



MiTek USA, Inc.

7777 Greenback Lane
Suite 109
Citrus Heights, CA, 95610
Telephone 916/676-1900
Fax 916/676-1909

Re: LC_CL822A
Plan 822 Elev A 30#

The truss drawing(s) referenced below have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Builders FirstSource - Colorado Springs.

Pages or sheets covered by this seal: R51225183 thru R51225201

My license renewal date for the state of Colorado is October 31, 2017.



July 26, 2017

Hernandez, Marcos

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	Plan 822 Elev A 30#	R51225183
LC_CL822A	A1	Common	7	1	Job Reference (optional)	

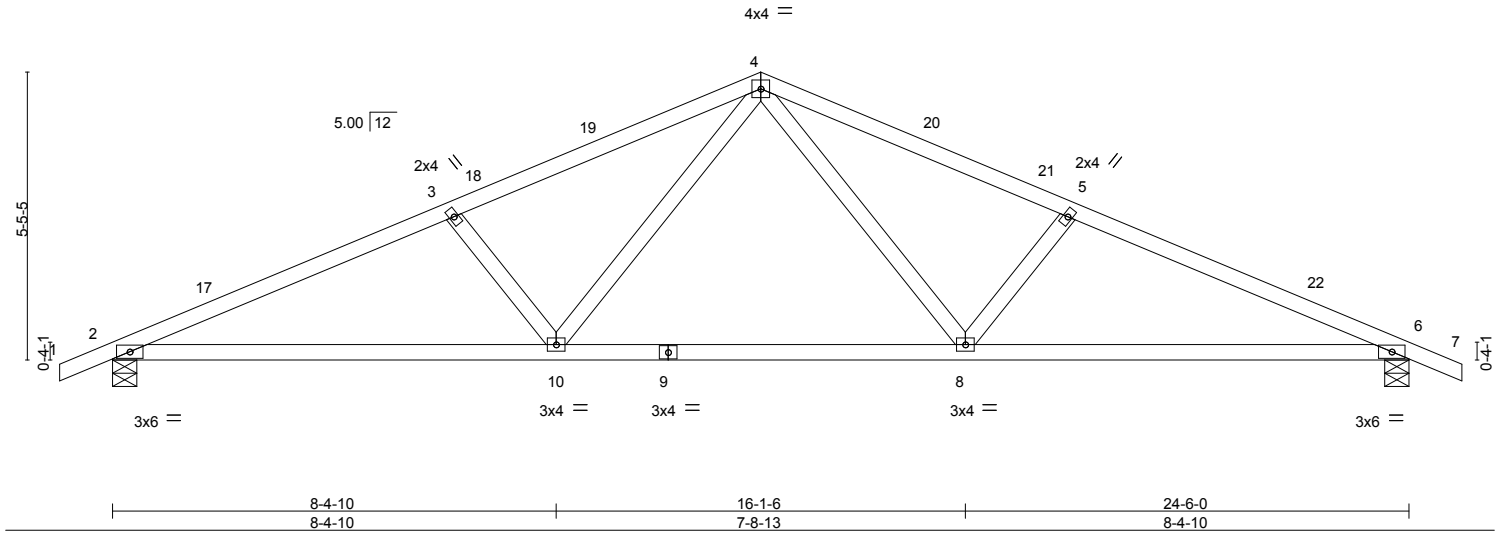
Builders First Source,
Colorado Springs, CO, 80939

7.640 s Apr 19 2016 MiTek Industries, Inc. Tue Jul 25 15:33:19 2017 Page 1

ID:5UPYP0J0jat4x98wjJ?fdAyJduh-lxCeqrlbchet6H2Rg7HZk8O?s8ugD?mRm5r3hlyuSTE

-1-0-0
1-0-0
6-5-6
6-5-6
12-3-0
5-9-10
18-0-10
5-9-10
24-6-0
6-5-6
25-6-0
1-0-0

Scale = 1:43.5



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	30.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.13	MT20	197/144		
(Roof Snow=30.0)		Lumber DOL	1.15	BC	0.55	Vert(TL)	-0.28				
TCDL	7.5	Rep Stress Incr	YES	WB	0.17	Horz(TL)	0.07				
BCLL	0.0	Code	IRC2009/TPI2007	(Matrix-M)							
BCDL	7.5										
								Weight: 82 lb		FT = 0%	

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-10-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-3-0 oc bracing.

REACTIONS. (lb/size) 2=1178/0-5-8, 6=1177/0-5-8
Max Horz 2=-114(LC 9)
Max Uplift 2=-252(LC 11), 6=-252(LC 11)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-17=-2107/498, 3-17=-2028/516, 3-18=-1833/467, 18-19=-1749/475, 4-19=-1742/486,
4-20=-1742/486, 20-21=-1749/476, 5-21=-1833/468, 5-22=-2028/516, 6-22=-2107/498
BOT CHORD 2-10=-389/1872, 9-10=-202/1258, 8-9=-202/1258, 6-8=-404/1872
WEBS 4-8=-124/678, 5-8=-535/213, 4-10=-124/678, 3-10=-535/213

- NOTES-**
- 1) Wind: ASCE 7-05; 100mph; TCDL=4.5psf; BCDL=4.5psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; enclosed; MWFRS (all heights) and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 12-3-0, Exterior(2) 12-3-0 to 15-3-0 zone; cantilever left and right exposed ; end vertical 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 7-05; Pf=30.0 psf (flat roof snow); Category II; Exp C; Fully Exp.; Ct=1.1
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
 - 5) Plates checked for a plus or minus 5 degree rotation about its center.
 - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 252 lb uplift at joint 2 and 252 lb uplift at joint 6.
 - 8) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.



July 26, 2017

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/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

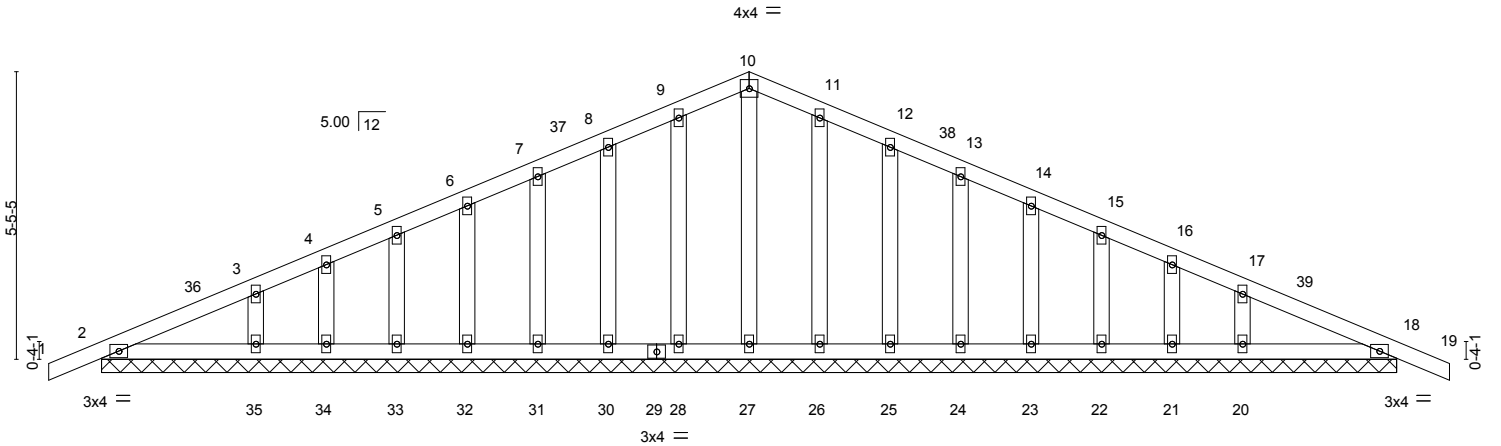
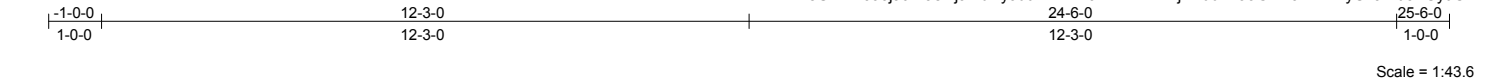


7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

Job	Truss	Truss Type	Qty	Ply	Plan 822 Elev A 30#	R51225184
LC_CL822A	A1E	Common Supported Gable	1	1	Job Reference (optional)	

Builders First Source, Colorado Springs, CO, 80939

7.640 s Apr 19 2016 MiTek Industries, Inc. Tue Jul 25 15:33:20 2017 Page 1
ID:5UPYP0J0jat4x98wJ?fdAyJduh-m7m02BmDN?mjkRddDrooGMxJ1YMRyUka?lbcECyuSTD



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	30.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	-0.01 19 n/r 120	MT20	197/144		
(Roof Snow=30.0)		Lumber DOL	1.15	BC	0.06	Vert(TL)	-0.01 19 n/r 120				
TCDL	7.5	Rep Stress Incr	YES	WB	0.06	Horz(TL)	0.00 18 n/a n/a				
BCLL	0.0	Code IRC2009/TPI2007		(Matrix)							
BCDL	7.5										
								Weight: 109 lb		FT = 0%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS	2x4 SPF No.2		

REACTIONS. All bearings 24-6-0.
(lb) - Max Horz 2=114(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 28, 30, 31, 32, 33, 34, 35, 26, 25, 24, 23, 22, 21, 20, 18
Max Grav All reactions 250 lb or less at joint(s) 2, 27, 28, 30, 31, 32, 33, 34, 35, 26, 25, 24, 23, 22, 21, 20, 18

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

NOTES-

- 1) Wind: ASCE 7-05; 100mph; TCDL=4.5psf; BCDL=4.5psf; h=15ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp C; enclosed; MWFRS (all heights) and C-C Corner(3) -1-0-0 to 2-0-0, Exterior(2) 2-0-0 to 12-3-0, Corner(3) 12-3-0 to 15-3-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-05; Pf=30.0 psf (flat roof snow); Category II; Exp C; Fully Exp.; Ct=1.1
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Plates checked for a plus or minus 5 degree rotation about its center.
- 8) Gable requires continuous bottom chord bearing.
- 9) Gable studs spaced at 1-4-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 28, 30, 31, 32, 33, 34, 35, 26, 25, 24, 23, 22, 21, 20, 18.
- 12) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.



July 26, 2017

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

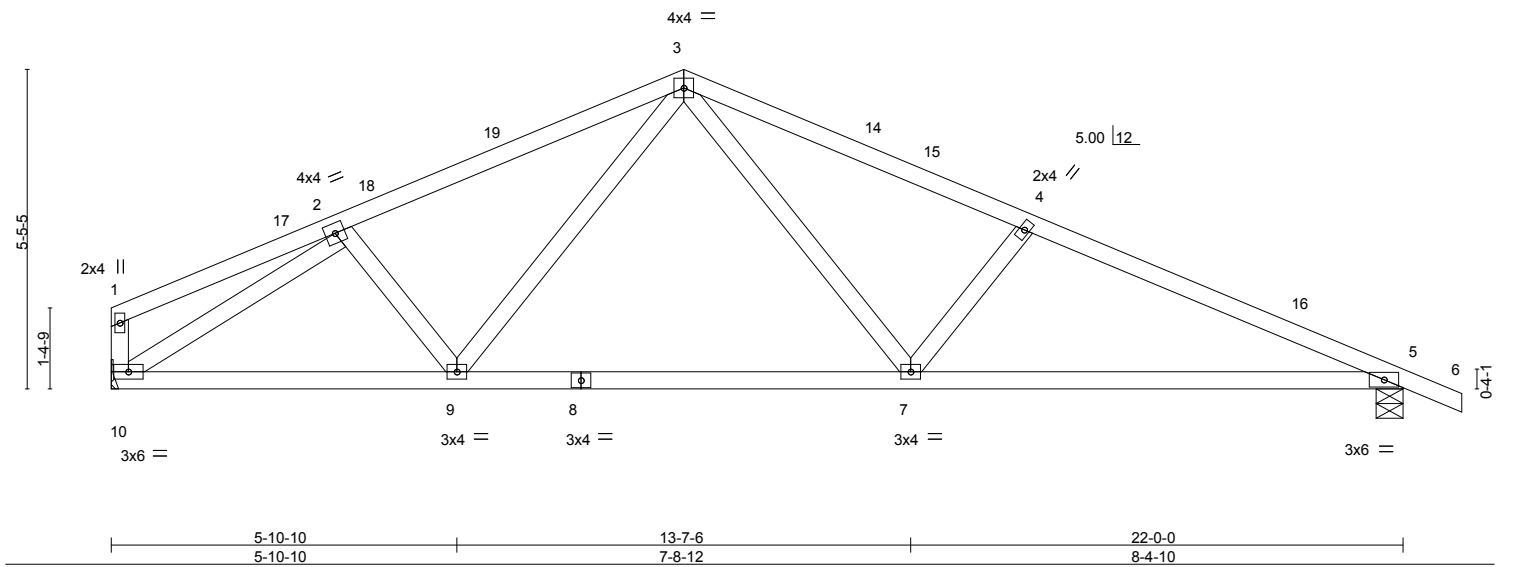
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

Job	Truss	Truss Type	Qty	Ply	Plan 822 Elev A 30#	R51225185
LC_CL822A	A2	Common	9	1		

Builders First Source,	Colorado Springs, CO, 80939	Job Reference (optional)				
		7.640 s Apr 19 2016 MiTek Industries, Inc. Tue Jul 25 15:33:21 2017 Page 1				
		ID:5UPYP0J0jat4x98wjJ?fdAyJduh-EJJOFXnr8luaLbCqnYJ1pZTLfybnhpnkEPKAmeYuSTC				
		15-6-10 5-9-10 22-0-0 23-0-0 1-0-0				
		Scale = 1:39.2				



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	30.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	-0.08	MT20	197/144		
(Roof Snow=30.0)		Lumber DOL	1.15	BC	0.50	Vert(TL)	-0.19				
TCDL	7.5	Rep Stress Incr	YES	WB	0.52	Horz(TL)	0.05				
BCLL	0.0	Code IRC2009/TPI2007		(Matrix-M)							
BCDL	7.5										

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 3-6-3 oc purlins, except end verticals.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 9-10-2 oc bracing.
WEBS	2x4 SPF No.2		

REACTIONS.	
(lb/size)	10=968/Mechanical, 5=1074/0-5-8
Max Horz	10=-140(LC 9)
Max Uplift	10=-182(LC 11), 5=-232(LC 11)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	3-14=-1486/430, 14-15=-1494/419, 4-15=-1578/411, 4-16=-1775/463, 5-16=-1853/445, 2-18=-1317/363, 18-19=-1234/371, 3-19=-1228/382
BOT CHORD	9-10=-238/1174, 8-9=-152/1016, 7-8=-152/1016, 5-7=-356/1638
WEBS	4-7=-495/214, 3-7=-124/644, 3-9=-37/301, 2-10=-1396/357

- NOTES-**
- 1) Wind: ASCE 7-05; 100mph; TCDL=4.5psf; BCDL=4.5psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; enclosed; MWFRS (all heights) and C-C Exterior(2) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 9-9-0, Exterior(2) 9-9-0 to 12-9-0 zone; cantilever left and right exposed; end vertical 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 7-05; Pf=30.0 psf (flat roof snow); Category II; Exp C; Fully Exp.; Ct=1.1
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
 - 5) Plates checked for a plus or minus 5 degree rotation about its center.
 - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 7) Refer to girder(s) for truss to truss connections.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=182, 5=232.
 - 9) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.



July 26,2017

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.

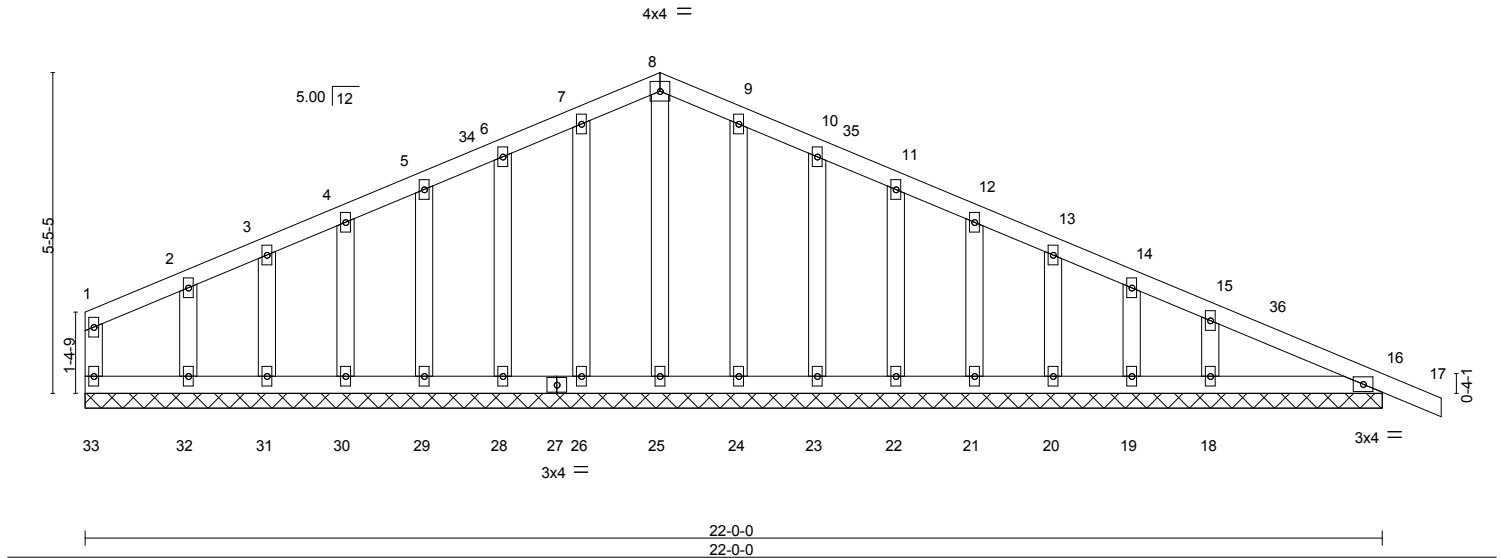


7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

Job	Truss	Truss Type	Qty	Ply	Plan 822 Elev A 30#	R51225186
LC_CL822A	A2E	Common Supported Gable	1	1	Job Reference (optional)	

Builders First Source, Colorado Springs, CO, 80939

7.640 s Apr 19 2016 MiTek Industries, Inc. Tue Jul 25 15:33:22 2017 Page 1
ID:5UPYP0J0jat4x98wjJ?fdAyJduh-IVtmTtoUvc0Rzn0LGqGLn0fXL1vQOEIT34jl4yuSTB



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 30.0	2-0-0	TC 0.13	in (loc) l/defl L/d	MT20	197/144
(Roof Snow=30.0)	Plate Grip DOL 1.15	BC 0.06	Vert(LL) -0.01 17 n/r 120		
TCDL 7.5	Lumber DOL 1.15	WB 0.06	Vert(TL) -0.01 17 n/r 120		
BCLL 0.0	Rep Stress Incr YES	(Matrix)	Horz(TL) 0.00 16 n/a n/a		
BCDL 7.5	Code IRC2009/TPI2007			Weight: 102 lb	FT = 0%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2	
OTHERS 2x4 SPF No.2	

REACTIONS. All bearings 22-0-0.
(lb) - Max Horz 33=140(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 33, 25, 26, 28, 29, 30, 31, 32, 24, 23, 22, 21, 20, 19, 18, 16
Max Grav All reactions 250 lb or less at joint(s) 33, 25, 26, 28, 29, 30, 31, 32, 24, 23, 22, 21, 20, 19, 18, 16

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 8-9=35/255

NOTES-

- 1) Wind: ASCE 7-05; 100mph; TCDL=4.5psf; BCDL=4.5psf; h=15ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp C; enclosed; MWFRS (all heights) and C-C Corner(3) 0-1-12 to 3-1-0, Exterior(2) 3-1-0 to 9-9-0, Corner(3) 9-9-0 to 12-9-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-05; Pf=30.0 psf (flat roof snow); Category II; Exp C; Fully Exp.; Ct=1.1
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Plates checked for a plus or minus 5 degree rotation about its center.
- 8) Gable requires continuous bottom chord bearing.
- 9) Gable studs spaced at 1-4-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 33, 25, 26, 28, 29, 30, 31, 32, 24, 23, 22, 21, 20, 19, 18, 16.
- 12) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.



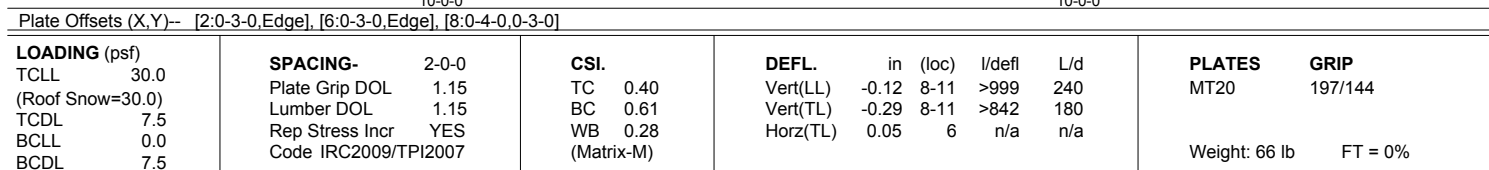
July 26, 2017

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.



7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610



REACTIONS. (lb/size) 2=975/0-5-8, 6=975/0-5-8
Max Horz 2=95(LC 10)
Max Uplift 2=-213(LC 11), 6=-213(LC 11)

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

TOP CHORD	2-15=-1655/446, 3-15=-1594/460, 3-16=-1205/316, 16-17=-1194/322, 4-17=-1131/332, 4-18=-1131/333, 18-19=-1194/322, 5-19=-1205/316, 5-20=-1594/460, 6-20=-1655/446
BOT CHORD	2-8=-347/1471, 6-8=-362/1471
WEBS	4-8=-88/525, 5-8=-572/229, 3-8=-572/229

NOTES-

- 1) Wind: ASCE 7-05; 100mph; TCDL=4.5psf; BCDL=4.5psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; enclosed; MWFRS (all heights) and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 10-0-0, Exterior(2) 10-0-0 to 13-0-0 zone; cantilever left and right exposed ; end vertical 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 7-05; Pf=30.0 psf (flat roof snow); Category II; Exp C; Fully Exp.; Ct=1.1
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 5) Plates checked for a plus or minus 5 degree rotation about its center.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=213, 6=213.
- 8) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.

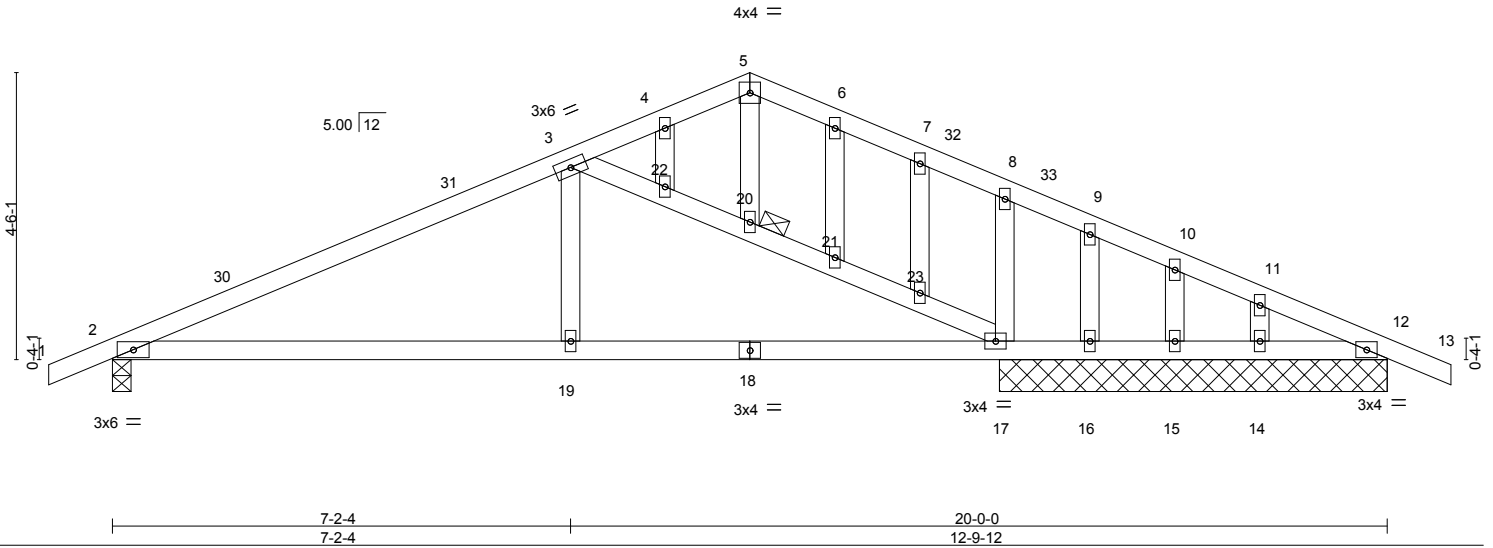
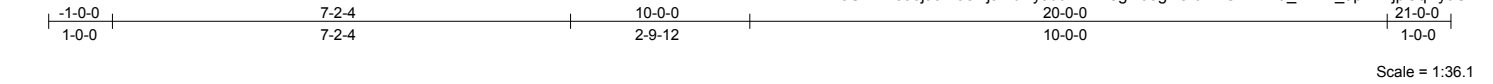


July 26, 2017

Job LC_CL822A	Truss A3E	Truss Type KINGPOST	Qty 1	Ply 1	Plan 822 Elev A 30# R51225188
------------------	--------------	------------------------	----------	----------	----------------------------------

Builders First Source, Colorado Springs, CO, 80939

Job Reference (optional)
7.640 s Apr 19 2016 MiTek Industries, Inc. Tue Jul 25 15:33:23 2017 Page 1
ID:5UPYP0J0jat4x98wjJ7fdAyJduh-AiR8gDo6gw8IbvMCvzMVu_Zkwll_9pX1hjpGqXyuSTA



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	30.0	2-0-0		TC	0.47	in (loc)	l/defl	MT20		197/144	
(Roof Snow=30.0)		Plate Grip DOL	1.15	BC	0.33	Vert(LL)	-0.05 19-26 >999				
TCDL	7.5	Lumber DOL	1.15	WB	0.18	Vert(TL)	-0.11 19-26 >999				
BCLL	0.0	Rep Stress Incr	YES	(Matrix-M)		Horz(TL)	0.02 27 n/a				
BCDL	7.5	Code IRC2009/TPI2007									
								Weight: 77 lb FT = 0%			

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-1-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 20

REACTIONS.

All bearings 6-1-0 except (jt=length) 2=0-3-8.
(lb) - Max Horz 2=-95(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 16, 15, 14, 12 except 2=-167(LC 11), 17=-110(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 15, 14, 12 except 2=768(LC 2), 17=706(LC 1), 12=270(LC 3)

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

TOP CHORD 2-30=-1006/198, 30-31=-911/207, 3-31=-825/218, 3-4=-273/131, 6-7=-262/95,
7-32=-257/82, 8-32=-305/78, 9-10=-263/30, 10-11=-257/7, 11-12=-254/6
BOT CHORD 2-19=-103/841, 18-19=-103/841, 17-18=-103/841
WEBS 3-22=-850/203, 20-22=-828/198, 20-21=-850/194, 21-23=-855/203, 17-23=-883/214,
8-17=-325/122

NOTES-

- 1) Wind: ASCE 7-05; 100mph; TCDL=4.5psf; BCDL=4.5psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; enclosed; MWFRS (all heights) and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 10-0-0, Exterior(2) 10-0-0 to 13-0-0 zone; cantilever left and right exposed ; end vertical 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 7-05; Pf=30.0 psf (flat roof snow); Category II; Exp C; Fully Exp.; Ct=1.1
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Plates checked for a plus or minus 5 degree rotation about its center.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 15, 14, 12, 12 except (jt=lb) 2=167, 17=110.
- 9) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.



July 26, 2017

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.

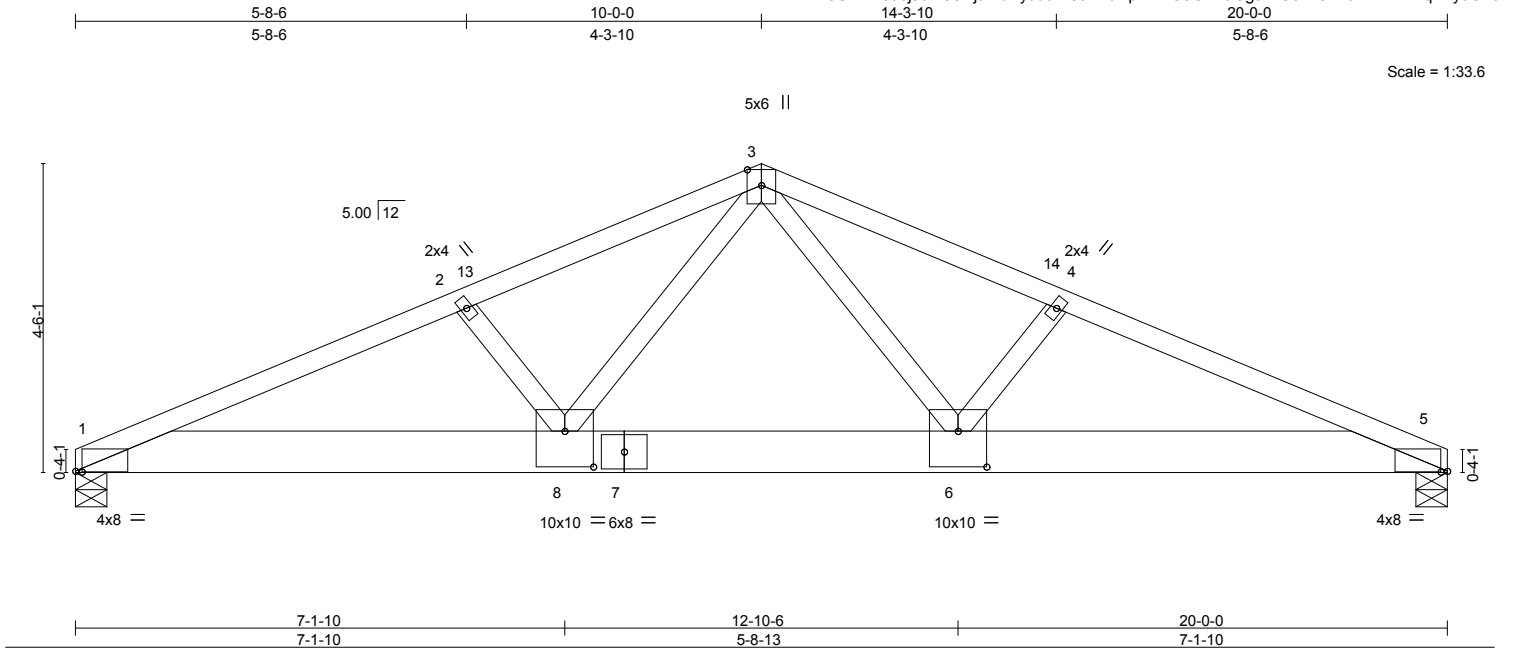


7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

Job LC_CL822A	Truss A3G	Truss Type Common Girder	Qty 1	Ply 2	Plan 822 Elev A 30#	R51225189
------------------	--------------	-----------------------------	----------	----------	---------------------	-----------

Builders First Source, Colorado Springs, CO, 80939

7.640 s Apr 19 2016 MiTek Industries, Inc. Tue Jul 25 15:33:24 2017 Page 1
ID:5UPYP0J0jat4x98wjJ?fdAyJduh-eu?XuYpkRDG9C2xOSgtkRC5rH9Z1uAYAwNzqNzyuST9



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 30.0	2-0-0	TC 0.75	in (loc) l/defl L/d	MT20	197/144
(Roof Snow=30.0)	Plate Grip DOL 1.15	BC 0.66	Vert(LL) -0.20 6-8 >999 240		
TCDL 7.5	Lumber DOL 1.15	WB 0.52	Vert(TL) -0.35 6-8 >667 180		
BCLL 0.0	Rep Stress Incr NO	(Matrix-M)	Horz(TL) 0.06 5 n/a n/a		
BCDL 7.5	Code IRC2009/TPI2007			Weight: 194 lb	FT = 0%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-3-3 oc purlins.
BOT CHORD 2x8 DF 1950F 1.7E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2	

REACTIONS. (lb/size) 1=5175/0-5-8, 5=5175/0-5-8
Max Horz 1=-84(LC 7)
Max Uplift 1=-973(LC 9), 5=-973(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-9469/1803, 2-13=-9285/1773, 3-13=-9276/1788, 3-14=-9276/1788, 4-14=-9285/1773,
4-5=-9469/1803
BOT CHORD 1-8=-1610/8714, 7-8=-1079/6111, 6-7=-1079/6111, 5-6=-1610/8714
WEBS 3-6=-774/4206, 4-6=-421/146, 3-8=-774/4206, 2-8=-421/146

NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-4-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 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.
- Wind: ASCE 7-05; 100mph; TCDL=4.5psf; BCDL=4.5psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; enclosed; MWFRS (all heights); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-05; Pf=30.0 psf (flat roof snow); Category II; Exp C; Fully Exp.; Ct=1.1
- Unbalanced snow loads have been considered for this design.
- Plates checked for a plus or minus 5 degree rotation about its center.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=973, 5=973.
- Girder carries tie-in span(s): 22-0-0 from 0-0-0 to 20-0-0
- "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.

LOAD CASE(S) Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-75, 3-5=-75, 1-5=-455(F=-440)



July 26, 2017

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/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

Job	Truss	Truss Type	Qty	Ply	Plan 822 Elev A 30#	R51225190
LC_CL822A	A4	Common	1	1	Job Reference (optional)	

Builders First Source, Colorado Springs, CO, 80939

7.640 s Apr 19 2016 MiTek Industries, Inc. Tue Jul 25 15:33:25 2017 Page 1
ID:5UPYP0J0jat4x98wjJ?fdAyJduh-64Zv5uqMCX00qCVb00OzzPe2EZ_xdlzJ91INvPyuST8

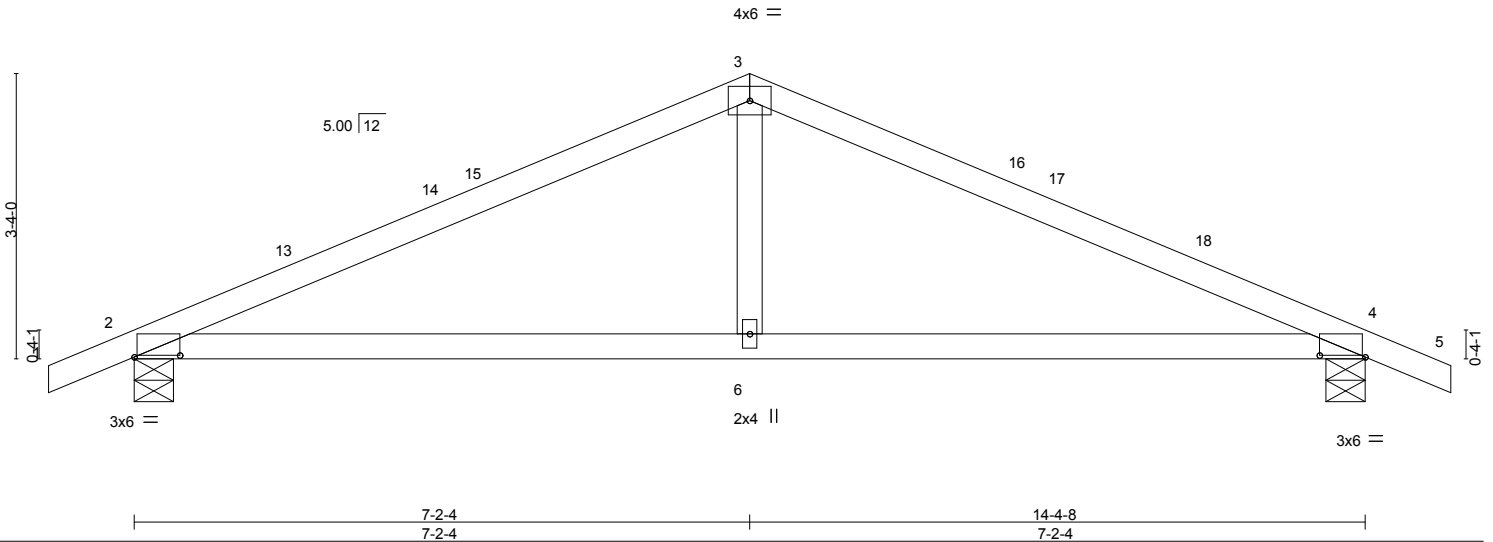
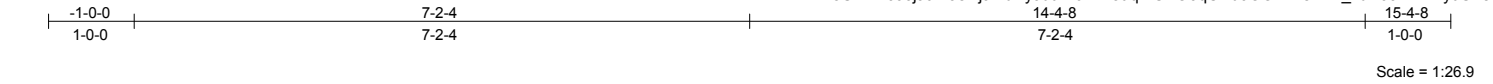


Plate Offsets (X,Y)-- [2:0-6-6,0-0-4], [4:0-6-6,0-0-4]									
LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES GRIP
TCLL 30.0	2-0-0		TC 0.61	Vert(LL)	-0.06	6-9	>999	240	MT20 197/144
(Roof Snow=30.0)	Plate Grip DOL 1.15		BC 0.36	Vert(TL)	-0.11	6-9	>999	180	
TCDL 7.5	Lumber DOL 1.15		WB 0.06	Horz(TL)	0.02	4	n/a	n/a	
BCLL 0.0	Rep Stress Incr YES		(Matrix-M)						
BCDL 7.5	Code IRC2009/TPI2007								Weight: 40 lb FT = 0%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-10-4 oc purlins.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2	

REACTIONS. (lb/size) 2=722/0-5-8, 4=722/0-5-8
Max Horz 2=-70(LC 9)
Max Uplift 2=-166(LC 11), 4=-166(LC 11)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-13=-877/213, 13-14=-789/222, 14-15=-777/223, 3-15=-775/234, 3-16=-775/234,
16-17=-777/223, 17-18=-789/222, 4-18=-877/213
BOT CHORD 2-6=-109/718, 4-6=-109/718

- NOTES-**
- 1) Wind: ASCE 7-05; 100mph; TCDL=4.5psf; BCDL=4.5psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; enclosed; MWFRS (all heights) and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 7-2-4, Exterior(2) 7-2-4 to 10-2-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) TCCL: ASCE 7-05; Pf=30.0 psf (flat roof snow); Category II; Exp C; Fully Exp.; Ct=1.1
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
 - 5) Plates checked for a plus or minus 5 degree rotation about its center.
 - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=166, 4=166.
 - 8) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.



July 26, 2017

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.

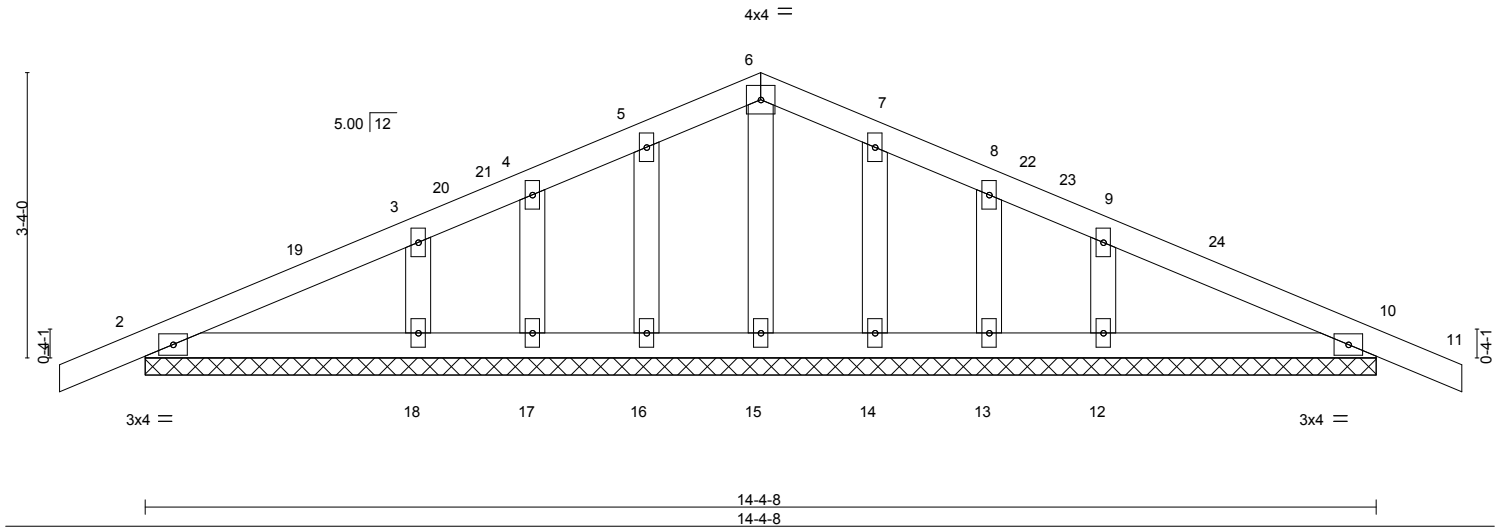
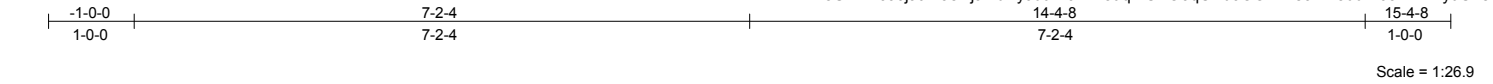


7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

Job LC_CL822A	Truss A4E	Truss Type Common Supported Gable	Qty 1	Ply 1	Plan 822 Elev A 30#	R51225191
------------------	--------------	--------------------------------------	----------	----------	---------------------	-----------

Builders First Source, Colorado Springs, CO, 80939

Job Reference (optional)
7.640 s Apr 19 2016 MiTek Industries, Inc. Tue Jul 25 15:33:25 2017 Page 1
ID:5UPYP0J0jat4x98wjJ7fdAyJduh-64Zv5uqMCXO0qCVb0O0zzPe9mZ3ddINJ91INvPyuST8



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 30.0 (Roof Snow=30.0)	2-0-0 Plate Grip DOL 1.15	TC 0.13	in (loc) l/defl L/d	MT20	197/144
TCDL 7.5	Lumber DOL 1.15	BC 0.06	Vert(LL) -0.01 11 n/r 120		
BCLL 0.0	Rep Stress Incr YES	WB 0.03	Vert(TL) -0.01 11 n/r 120		
BCDL 7.5	Code IRC2009/TPI2007	(Matrix)	Horz(TL) 0.00 10 n/a n/a		
				Weight: 51 lb	FT = 0%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SPF No.2	

REACTIONS.	All bearings 14-4-8.
(lb) - Max Horz 2=-70(LC 9)	
Max Uplift	All uplift 100 lb or less at joint(s) 2, 10, 16, 17, 18, 14, 13, 12
Max Grav	All reactions 250 lb or less at joint(s) 2, 10, 15, 16, 17, 14, 13 except 18=272(LC 2), 12=272(LC 3)

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

- NOTES-**
- 1) Wind: ASCE 7-05; 100mph; TCDL=4.5psf; BCDL=4.5psf; h=15ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp C; enclosed; MWFRS (all heights) and C-C Corner(3) -1-0-0 to 2-0-0, Exterior(2) 2-0-0 to 7-2-4, Corner(3) 7-2-4 to 10-2-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 3) TCLL: ASCE 7-05; Pf=30.0 psf (flat roof snow); Category II; Exp C; Fully Exp.; Ct=1.1
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
 - 6) All plates are 2x4 MT20 unless otherwise indicated.
 - 7) Plates checked for a plus or minus 5 degree rotation about its center.
 - 8) Gable requires continuous bottom chord bearing.
 - 9) Gable studs spaced at 1-4-0 oc.
 - 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10, 16, 17, 18, 14, 13, 12.
 - 12) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.



July 26, 2017

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.



7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

Builders First Source, Colorado Springs, CO, 80939
 7.640 s Apr 19 2016 MiTek Industries, Inc. Tue Jul 25 15:33:26 2017 Page 1
 ID:5UPYP0J0jat4x98wjJ?fidAyJduh-aH7HIEr_zrWtSM4na5vCWdBFJzF0M7yTng2xRsyuST7

 Scale = 1:36.1

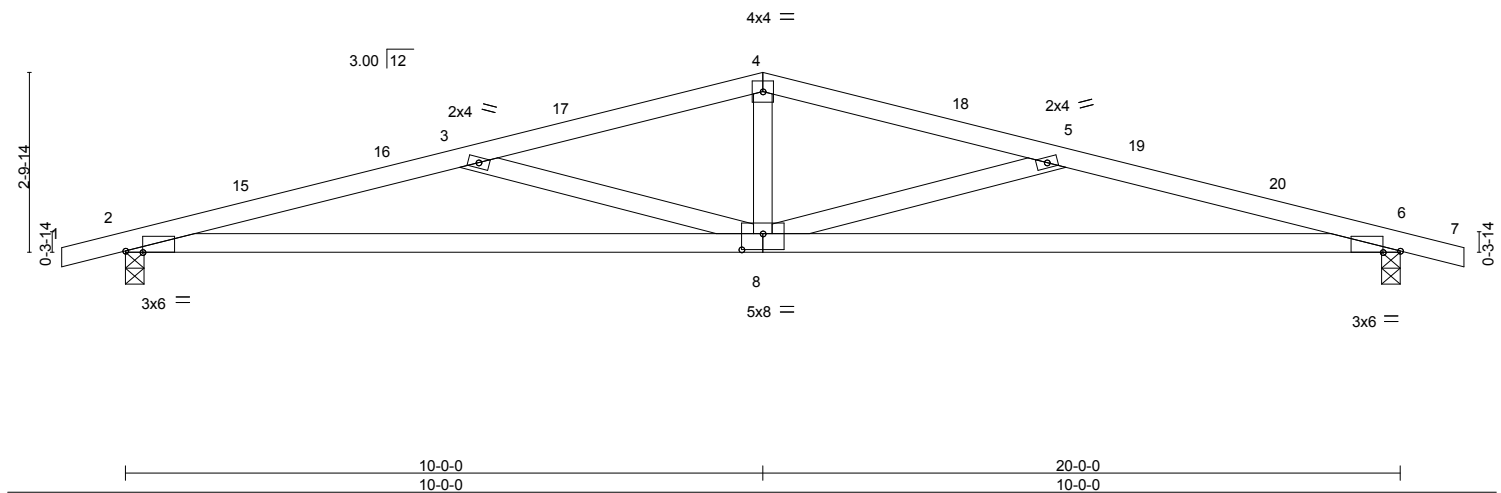


Plate Offsets (X,Y)-- [2:0-3-4,Edge], [6:0-3-4,Edge], [8:0-4-0,0-3-0]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	30.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	-0.18 8 >999 240	MT20	197/144
(Roof Snow=30.0)		Lumber DOL	1.15	BC	0.69	Vert(TL)	-0.35 8-11 >690 180		
TCDL	7.5	Rep Stress Incr	YES	WB	0.33	Horz(TL)	0.08 6 n/a n/a		
BCLL	0.0	Code IRC2009/TPI2007		(Matrix-M)				Weight: 62 lb	FT = 0%
BCDL	7.5								

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

TOP CHORD	Structural wood sheathing directly applied or 3-8-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 7-6-6 oc bracing.

REACTIONS. (lb/size) 2=975/0-3-8, 6=975/0-3-8
Max Horz 2=-31(LC 8)
Max Uplift 2=-213(LC 11), 6=-213(LC 11)

TOP CHORD 2-15=-2403/657, 15-16=-2363/658, 3-16=-2346/665, 3-17=-1776/442, 4-17=-1734/449,
4-18=-1734/449, 5-18=-1776/442, 5-19=-2346/665, 19-20=-2363/658, 6-20=-2403/657
BOT CHORD 2-8=-594/2293, 6-8=-603/2293
WEBS 4-8=-49/478, 5-8=-819/269, 3-8=-819/270

- 1) Wind: ASCE 7-05; 100mph; TCFL=4.5psf; BCDL=4.5psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; enclosed; MWFRS (all heights) and C-C Exterior(2) -1.0-0 to 2.0-0, Interior(1) 2.0-0 to 10.0-0, Exterior(2) 10.0-0 to 13.0-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCFL: ASCE 7-05; Pf=30.0 psf (flat roof snow); Category II; Exp C; Fully Exp.; Ct=1.1
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 20.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 5) Plates checked for a plus or minus 5 degree rotation about its center.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=213, 6=213.
- 8) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.



July 26, 2017



WARNING – Verify design parameters and READ NOTES on this and INCLUDED REFERENCED LITERATURE FIRST. **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.



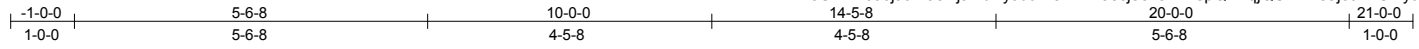
7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

Job LC_CL822A	Truss A5E	Truss Type GABLE	Qty 1	Ply 1	Plan 822 Elev A 30# R51225193
------------------	--------------	---------------------	----------	----------	----------------------------------

Builders First Source, Colorado Springs, CO, 80939

7.640 s Apr 19 2016 MiTek Industries, Inc. Tue Jul 25 15:33:27 2017 Page 1

ID:5UPYP0J0jat4x98wjJ?fdAyJduh-3ThfWascj8ek3Wfz8pQR2qjQUMYk5ajccKnUzlyuST6



Scale = 1:36.1

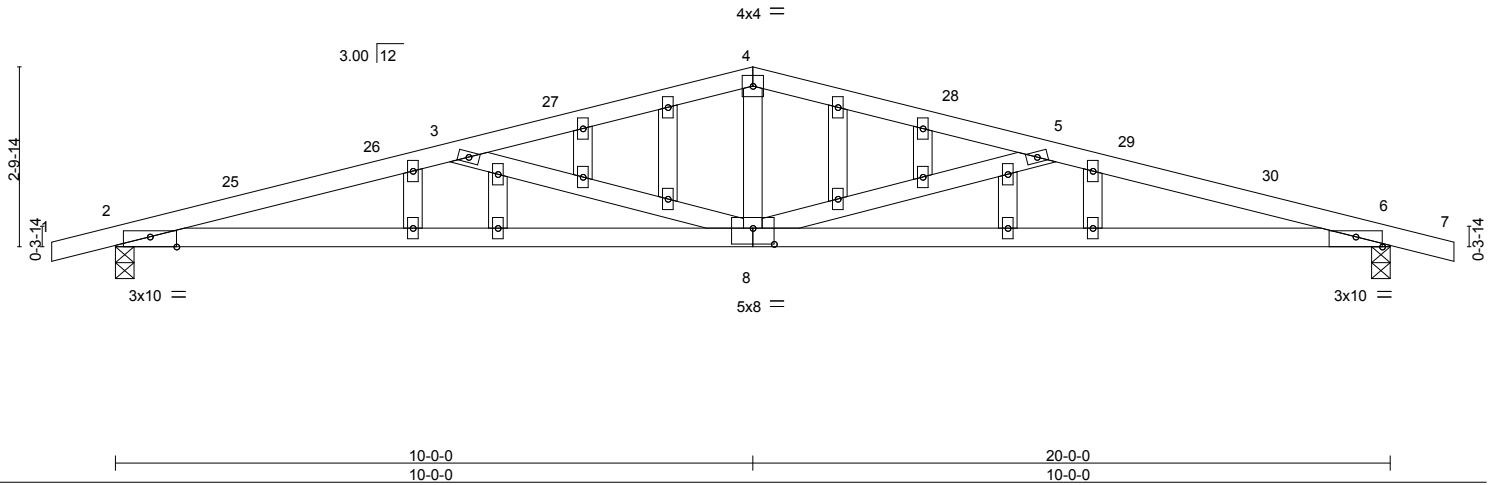


Plate Offsets (X,Y)-- [2:0-5-0,Edge], [6:0-5-0,Edge], [8:0-4-0,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0	2-0-0	TC 0.50	Vert(LL)	-0.20	8	>999	240	MT20	197/144
(Roof Snow=30.0)	Plate Grip DOL 1.15	BC 0.85	Vert(TL)	-0.50	2-8	>476	180		
TCDL 7.5	Lumber DOL 1.15	WB 0.36	Horz(TL)	0.09	6	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	(Matrix)							
BCDL 7.5	Code IRC2009/TPI2007								
								Weight: 72 lb	FT = 0%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-0-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 5-5-13 oc bracing.

REACTIONS.

(lb/size) 2=973/0-3-8, 6=973/0-3-8
Max Horz 2=-31(LC 8)
Max Uplift 2=-218(LC 11), 6=-218(LC 11)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-25=-2619/1214, 25-26=-2575/1218, 3-26=-2541/1224, 3-27=-1898/835, 4-27=-1852/842,
4-28=-1852/842, 5-28=-1898/835, 5-29=-2541/1224, 29-30=-2575/1218,
6-30=-2619/1213
BOT CHORD 2-8=-1131/2491, 6-8=-1134/2491
WEBS 4-8=-147/564, 5-8=-895/470, 3-8=-895/470

NOTES-

- 1) Wind: ASCE 7-05; 100mph; TCDL=4.5psf; BCDL=4.5psf; h=15ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp C; enclosed; MWFRS (all heights) and C-C Corner(3) -1-0-0 to 2-0-0, Exterior(2) 2-0-0 to 10-0-0, Corner(3) 10-0-0 to 13-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-05; Pf=30.0 psf (flat roof snow); Category II; Exp C; Fully Exp.; Ct=1.1
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 20.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Plates checked for a plus or minus 5 degree rotation about its center.
- 8) Gable studs spaced at 1-4-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=218, 6=218.
- 11) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.



July 26, 2017

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.

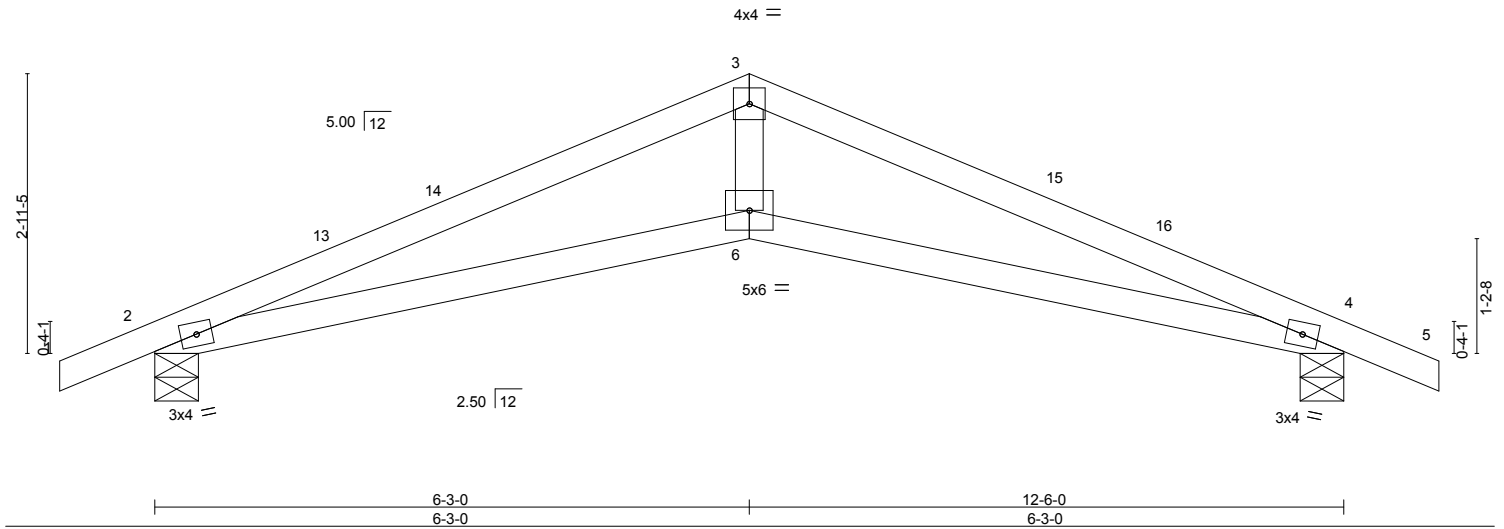
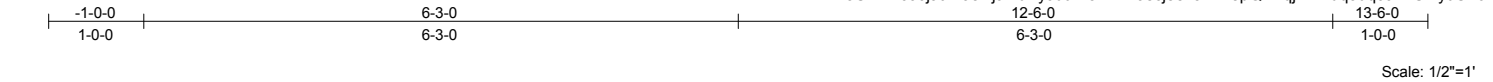


7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

Job	Truss	Truss Type	Qty	Ply	Plan 822 Elev A 30#	R51225194
LC_CL822A	A6	Scissor	3	1	Job Reference (optional)	

Builders First Source, Colorado Springs, CO, 80939

7.640 s Apr 19 2016 MiTek Industries, Inc. Tue Jul 25 15:33:27 2017 Page 1
ID:5UPYP0J0jat4x98wjJ?fdAyJduh-3ThfWascj8ek3Wfz8pQR2qjPLMdq5dqccKnUzlyuST6



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	30.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	-0.10 6-12 >999 240	MT20		197/144	
(Roof Snow=30.0)		Lumber DOL	1.15	BC	0.53	Vert(TL)	-0.17 6-12 >867 180				
TCDL	7.5	Rep Stress Incr	YES	WB	0.16	Horz(TL)	0.07 4 n/a n/a				
BCLL	0.0	Code IRC2009/TPI2007		(Matrix-M)							
BCDL	7.5										
								Weight: 34 lb FT = 0%			

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 4-2-2 oc purlins.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SPF No.2		

REACTIONS. (lb/size) 2=638/0-5-8, 4=638/0-5-8
Max Horz 2=62(LC 10)
Max Uplift 2=-150(LC 11), 4=-150(LC 11)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-13=-1469/373, 13-14=-1403/377, 3-14=-1393/388, 3-15=-1393/376, 15-16=-1403/366,
4-16=-1469/362
BOT CHORD 2-6=-272/1326, 4-6=-272/1326
WEBS 3-6=-89/660

- NOTES-**
- 1) Wind: ASCE 7-05; 100mph; TCDL=4.5psf; BCDL=4.5psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; enclosed; MWFRS (all heights) and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 6-3-0, Exterior(2) 6-3-0 to 9-3-0 zone; cantilever left and right exposed; end vertical 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 7-05; Pf=30.0 psf (flat roof snow); Category II; Exp C; Fully Exp.; Ct=1.1
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
 - 5) Plates checked for a plus or minus 5 degree rotation about its center.
 - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 7) Bearing at joint(s) 2, 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 capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=150, 4=150.
 - 9) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.



July 26, 2017

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.

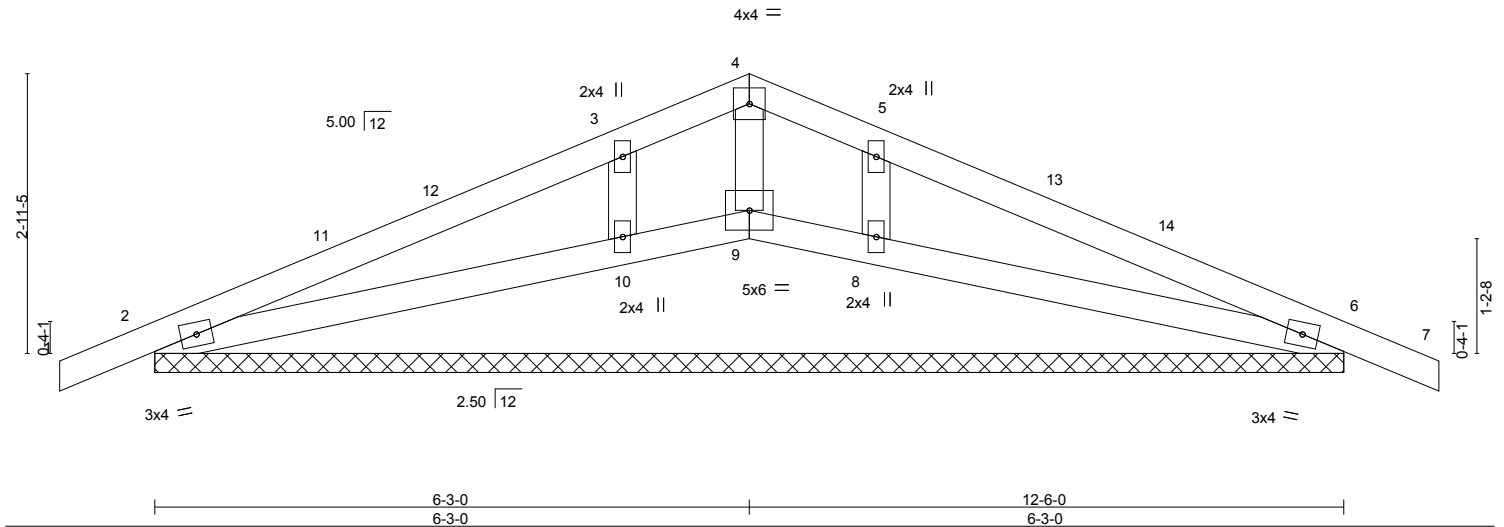
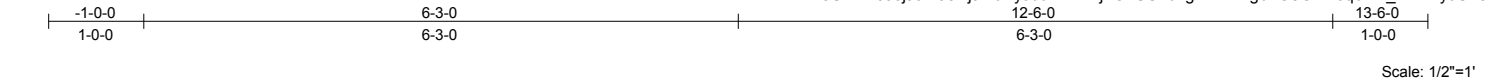


7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

Job LC_CL822A	Truss A6E	Truss Type GABLE	Qty 1	Ply 1	Plan 822 Elev A 30#	R51225195
------------------	--------------	---------------------	----------	----------	---------------------	-----------

Builders First Source, Colorado Springs, CO, 80939

Job Reference (optional)
7.640 s Apr 19 2016 MiTek Industries, Inc. Tue Jul 25 15:33:28 2017 Page 1
ID:5UPYP0J0jat4x98wjJ?fdAyJduh-XfE1jwsEUSnbhgEAhWxgb2GeGm26q6lmr_X1WkyuST5



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL	30.0	Plate Grip DOL	1.15	TC	0.30	in	(loc)	l/defl	L/d	MT20		197/144	
(Roof Snow=30.0)		Lumber DOL	1.15	BC	0.14	Vert(LL)	-0.01	7	n/r				
TCDL	7.5	Rep Stress Incr	YES	WB	0.05	Vert(TL)	0.00	6	n/r				
BCLL	0.0	Code IRC2009/TPI2007		(Matrix)		Horz(TL)	0.00	6	n/a				
BCDL	7.5												
										Weight: 36 lb		FT = 0%	

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.2

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 12-6-0.
(lb) - Max Horz 2=-62(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 9=-250(LC 1), 10=-119(LC 11), 8=-119(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 9 except 2=263(LC 2), 6=263(LC 3), 10=551(LC 2), 8=551(LC 3)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-10=-427/232, 5-8=-427/232

NOTES-

- 1) Wind: ASCE 7-05; 100mph; TCDL=4.5psf; BCDL=4.5psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; enclosed; MWFRS (all heights) and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 6-3-0, Exterior(2) 6-3-0 to 9-3-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-05; Pf=30.0 psf (flat roof snow); Category II; Exp C; Fully Exp.; Ct=1.1
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 6) Plates checked for a plus or minus 5 degree rotation about its center.
- 7) Gable requires continuous bottom chord bearing.
- 8) Gable studs spaced at 1-4-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6 except (jt=lb) 9=250, 10=119, 8=119.
- 11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 9, 10, 8.
- 12) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.



July 26, 2017

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.



7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

Job	Truss	Truss Type	Qty	Ply	Plan 822 Elev A 30#	R51225196
LC_CL822A	AM1	Monopitch	2	1	Job Reference (optional)	

Builders First Source, Colorado Springs, CO, 80939

7.640 s Apr 19 2016 MiTek Industries, Inc. Tue Jul 25 15:33:28 2017 Page 1
ID:5UPYP0J0jat4x98wjJ?fdAyJduh-XfE1jwsEUSnbhgEAhWxgb2Gesm_eq3?mr_X1WkyuST5

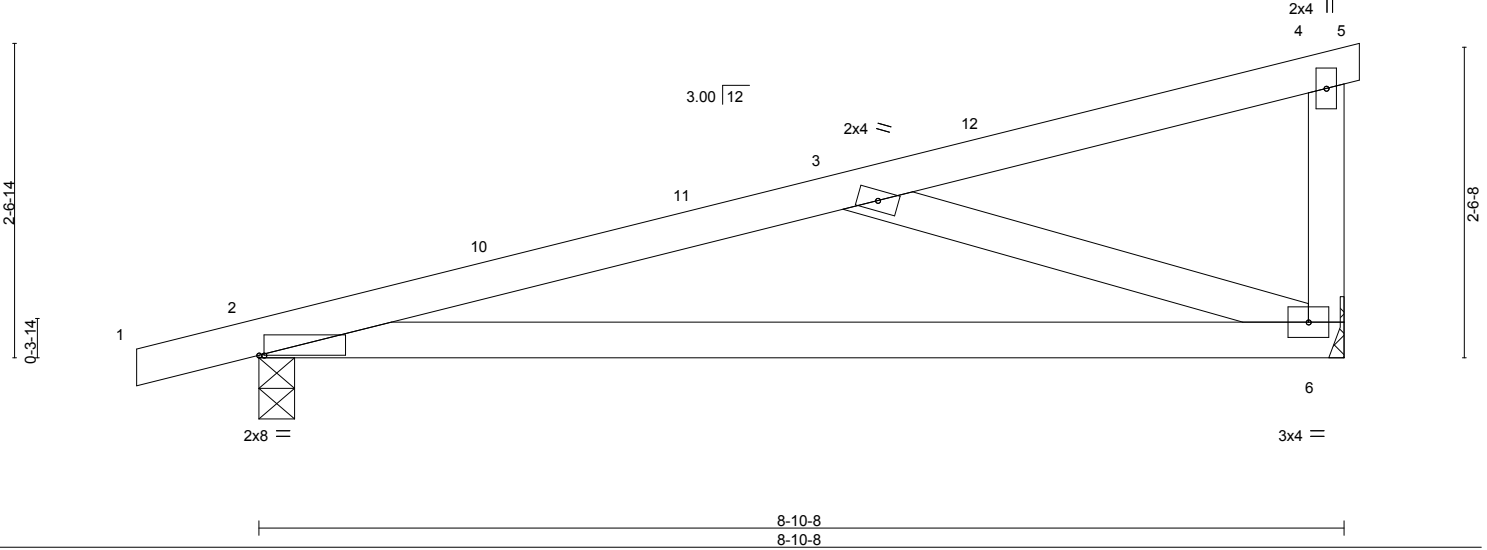


Plate Offsets (X,Y)-- [2:0-0-8,0-0-0]							
LOADING (psf)		SPACING	2-0-0	CSI	DEFL.	in (loc)	l/defl L/d
TCLL 30.0		Plate Grip DOL	1.15	TC 0.27	Vert(LL)	-0.12 6-9	>877 240
(Roof Snow=30.0)		Lumber DOL	1.15	BC 0.43	Vert(TL)	-0.26 6-9	>399 180
TCDL 7.5		Rep Stress Incr	YES	WB 0.23	Horz(TL)	0.01 6	n/a n/a
BCLL 0.0		Code IRC2009/TPI2007		(Matrix-M)			
BCDL 7.5							
				PLATES GRIP			
				MT20 197/144			
				Weight: 29 lb FT = 0%			

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-11-13 oc bracing.

REACTIONS.

(lb/size) 2=495/0-3-8, 6=386/Mechanical
Max Horz 2=98(LC 10)
Max Uplift 2=179(LC 11), 6=-137(LC 11)
Max Grav 2=524(LC 2), 6=462(LC 2)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-10=-806/354, 10-11=-790/357, 3-11=-749/361
BOT CHORD 2-6=-424/767
WEBS 3-6=-802/427

NOTES-

- 1) Wind: ASCE 7-05; 100mph; TCDL=4.5psf; BCDL=4.5psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; partially; MWFRS (all heights) and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 9-0-0 zone; cantilever left and right exposed ; end vertical 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 7-05; Pf=30.0 psf (flat roof snow); Category II; Exp C; Fully Exp.; Ct=1.1
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 20.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 5) Plates checked for a plus or minus 5 degree rotation about its center.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=179, 6=137.
- 9) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.



July 26, 2017

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/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

Job LC_CL822A	Truss AM1E	Truss Type GABLE	Qty 1	Ply 1	Plan 822 Elev A 30#	R51225197
------------------	---------------	---------------------	----------	----------	---------------------	-----------

Builders First Source, Colorado Springs, CO, 80939

7.640 s Apr 19 2016 MiTek Industries, Inc. Tue Jul 25 15:33:29 2017 Page 1
ID:5UPYPOJ0jat4x98wjJ?fdAyJduh-?soQxGttFivSjqpMFESv8FppmAMTZWtv4eGb2AyuST4

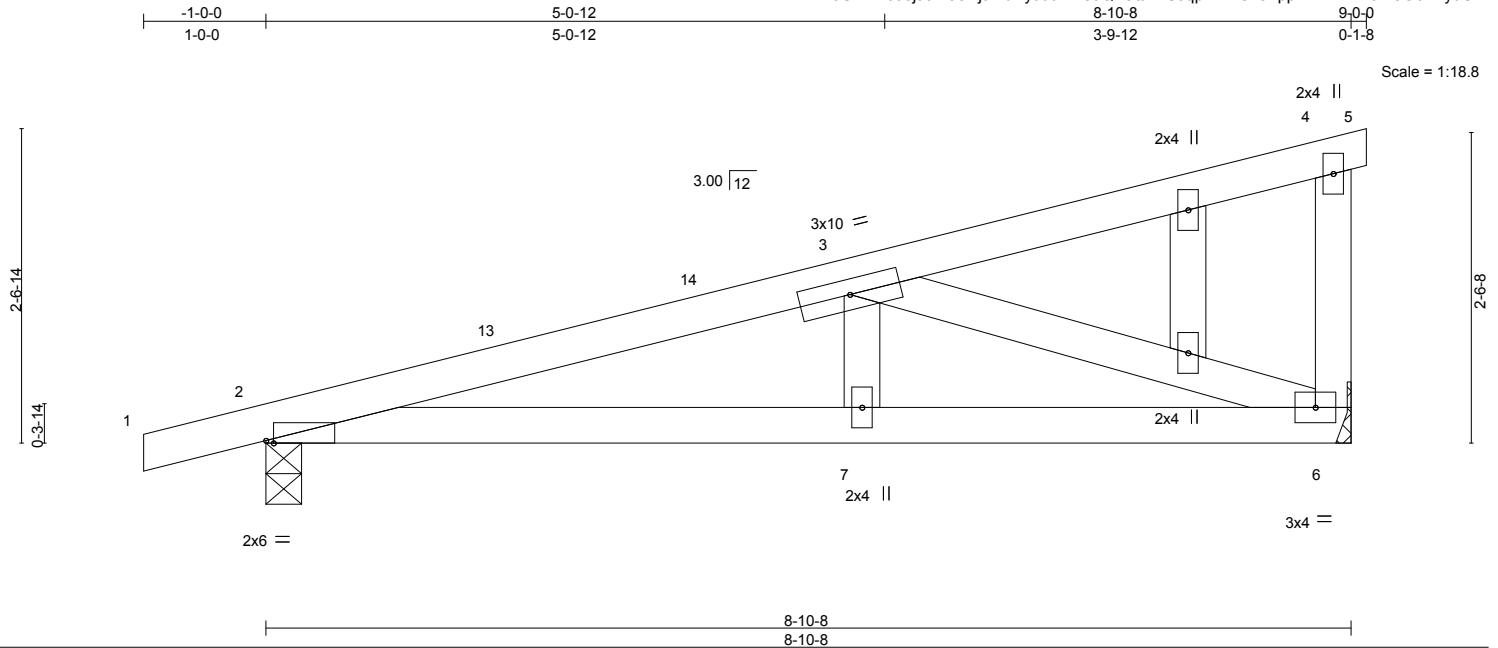


Plate Offsets (X,Y)-- [2:0-0-12,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0	2-0-0	TC 0.26	Vert(LL)	-0.03	7-12	>999	240	MT20	197/144
(Roof Snow=30.0)	Plate Grip DOL 1.15	BC 0.26	Vert(TL)	-0.05	7-12	>999	180		
TCDL 7.5	Lumber DOL 1.15	WB 0.25	Horz(TL)	0.01	6	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	(Matrix-M)							
BCDL 7.5	Code IRC2009/TPI2007								
								Weight: 31 lb	FT = 0%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-0-9 oc bracing.

REACTIONS.

(lb/size) 2=488/0-3-8, 6=393/Mechanical
Max Horz 2=98(LC 10)
Max Uplift 2=183(LC 11), 6=133(LC 11)
Max Grav 2=518(LC 2), 6=469(LC 2)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-13=-892/312, 13-14=-865/314, 3-14=-828/319
BOT CHORD 2-7=-426/839, 6-7=-423/844
WEBS 3-6=-883/426

NOTES-

- 1) Wind: ASCE 7-05; 100mph; TCDL=4.5psf; BCDL=4.5psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; partially; MWFRS (all heights) and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 9-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-05; Pf=30.0 psf (flat roof snow); Category II; Exp C; Fully Exp.; Ct=1.1
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 20.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 6) Plates checked for a plus or minus 5 degree rotation about its center.
- 7) Gable studs spaced at 1-4-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) Refer to girder(s) for truss to truss connections.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=183, 6=133.
- 11) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.



July 26, 2017

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.



7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

Job	Truss	Truss Type	Qty	Ply	Plan 822 Elev A 30#	R51225198
LC_CL822A	AM2	Monopitch	4	1	Job Reference (optional)	

Builders First Source, Colorado Springs, CO, 80939

7.640 s Apr 19 2016 MiTek Industries, Inc. Tue Jul 25 15:33:29 2017 Page 1
ID:5UPYP0J0jat4x98wjJ7fdAyJduh-7soQxGtFVsjqpMFESv8FppRAKgzWDv4eGb2AyuST4

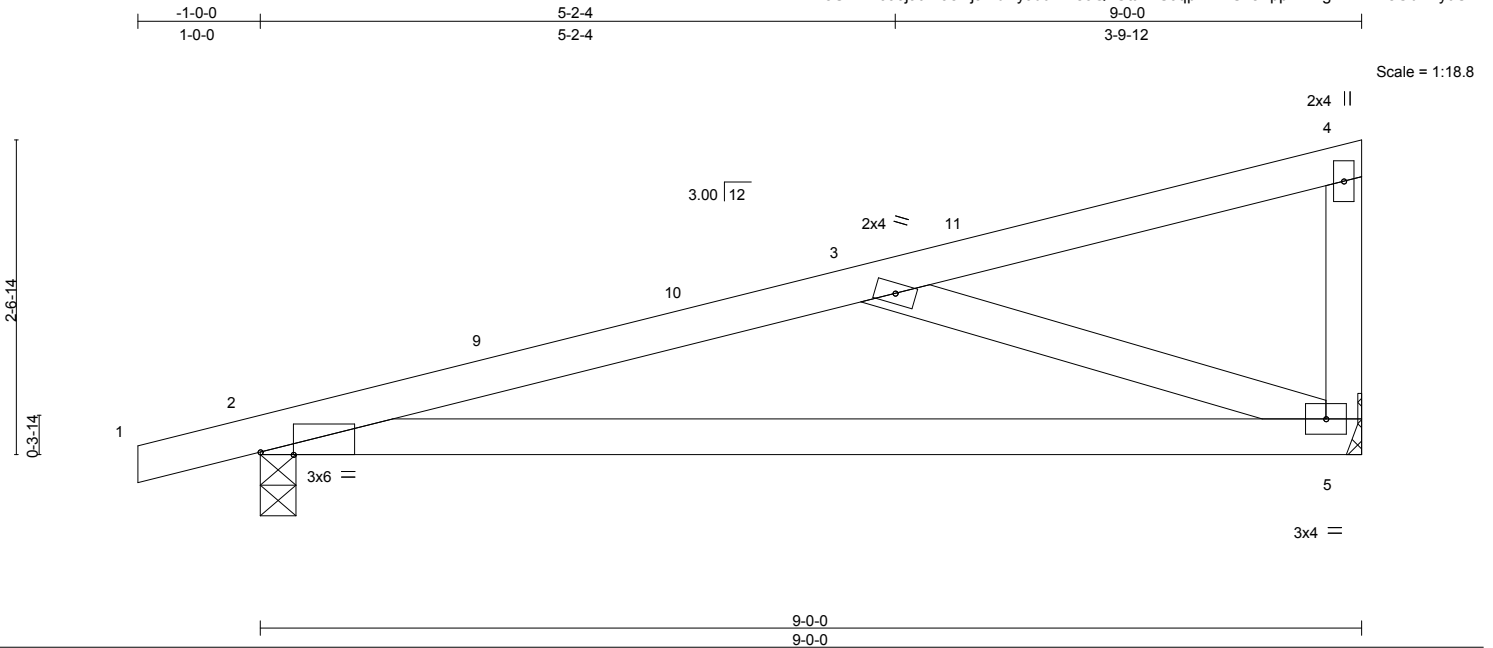


Plate Offsets (X,Y)-- [2:0-3-4,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0	2-0-0	TC 0.28	Vert(LL)	-0.13	5-8	>836	240	MT20	197/144
(Roof Snow=30.0)	Plate Grip DOL 1.15	BC 0.44	Vert(TL)	-0.28	5-8	>380	180		
TCDL 7.5	Lumber DOL 1.15	WB 0.23	Horz(TL)	0.01	5	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	(Matrix-M)						Weight: 29 lb	FT = 0%
BCDL 7.5	Code IRC2009/TPI2007								

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6'-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8'-10-8 oc bracing.

REACTIONS.

(lb/size) 2=502/0-3-8, 5=370/Mechanical
Max Horz 2=98(LC 10)
Max Uplift 2=182(LC 11), 5=133(LC 11)
Max Grav 2=533(LC 2), 5=442(LC 2)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-9=-811/353, 9-10=-793/356, 3-10=-751/361
BOT CHORD 2-5=-433/769
WEBS 3-5=-807/439

NOTES-

- 1) Wind: ASCE 7-05; 100mph; TCDL=4.5psf; BCDL=4.5psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; partially; MWFRS (all heights) and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 8-10-4 zone; cantilever left and right exposed; end vertical 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 7-05; Pf=30.0 psf (flat roof snow); Category II; Exp C; Fully Exp.; Ct=1.1
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 20.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 5) Plates checked for a plus or minus 5 degree rotation about its center.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=182, 5=133.
- 9) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.



July 26, 2017

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/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

Job	Truss	Truss Type	Qty	Ply	Plan 822 Elev A 30#	R51225199
LC_CL822A	AM3	Monopitch	1	1	Job Reference (optional)	

Builders First Source, Colorado Springs, CO, 80939

7.640 s Apr 19 2016 MiTek Industries, Inc. Tue Jul 25 15:33:30 2017 Page 1
ID:5UPYP0J0jat4x98wjJ7fdAyJduh-T2Mo8cuV031JwzOYpx_8gTLzqajOI053II08adyuST3

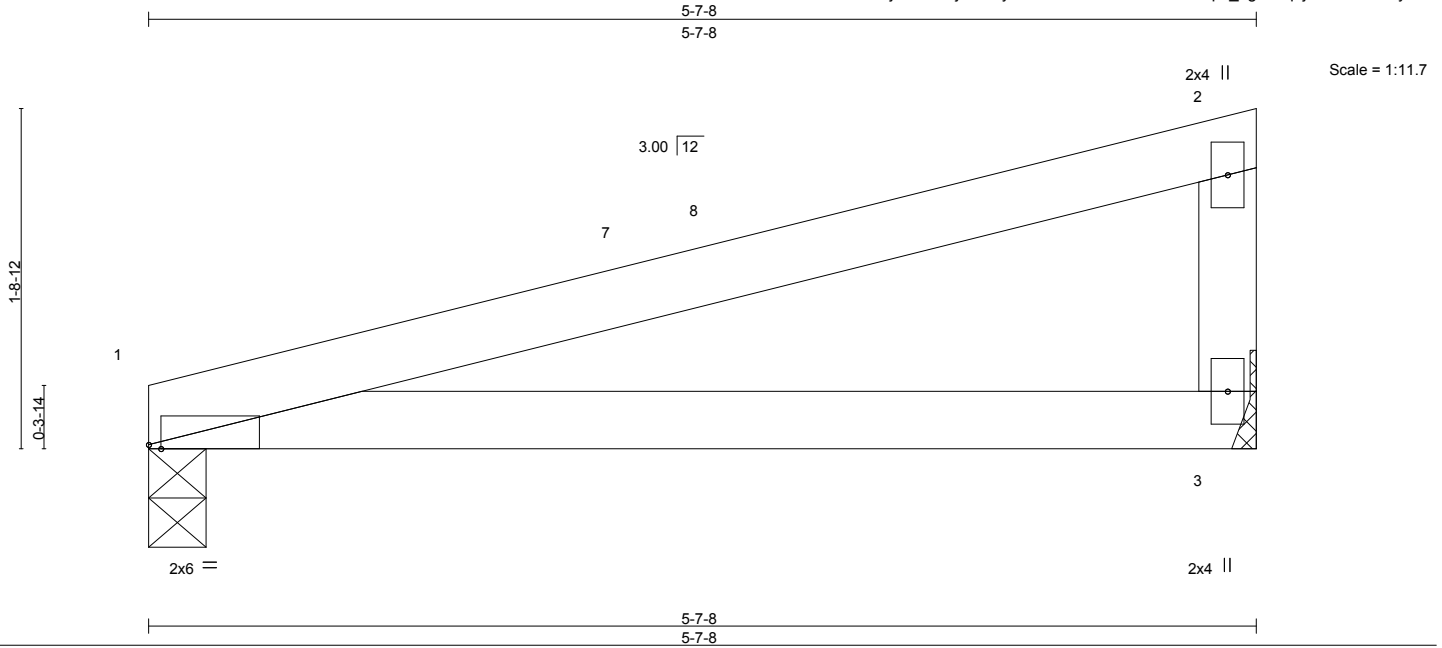


Plate Offsets (X,Y)-- [1:0-0-12,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0	2-0-0	TC 0.36	Vert(LL)	-0.04	3-6	>999	240	MT20	197/144
(Roof Snow=30.0)	Plate Grip DOL 1.15	BC 0.22	Vert(TL)	-0.08	3-6	>845	180		
TCDL 7.5	Lumber DOL 1.15	WB 0.00	Horz(TL)	0.00	1	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	(Matrix-M)							
BCDL 7.5	Code IRC2009/TPI2007							Weight: 14 lb	FT = 0%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-7-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=289/0-3-8, 3=204/Mechanical
Max Horz 1=58(LC 10)
Max Uplift 1=54(LC 11), 3=39(LC 11)
Max Grav 1=300(LC 2), 3=225(LC 2)

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

NOTES-

- 1) Wind: ASCE 7-05; 100mph; TCDL=4.5psf; BCDL=4.5psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; enclosed; MWFRS (all heights) and C-C Exterior(2) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 5-5-12 zone; cantilever left and right exposed ; end vertical 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 7-05; Pf=30.0 psf (flat roof snow); Category II; Exp C; Fully Exp.; Ct=1.1
- 3) Unbalanced snow loads have been considered for this design.
- 4) Plates checked for a plus or minus 5 degree rotation about its center.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 8) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.



July 26, 2017

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/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

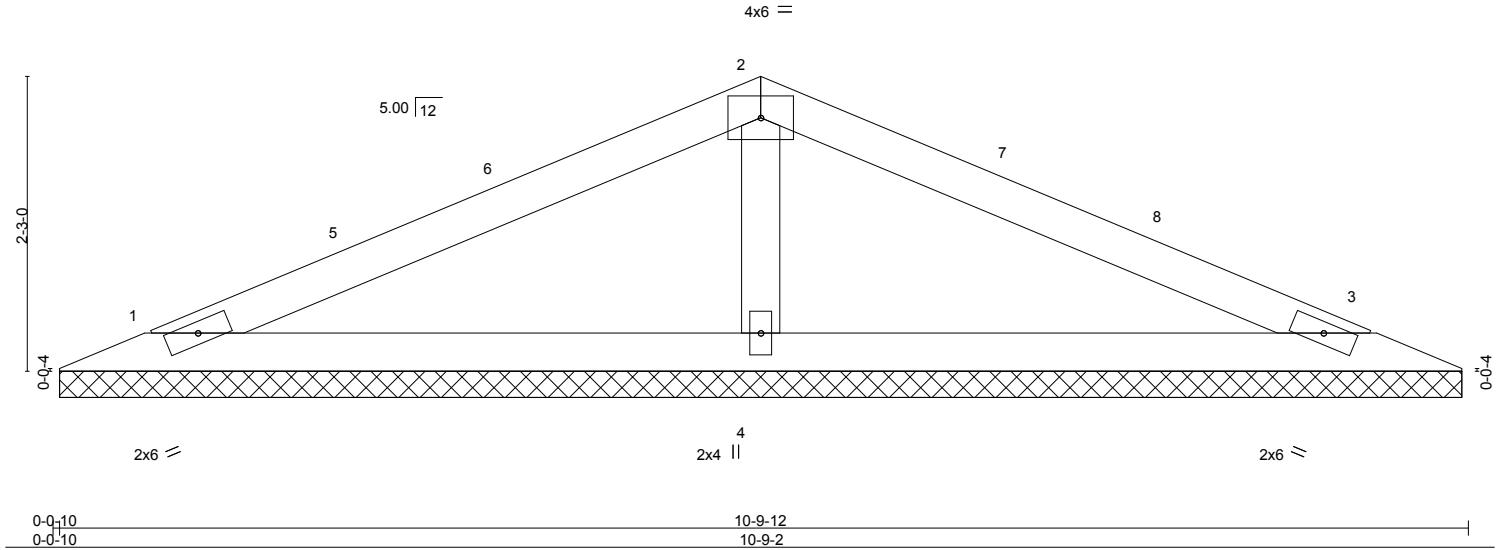
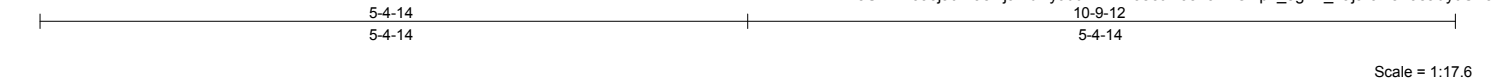


7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

Job	Truss	Truss Type	Qty	Ply	Plan 822 Elev A 30#	R51225200
LC_CL822A	AVS1	Valley	1	1	Job Reference (optional)	

Builders First Source, Colorado Springs, CO, 80939

7.640 s Apr 19 2016 MiTek Industries, Inc. Tue Jul 25 15:33:30 2017 Page 1
ID:5UPYPOJ0jat4x98wjJ?fdAyJduh-T2Mo8cuV031JwzOYpx_8gTL_?ajal0N3I108adyuST3



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 30.0 (Roof Snow=30.0)	2-0-0 Plate Grip DOL 1.15	TC 0.29	Vert(LL) n/a	-	n/a	999	MT20	197/144
TCDL 7.5	Lumber DOL 1.15	BC 0.20	Vert(TL) n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr YES	WB 0.05	Horz(TL) 0.00	3	n/a	n/a		
BCDL 7.5	Code IRC2009/TPI2007	(Matrix)					Weight: 26 lb	FT = 0%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SPF No.2	

REACTIONS. (lb/size) 1=183/10-8-8, 3=183/10-8-8, 4=471/10-8-8
Max Horz 1=-40(LC 9)
Max Uplift 1=-41(LC 11), 3=-41(LC 11), 4=-75(LC 11)
Max Grav 1=192(LC 2), 3=192(LC 3), 4=471(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-331/161

- NOTES-**
- 1) Wind: ASCE 7-05; 100mph; TCDL=4.5psf; BCDL=4.5psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; enclosed; MWFRS (all heights) and C-C Exterior(2) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 5-4-14, Exterior(2) 5-4-14 to 8-4-14 zone; cantilever left and right exposed; end vertical 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 7-05; Pf=30.0 psf (flat roof snow); Category II; Exp C; Fully Exp.; Ct=1.1
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) Plates checked for a plus or minus 5 degree rotation about its center.
 - 5) Gable requires continuous bottom chord bearing.
 - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
 - 8) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.



July 26, 2017

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 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.

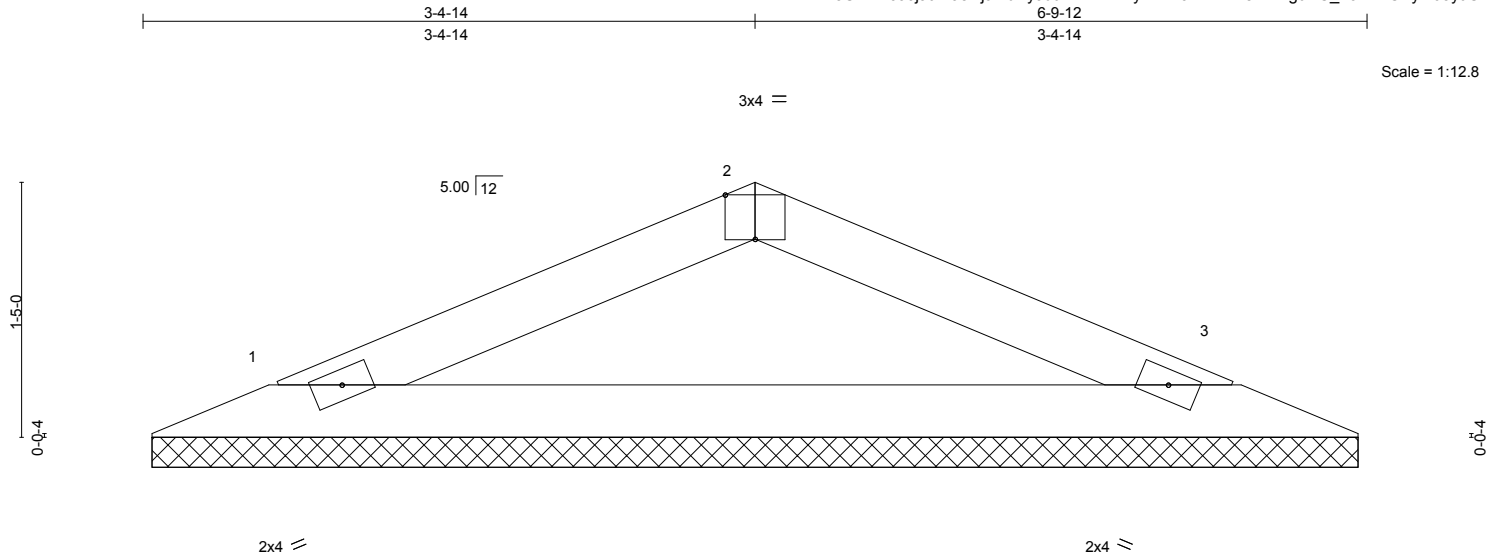


7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

Job	Truss	Truss Type	Qty	Ply	Plan 822 Elev A 30#	R51225201
LC_CL822A	AVS2	Valley	1	1	Job Reference (optional)	

Builders First Source, Colorado Springs, CO, 80939

7.640 s Apr 19 2016 MiTek Industries, Inc. Tue Jul 25 15:33:31 2017 Page 1
ID:5UPYP0J0jat4x98wjJ7fdAyJduh-xEwAMyv7nN9AY7ziNeVNDguBC_2o1TKCXylh63yuST2



0-0-10		6-9-12												
0-0-10		6-9-2												
Plate Offsets (X,Y)-- [2:0-2-0,Edge]														
LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP		
TCLL	30.0		2-0-0			TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	197/144
(Roof Snow=30.0)						BC	0.27	Vert(TL)	n/a	-	n/a	999		
TCDL	7.5					WB	0.00	Horz(TL)	0.00	3	n/a	n/a		
BCLL	0.0					(Matrix)							Weight: 14 lb	FT = 0%
BCDL	7.5													

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 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) 1=239/6-8-8, 3=239/6-8-8
Max Horz 1=23(LC 8)
Max Uplift 1=-45(LC 9), 3=-45(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-287/199, 2-3=-287/199

NOTES-

- 1) Wind: ASCE 7-05; 100mph; TCDL=4.5psf; BCDL=4.5psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; enclosed; MWFRS (all heights) and C-C Exterior(2) zone; cantilever left and right exposed; end vertical 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 7-05; Pf=30.0 psf (flat roof snow); Category II; Exp C; Fully Exp.; Ct=1.1
- 3) Plates checked for a plus or minus 5 degree rotation about its center.
- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 7) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.



July 26, 2017

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

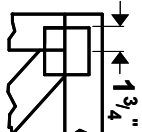
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



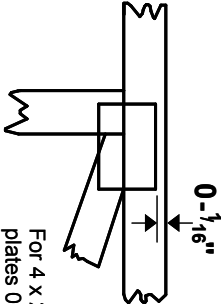
7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

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 2020 software** or upon request.

PLATE SIZE

4 X 4

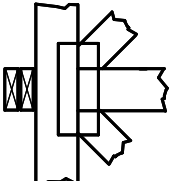
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



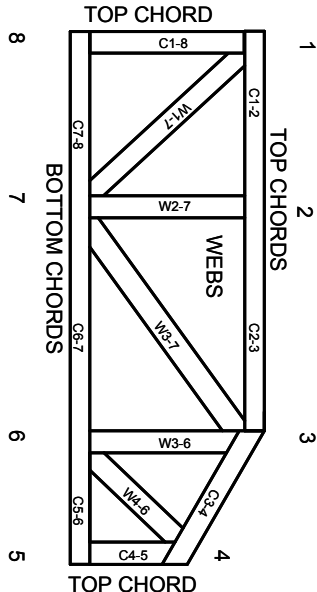
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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

6-4-8 dimensions shown in ft-in-sixteenths (Drawings not to scale)



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.

© 2012 MITek® All Rights Reserved



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



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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