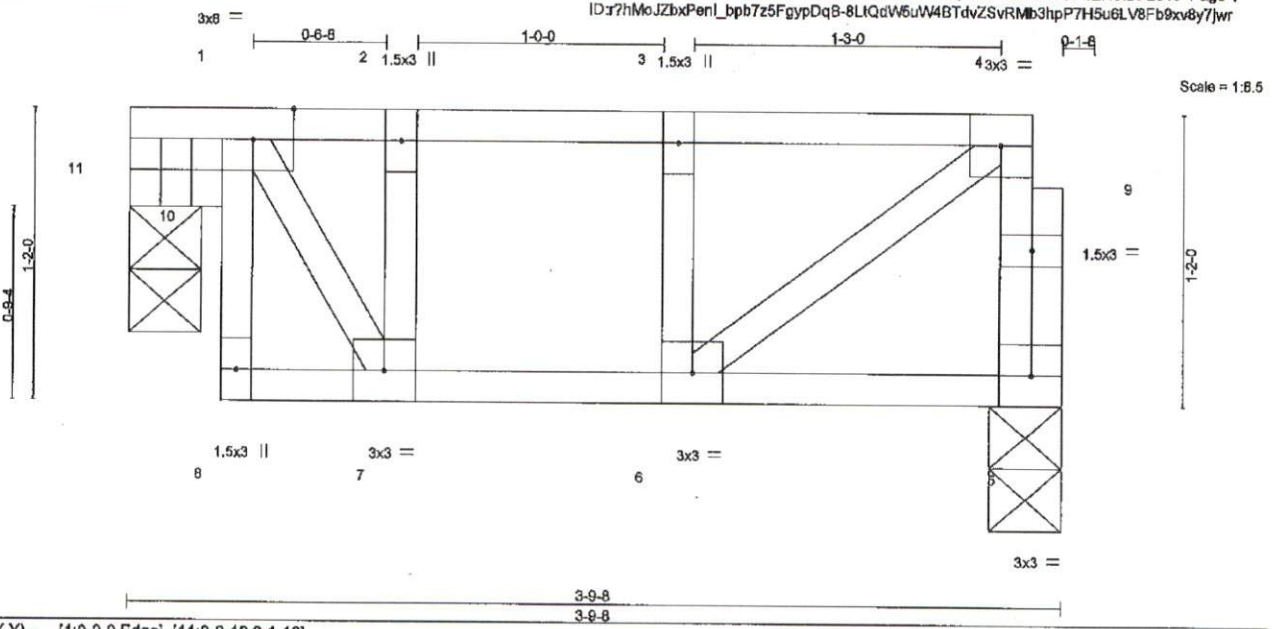

Plate Offsets (X,Y)— [1:0-2-0,Edge], [11:0-0-12,0-1-10]

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	0.13	Vert(LL)	-0.01	6	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.13	Vert(CT)	-0.01	6	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	5	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-P							Weight: 22 lb	FT = 20%F, 11%E

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-9-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 5=182/0-3-8, 11=167/0-3-8

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

NOTES-

1) Unbalanced floor live loads have been considered for this design.
2) Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
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.

December 18,2018

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TRENCO
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Job	Truss	Truss Type	Qty	Ply	LGI Homes	
BURKE_FL	F9	Floor	3	1	Job Reference (optional)	E12536153

Builders FirstSource, Albemarle , NC 28001

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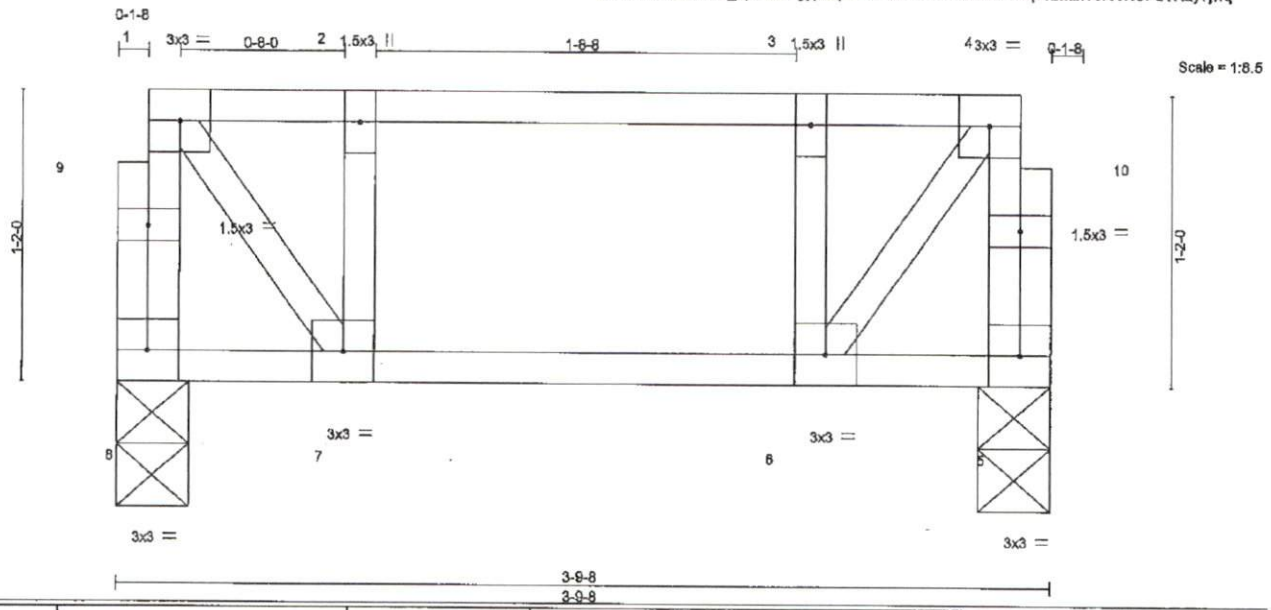

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.13	Vert(LL)	-0.00	6	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.06	Vert(CT)	-0.00	7	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	5	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-SH							Weight: 22 lb	FT = 20%F, 11%E

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-9-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 8=189/0-3-8, 5=189/0-3-8

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

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.

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Job	Truss	Truss Type	Qty	Ply	LGI Homes	
BURKE_FL	F10	Floor	2	1	Job Reference (optional)	E12536154

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8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Dec 18 12:45:18 2018 Page 1
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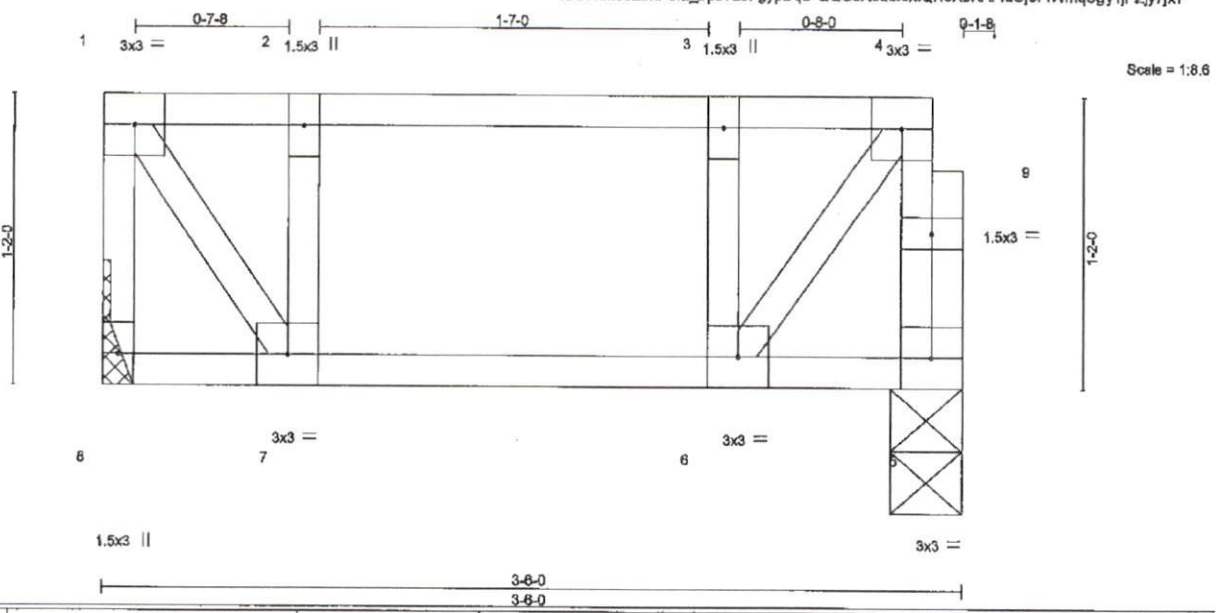


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.13	Vert(LL)	-0.00	6	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.07	Vert(CT)	-0.00	6	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	5	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-SH							Weight: 20 lb	FT = 20%F, 11%E

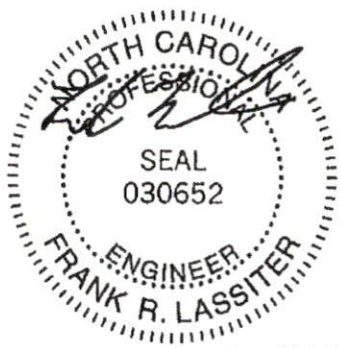
LUMBER-
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)

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

REACTIONS. (lb/size) 8=182/Mechanical, 5=176/0-3-8

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

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) Refer to girder(s) for truss to truss connections.
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.



December 18,2018

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

Job	Truss	Truss Type	Qty	Ply	LGI Homes	
BURKE_FL	F11	Floor	4	1		E12536165
Builders FirstSource, Albemarle , NC 28001					Job Reference (optional)	

8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Dec 18 12:45:19 2018 Page 1
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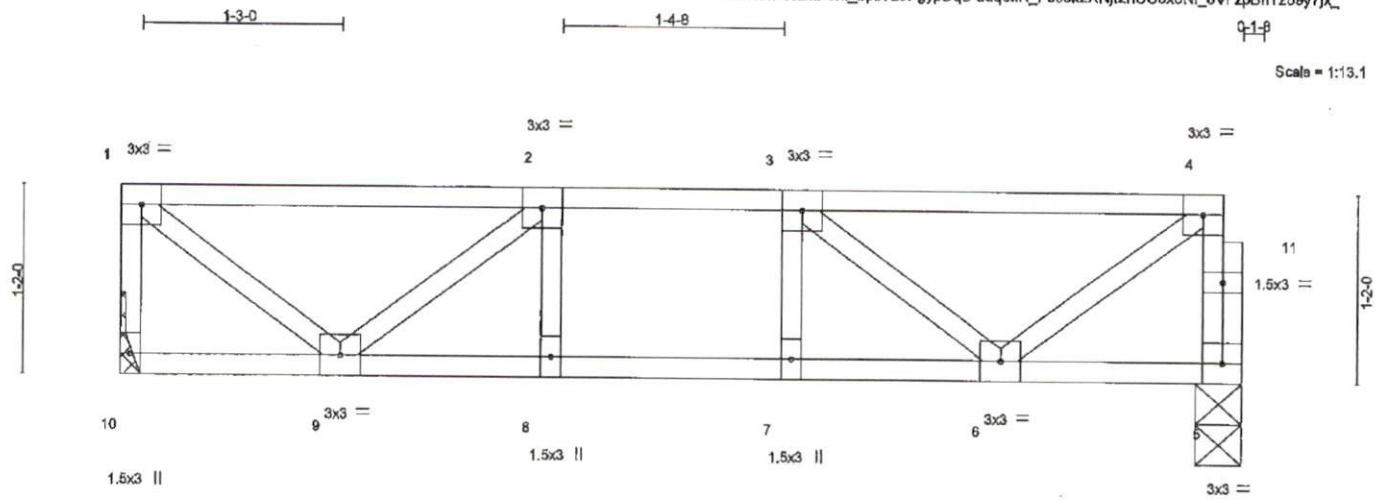

1-4-8 | 5-8-0 | 7-0-0
1-4-8 | 4-1-8 | 1-5-0

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	0.46	Vert(LL)	-0.03	6-7	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.36	Vert(CT)	-0.03	6-7	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.00	5	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-SH							Weight: 36 lb	FT = 20%F, 11%E

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

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

REACTIONS. (lb/size) 10=375/Mechanical, 5=368/0-3-8

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-10=-368/0, 4-5=-363/0, 1-2=-324/0, 2-3=-632/0, 3-4=-338/0
BOT CHORD 6-9=0/632, 7-8=0/632, 6-7=0/632
WEBS 4-6=0/404, 1-9=0/414, 3-6=-376/0, 2-9=-393/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) Refer to girder(s) for truss to truss connections.
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.

December 18,2018

Job	Truss	Truss Type	Qty	Ply	LGI Homes	E12636169
BURKE_FI.	F12E	Floor Supported Gable	1	1	Job Reference (optional)	

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0-1-8

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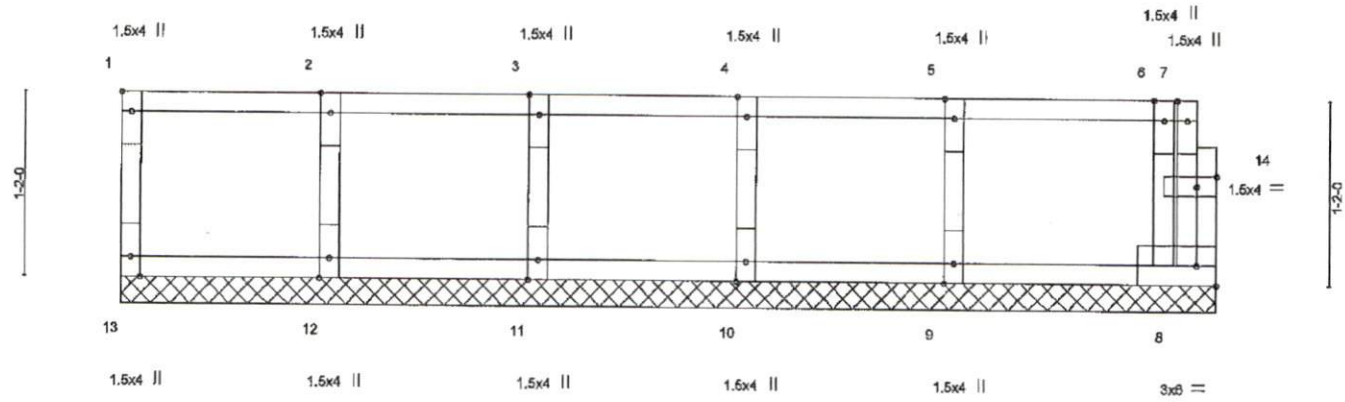


7-0-0
7-0-0

Plate Offsets (X,Y)-- [1:Edge,0-0-12], [14:0-1-8,0-0-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	8	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-R							Weight: 31 lb	FT = 20%F, 11%E

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

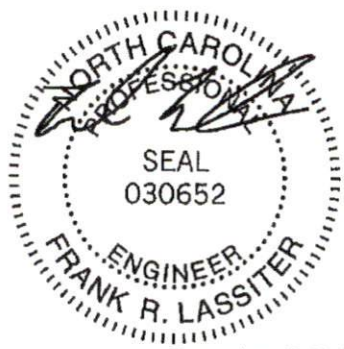
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 13=69/7-0-0, 8=78/7-0-0, 12=143/7-0-0, 11=149/7-0-0, 10=143/7-0-0, 9=161/7-0-0

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-13=-59/0, 8-14=0/19, 7-14=0/19, 1-2=-14/0, 2-3=-14/0, 3-4=-14/0, 4-5=-14/0, 5-6=-14/0, 6-7=-2/0
BOT CHORD 12-13=0/14, 11-12=0/14, 10-11=0/14, 9-10=0/14, 8-9=0/14
WEBS 2-12=-134/0, 3-11=-134/0, 4-10=-131/0, 5-9=-143/0, 6-8=-93/0

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



December 18,2018

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TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	LGI Homes
BURKE_FL	F13E	Floor Supported Gable	1	1	E12536157
					Job Reference (optional)

Builders FirstSource, Albemarle , NC 28001

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0-1-8

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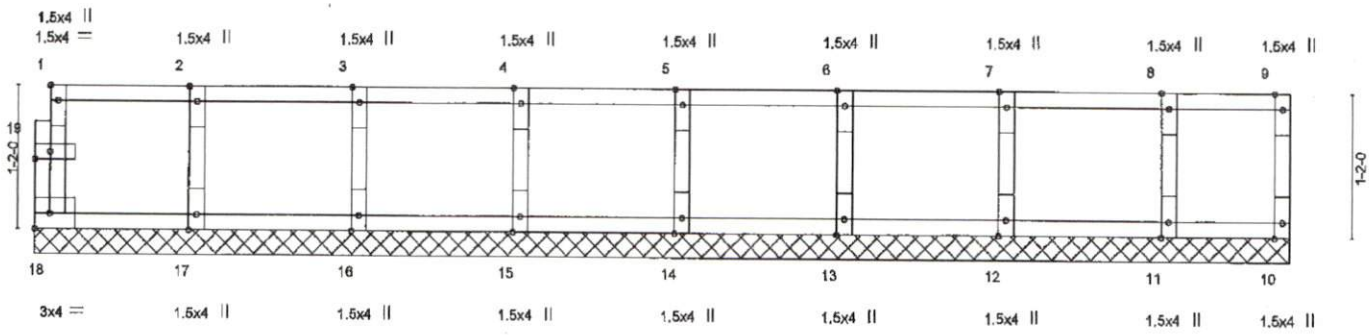

10-4-0
10-4-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	10	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-R							Weight: 44 lb	FT = 20%F, 11%E

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 10-4-0.
(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.
5) CAUTION, Do not erect truss backwards.

December 18,2018

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Job	Truss	Truss Type	Qty	Ply	LGI Homes
BURKE_FL	F14	Floor	1	1	E12536158

Builders FirstSource, Albemarle , NC 28001

Job Reference (optional)

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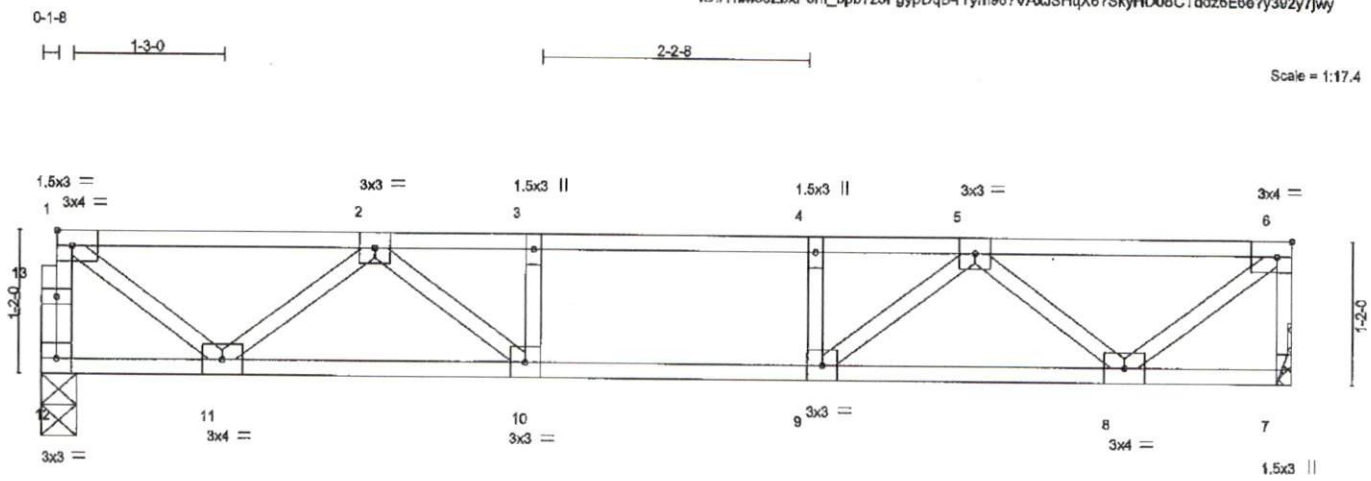


Plate Offsets (X,Y)— [6:0-1-8,Edge]

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	0.43	Vert(LL)	-0.07	10-11	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.48	Vert(CT)	-0.08	10-11	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.01	7	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-SH							Weight: 51 lb	FT = 20%F, 11%E

LUMBER-

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

BRACING-

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

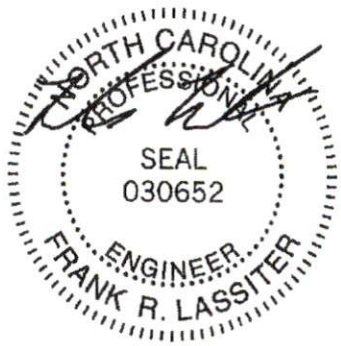
REACTIONS. (lb/size) 12=552/0-3-8, 7=558/Mechanical

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

TOP CHORD	1-12=-548/0, 6-7=-553/0, 1-2=-587/0, 2-3=-1314/0, 3-4=-1314/0, 4-5=-1314/0, 5-6=-561/0
BOT CHORD	10-11=0/1087, 9-10=0/1314, 8-9=0/1071
WEBS	6-8=0/716, 1-11=0/707, 5-8=-664/0, 2-11=-651/0, 5-9=0/463, 2-10=0/449

NOTES-

1) Unbalanced floor live loads have been considered for this design.
2) Refer to girder(s) for truss to truss connections.
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.



December 18,2018

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.

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Edenton, NC 27932

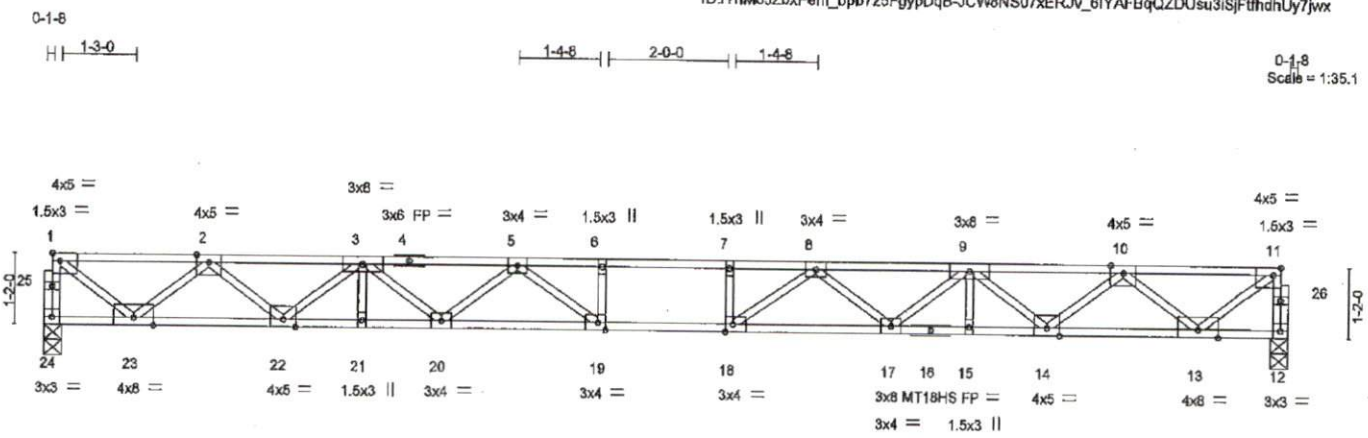
Job	Truss	Truss Type	Qty	Ply	LGI Homes	
BURKE_FL	F15	Floor	9	1		E12536159

Builders FirstSource, Albemarle , NC 28001

Job Reference (optional)

8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Dec 18 12:45:22 2018 Page 1

ID:r?hMoJZbxPenl_bpb7z5FgypDqB-JCW8NS07xERJv_6IYAFBqQZDUsu3iSjFtfhdhUy7jwx



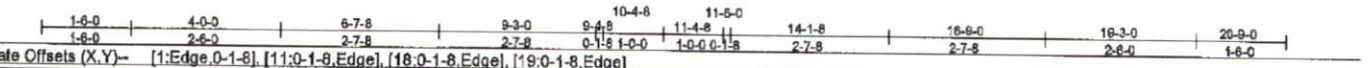


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [11:0-1-8,Edge], [18:0-1-8,Edge], [19:0-1-8,Edge]

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	0.78	Vert(LL)	-0.47	18-19	>521	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.80	Vert(CT)	-0.65	18-19	>379	240	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.77	Horz(CT)	0.09	12	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-SH							Weight: 104 lb	FT = 20%F, 11%E

LUMBER-

TOP CHORD 2x4 SP No.2(flat) *Except* 4-11: 2x4 SP No.1(flat)

BOT CHORD 2x4 SP 2400F 2.0E(flat) *Except* 12-16: 2x4 SP No.1(flat)

WEBS 2x4 SP No.3(flat)

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.

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

REACTIONS. (lb/size) 24=1121/0-3-8, 12=1121/0-3-8

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

TOP CHORD 1-24=-1115/0, 11-12=-1116/0, 1-2=-1339/0, 2-3=-3367/0, 3-5=-4751/0, 5-6=-5490/0, 6-7=-5490/0, 7-8=-5490/0, 8-9=-4752/0, 9-10=-3369/0, 10-11=-1339/0

BOT CHORD 22-23=0/2526, 21-22=0/4226, 20-21=0/4226, 19-20=0/5225, 18-19=0/5490, 17-18=0/5226, 15-17=0/4225, 14-15=0/4225, 13-14=0/2526

WEBS 6-19=-296/0, 7-18=-296/0, 1-23=0/1624, 2-23=-1544/0, 2-22=0/1095, 3-22=-1097/0, 3-20=0/670, 5-20=-618/0, 5-19=-151/749, 11-13=0/1624, 10-13=-1545/0, 10-14=0/1097, 9-14=-1092/0, 9-17=0/673, 8-17=-817/0, 8-18=-152/748

NOTES-

1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
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.

December 18,2018

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.

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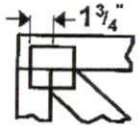
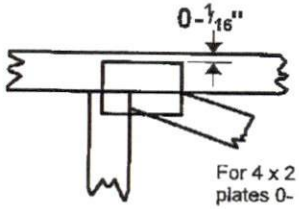
Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

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

PLATE SIZE

4 x 4

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

LATERAL BRACING LOCATION

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

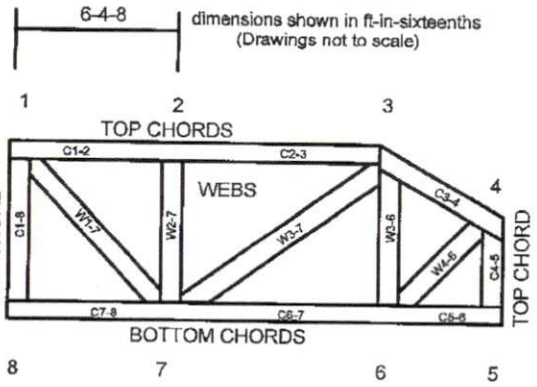
BEARING

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

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

MiTek

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General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

FLOOR TRUSS NOTES:

DO NOT CUT, DRILL, NOTCH, OR OTHERWISE DAMAGE TRUSSES. Contact your BFS Representative for assistance PRIOR TO modifying any truss. Espanol - (NO CORTE, PERFORE, HAGA MUESCAS O DANE DE CUALQUIER OTRA MANERA LAS TRUSSES (CERCHAS DE MADERA). Contacte a su representante de BFS para asistencia ANTES de realizar cualquier modificacion.)

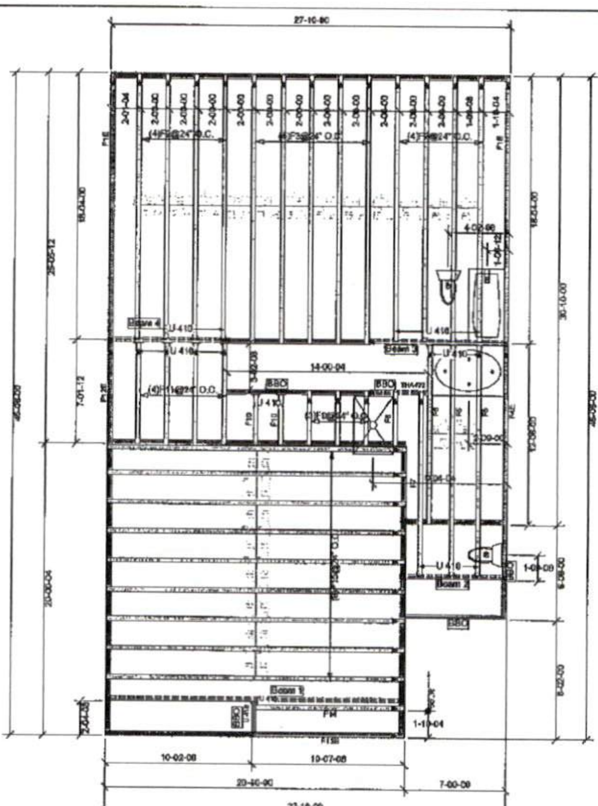
1. This Truss Placement Diagram is intended to serve as a guide for truss installation. This Diagram has been prepared by a Truss Technician and is not an engineered drawing.
2. The responsibilities of the Owner, Building Designer, Contractor, Truss Designer, and Truss Manufacturer shall be as defined by the TPI 1 National Standard.
3. The wood components shown on this diagram are to be used in dry service (moisture under 19%) and non-toxic environmental applications. The metal plates and hangers are galvanized to the G60 Standard unless noted otherwise.
4. Refer to the Truss Design Drawings for specific information about each individual truss design.
5. The Truss Technician shall provide Truss-to-Truss Connection Requirements. Any special or other connection shall be the responsibility of the Building Designer.
6. The Truss Placement Diagram and Truss Design Drawings are the property of Builders FirstSource and may not be reused or reproduced in part or in total under any circumstances without prior written authorization.
7. Floor Trusses have been spaced as specified in the plans or as directed by the contractor / customer. BFS recommends that the contractor / customer consider economics, floor performance, floor coverings, and accessibility when selecting the floor truss spacing.
8. Inflexible floor coverings, such as ceramic tile, require special consideration and planning by the contractor. The contractor shall select and use an approved floor covering assembly for the chosen floor covering and floor truss spacing used in the project. Ceramic tile assemblies are shown in the TCNA Handbook for Ceramic, Glass, and Stone Installation. Builders FirstSource is not responsible for floor covering related issues.
9. The builder / owner is to inform Builders FirstSource of any additional loads placed on floor trusses, such as loads from structural members, heavy granite island countertops, fireplace surrounds, etc. If we do not note these additional loads on the placement diagram or truss design drawings, then they have not been added.
10. This Placement Diagram may show approximate plumbing drop locations with a corresponding truss layout. With or without this information, the contractor shall insure that the installer verifies all plumbing locations and installs the trusses to avoid interference. Consider all plumbing such as toilets, tub drains and overflow, showers, etc. The contractor shall also plan for other potential utility conflicts.
11. Floor Truss Spacing may be shared to avoid plumbing interference. Avoid overloading single trusses due to truss spacing shifts. Do not exceed the allowable span rating of the subfloor sheathing used.
12. Floor Trusses shall be fully sheathed on the top chord. The builder shall select structural sheathing that meets the truss spacing requirement as well as the desired long term performance characteristics for the specific assembly.
13. Strongbacks are either recommended or required as shown on the Truss Design Drawings. BFS recommends installing strongbacks for all floor trusses to improve floor performance and allow load sharing between trusses.
14. This Placement Diagram is based upon the supporting structure being structurally adequate, dimensionally accurate, square, plumb, and level to adequately support the trusses. The foundation design, structural member sizing, load transfer, bearing conditions, and the structure's compliance with the applicable building code are the responsibility of the Owner, Building Designer, and Contractor.

WARNING:

TRUSSES MUST BE BRACED DURING INSTALLATION. FAILURE TO DO SO MAY RESULT IN INJURY OR DEATH. Espanol - (TRUSSES (CERCHAS) DEBERAN TENER UN SOPORTE DURANTE LA INSTALACION. NO HACERLO PODRIA RESULTAR EN LESIONES O MUERTE.)

1. Trusses shall be installed in a safe manner meeting all code, local, OSHA, TPI, and BCSI Specifications. Failure to follow these specifications may result in injury or death.
2. Floor Trusses shall be temporarily restrained during installation. DO NOT WALK ON UNRESTRAINED FLOOR TRUSSES. Unrestrained floor trusses may suddenly collapse or roll over and may cause injury or death.
3. BCSI INSTRUCTIONS SHALL BE FOLLOWED: BCSI-B7 • Floor Truss Installation

TOTAL FLOOR AREA
1160.76 SQ FT



Connector Summary		
Product	Manuf	Qty
THA422	Simpson	1
U 410	Simpson	22

Products				
Nol Qty	Plies	Product	Length	ProdID
2	2	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	10-00-00	Beam 3
2	2	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	18-00-00	Beam 4
2	2	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	6-00-00	Beam 2
2	2	1-3/4" x 14" VERSA-LAM® 2.0 3100 SP	22-00-00	Beam 1

Until the building is completely erected in accordance with plans, the trusses may be unstable and present a safety hazard. Truss instability may increase with building width, height, and length. Buildings under construction are vulnerable to high winds and present a possible safety hazard. It is the responsibility of the contractor and framer to recognize adverse weather conditions and take prompt and appropriate action to protect life and prevent injury. Prior to setting trusses, refer to Building Component Safety Information (BCSI) document produced by SBCA and TPI. Follow BCSI Specifications for Erection and Bracing.

No Scale

Customer Name: LGI Homes
Subdivision: Avery Pond
Lot#: 197 Plan Name: Burke
MISC NOTES
File Name 1624256

Builders FirstSource
Albemarle, NC

Revisions:

Drawn By: JEFF BURRIS
DATE: 1/16/2019
Page Number
1 of 1

ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: Burke_RF
LGI 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: E12536174 thru E12536189

My license renewal date for the state of North Carolina is December 31, 2018.

North Carolina COA: C-0844

December 18,2018

Lassiter, Frank

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	LGI Homes	
BURKE_RF	A1E	Common Supported Gable	1	1	Job Reference (optional)	E12536174

Builders FirstSource, Albemarle , NC 28001

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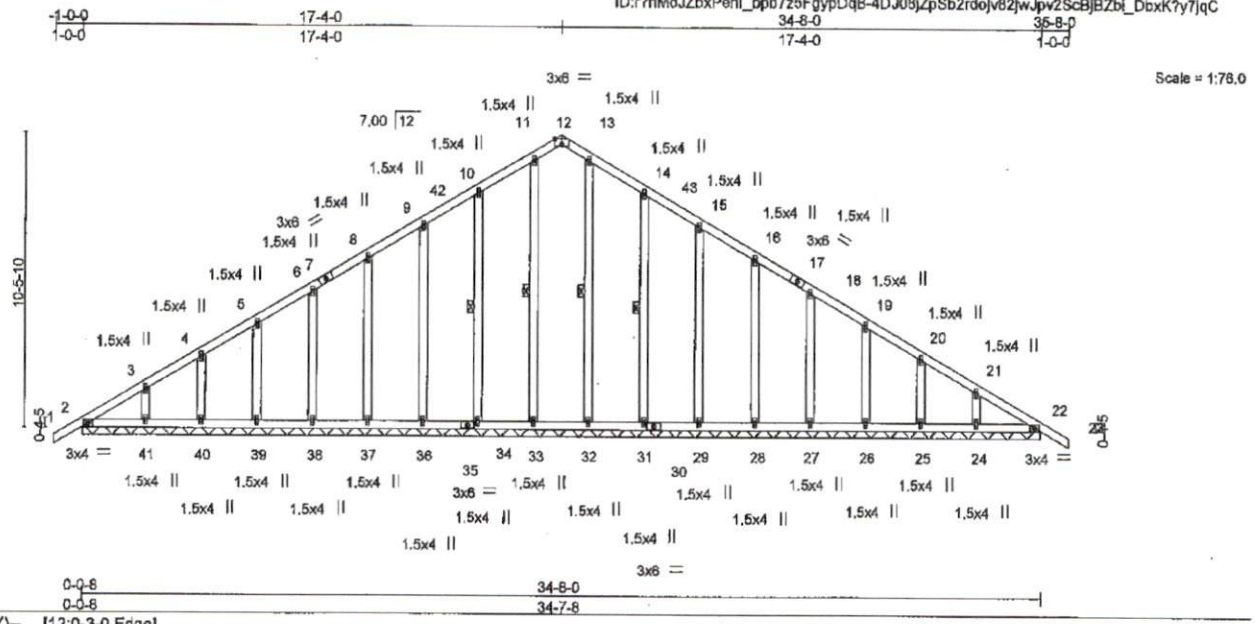


Plate Offsets (X,Y)-- [12:0-3-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	-0.00	22	n/r	120	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	22	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.01	22	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-SH							Weight: 240 lb	FT = 20%
BCDL	10.0											

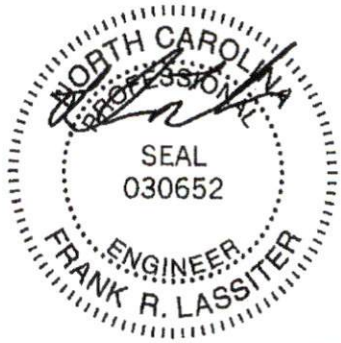
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 11-33, 10-34, 13-32, 14-31

REACTIONS. All bearings 34-7-0.
(lb) - Max Horz 2=-207(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 2, 34, 36, 37, 38, 39, 40, 41, 31, 29, 28, 27, 26, 25, 24
Max Grav All reactions 250 lb or less at joint(s) 2, 33, 34, 36, 37, 38, 39, 40, 41, 32, 31, 29, 28, 27, 26, 25, 24, 22

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-0-0 to 2-0-0, Exterior(2) 2-0-0 to 17-4-0, Corner(3) 17-4-0 to 20-4-0, Exterior(2) 20-4-0 to 35-8-0 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 34, 36, 37, 38, 39, 40, 41, 31, 29, 28, 27, 26, 25, and 24. This connection is for uplift only and does not consider lateral forces.
11) Non Standard bearing condition. Review required.



December 18,2018

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

Job	Truss	Truss Type	Qty	Ply	LGI Homes
BURKE_RF	A2	Common	3	1	E12536175

Job Reference (optional)

Builders FirstSource, Albemarle , NC 28001

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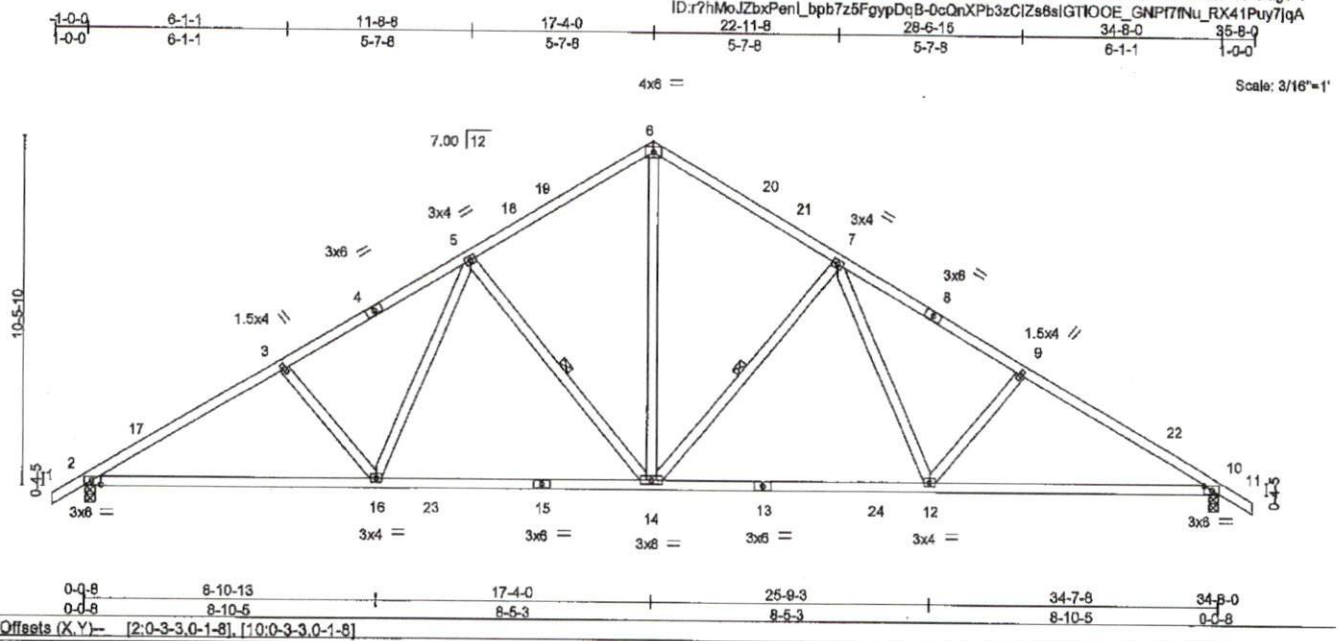


LOADING (psf)		SPACING-	2-0-0	CSI		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.19	14-16	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.35	14-16	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.10	10	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-SH							Weight: 189 lb	FT = 20%
BCDL	10.0											

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-2-4 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 7-14, 5-14

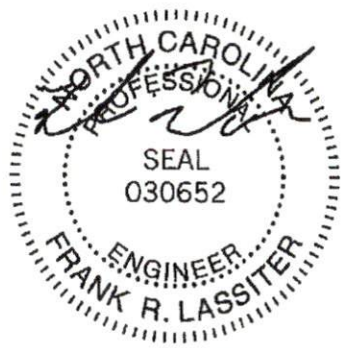
REACTIONS. (lb/size) 2=1275/0-3-8, 10=1275/0-3-8
Max Horz 2=-207(LC 14)
Max Uplift 2=-48(LC 16), 10=-48(LC 17)
Max Grav 2=1444(LC 2), 10=1444(LC 2)

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

TOP CHORD	2-3=-2286/75, 3-5=-2090/88, 5-6=-1456/121, 6-7=-1456/121, 7-9=-2090/89, 9-10=-2286/75
BOT CHORD	2-16=-120/2039, 14-16=-29/1655, 12-14=0/1553, 10-12=0/1908
WEBS	6-14=-33/1114, 7-14=-635/156, 7-12=-5/520, 9-12=-297/141, 5-14=-635/156, 5-16=-5/520, 3-16=-297/140

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 17-4-0, Exterior(2) 17-4-0 to 20-4-0, Interior(1) 20-4-0 to 35-8-0 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 10. This connection is for uplift only and does not consider lateral forces.



December 18,2018

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

Job	Truss	Truss Type	Qty	Ply	LGI Homes	
BURKE_RF	A3	Common	5	1	Job Reference (optional)	E12536176

Builders FirstSource, Albemarle , NC 28001

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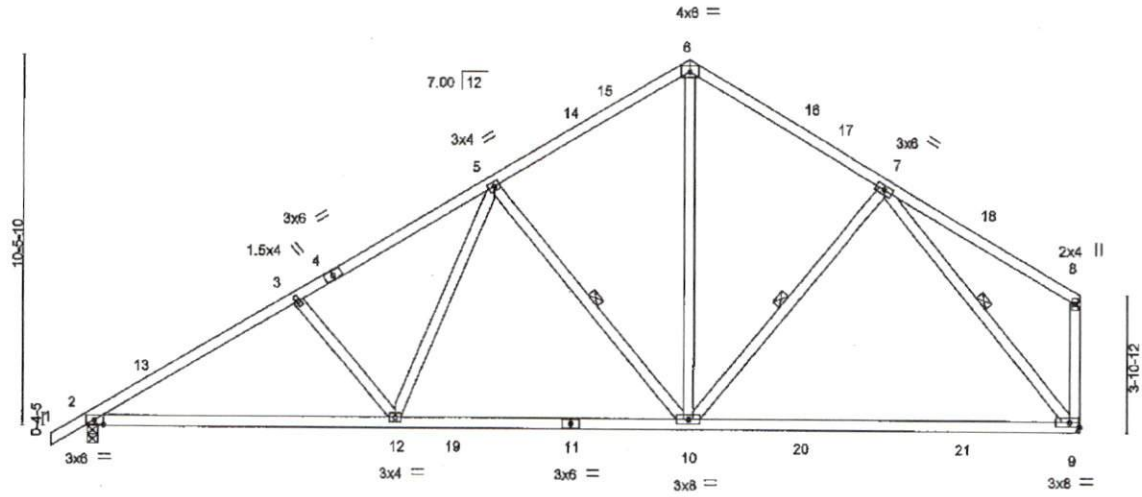
ID:r?hMoJZbxPenl_bpb7z5FgypDqB-Vo_9kdbhkWQQUGRUpAGdwRXNBp_pOqx8gBqbxKy7jq9

1-0-0	6-1-1	11-8-8	17-4-0	22-11-8	28-6-15	28-7-4
1-0-0	6-1-1	5-7-8	5-7-8	5-7-8	5-7-8	0-0-5

Scale = 1:60.5



0-0-8	8-10-13	17-4-0	25-6-3	28-7-4
0-0-8	8-10-5	8-6-3	8-6-3	2-10-1

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.84	Vert(LL)	-0.46	9-10	>742	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.84	9-10	>407	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.05	9	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-SH							Weight: 169 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2 *Except*
	9-11: 2x4 SP No.1
WEBS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-8-4 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 9-2-13 oc bracing.
WEBS	1 Row at midpt 7-10, 5-10, 7-9

REACTIONS. (lb/size) 2=1062/0-3-8, 9=1001/Mechanical
Max Horz 2=210(LC 16)
Max Uplift 2=-48(LC 16), 9=-4(LC 17)
Max Grav 2=1203(LC 2), 9=1162(LC 31)

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

TOP CHORD	2-3=-1829/79, 3-5=-1647/92, 5-6=-1013/104, 6-7=-1036/109
BOT CHORD	2-12=-192/1635, 10-12=-98/1253, 9-10=-21/746
WEBS	5-10=-620/163, 6-10=-25/693, 7-9=-1104/53, 5-12=-15/495, 3-12=-305/139

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 17-4-0, Exterior(2) 17-4-0 to 20-4-0, Interior(1) 20-4-0 to 28-5-8 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9.
10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.

December 18,2018

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

Job	Truss	Truss Type	Qty	Ply	LGI Homes	
BURKE_RF	A3A	Common	5	1		E12536177
Builders FirstSource,	Albemarle , NC 28001				Job Reference (optional)	

8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Dec 18 12:52:38 2018 Page 1
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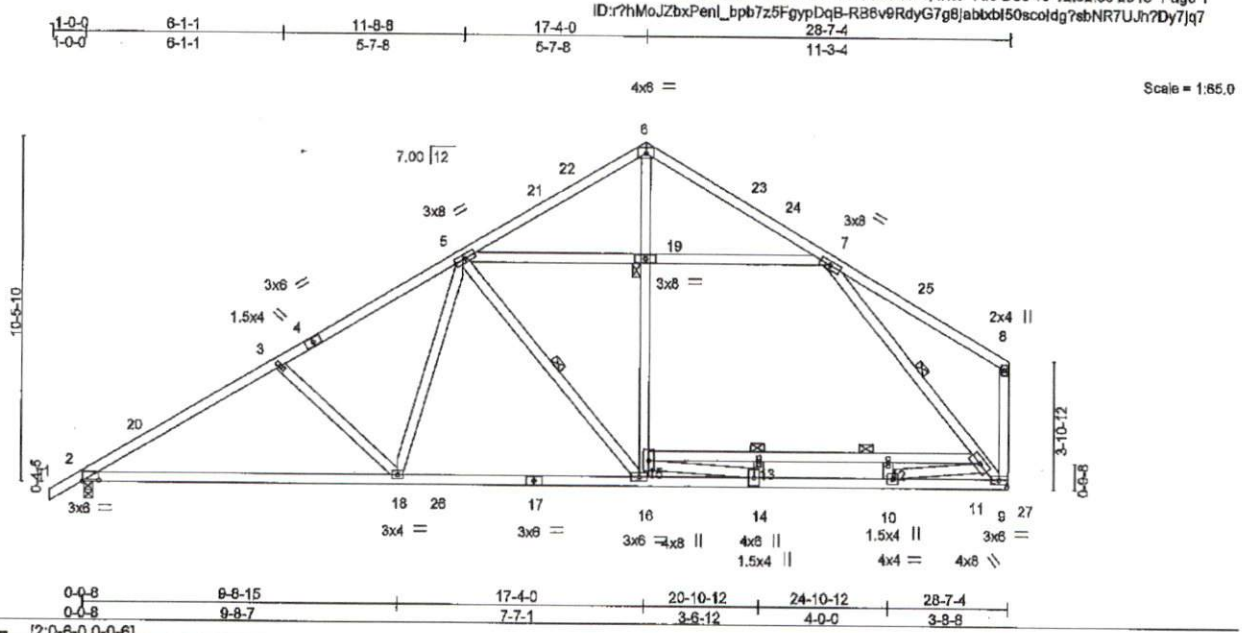


Plate Offsets (X,Y)— [2:0-6-0,0-0-6]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	-0.21	2-18	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.46	2-18	>732	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.98	Horz(CT)	0.07	9	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-SH							Weight: 199 lb	FT = 20%
BCDL	10.0											

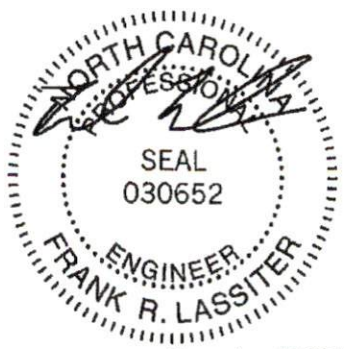
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-5-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
2-2-0 oc bracing: 2-18.
4-5-0 oc bracing: 11-15
WEBS 1 Row at midpt 5-16, 7-9
JOINTS 1 Brace at Jt(s): 19

REACTIONS. (lb/size) 2=1104/0-3-8, 9=1161/Mechanical
Max Horz 2=210(LC 16)
Max Uplift 2=-23(LC 16)
Max Grav 2=1323(LC 30), 9=1536(LC 31)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2058/34, 3-5=-1836/29, 5-6=-1722/0, 6-7=-1756/0
BOT CHORD 2-18=-154/1832, 16-18=-54/1474, 14-16=-17/662, 10-14=0/2185, 9-10=0/1397, 13-15=-1522/0, 12-13=-1522/0, 11-12=-1522/0
WEBS 3-18=-314/141, 5-18=0/485, 5-16=-985/85, 15-16=0/1005, 15-19=0/1419, 6-19=0/1412, 7-19=-2/817, 5-19=0/642, 7-11=-1392/0, 9-11=-1929/0, 14-15=0/1784, 10-11=0/1067

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 17-4-0, Exterior(2) 17-4-0 to 20-4-0, Interior(1) 20-4-0 to 28-5-8 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Refer to girder(s) for truss to truss connections.
9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at Jt(s) 2. This connection is for uplift only and does not consider lateral forces.



December 18,2018

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

Job	Truss	Truss Type	Qty	Ply	LGI Homes	
BURKE_RF	A4E	GABLE	1	1		E12536178
					Job Reference (optional)	

Builders FirstSource, Albemarle , NC 28001

8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Dec 18 12:52:39 2018 Page 1
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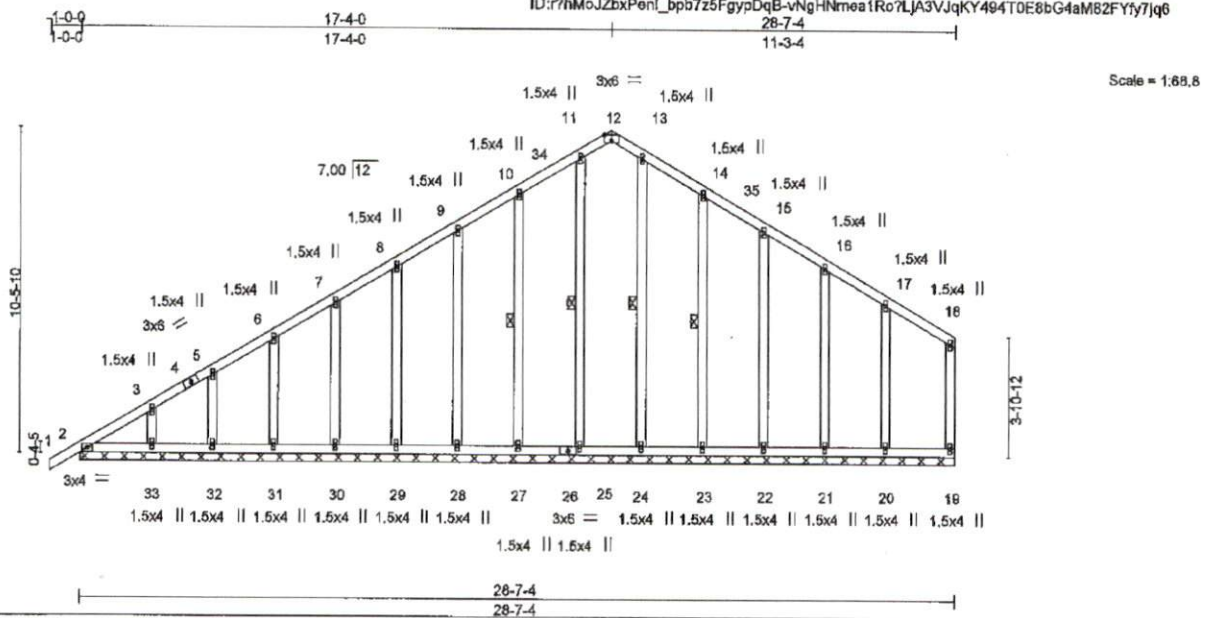


Plate Offsets (X,Y)-- [12:0-3-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	1	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00	19	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-SH							Weight: 214 lb	FT = 20%
BCDL	10.0											

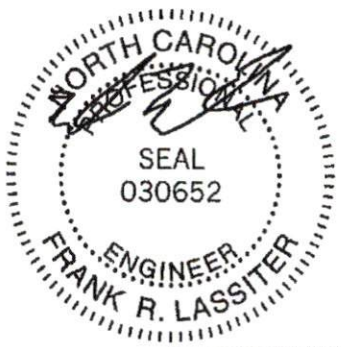
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 11-25, 10-27, 13-24, 14-23

REACTIONS. All bearings 28-7-4.
(lb) - Max Horz 2=210(LC 16)
Max Uplift All uplift 100 lb or less at joint(s) 19, 2, 25, 27, 28, 29, 30, 31, 32, 33, 23, 22, 21, 20
Max Grav All reactions 250 lb or less at joint(s) 19, 2, 25, 27, 28, 29, 30, 31, 32, 33, 24, 23, 22, 21, 20

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-0-0 to 2-0-0, Exterior(2) 2-0-0 to 17-4-0, Corner(3) 17-4-0 to 20-4-0, Exterior(2) 20-4-0 to 28-5-8 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 19, 2, 25, 27, 28, 29, 30, 31, 32, 33, 23, 22, 21, and 20. This connection is for uplift only and does not consider lateral forces.



December 18,2018

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

Job	Truss	Truss Type	Qty	Ply	LGI Homes	
BURKE_RF	B1E	Common Supported Gable	1	1	Job Reference (optional)	E12536179

Builders FirstSource, Albemarle , NC 28001

8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Dec 18 12:52:41 2018 Page 1
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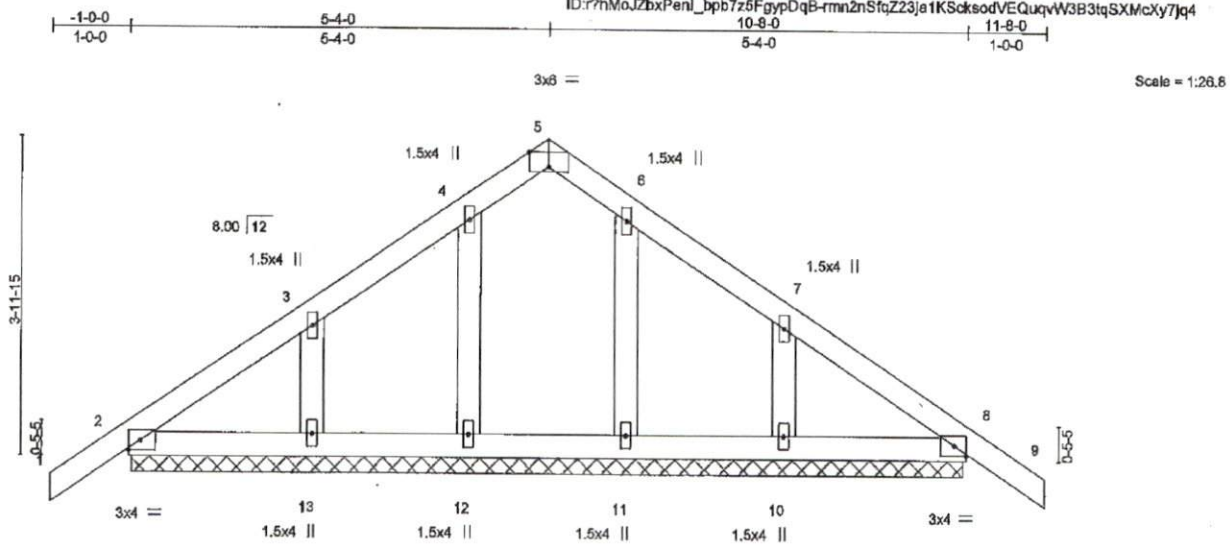

Plate Offsets (X,Y)-- [5:0-3-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	In	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	9	n/r	120	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	9	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	8	n/a	n/a		
BCLL	0.0 *	Code IRC2015/TPI2014		Matrix-P							Weight: 52 lb	FT = 20%
BCDL	10.0											

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

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

REACTIONS. All bearings 10-7-0.
(lb) - Max Horz 2=-82(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 12, 13, 11, 10
Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 11, 10

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-0-0 to 2-0-0, Exterior(2) 2-0-0 to 5-4-0, Corner(3) 5-4-0 to 8-4-0, Exterior(2) 8-4-0 to 11-8-0 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 12, 13, 11, and 10. This connection is for uplift only and does not consider lateral forces.
10) Non Standard bearing condition. Review required.

December 18,2018

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TRENCO
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	LGI Homes	
BURKE_RF	B2	Common	1	1	Job Reference (optional)	E12536180

Builders FirstSource, Albemarle , NC 28001 — 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Dec 18 12:52:42 2018 Page 1

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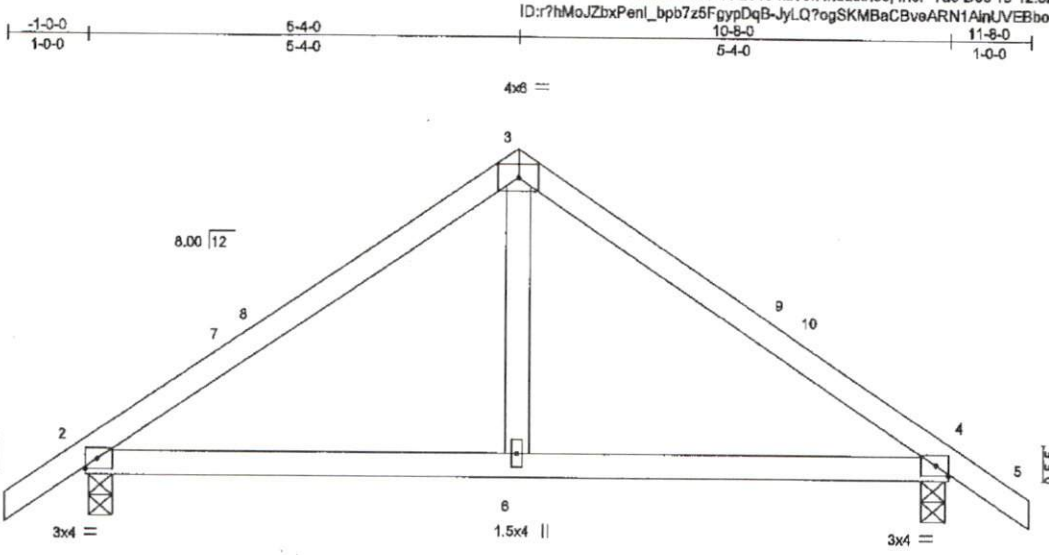


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	-0.02	2-6	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.04	2-6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.01	4	n/a	n/a		
BCLL	0.0 *	Code IRC2015/TPI2014		Matrix-P							Weight: 44 lb	FT = 20%
BCDL	10.0											

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

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

REACTIONS. (lb/size) 2=425/0-3-8, 4=425/0-3-8
Max Horz 2=82(LC 13)
Max Uplift 2=-24(LC 14), 4=-24(LC 15)
Max Grav 2=484(LC 2), 4=484(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-461/20, 3-4=-461/20
BOT CHORD 2-6=0/299, 4-6=0/299
WEBS 3-6=0/257

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 5-4-0, Exterior(2) 5-4-0 to 8-4-0, Interior(1) 8-4-0 to 11-8-0 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.

December 18,2018

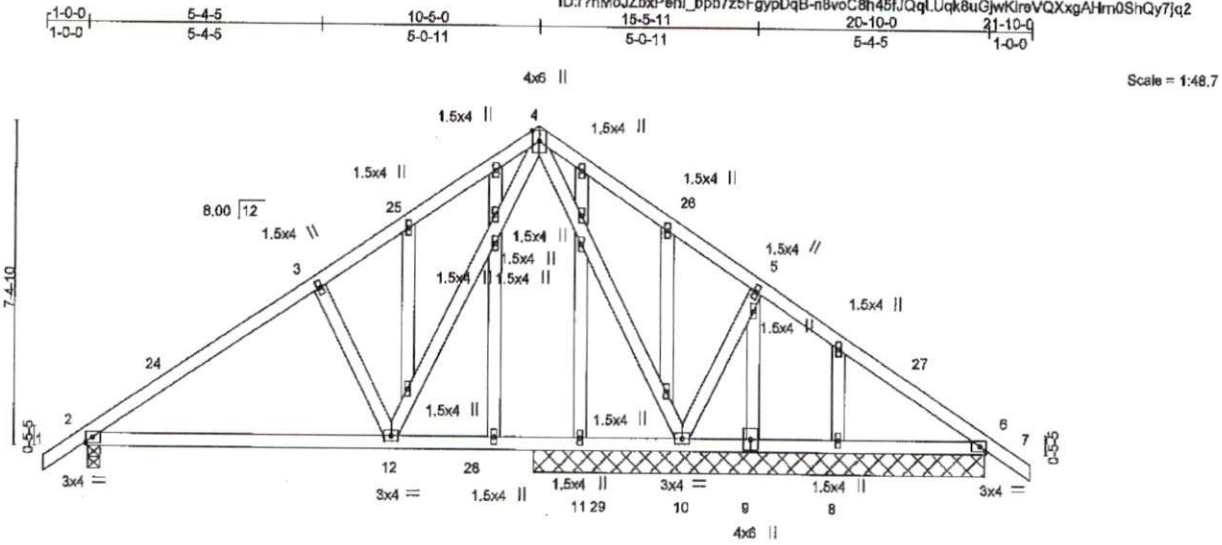
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	LGI Homes	
BURKE_RF	B3E	Common Structural Gable	1	1	Job Reference (optional)	E12536181

Builders FirstSource, Albemarle , NC 28001

8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Dec 18 12:52:43 2018 Page 1

ID:r?hMoJZbxPenI_bpb7z5FgypDqB-n8voC8h45fJQqLUqk8uGjwKlreVQXxgAHm0ShQy7jq2



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	-0.06	2-12	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.13	2-12	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.66	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-SH							Weight: 144 lb	FT = 20%
BCDL	10.0											

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 10-5-8 except (jt=length) 2=0-3-8.

(lb) - Max Horz 2=-147(LC 12)

Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 6

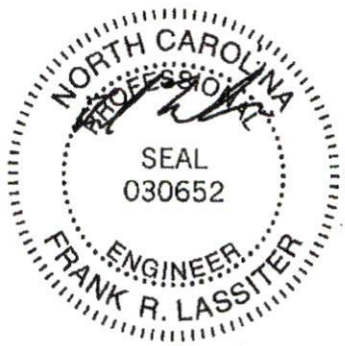
Max Grav All reactions 250 lb or less at joint(s) 11, 8, 6 except 2=577(LC 2), 10=806(LC 2)

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

TOP CHORD	2-3=-629/43, 3-4=-493/100
BOT CHORD	2-12=-52/511
WEBS	4-10=-553/48, 5-10=-302/155, 4-12=-69/465, 3-12=-294/150

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 10-5-0, Exterior(2) 10-5-0 to 13-5-0, Interior(1) 13-5-0 to 21-10-0 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 10, and 6. This connection is for uplift only and does not consider lateral forces.



December 18,2018

ENGINEERING BY
TRENCO
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	LGI Homes
BURKE_RF	B4	Scissor	3	1	E12536182

Builders FirstSource, Albemarle , NC 28001

Job Reference (optional)

8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Dec 18 12:52:44 2018 Page 1

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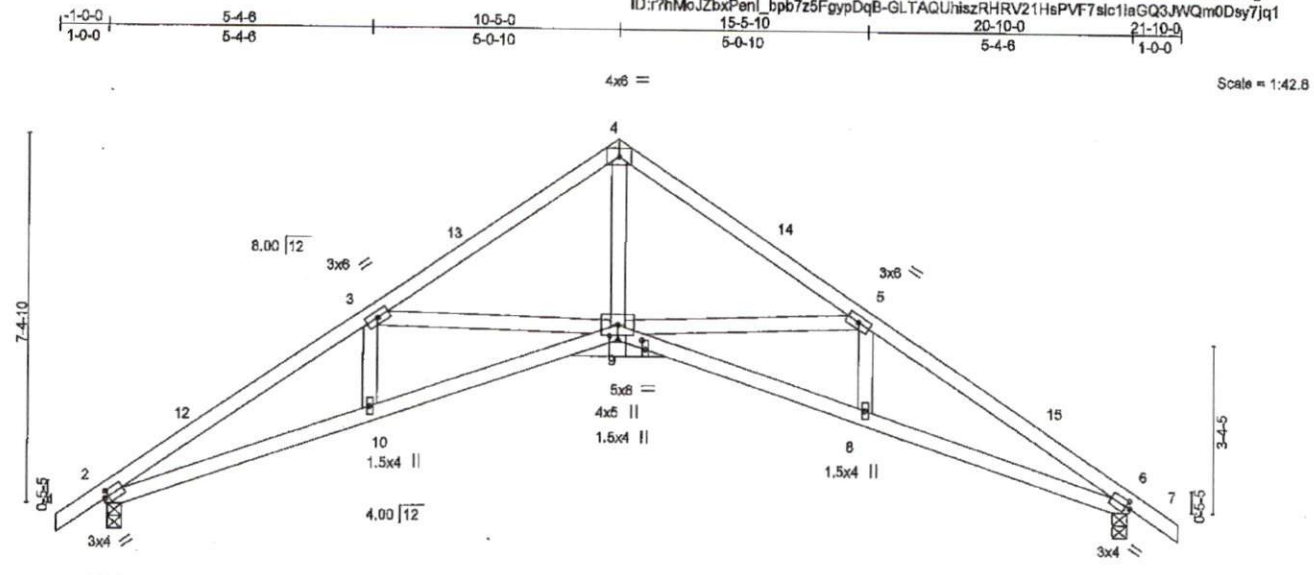


Plate Offsets (X,Y)-- [2:0-1-0,0-1-8], [5:0-1-0,0-1-8], [9:0-1-0,0-2-0], [11:0-2-4,0-0-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.87	Vert(LL)	-0.11	9	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.22	8-9	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.21	6	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-SH							Weight: 102 lb	FT = 20%
BCDL	10.0											

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-8-1 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

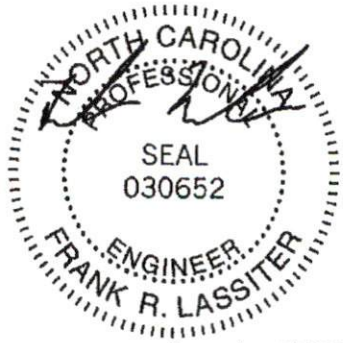
REACTIONS. (lb/size) 2=785/0-3-8, 6=785/0-3-8
Max Horz 2=-147(LC 12)
Max Uplift 2=-31(LC 14), 6=-31(LC 15)
Max Grav 2=890(LC 2), 6=890(LC 2)

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

TOP CHORD	2-3=-2116/71, 3-4=-1479/11, 4-5=-1479/31, 5-6=-2116/0
BOT CHORD	2-10=-91/1761, 9-10=-90/1756, 8-9=0/1754, 6-8=0/1759
WEBS	3-9=-528/165, 4-9=0/1262, 5-9=-535/174

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 10-5-0, Exterior(2) 10-5-0 to 13-5-0, Interior(1) 13-5-0 to 21-10-0 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Bearing at joint(s) 2, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.



December 18,2018

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

Job	Truss	Truss Type	Qty	Ply	LGI Homes
BURKE_RF	B5	Scissor	3	1	E12536183

Job Reference (optional)

Builders FirstSource, Albemarle , NC 28001

8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Dec 18 12:52:45 2018 Page 1
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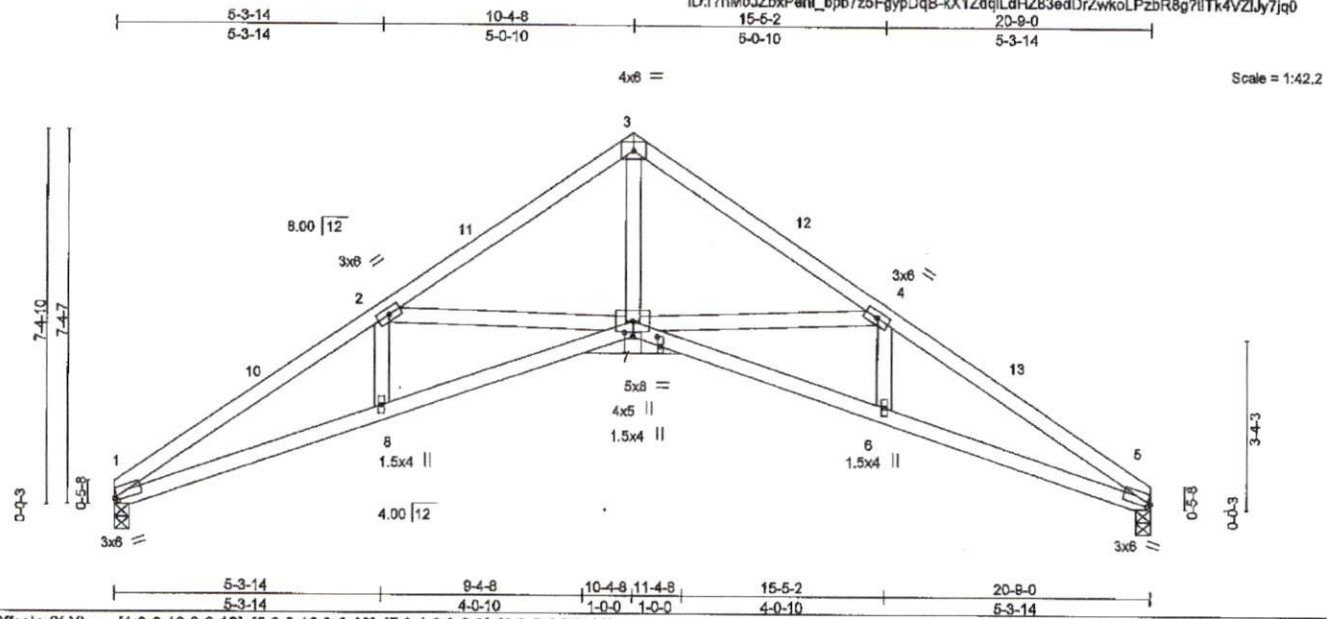


Plate Offsets (X,Y)-- [1:0-0-12,0-0-12], [5:0-0-12,0-0-12], [7:0-1-0,0-2-0], [9:0-2-4,0-0-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	-0.11	7	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.22	6-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.21	5	n/a	n/a		
BCLL	0.0 *	Code IRC2015/TPI2014		Matrix-SH							Weight: 98 lb	FT = 20%
BCDL	10.0											

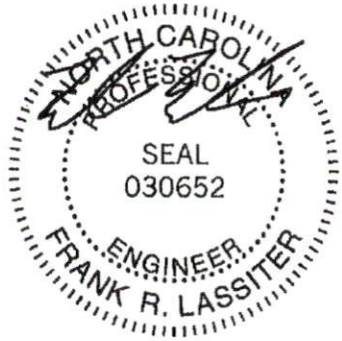
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-6-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=724/0-3-8, 5=724/0-3-8
Max Horz 1=-138(LC 12)
Max Uplift 1=-14(LC 14), 5=-14(LC 15)
Max Grav 1=818(LC 2), 5=818(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2124/84, 2-3=-1481/20, 3-4=-1481/40, 4-5=-2124/17
BOT CHORD 1-8=-110/1767, 7-8=-109/1761, 6-7=0/1761, 5-6=0/1767
WEBS 2-7=-535/168, 3-7=0/1264, 4-7=-540/177

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-2-4 to 3-2-4, Interior(1) 3-2-4 to 10-5-0, Exterior(2) 10-5-0 to 13-5-0, Interior(1) 13-5-0 to 20-7-12 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearing at joint(s) 1, 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 5. This connection is for uplift only and does not consider lateral forces.



December 18,2018

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

Job	Truss	Truss Type	Qty	Ply	LGI Homes
BURKE_RF	B5A	Roof Special	1	1	E12536184

Builders FirstSource, Albemarle , NC 28001

Job Reference (optional)

8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Dec 18 12:52:46 2018 Page 1

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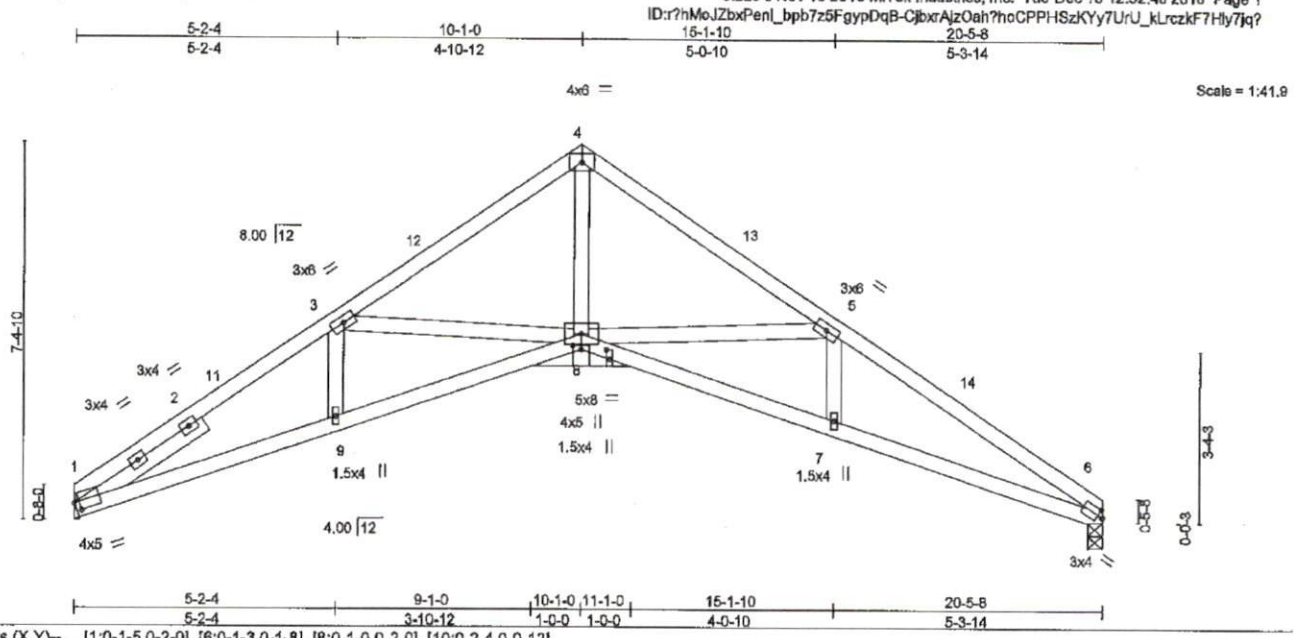


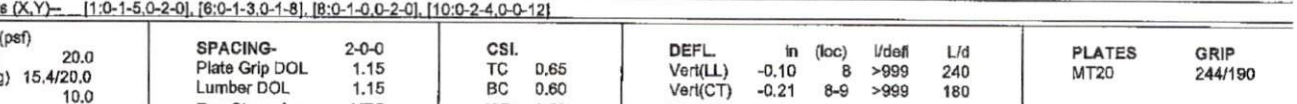


Plate Offsets (X,Y)-- [1:0-1-5,0-2-0], [6:0-1-3,0-1-8], [8:0-1-0,0-2-0], [10:0-2-4,0-0-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.10	8	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.21	8-9	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.19	6	n/a	n/a		
BCLL	0.0 *	Code IRC2015/TPI2014		Matrix-SH							Weight: 101 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
SLIDER	Left 2x4 SP No.3 3-0-6

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-7-4 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

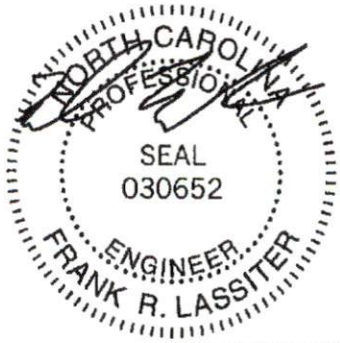
REACTIONS. (lb/size) 1=716/Mechanical, 6=716/0-3-8
Max Horz 1=-137(LC 10)
Max Uplift 1=-13(LC 14), 6=-15(LC 15)
Max Grav 1=809(LC 2), 6=809(LC 2)

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

TOP CHORD	1-3=-1966/77, 3-4=-1440/19, 4-5=-1452/39, 5-6=-2093/17
BOT CHORD	1-9=-96/1609, 8-9=-96/1617, 7-8=0/1734, 6-7=0/1740
WEBS	3-8=-434/158, 4-8=0/1217, 5-8=-538/177

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-2 to 3-1-2, Interior(1) 3-1-2 to 10-1-0, Exterior(2) 10-1-0 to 13-1-0, Interior(1) 13-1-0 to 20-3-12 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1.
9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6. This connection is for uplift only and does not consider lateral forces.



December 18,2018

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

Job	Truss	Truss Type	Qty	Ply	LGI Homes	
BURKE_RF	B6G	COMMON GIRDER	1	3	Job Reference (optional)	E12536185

Builders FirstSource, Albemarle , NC 28001 — 8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Dec 18 12:52:48 2018 Page 1

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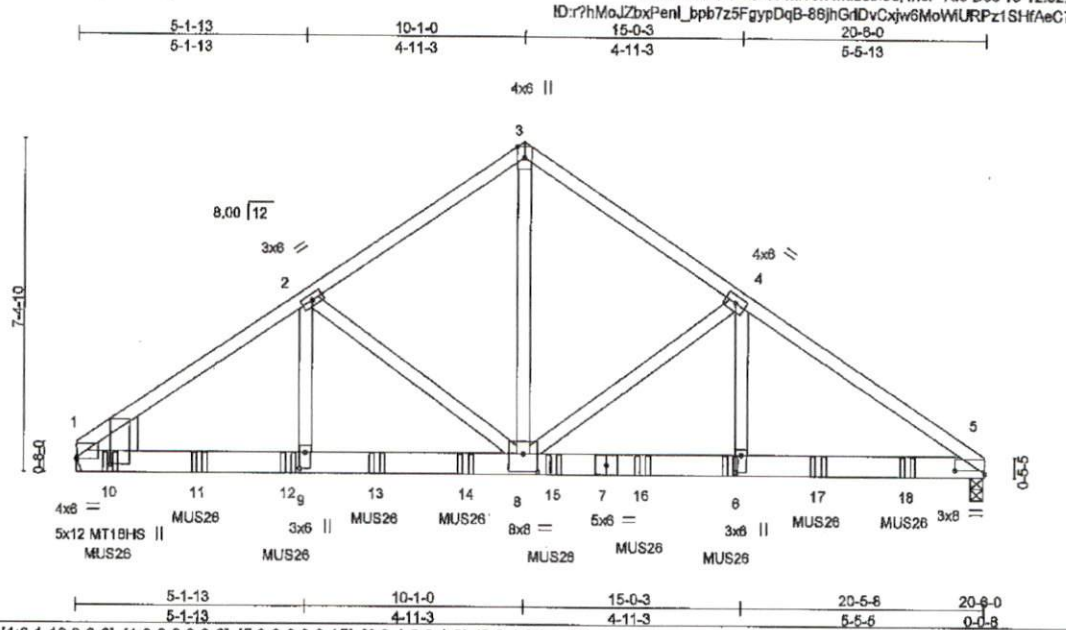

Plate Offsets (X,Y)-- [1:0-1-12,0-9-6], [1:0-0-0,0-0-6], [5:0-8-0,0-0-15], [6:0-4-8,0-1-8], [8:0-4-0,0-4-12], [9:0-4-4,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	-0.09	6-8	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.17	6-8	>999	180	MT18HS	244/190
TCDL	10.0	Rep Stress Incr	NO	WB	0.99	Horz(CT)	0.04	5	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-SH							Weight: 360 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP DSS
WEBS 2x4 SP No.3
WEDGE
Left: 2x10 SP No.2

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

REACTIONS. (lb/size) 5=6007/(0-3-8 + LGT3-SDS2.5 Simpson Strong-Tie) (req. 0-3-15), 1=6045/Mechanical
Max Horz 1=-135(LC 29)
Max Grav 5=7481(LC 3), 1=7087(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-9487/0, 2-3=-6769/0, 3-4=-6771/0, 4-5=-10629/0
BOT CHORD 1-9=0/7649, 8-9=0/7649, 6-8=0/8717, 5-6=0/8717
WEBS 3-8=0/7197, 4-8=-3935/0, 4-6=0/4350, 2-8=-2673/254, 2-9=-66/3094

NOTES-
1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-5-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone, cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
5) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) LGT3-SDS2.5 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
11) Use Simpson Strong-Tie MUS26 (6-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 0-9-4 from the left end to 8-9-4 to connect truss(es) to back face of bottom chord.
12) Use Simpson Strong-Tie MUS26 (6-10d Girder, 6-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 10-9-4 from the left end to 18-9-4 to connect truss(es) to back face of bottom chord.
13) Fill all nail holes where hanger is in contact with lumber.
14) LGT3 Hurricane ties must have three studs in line below the truss.

Continued on page 2

NORTH CAROLINA PROFESSIONAL SEAL 030652 ENGINEER FRANK R. LASSITER

December 18,2018

LOAD CASE(S) Standard

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LOAD CASE(S) Standard

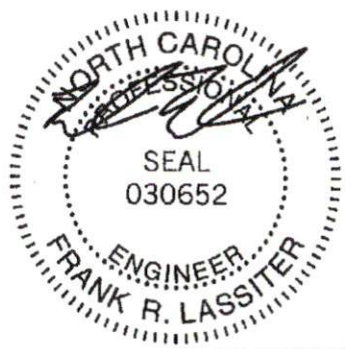
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-51, 3-5=-51, 1-5=-20

Concentrated Loads (lb)

Vert: 6=-1141(B) 10=-984(B) 11=-981(B) 12=-981(B) 13=-981(B) 14=-981(B) 15=-1141(B) 16=-1141(B) 17=-1141(B) 18=-1141(B)



December 18,2018

Job	Truss	Truss Type	Qty	Ply	LGI Homes
BURKE_RF	G1	Monopitch	6	1	E12536186

Builders FirstSource, Albemarle , NC 28001

Job Reference (optional)

8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Dec 18 12:52:49 2018 Page 1
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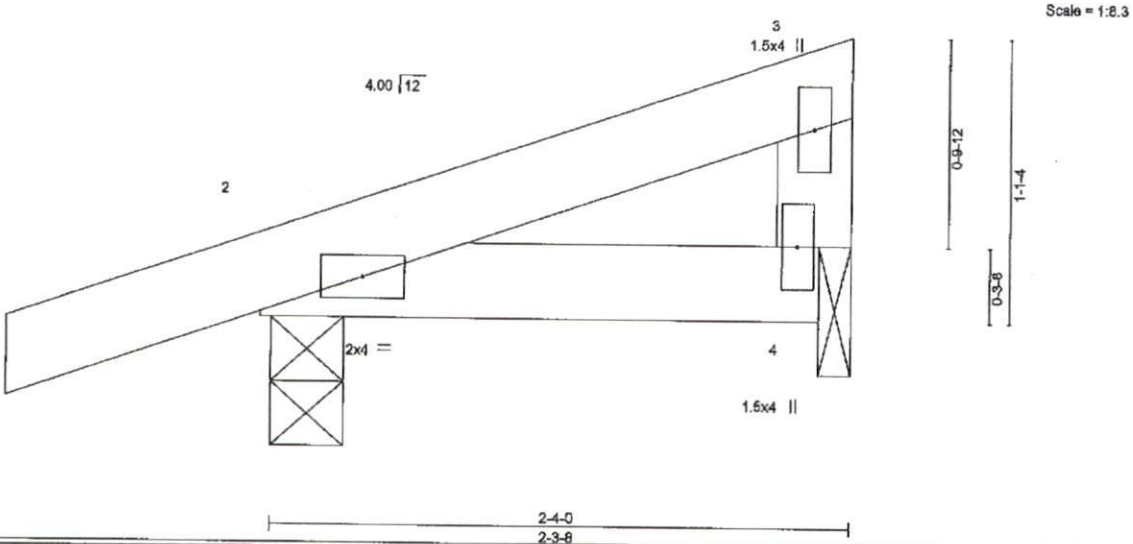


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	-0.00	2-4	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.00	2-4	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-P							Weight: 9 lb	FT = 20%
BCDL	10.0											

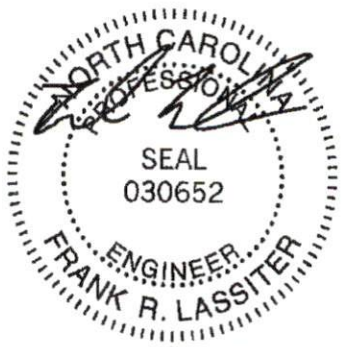
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-4-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 4=56/0-1-8, 2=147/0-3-8
Max Horz 2=35(LC 12)
Max Uplift 4=-6(LC 16), 2=-45(LC 12)
Max Grav 4=62(LC 2), 2=170(LC 2)

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

NOTES-
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 4 and 2. This connection is for uplift only and does not consider lateral forces.



December 18,2018

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Job	Truss	Truss Type	Qty	Ply	LGI Homes	
BURKE_RF	P1	Monopitch Supported Gable	4	1		E12536187

Builders FirstSource, Albemarle , NC 28001

Job Reference (optional)

8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Dec 18 12:52:50 2018 Page 1
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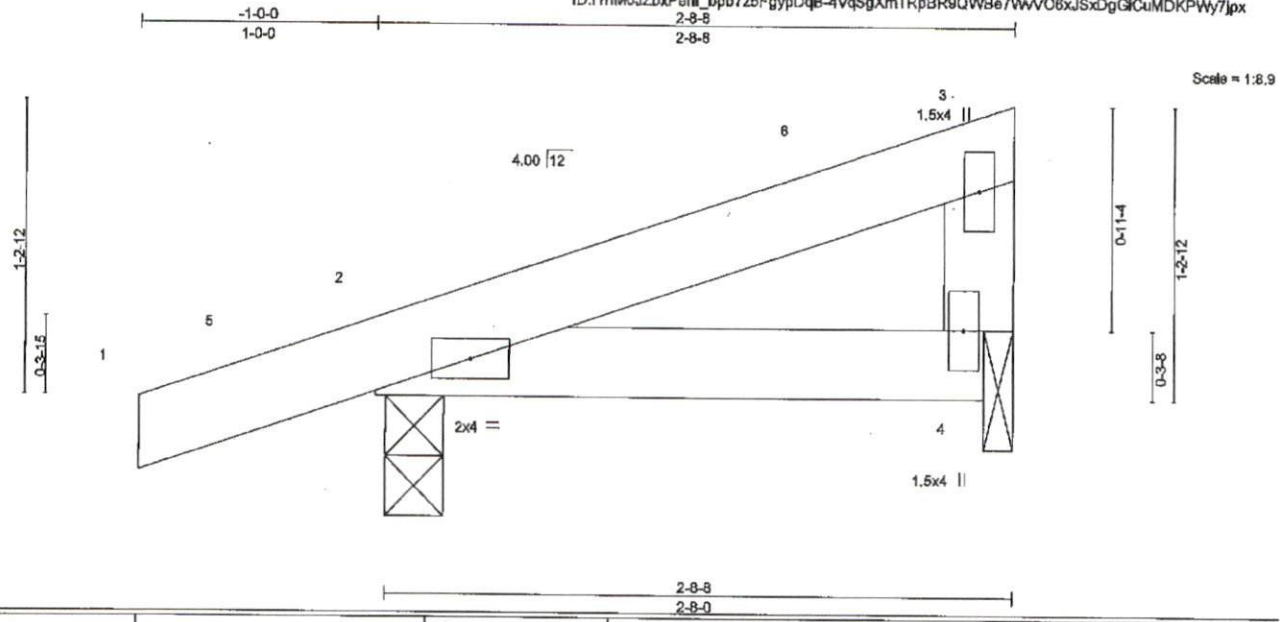

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	-0.00	2-4	>999	240	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.00	2-4	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-P							Weight: 11 lb	FT = 20%
BCDL	10.0											

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

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

REACTIONS. (lb/size) 2=157/0-3-0, 4=73/0-1-8
Max Horz 2=39(LC 12)
Max Uplift 2=-43(LC 12), 4=-8(LC 16)
Max Grav 2=181(LC 2), 4=82(LC 2)

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

NOTES-
1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-0-0 to 2-0-0, Exterior(2) 2-0-0 to 2-6-12 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.

December 18,2018

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TRENCO
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Job	Truss	Truss Type	Qty	Ply	LGI Homes	
BURKE_RF	V1	Valley	1	1		E12536188

Builders FirstSource, Albemarle , NC 28001

Job Reference (optional)

8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Dec 18 12:52:50 2018 Page 1

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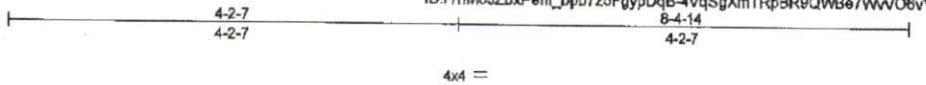
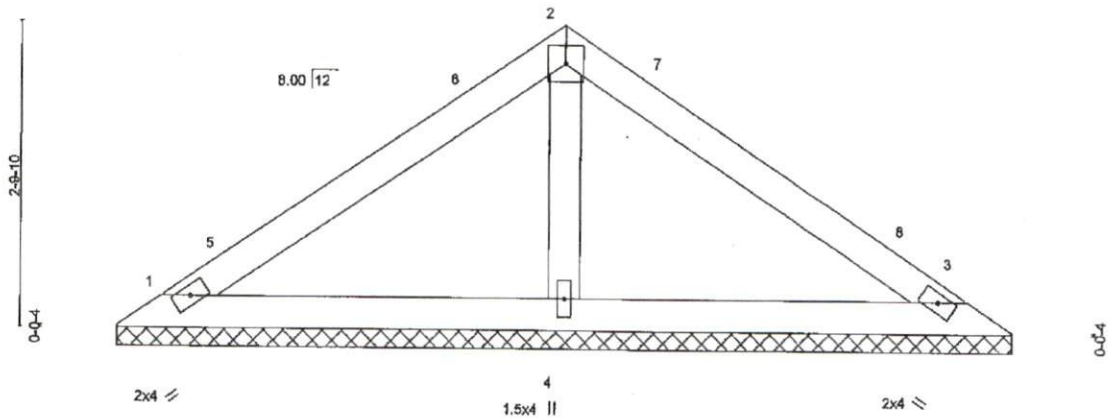


4x4 =

Scale = 1:19.6



8-4-8
8-4-8

8-4-14
0-0-6

LOADING (psf)		SPACING-	2-0-0	CSI		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-P							Weight: 29 lb	FT = 20%
BCDL	10.0											

LUMBER-

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

BRACING-

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

REACTIONS. (lb/size) 1=140/8-4-2, 3=140/8-4-2, 4=246/8-4-2
Max Horz 1=-48(LC 10)
Max Uplift 1=-19(LC 14), 3=-25(LC 15)
Max Grav 1=161(LC 2), 3=161(LC 2), 4=274(LC 2)

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

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 4-2-7, Exterior(2) 4-2-7 to 7-2-7, Interior(1) 7-2-7 to 7-11-1 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 3. This connection is for uplift only and does not consider lateral forces.

December 18,2018

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Job	Truss	Truss Type	Qty	Ply	LGI Homes
BURKE_RF	V2	Valley	1	1	E12536189

Builders FirstSource, Albemarle , NC 28001

Job Reference (optional)

8.220 s Nov 16 2018 MiTek Industries, Inc. Tue Dec 18 12:52:51 2018 Page 1
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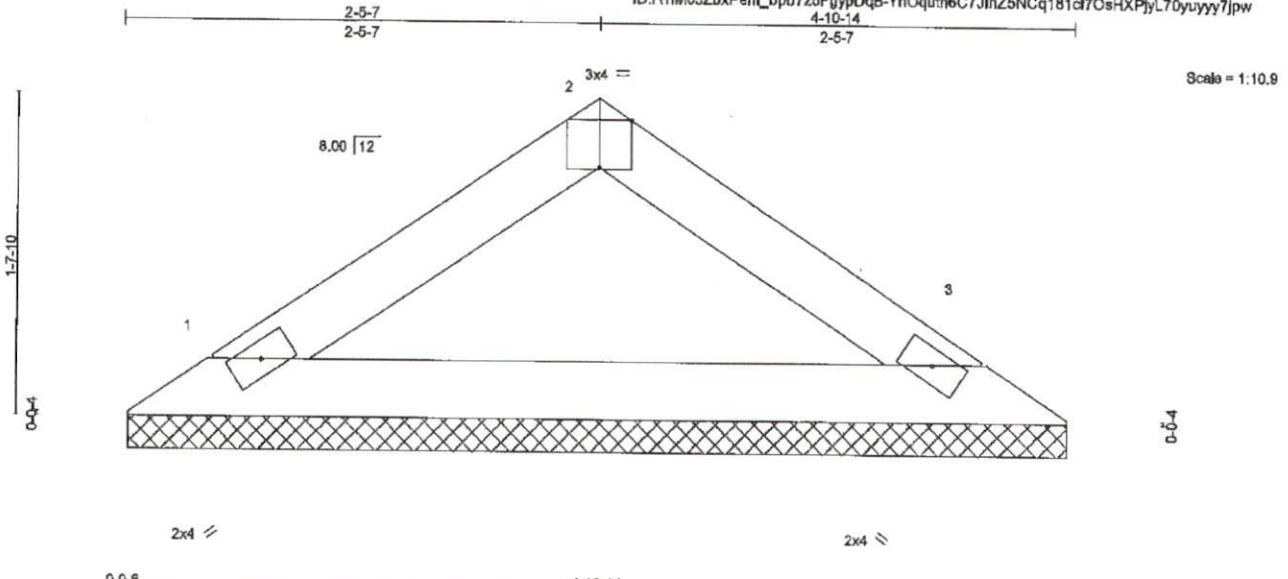


Plate Offsets (X,Y)-- [2:0-2-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	In	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-P							Weight: 14 lb	FT = 20%
BCDL	10.0											

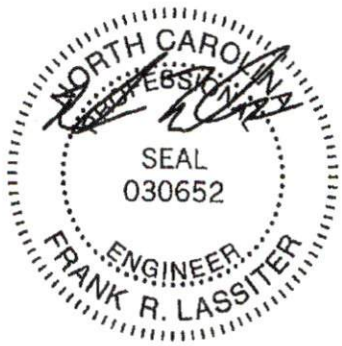
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-10-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=140/4-10-2, 3=140/4-10-2
Max Horz 1=-25(LC 12)
Max Uplift 1=-3(LC 14), 3=-3(LC 15)
Max Grav 1=158(LC 2), 3=158(LC 2)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=15.4 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 3. This connection is for uplift only and does not consider lateral forces.



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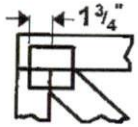
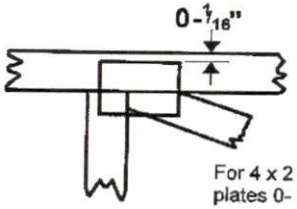
Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

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

PLATE SIZE

4 x 4

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

LATERAL BRACING LOCATION

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

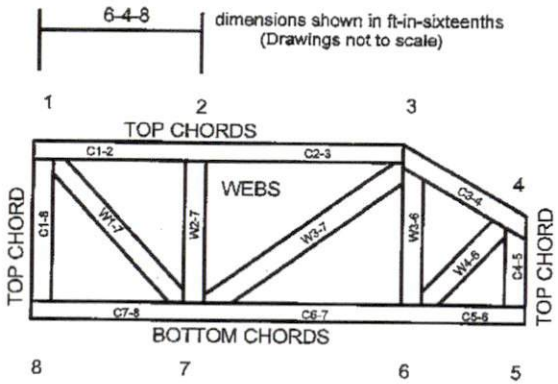
BEARING

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

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

ROOF TRUSS NOTES:

DO NOT CUT, DRILL, NOTCH, OR OTHERWISE DAMAGE TRUSSES. Contact your BFS Representative for assistance PRIOR TO modifying any truss.
Espanol - (NO CORTE, PERFORE, HAGA MUESCAS O DANE DE CUALQUIER OTRA MANERA LAS TRUSSES (CERCHAS DE MADERA). Contacte a su representante de BFS para asistencia ANTES de realizar cualquier modification.)

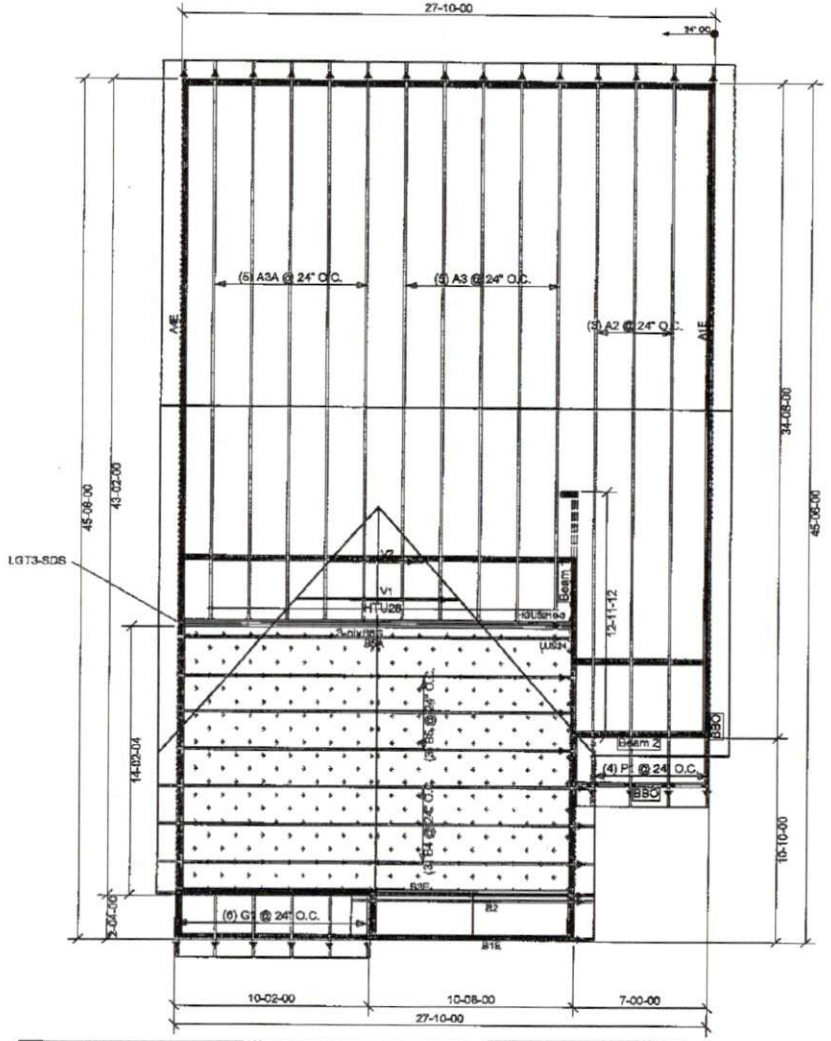
1. This Truss Placement Diagram is intended to serve as a guide for truss installation. This Diagram has been prepared by a Truss Technician and is not an engineered drawing.
2. The responsibilities of the Owner, Building Designer, Contractor, Truss Designer, and Truss Manufacturer shall be as defined by the TPI 1 National Standard.
3. The wood components shown on this diagram are to be used in dry service (moisture content<19%) and non-toxic environmental applications. The metal plates and hangers are galvanized to the G60 Standard unless noted otherwise.
4. Refer to the Truss Design Drawings for specific information about each individual truss design.
5. The Truss Technician shall provide Truss-to-Truss Connection Requirements. Any special or other connection shall be the responsibility of the Building Designer.
6. The Truss Placement Diagram and Truss Design Drawings are the property of Builders FirstSource and may not be reused or reproduced in part or in total under any circumstances without prior written authorization.
7. In some cases, said framing may be required to achieve the final appearance shown on the Construction Documents.
8. Field framing, including valley rafters, installed over roof trusses shall have a knee brace from the rafter to the truss top chord at intervals of 48" on center (O.C.) or less. Stagger knee braces from adjacent rafters such that the load is distributed uniformly over multiple truss locations and not concentrated at one location or along one truss.
9. Truss Top Chords shall be fully sheathed or have lateral bracing (purlins) spaced at 24" O.C. or less. Truss Bottom Chord Bracing shall not exceed the maximum shown on the Truss Design Drawing. Field framed bottom chord floor or ceiling attachments shall be spaced at 24" O.C. or less. Proper Bracing prevents buckling of individual truss members due to design loads.
10. This Placement Diagram is based upon the supporting structure being structurally adequate, dimensionally correct, square, plumb, and level to adequately support the trusses. The foundation design, structural member sizing, load transfer, bearing conditions, and the structure's compliance with the applicable building code are the responsibility of the Owner, Building Designer, and Contractor.
11. If Piggyback Trusses are included in this project, refer to the MiTek Piggyback Connection Detail applicable for the project details and wind load category.
12. The Contractor shall follow the SBCA TTB Partition Separation Prevention and fabrications for truss attachment to non-load bearing walls and carefully complete these details to avoid gypsum wall board related issues.

WARNING:

TRUSSES MUST BE BRACED DURING INSTALLATION. FAILURE TO DO SO MAY RESULT IN INJURY OR DEATH.
Espanol - (TRUSSES (CERCHAS) DEBERAN TENER UN SOPORTE DURANTE LA INSTALACION. NO HACERLO PODRIA RESULTAR EN LESIONES O MUERTE.)

1. Trusses shall be installed in a safe manner meeting all code, local, OSHA, TPI, and BCSI Specifications. Failure to follow these specifications may result in injury or death.
2. Buildings under construction are vulnerable to high winds and present a possible safety hazard. The Contractor is responsible for recognizing adverse weather conditions and shall take appropriate action to prevent injury or death.
3. BCSI INSTRUCTIONS SHALL BE FOLLOWED:
BCSI-B1 = Safe Truss Handling and Installation
BCSI-B2 = Installation and Temporary Restraint
BCSI-B3 = Permanent Restraint
BCSI-B4 = Safe Construction Loading
BCSI-B5 = Truss Damage and Modification Guidelines
BCSI-B7 = Floor Truss Installation
BCSI-B8 = Toe-Nailed Connections
BCSI-B9 = Multi-Ply Girders
BCSI-B10 = Post Frame Truss Installation
BCSI-B11 = Fall Protection
4. Follow TPI Requirements for Long Span Trusses (>60').

TOTAL ROOF AREA
1577.24 SQ FT



Products			
Plies	Product	Length	PlotID
2	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	10-00-00	Beam 1

Truss Connector Total List		
Qty	Product	Manuf
1	HGUS210-3	Simpson
1	LGT3-SDS	Simpson
10	HTU26	Simpson
1	LUS24	Simpson

Hatch Legend
Slope Ceiling

Verify the building is completely erected in accordance with plans, the trusses may be unstable and present a safety hazard. Truss bracing may increase with building width, height, and length. Buildings under construction are vulnerable to high winds and present a possible safety hazard. It is the responsibility of the contractor and framer to recognize adverse weather conditions and take prompt and appropriate actions to protect life and prevent injury. Prior to setting trusses, refer to Building Component Safety Information (BCSI) document produced by SBCA and TPI. Follow BCSI Specifications for Erection and Bracing.

No Scale

Customer Name: LGI Homes
Subdivision: Avery Pond
Lot# : 197 Plan Name: Burke
MISC NOTES:
File Name 1624259

Builders FirstSource
Albemarle, NC

Revisions:

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