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

Re: LC_CL923A
Plan 923 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: R54713617 thru R54713628

My license renewal date for the state of Colorado is October 31, 2019.

July 9,2018

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 923 Elev A 30#
LC_CL923A	A1	Common Truss	13	1	R54713617
					Job Reference (optional)

Builders First Source, Colorado Springs, CO, 80939 8.220 s May 24 2018 MiTek Industries, Inc. Mon Jul 9 13:38:36 2018 Page 1
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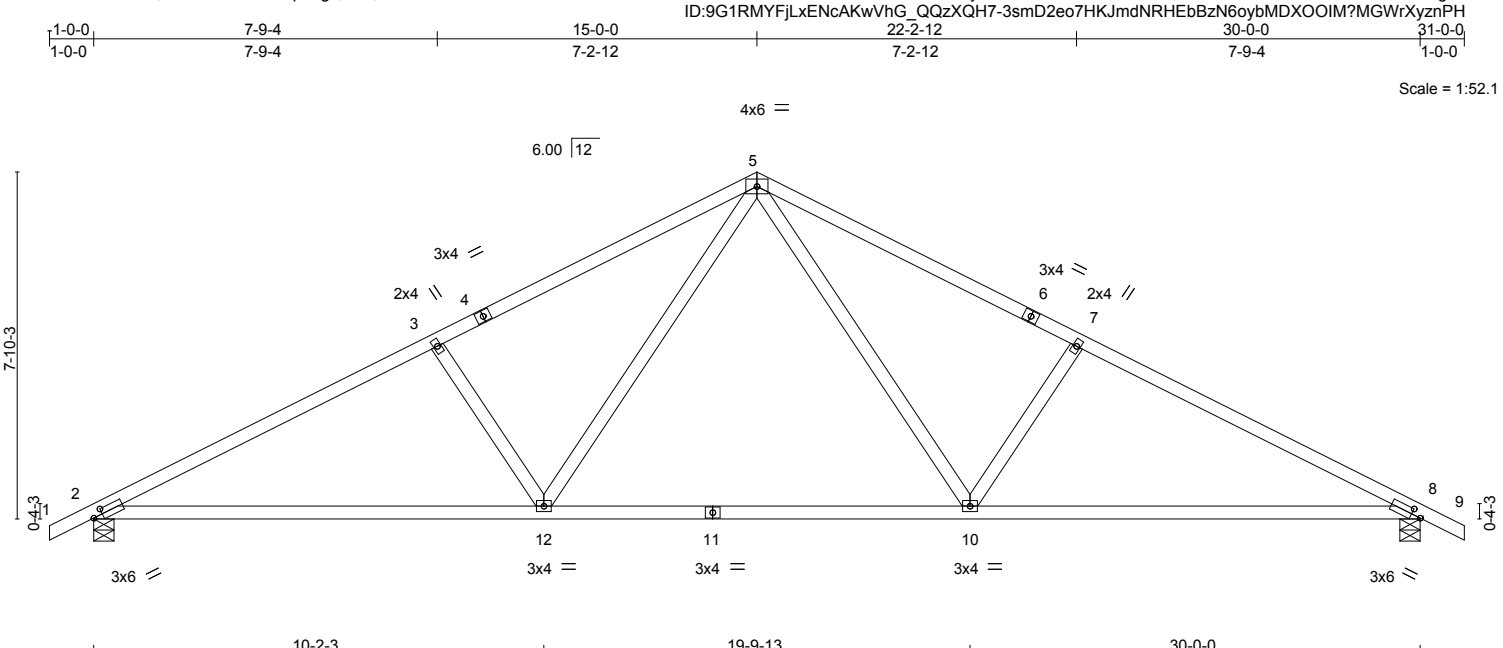

Plate Offsets (X,Y)-- [2:0-2-9,0-1-8], [8:0-2-9,0-1-8]

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	0.86	Vert(LL)	-0.15	10-12	>999	240	MT20	197/144
TCDL	7.5	Lumber DOL	1.15	BC	0.69	Vert(TL)	-0.37	10-12	>974	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.40	Horz(TL)	0.09	8	n/a	n/a		
BCDL	7.5	Code	IRC2009/TPI2007	Matrix-MSH							Weight: 105 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.
BOT CHORD Rigid ceiling directly applied or 7-4-3 oc bracing.

REACTIONS. (lb/size) 2=1425/0-5-8, 8=1425/0-5-8
Max Horz 2=192(LC 8)
Max Uplift 2=-298(LC 9), 8=-298(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2298/861, 3-5=-2003/849, 5-7=-2003/849, 7-8=-2298/860
BOT CHORD 2-12=-633/1954, 10-12=-278/1297, 8-10=-634/1954
WEBS 5-10=-279/717, 7-10=-541/381, 5-12=-279/717, 3-12=-541/381

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) 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
3) Plates checked for a plus or minus 5 degree rotation about its center.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=298, 8=298.

July 9,2018

MiTek
7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

Job	Truss	Truss Type	Qty	Ply	Plan 923 Elev A 30#
LC_CL923A	A1E	Common Truss	2	1	R54713618
					Job Reference (optional)

Builders First Source, Colorado Springs, CO, 80939 — 8.220 s May 24 2018 MiTek Industries, Inc. Mon Jul 9 13:38:37 2018 Page 1
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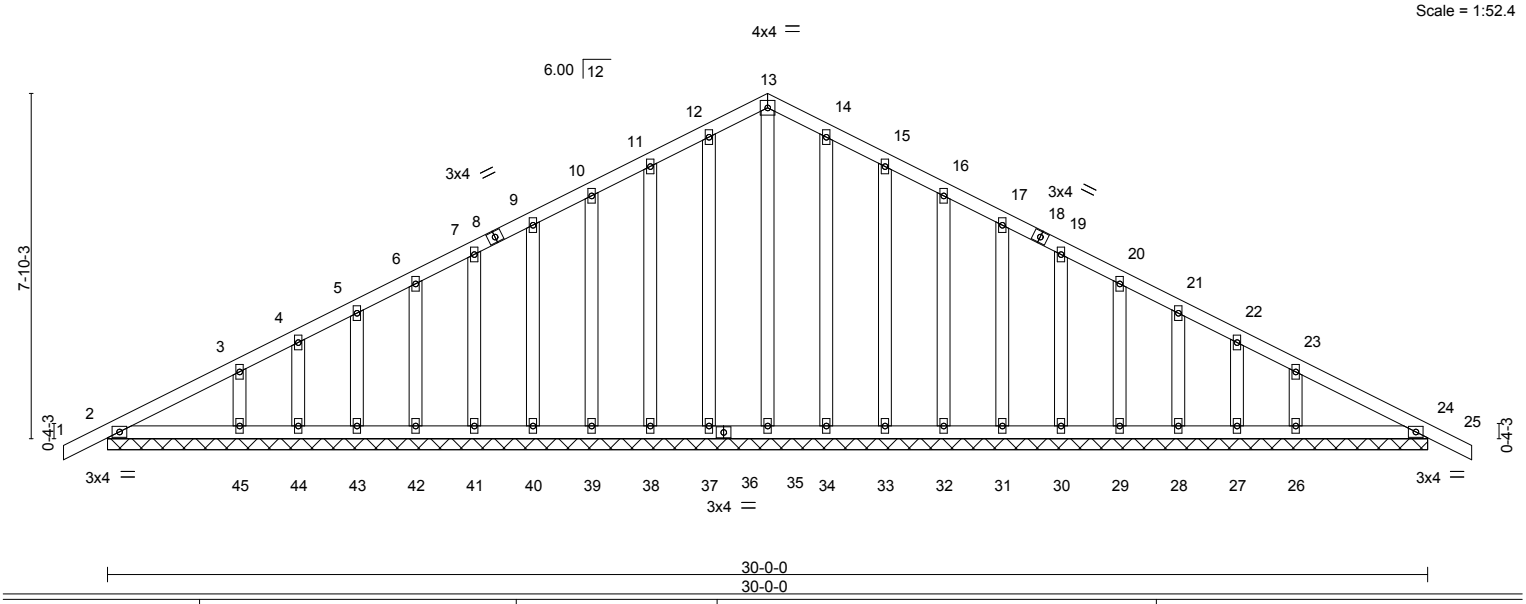
1-0-0 | 15-0-0 | 30-0-0 | 31-0-0
1-0-0 | 15-0-0 | 15-0-0 | 1-0-0

Scale = 1:52.4



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	0.08	Vert(LL)	0.00	24	n/r	120	MT20	197/144
TCDL	7.5	Lumber DOL	1.15	BC	0.05	Vert(TL)	0.00	25	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.16	Horz(TL)	0.01	24	n/a	n/a		
BCDL	7.5	Code IRC2009/TPI2007		Matrix-SH							Weight: 165 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 10-0-0 oc bracing.

REACTIONS. All bearings 30-0-0.
(lb) - Max Horz 2=-192(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 2, 35, 37, 38, 39, 40, 41, 42, 43, 44, 45, 34, 33, 32, 31, 30, 29, 28, 27, 26, 24
Max Grav All reactions 250 lb or less at joint(s) 2, 35, 37, 38, 39, 40, 41, 42, 43, 44, 45, 34, 33, 32, 31, 30, 29, 28, 27, 26, 24

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 11-12=-57/251, 12-13=-46/278, 13-14=-38/278, 14-15=-32/251

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) 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 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
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) All plates are 2x4 MT20 unless otherwise indicated.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Gable requires continuous bottom chord bearing.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 35, 37, 38, 39, 40, 41, 42, 43, 44, 45, 34, 33, 32, 31, 30, 29, 28, 27, 26, 24.

July 9,2018

MiTek
7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

Job	Truss	Truss Type	Qty	Ply	Plan 923 Elev A 30# R54713619
LC_CL923A	A1T	Roof Special	5	1	Job Reference (optional)

Builders First Source, Colorado Springs, CO, 80939 8.220 s May 24 2018 MiTek Industries, Inc. Mon Jul 9 13:38:39 2018 Page 1
ID:9G1RMYFjLxENcAKwVhG_QQzXQH7-TRSLgfr0aFhLUqAsvjkg_kQWLZC?bInohKUARsyznPE

1-0-0	7-9-4	15-0-0	18-6-8	22-9-8	27-0-8	30-0-0	31-0-0
1-0-0	7-9-4	7-2-12	3-6-8	4-3-0	4-3-0	2-11-8	1-0-0

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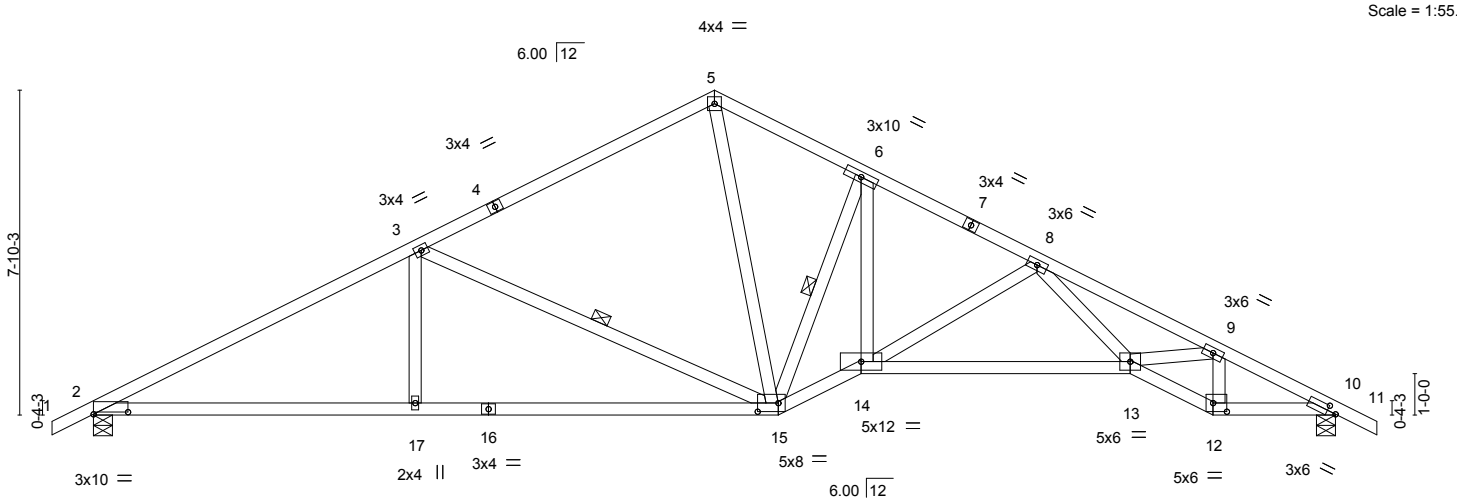

7-9-4	16-6-8	18-6-8	25-0-8	27-0-8	30-0-0
7-9-4	8-9-4	2-0-0	6-6-0	2-0-0	2-11-8

Plate Offsets (X,Y)-- [2:0-10-0,0-0-10], [10:0-2-9,0-1-8], [12:0-4-0,0-2-8], [15:0-6-0,0-2-8]

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	0.70	Vert(LL)	-0.23	13-14	>999	240	MT20	197/144
TCDL	7.5	Lumber DOL	1.15	BC	0.83	Vert(TL)	-0.53	15-17	>683	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.41	Horz(TL)	0.20	10	n/a	n/a		
BCDL	7.5	Code	IRC2009/TPI2007	Matrix-MSH							Weight: 124 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 2-5-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-5-2 oc bracing.
WEBS 1 Row at midpt 3-15, 6-15

REACTIONS. (lb/size) 2=1424/0-5-8, 10=1426/0-5-8
Max Horz 2=-192(LC 7)
Max Uplift 2=-299(LC 9), 10=-297(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2328/830, 3-5=-1510/638, 5-6=-1637/754, 6-8=-2230/862, 8-9=-3731/1320, 9-10=-2343/879
BOT CHORD 2-17=-605/1977, 15-17=-605/1977, 14-15=-580/2199, 13-14=-842/2643, 12-13=-753/2165, 10-12=-710/2027
WEBS 3-17=0/308, 3-15=-836/406, 5-15=-401/941, 6-15=-1571/565, 6-14=-432/1472, 8-14=-844/401, 8-13=-288/1007, 9-13=-365/1404, 9-12=-1059/387

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) 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
3) Plates checked for a plus or minus 5 degree rotation about its center.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=299, 10=297.

July 9,2018

MiTek
7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

Job	Truss	Truss Type	Qty	Ply	Plan 923 Elev A 30#
LC_CL923A	A2	Common Truss	2	1	R54713620
					Job Reference (optional)

Builders First Source, Colorado Springs, CO, 80939 8.220 s May 24 2018 MiTek Industries, Inc. Mon Jul 9 13:38:40 2018 Page 1
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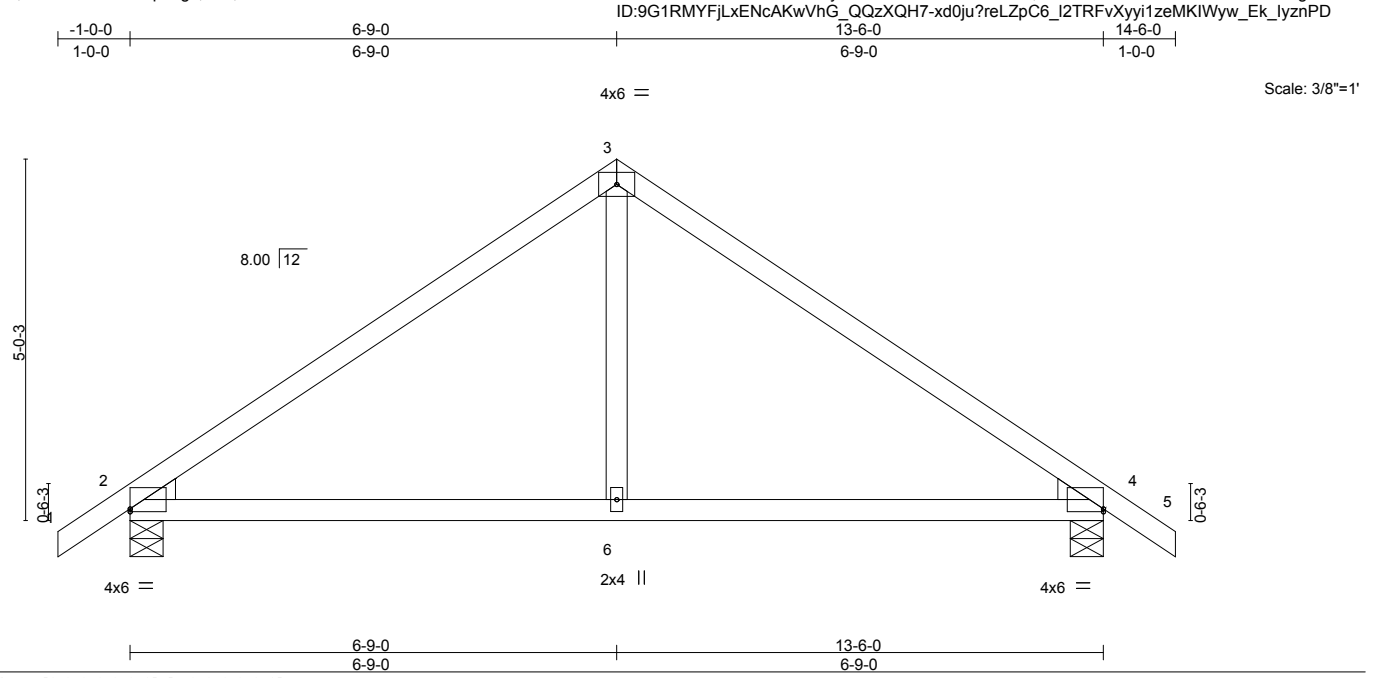

Plate Offsets (X,Y)-- [2:0-0-0,0-0-8], [4:0-0-0,0-0-8]

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	0.64	Vert(LL)	-0.08	6-9	>999	240	MT20	197/144
TCDL	7.5	Lumber DOL	1.15	BC	0.44	Vert(TL)	-0.14	6-9	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horz(TL)	0.02	2	n/a	n/a		
BCDL	7.5	Code	IRC2009/TPI2007	Matrix-MSH							Weight: 43 lb	FT = 0%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SP No.3, Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-0-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=683/0-5-8, 4=683/0-5-8
Max Horz 2=-139(LC 7)
Max Uplift 2=-159(LC 9), 4=-159(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-735/220, 3-4=-735/220
BOT CHORD 2-6=-37/497, 4-6=-37/497
WEBS 3-6=0/271

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) 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
3) Plates checked for a plus or minus 5 degree rotation about its center.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=159, 4=159.

July 9,2018

MiTek
7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

Job	Truss	Truss Type	Qty	Ply	Plan 923 Elev A 30#
LC_CL923A	A2E	Common Truss	1	1	R54713621
					Job Reference (optional)

Builders First Source, Colorado Springs, CO, 80939 8.220 s May 24 2018 MiTek Industries, Inc. Mon Jul 9 13:38:41 2018 Page 1
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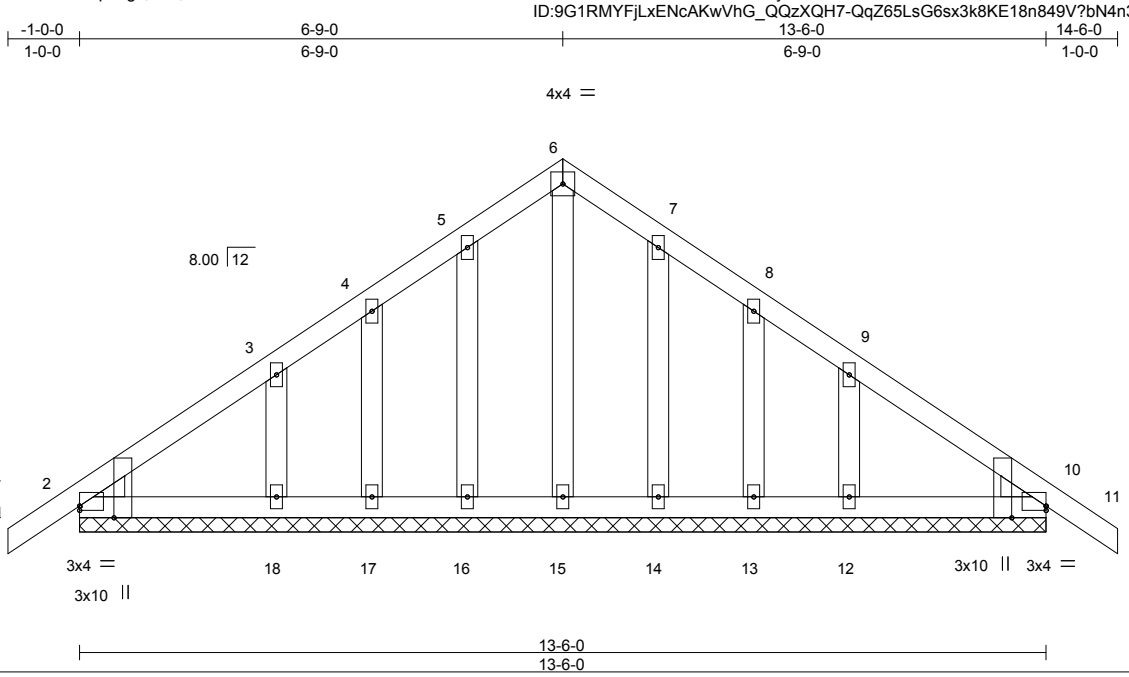

Plate Offsets (X,Y)-- [2:0-0-0,0-0-12], [2:0-1-15,Edge], [10:0-0-0,0-0-12], [10:0-1-15,Edge]

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	0.07	Vert(LL)	-0.00	10	n/r	120	MT20	197/144
TCDL	7.5	Lumber DOL	1.15	BC	0.04	Vert(TL)	0.00	10	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(TL)	0.00	10	n/a	n/a		
BCDL	7.5	Code IRC2009/TPI2007		Matrix-SH							Weight: 61 lb	FT = 0%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2, Right: 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. All bearings 13-6-0.
(lb) - Max Horz 2=-139(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 15, 16, 17, 18, 14, 13, 12
Max Grav All reactions 250 lb or less at joint(s) 2, 10, 15, 16, 17, 18, 14, 13, 12

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 7-05; 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 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
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) All plates are 2x4 MT20 unless otherwise indicated.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Gable requires continuous bottom chord bearing.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10, 15, 16, 17, 18, 14, 13, 12.

July 9,2018

MiTek
7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

Job	Truss	Truss Type	Qty	Ply	Plan 923 Elev A 30#
LC_CL923A	A2G	Common Truss	1	2	R54713622

Job Reference (optional)

Builders First Source, Colorado Springs, CO, 80939 — 8.220 s May 24 2018 MiTek Industries, Inc. Mon Jul 9 13:38:42 2018 Page 1
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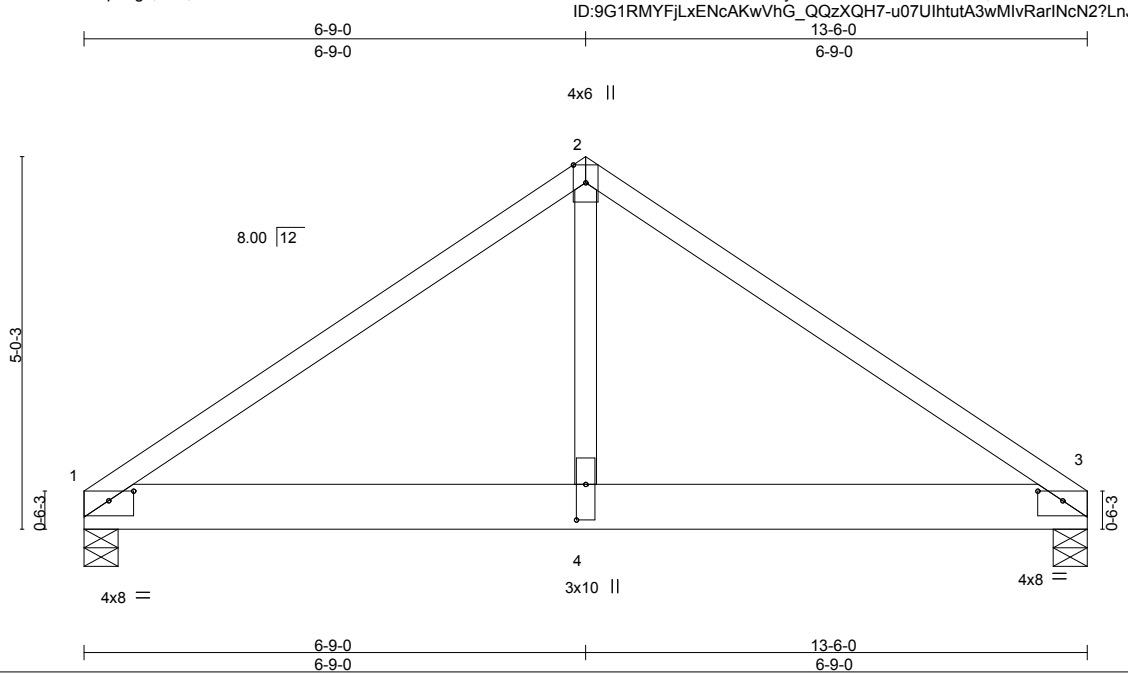

Scale = 1:31.0

Plate Offsets (X,Y)-- [1:0-4-0,0-1-9], [3:0-4-0,0-1-9], [4:0-5-12,0-1-8]

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	0.71	Vert(LL)	-0.08	4-7	>999	240	MT20	118/123
TCDL	7.5	Lumber DOL	1.15	BC	0.46	Vert(TL)	-0.13	4-7	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.61	Horz(TL)	0.01	3	n/a	n/a		
BCDL	7.5	Code	IRC2009/TPI2007	Matrix-MSH							Weight: 133 lb	FT = 0%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 1 1/2" x 7 1/4" 2.0E Microllam® LVL
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-6-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=4790/0-5-8, 3=4790/0-5-8
Max Horz 1=-121(LC 5)
Max Uplift 1=-900(LC 7), 3=-900(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-5008/960, 2-3=-5008/960
BOT CHORD 1-4=-697/4066, 3-4=-697/4066
WEBS 2-4=-899/4946

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
Bottom chords connected as follows: 1 1/2" x 7 1/4" - 2 rows staggered at 0-8-0 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 7-05; 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
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) 1=900, 3=900.
8) Girder carries tie-in span(s): 30-0-0 from 0-0-0 to 13-6-0

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-75, 2-3=-75, 5-8=-635(F=-620)

July 9,2018

MiTek
7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

Job	Truss	Truss Type	Qty	Ply	Plan 923 Elev A 30# R54713623
LC_CL923A	A3	Common Truss	6	1	Job Reference (optional)

Builders First Source, Colorado Springs, CO, 80939 8.220 s May 24 2018 MiTek Industries, Inc. Mon Jul 9 13:38:43 2018 Page 1
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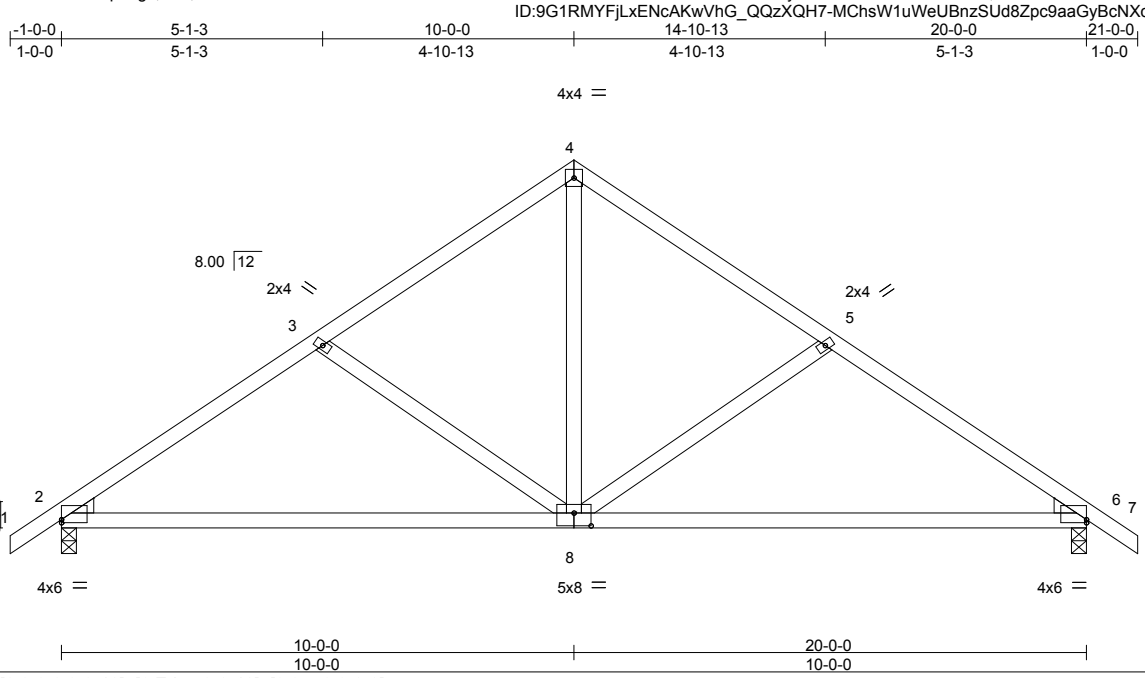

Plate Offsets (X,Y)-- [2:0-0-0,0-0-12], [6:Edge,0-0-12], [8:0-4-0,0-3-0]

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	0.34	Vert(LL)	-0.16	8-14	>999	240	MT20	197/144
TCDL	7.5	Lumber DOL	1.15	BC	0.67	Vert(TL)	-0.34	8-11	>701	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.25	Horz(TL)	0.03	6	n/a	n/a		
BCDL	7.5	Code	IRC2009/TPI2007	Matrix-MSH							Weight: 75 lb	FT = 0%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SP No.3, Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-0-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=975/0-3-8, 6=975/0-3-8
Max Horz 2=197(LC 8)
Max Uplift 2=-213(LC 9), 6=-213(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1264/392, 3-4=-934/326, 4-5=-934/326, 5-6=-1264/392
BOT CHORD 2-8=-215/977, 6-8=-217/977
WEBS 4-8=-187/565, 5-8=-377/247, 3-8=-377/247

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) 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
3) Plates checked for a plus or minus 5 degree rotation about its center.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) 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.

July 9,2018

MiTek
7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

Job	Truss	Truss Type	Qty	Ply	Plan 923 Elev A 30#
LC_CL923A	A3E	GABLE	1	1	R54713624
					Job Reference (optional)

Builders First Source, Colorado Springs, CO, 80939 8.220 s May 24 2018 MiTek Industries, Inc. Mon Jul 9 13:38:46 2018 Page 1
ID:9G1RMYFjLxENcAKwVhG_QQzXQH7-mnN?82wPxPZMqvCCphMJnDCnpOdlkzMqlwh2ByyznP7

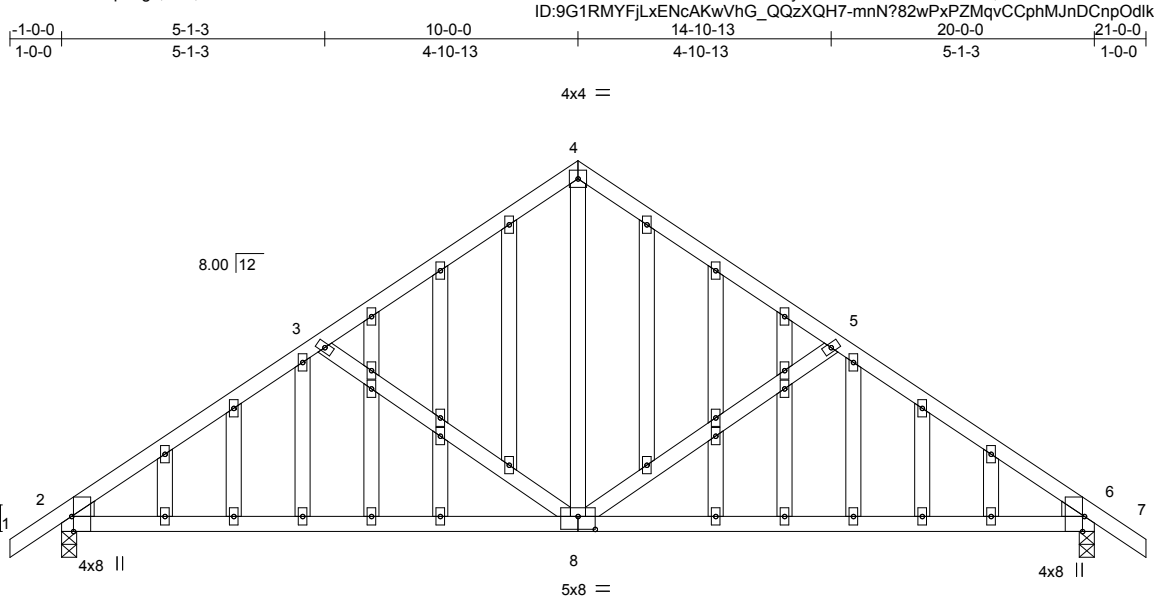

Plate Offsets (X,Y)-- [2:0-0-12,0-1-3], [2:0-1-9,0-5-13], [2:0-3-8,Edge], [6:0-3-8,Edge], [6:0-1-9,0-5-13], [6:0-0-12,0-1-3], [8:0-4-0,0-3-0]

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	0.36	Vert(LL)	-0.17	2-8	>999	240	MT20	197/144
TCDL	7.5	Lumber DOL	1.15	BC	0.69	Vert(TL)	-0.38	2-8	>622	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.23	Horz(TL)	0.03	6	n/a	n/a		
BCDL	7.5	Code	IRC2009/TPI2007	Matrix-SH							Weight: 121 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
WEDGE
Left: 2x4 SPF No.2, Right: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-11-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=973/0-3-8, 6=973/0-3-8
Max Horz 2=197(LC 8)
Max Uplift 2=-218(LC 9), 6=-218(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1223/380, 3-4=-916/321, 4-5=-916/321, 5-6=-1223/380
BOT CHORD 2-8=-202/938, 6-8=-205/938
WEBS 4-8=-184/553, 5-8=-355/241, 3-8=-355/241

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) 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
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) All plates are 2x4 MT20 unless otherwise indicated.
5) Plates checked for a plus or minus 5 degree rotation about its center.
6) Gable studs spaced at 1-4-0 oc.
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) except (jt=lb) 2=218, 6=218.

July 9,2018

MiTek
7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

Job	Truss	Truss Type	Qty	Ply	Plan 923 Elev A 30#
LC_CL923A	A4	Monopitch Truss	2	1	R54713625
					Job Reference (optional)

Builders First Source, Colorado Springs, CO, 80939 8.220 s May 24 2018 MiTek Industries, Inc. Mon Jul 9 13:38:49 2018 Page 1
ID:9G1RMYFjLxENcAKwVhG_QQzXQH7-BM27m4yHEKywhNxnVqw0OrqBxbfUxNiG_uvioHyznP4

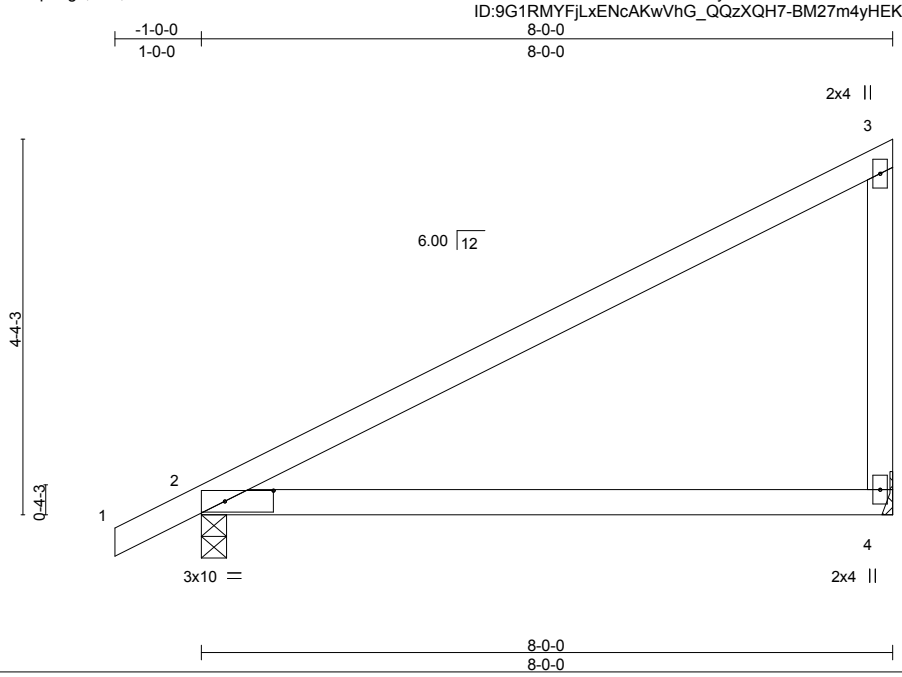

Plate Offsets (X,Y)-- [2:0-6-12,0-1-8]

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	0.82	Vert(LL)	0.28	4-7	>342	240	MT20	197/144
TCDL	7.5	Lumber DOL	1.15	BC	0.69	Vert(TL)	-0.49	4-7	>192	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(TL)	0.01	2	n/a	n/a		
BCDL	7.5	Code	IRC2009/TPI2007	Matrix-MP							Weight: 25 lb	FT = 0%

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E
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 10-0-0 oc bracing.

REACTIONS. (lb/size) 4=349/Mechanical, 2=433/0-3-8
Max Horz 2=184(LC 8)
Max Uplift 4=-126(LC 6), 2=-162(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-256/299

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; Pr. 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) Plates checked for a plus or minus 5 degree rotation about its center.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=126, 2=162.

July 9,2018

MiTek
7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

Job	Truss	Truss Type	Qty	Ply	Plan 923 Elev A 30#
LC_CL923A	AVS1	Valley Truss	1	1	R54713626
					Job Reference (optional)

Builders First Source, Colorado Springs, CO, 80939 8.220 s May 24 2018 MiTek Industries, Inc. Mon Jul 9 13:38:51 2018 Page 1
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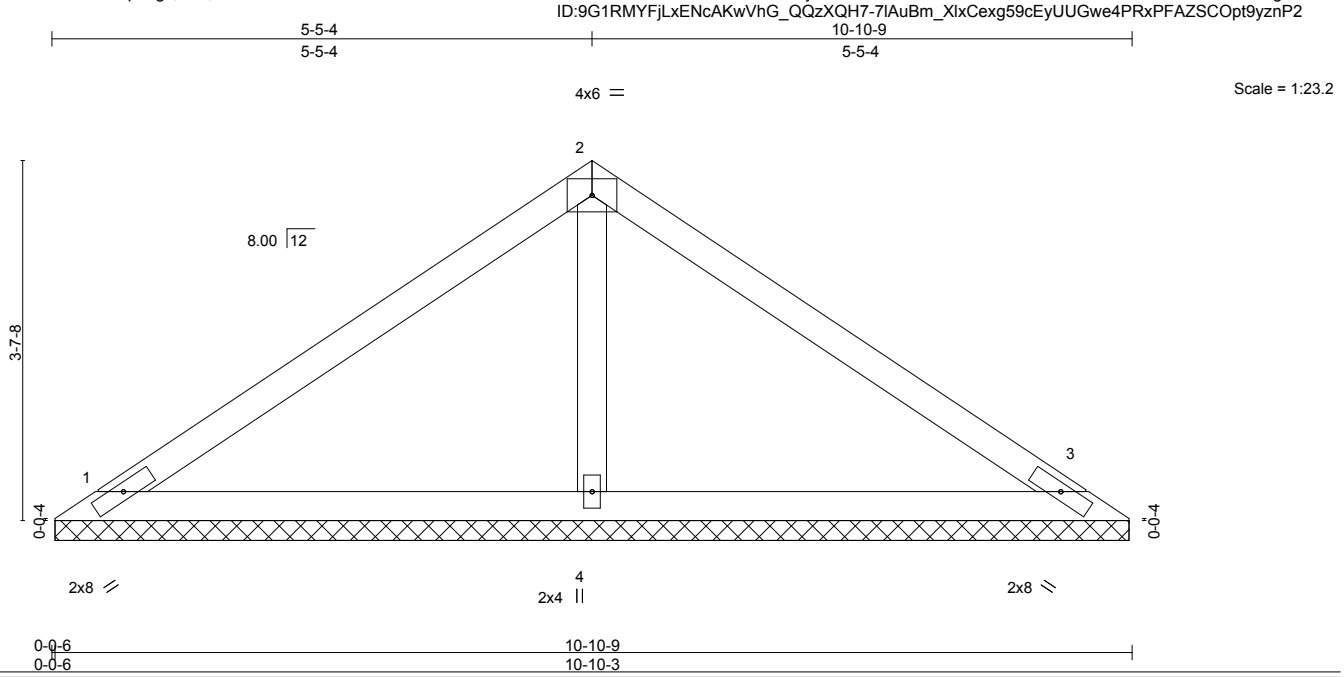

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	30.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	7.5	Lumber DOL	1.15	BC	0.24	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.07	Horz(TL)	0.00	3	n/a	n/a		
BCDL	7.5	Code	IRC2009/TPI2007	Matrix-SH							Weight: 29 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 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=216/10-9-13, 3=216/10-9-13, 4=459/10-9-13
Max Horz 1=-89(LC 7)
Max Uplift 1=-52(LC 9), 3=-52(LC 9), 4=-64(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-307/117

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) 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
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, 4.

July 9,2018

MiTek
7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

Job	Truss	Truss Type	Qty	Ply	Plan 923 Elev A 30#
LC_CL923A	AVS2	Valley Truss	1	1	R54713627
					Job Reference (optional)

Builders First Source, Colorado Springs, CO, 80939 8.220 s May 24 2018 MiTek Industries, Inc. Mon Jul 9 13:38:53 2018 Page 1
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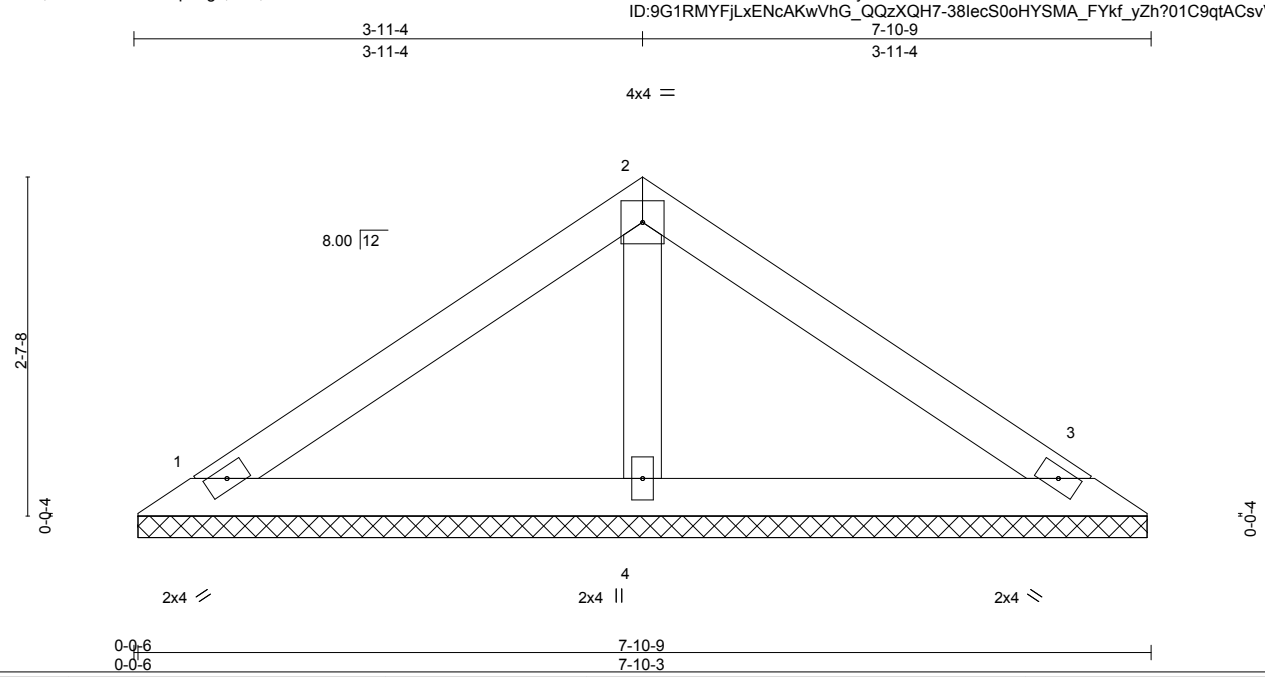

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	30.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	7.5	Lumber DOL	1.15	BC	0.09	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(TL)	0.00	3	n/a	n/a		
BCDL	7.5	Code	IRC2009/TPI2007	Matrix-P							Weight: 21 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 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=172/7-9-13, 3=172/7-9-13, 4=278/7-9-13
Max Horz 1=-62(LC 7)
Max Uplift 1=-49(LC 9), 3=-49(LC 9), 4=-19(LC 9)

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 7-05; 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
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, 4.

July 9,2018

MiTek
7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

Job	Truss	Truss Type	Qty	Ply	Plan 923 Elev A 30#
LC_CL923A	AVS3	Valley Truss	1	1	R54713628
					Job Reference (optional)

Builders First Source, Colorado Springs, CO, 80939 8.220 s May 24 2018 MiTek Industries, Inc. Mon Jul 9 13:38:54 2018 Page 1
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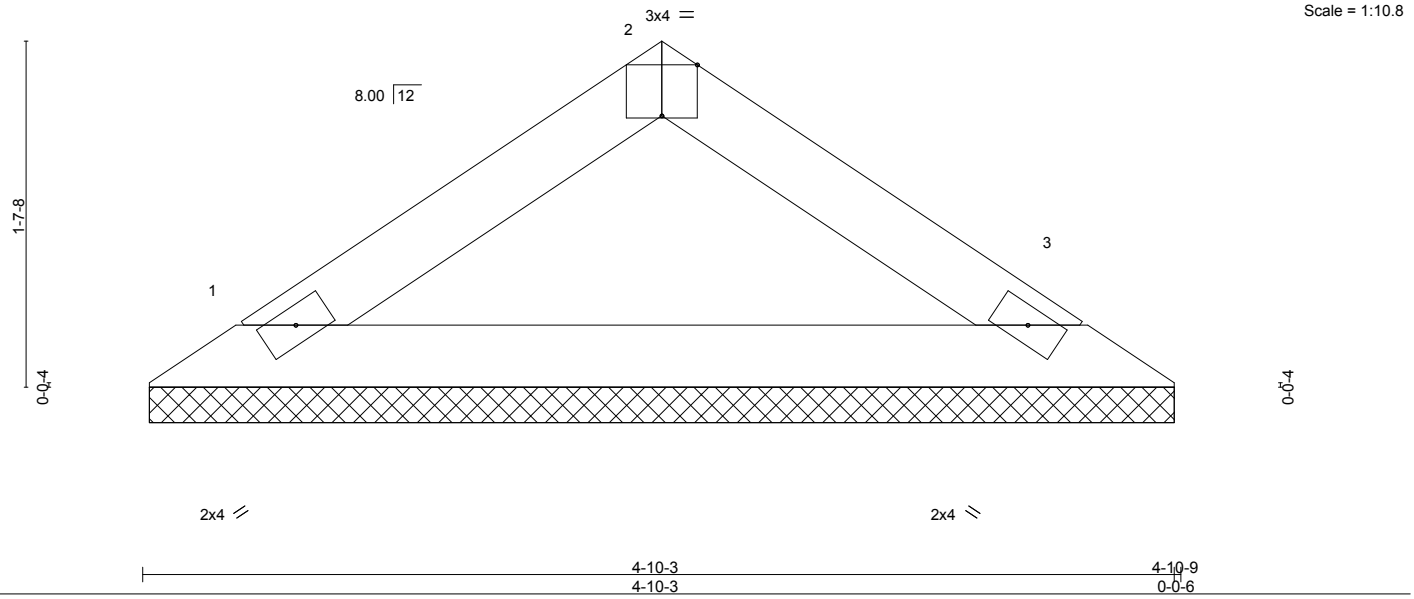


Plate Offsets (X,Y)-- [2:0-2-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	30.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	7.5	Lumber DOL	1.15	BC	0.14	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(TL)	0.00	3	n/a	n/a		
BCDL	7.5	Code	IRC2009/TPI2007	Matrix-P							Weight: 11 lb	FT = 0%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-10-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=176/4-9-13, 3=176/4-9-13
Max Horz 1=35(LC 8)
Max Uplift 1=-33(LC 9), 3=-33(LC 9)

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

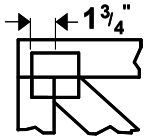
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=4.5psf; BCDL=4.5psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (all heights) and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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.

July 9,2018

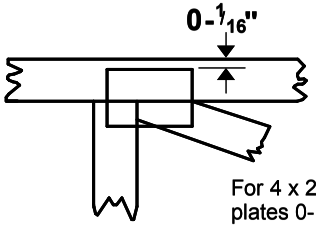
MiTek
7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

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.

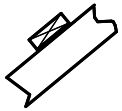
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

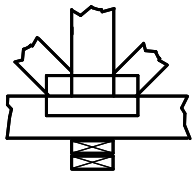
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

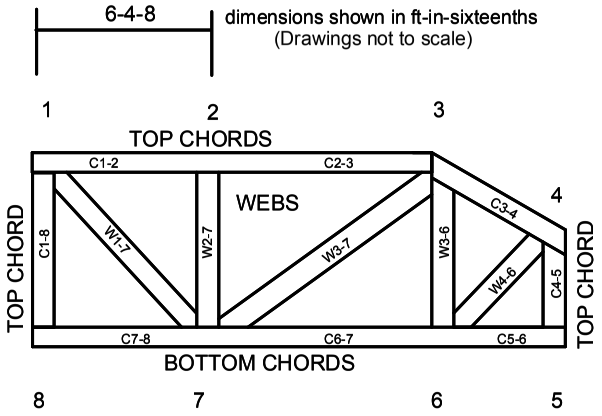


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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 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.