MiTek USA, Inc.
250 Klug Circle
Corona, CA 92880
951-245-9525

Re: Redding_Hinkle

The truss drawing(s) referenced below have been prepared by MiTek Industries, Inc. under my direct supervision based on the parameters provided by Aloha Lumber & Truss, Inc..

Pages or sheets covered by this seal: K1288355 thru K1288362

My license renewal date for the state of California is September 30, 2016.

Lumber design values are in accordance with ANSI/TPI 1-2007 section 6.3
These truss designs rely on lumber values established by others.

July 2,2015

Rivera, Mark

The seal on these drawings indicate acceptance of professional engineering responsibility solely for the truss components shown. The suitability and use of this component for any particular building is the responsibility of the building designer, per ANSI/TPI 1.

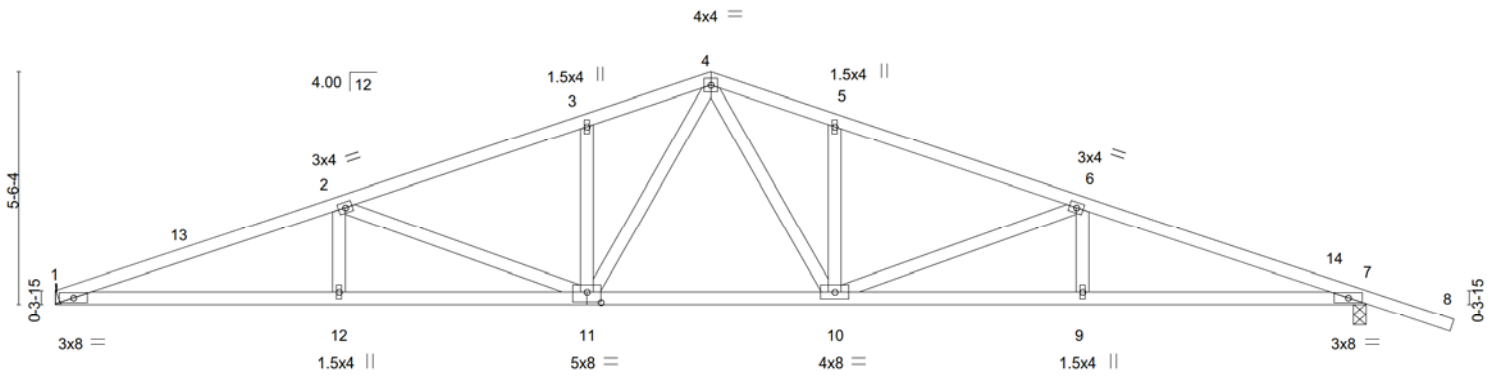
REDDING_HINKLE	A	Common	7	1	Job Reference (optional)

Aloha Truss, Ramona, CA 92065 — 7.630 s Jun 23 2015 MiTek Industries, Inc. Thu Jul 02 14:54:57 2015 Page 1

ID:K4hKkYQvimxLXBXPADzPHYz03Ue-HvWSh2gPuaMVMH5?ME6u5j80pcyA3GlGgpdnozz033S

6-8-14	12-7-10	15-7-0	18-6-6	24-5-2	31-2-0	33-2-0
6-8-14	5-10-12	2-11-6	2-11-6	5-10-12	6-8-14	2-0-0

Scale = 1:54.8



6-8-14	12-7-10	18-6-6	24-5-2	31-2-0
6-8-14	5-10-12	5-10-12	5-10-12	6-8-14

Plate Offsets (X,Y)-- [11:0-4-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.18	11	>999	240	MT20	220/195
TCDL	14.0	Lumber DOL	1.15	BC	0.83	Vert(TL)	-0.65	10-11	>575	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.54	Horz(TL)	0.20	7	n/a	n/a		
BCDL	10.0	Code IBC2012/TPI2007		(Matrix)							Weight: 140 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 DF No.1&Btr G *Except* T2: 2x4 DF No.2 G
BOT CHORD 2x4 DF No.2 G
WEBS 2x4 DF No.2 G

BRACING-

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 1=1357/Mechanical, 7=1517/0-3-8
Max Horz 1=-49(LC 10)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-13=-3488/0, 2-13=-3434/0, 2-3=-2628/16, 3-4=-2600/43, 4-5=-2592/47, 5-6=-2616/13, 6-14=-3348/0, 7-14=-3419/0
BOT CHORD 1-12=0/3256, 11-12=0/3256, 10-11=0/2001, 9-10=0/3165, 7-9=0/3165
WEBS 4-10=-4/851, 5-10=-327/73, 6-10=-815/0, 6-9=0/263, 4-11=-5/867, 3-11=-315/71, 2-11=-900/24, 2-12=0/272

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=110mph (3-second gust) Vasd=87mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=31ft; eave=4ft; Cat. II; Exp B; enclosed; MWFRS (directional) and C-C Exterior(2) 0-0-12 to 3-2-2, Interior(1) 3-2-2 to 15-7-0, Exterior(2) 15-7-0 to 18-6-6 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) A plate rating reduction of 20% has been applied for the green lumber members.
6) Refer to girder(s) for truss to truss connections.
7) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

LOAD CASE(S) Standard

July 2,2015

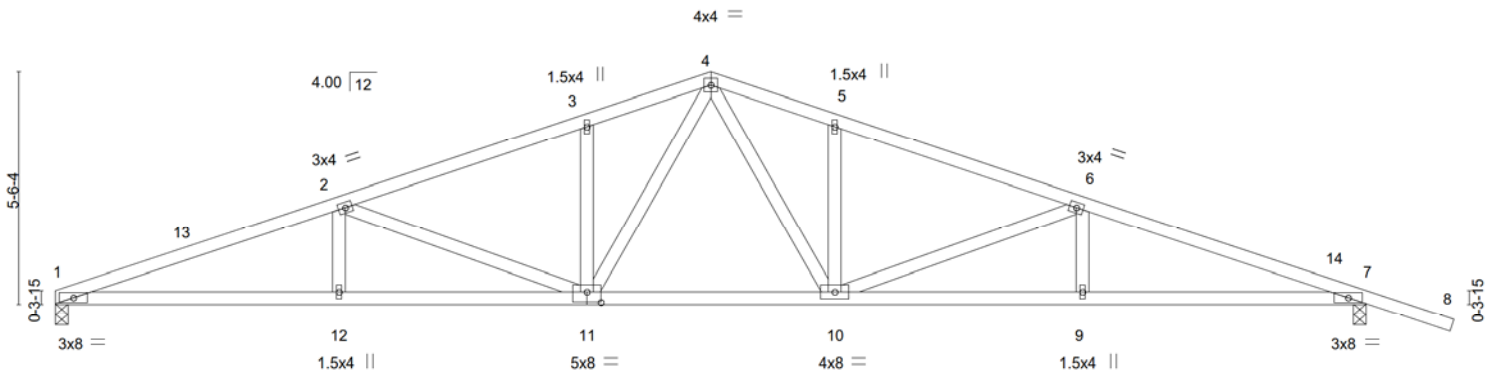
REDDING_HINKLE	A1	Common	1	1	Job Reference (optional)

Aloha Truss, Ramona, CA 92065 — 7.630 s Jun 23 2015 MiTek Industries, Inc. Thu Jul 02 14:54:58 2015 Page 1

ID:K4hKkYQvimxLXBXPADzPHYz03Ue-l54ruOh2ftUL_QgCwye7exh890JVojDPvTNLKQz033R

6-8-14	12-7-10	15-7-0	18-6-6	24-5-2	31-2-0	33-2-0
6-8-14	5-10-12	2-11-6	2-11-6	5-10-12	6-8-14	2-0-0

Scale = 1:54.8



6-8-14	12-7-10	18-6-6	24-5-2	31-2-0
6-8-14	5-10-12	5-10-12	5-10-12	6-8-14

Plate Offsets (X,Y)-- [11:0-4-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	1.00	Vert(LL)	-0.18	11	>999	240	MT20	220/195
TCDL	14.0	Lumber DOL	1.15	BC	0.83	Vert(TL)	-0.65	10-11	>566	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.53	Horz(TL)	0.20	7	n/a	n/a		
BCDL	10.0	Code	IBC2012/TPI2007	(Matrix)							Weight: 140 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 DF No.2 G
BOT CHORD 2x4 DF No.2 G
WEBS 2x4 DF No.2 G

BRACING-

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 5-9-12 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 1=1353/0-3-8, 7=1513/0-3-8
Max Horz 1=-49(LC 30)
Max Uplift 1=-385(LC 33), 7=-431(LC 34)

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

TOP CHORD 1-13=-3570/1269, 2-13=-3395/1004, 2-3=-2611/754, 3-4=-2584/282, 4-5=-2581/275, 5-6=-2604/751, 6-14=-3337/1160, 7-14=-3617/1237
BOT CHORD 1-12=-1162/3350, 11-12=-612/3216, 10-11=-136/1990, 9-10=-569/3155, 7-9=-1078/3332
WEBS 4-10=-4/851, 5-10=-328/73, 6-10=-815/2, 6-9=0/264, 4-11=-8/859, 3-11=-316/75, 2-11=-876/31, 2-12=0/271

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=110mph (3-second gust) Vasd=87mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=31ft; eave=4ft; Cat. II; Exp B; enclosed; MWFRS (directional) and C-C Exterior(2) 0-1-12 to 3-3-2, Interior(1) 3-3-2 to 15-7-0, Exterior(2) 15-7-0 to 18-6-6 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) A plate rating reduction of 20% has been applied for the green lumber members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 385 lb uplift at joint 1 and 431 lb uplift at joint 7.
7) This truss has been designed for a total drag load of 2600 lb. Lumber DOL=(1.33) Plate grip DOL=(1.33) Connect truss to resist drag loads along bottom chord from 0-0-0 to 31-2-0 for 83.4 plf.
8) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

LOAD CASE(S) Standard

July 2,2015

REDDING_HINKLE	A2	Common	3	1	Job Reference (optional)

Aloha Truss, Ramona, CA 92065 — 7.630 s Jun 23 2015 MiTek Industries, Inc. Thu Jul 02 14:54:59 2015 Page 1

ID:K4hKkYQvimxLXBXPADzPHYz03Ue-DHeD6khgQBcCbaFOUf9MA8DOVQghXB2Z776ussz033Q

-2-0-0	6-8-14	12-7-10	15-7-0	18-6-6	24-5-2	31-2-0	33-2-0
2-0-0	6-8-14	5-10-12	2-11-6	2-11-6	5-10-12	6-8-14	2-0-0

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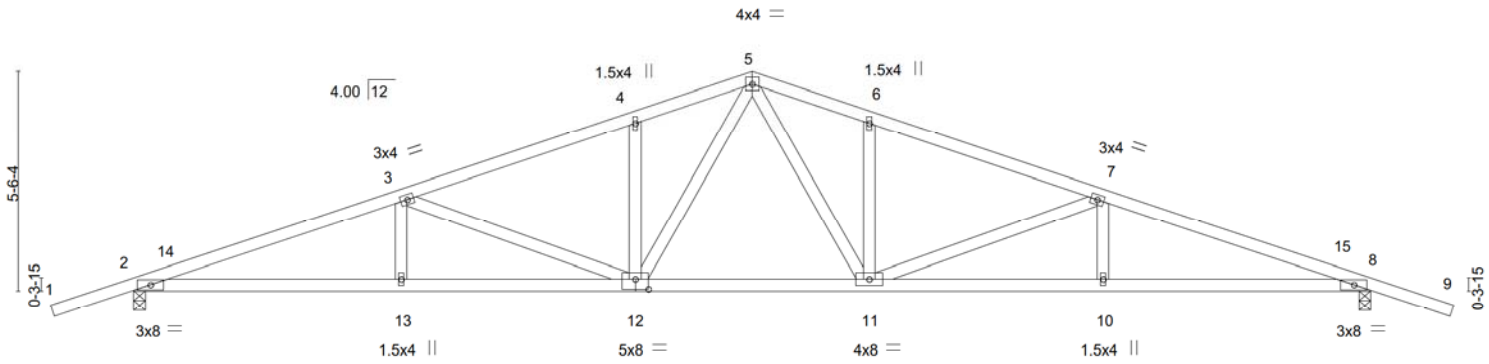

6-8-14	12-7-10	18-6-6	24-5-2	31-2-0
6-8-14	5-10-12	5-10-12	5-10-12	6-8-14

Plate Offsets (X,Y)-- [12:0-4-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.18	12	>999	240	MT20	220/195
TCDL	14.0	Lumber DOL	1.15	BC	0.77	Vert(TL)	-0.65	11-12	>573	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.49	Horz(TL)	0.20	8	n/a	n/a		
BCDL	10.0	Code IBC2012/TPI2007		(Matrix)							Weight: 143 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 DF No.2 G
BOT CHORD 2x4 DF No.2 G
WEBS 2x4 DF No.2 G

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-7-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 2=1508/0-3-8, 8=1508/0-3-8
Max Horz 2=48(LC 11)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-14=-3391/0, 3-14=-3321/0, 3-4=-2588/0, 4-5=-2564/33, 5-6=-2564/33, 6-7=-2588/0, 7-15=-3321/0, 8-15=-3391/0
BOT CHORD 2-13=0/3140, 12-13=0/3140, 11-12=0/1974, 10-11=0/3140, 8-10=0/3140
WEBS 5-11=-5/851, 6-11=-328/74, 7-11=-815/0, 7-10=0/264, 5-12=-5/851, 4-12=-328/74, 3-12=-815/0, 3-13=0/264

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=110mph (3-second gust) Vasd=87mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=31ft; eave=4ft; Cat. II; Exp B; enclosed; MWFRS (directional) and C-C Exterior(2) -2-0-9 to 1-0-13, Interior(1) 1-0-13 to 15-7-0, Exterior(2) 15-7-0 to 18-6-6 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) A plate rating reduction of 20% has been applied for the green lumber members.
6) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

LOAD CASE(S) Standard

July 2,2015

REDDING_HINKLE	AG	GABLE	1	1	Job Reference (optional)

Aloha Truss, Ramona, CA 92065

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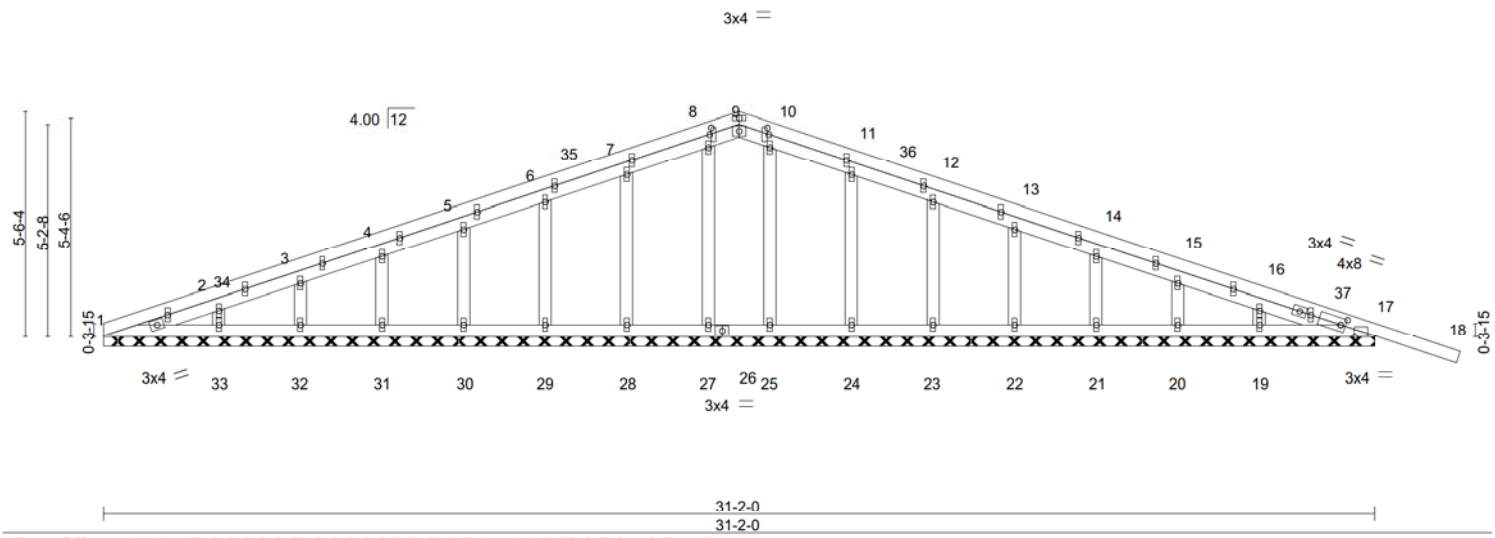
ID:K4hKkYQvimxLXBXPADzPHYz03Ue-9gmzXQjwxoswruPnb4BqFZJqsEW0?CcrbRb?xkz033O

15-7-0 | 31-2-0 | 33-2-0

15-7-0 | 15-7-0 | 2-0-0

Scale = 1:56.5



31-2-0

31-2-0

Plate Offsets (X,Y)-- [8:0-2-0,0-0-8], [10:0-2-0,0-0-8], [17:0-1-8,0-2-0], [17:0-4-2,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	-0.02	18	n/r	120	MT20	220/195
TCDL	14.0	Lumber DOL	1.15	BC	0.07	Vert(TL)	-0.06	18	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(TL)	0.00	17	n/a	n/a		
BCDL	10.0	Code	IBC2012/TPI2007	(Matrix)							Weight: 181 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 DF No.2 G
BOT CHORD 2x4 DF No.2 G
OTHERS 2x4 DF No.2 G

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.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 31-2-0.
(lb) - Max Horz 1=-47(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 28, 24, 20, 17
Max Grav All reactions 250 lb or less at joint(s) 1, 27, 28, 29, 30, 31, 32, 25, 24, 23, 22, 21, 20, 19 except 33=253(LC 21), 17=311(LC 22)

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

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=110mph (3-second gust) Vasd=87mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=31ft; eave=2ft; Cat. II; Exp B; enclosed; MWFRS (directional) and C-C Corner(3) 0-0-0 to 3-1-6, Exterior(2) 3-1-6 to 15-7-0, Corner(3) 15-7-0 to 18-8-6 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 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) A plate rating reduction of 20% has been applied for the green lumber members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 28, 24, 20, 17.
11) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) No notches allowed in overhang and 0 from left end and 20000 from right end or 12" along rake from scarf, whichever is larger. Minimum 1.5x4 tie plates required at 2-0-0 o.c. maximum between the stacking chords. For edge-wise notching, provide at least one tie plate between each notch.

LOAD CASE(S) Standard

July 2,2015

REDDING_HINKLE	B	Common	1	1	Job Reference (optional)

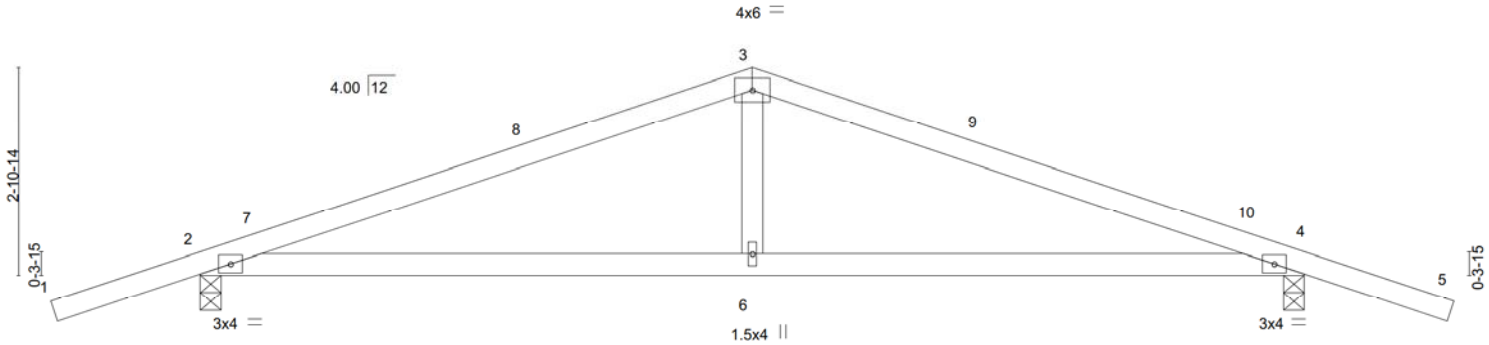
Aloha Truss, Ramona, CA 92065 — 7.630 s Jun 23 2015 MiTek Industries, Inc. Thu Jul 02 14:55:02 2015 Page 1

ID:K4hKkYQvimxLXBXPADzPHYz03Ue-esKLkmkYi6_nS2zz9ni3onrt8dkUkeU?q5LYTBz033N

-2-0-0 | 7-8-12 | 15-5-8 | 17-5-8

2-0-0 | 7-8-12 | 7-8-12 | 2-0-0

Scale: 3/8"=1'



7-8-12 | 15-5-8

7-8-12 | 7-8-12

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	-0.07	4-6	>999	240	MT20	220/195
TCDL	14.0	Lumber DOL	1.15	BC	0.57	Vert(TL)	-0.27	4-6	>666	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(TL)	0.04	4	n/a	n/a		
BCDL	10.0	Code	IBC2012/TPI2007	(Matrix)							Weight: 53 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 DF No.2 G
BOT CHORD 2x4 DF No.2 G
WEBS 2x4 DF No.2 G

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-11-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 2=816/0-3-8, 4=816/0-3-8
Max Horz 2=-24(LC 10)
Max Uplift 2=-17(LC 12), 4=-17(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-1193/0, 7-8=-1109/0, 3-8=-1092/0, 3-9=-1092/0, 9-10=-1109/0, 4-10=-1193/0
BOT CHORD 2-6=0/1049, 4-6=0/1049
WEBS 3-6=0/366

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=110mph (3-second gust) Vasd=87mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; enclosed; MWFRS (directional) and C-C Exterior(2) -2-0-9 to 0-11-7, Interior(1) 0-11-7 to 7-8-12, Exterior(2) 7-8-12 to 10-8-12 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
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) A plate rating reduction of 20% has been applied for the green lumber members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
7) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

LOAD CASE(S) Standard

REGISTERED PROFESSIONAL ENGINEER
MARK PAUL RIVERA
C 66864
EXP. 09/30/2016
CIVIL
STATE OF CALIFORNIA

July 2,2015

REDDING_HINKLE	B1	Common	1	1	Job Reference (optional)

Aloha Truss, Ramona, CA 92065

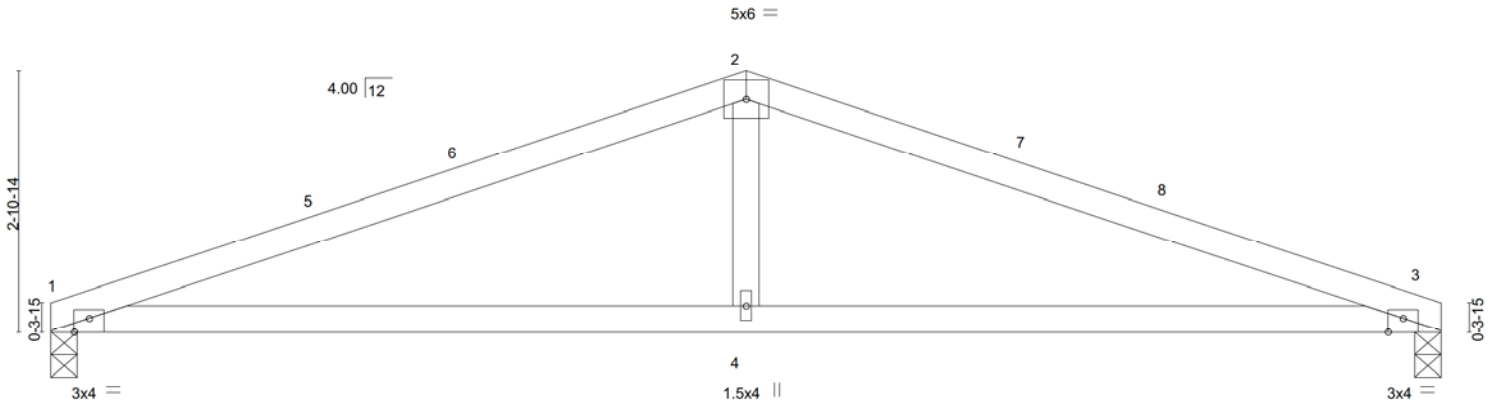
7.630 s Jun 23 2015 MiTek Industries, Inc. Thu Jul 02 14:55:02 2015 Page 1

ID:K4hKkYQvimxLXBXPADzPHYz03Ue-esKLkmkYi6_nS2zz9ni3onrqkdj3keS?q5LYTBz033N

7-8-12 | 15-5-8

7-8-12 | 7-8-12

Scale = 1:25.6



7-8-12 | 15-5-8

7-8-12 | 7-8-12

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	-0.07	3-4	>999	240	MT20	220/195
TCDL	14.0	Lumber DOL	1.15	BC	0.59	Vert(TL)	-0.29	3-4	>622	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(TL)	0.04	3	n/a	n/a		
BCDL	10.0	Code IBC2012/TPI2007		(Matrix)							Weight: 47 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 DF No.2 G
BOT CHORD 2x4 DF No.2 G
WEBS 2x4 DF No.2 G

BRACING-

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 1=667/0-3-8, 3=667/0-3-8
Max Horz 1=-20(LC 10)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-5=-1274/16, 5-6=-1196/16, 2-6=-1172/34, 2-7=-1172/34, 7-8=-1196/16, 3-8=-1274/16
BOT CHORD 1-4=0/1132, 3-4=0/1132
WEBS 2-4=0/375

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=110mph (3-second gust) Vasd=87mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; enclosed; MWFRS (directional) and C-C Exterior(2) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 7-8-12, Exterior(2) 7-8-12 to 10-8-12 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
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) A plate rating reduction of 20% has been applied for the green lumber members.
6) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

LOAD CASE(S) Standard

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REDDING_HINKLE	B2	Common Girder	1	2 Job Reference (optional)

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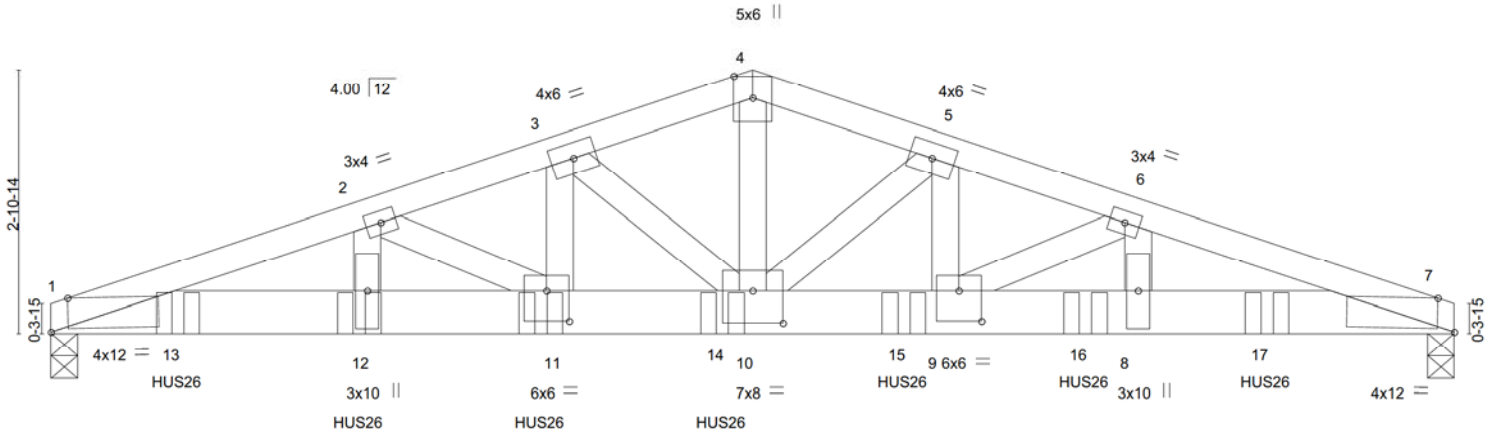
ID:K4hKkYQvimxLXBXPADzPHYz03Ue-aFR69SloEjEViL7LGClXtCwC1RJkCRWIHPqfX3z033L

3-5-13	5-7-4	7-8-12	9-10-4	11-11-11	15-5-8
3-5-13	2-1-8	2-1-8	2-1-8	2-1-8	3-5-13

Scale = 1:25.4



3-5-13	5-7-4	7-8-12	9-10-4	11-11-11	15-5-8
3-5-13	2-1-8	2-1-8	2-1-8	2-1-8	3-5-13

Plate Offsets (X,Y)-- [1:0-2-4,Edge], [7:0-2-4,Edge], [9:0-3-0,0-4-0], [10:0-4-0,0-4-4], [11:0-3-0,0-4-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	-0.15	10	>999	240	MT20	220/195
TCDL	14.0	Lumber DOL	1.15	BC	0.97	Vert(TL)	-0.51	10-11	>356	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.54	Horz(TL)	0.11	7	n/a	n/a		
BCDL	10.0	Code IBC2012/TPI2007		(Matrix)							Weight: 155 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 DF No.2 G
BOT CHORD 2x6 DF SS G
WEBS 2x4 DF No.2 G

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-5-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=5526/0-3-8, 7=5167/0-3-8
Max Horz 1=19(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-13405/0, 2-3=-11673/0, 3-4=-9327/0, 4-5=-9327/0, 5-6=-11635/0, 6-7=-13344/0
BOT CHORD 1-13=0/12692, 12-13=0/12692, 11-12=0/12692, 11-14=0/11074, 10-14=0/11074, 10-15=0/11038, 9-15=0/11038, 9-16=0/12632, 8-16=0/12632, 8-17=0/12632, 7-17=0/12632
WEBS 4-10=0/5638, 5-10=-2882/0, 5-9=0/2437, 6-9=-1814/0, 6-8=0/1272, 3-10=-2929/0, 3-11=0/2484, 2-11=-1841/0, 2-12=0/1282

NOTES-

1) 2-ply truss to be connected together with 16d (0.131"x 3.5") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc clinched.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-3-0 oc clinched.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc clinched.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=110mph (3-second gust) Vasd=87mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) A plate rating reduction of 20% has been applied for the green lumber members.
8) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
9) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 1-4-12 from the left end to 13-4-12 to connect truss(es) A (1 ply 2x4 DF) to back face of bottom chord.
10) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-68, 4-7=-68, 1-7=-20

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Continued on page 2

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 11=-1337(B) 12=-1337(B) 13=-1337(B) 14=-1337(B) 15=-1337(B) 16=-1337(B) 17=-1337(B)

REDDING_HINKLE	BG	GABLE	1	1	Job Reference (optional)

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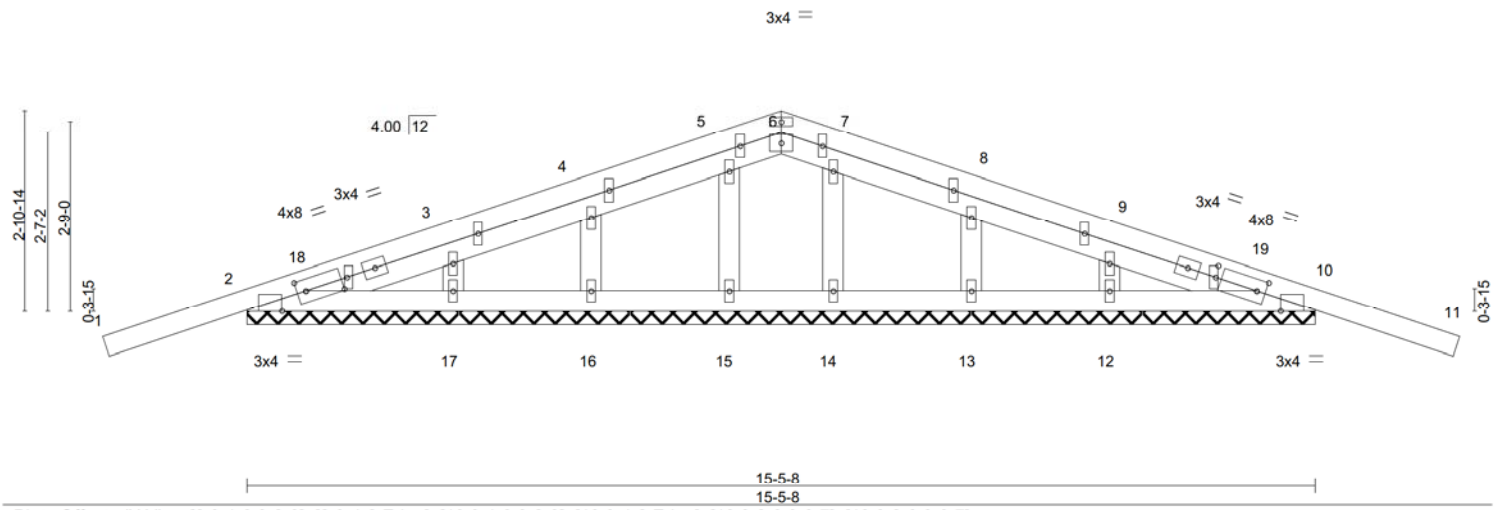
ID:K4hKkYQvimxLXBXPADzPHYz03Ue-2R?UMnmR?1MMJViYqwGmQPTWrrt0x0_RW3ZD4Wz033K

-2-0-0 | 7-8-12 | 15-5-8 | 17-5-8

2-0-0 | 7-8-12 | 7-8-12 | 2-0-0

Scale = 1:33.4



15-5-8

15-5-8

Plate Offsets (X,Y)-- [2:0-1-8,0-2-0], [2:0-4-2,Edge], [10:0-1-8,0-2-0], [10:0-4-2,Edge], [18:0-2-0,0-0-7], [19:0-2-0,0-0-7]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	-0.02	11	n/r	120	MT20	220/195
TCDL	14.0	Lumber DOL	1.15	BC	0.07	Vert(TL)	-0.06	11	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(TL)	0.00	10	n/a	n/a		
BCDL	10.0	Code IBC2012/TPI2007		(Matrix)							Weight: 79 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 DF No.2 G
BOT CHORD 2x4 DF No.2 G
OTHERS 2x4 DF No.2 G

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.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 15-5-8.
(lb) - Max Horz 2=22(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 16, 13
Max Grav All reactions 250 lb or less at joint(s) 15, 16, 17, 14, 13, 12 except 2=312(LC 21), 10=312(LC 22)

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

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=110mph (3-second gust) Vasd=87mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; enclosed; MWFRS (directional) and C-C Corner(3) -2-0-9 to 0-11-7, Exterior(2) 0-11-7 to 7-8-12, Corner(3) 7-8-12 to 10-6-6 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 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) A plate rating reduction of 20% has been applied for the green lumber members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10, 16, 13.
11) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) No notches allowed in overhang and 20000 from left end and 20000 from right end or 12" along rake from scarf, whichever is larger. Minimum 1.5x4 tie plates required at 2-0-0 o.c. maximum between the stacking chords. For edge-wise notching, provide at least one tie plate between each notch.

LOAD CASE(S) Standard

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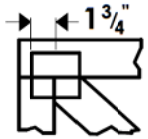
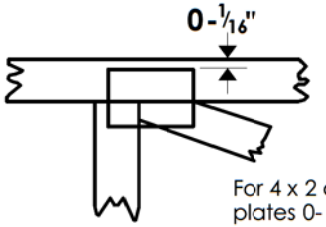
Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

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

PLATE SIZE

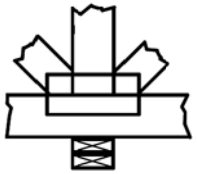
4 x 4

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

LATERAL BRACING LOCATION

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

BEARING

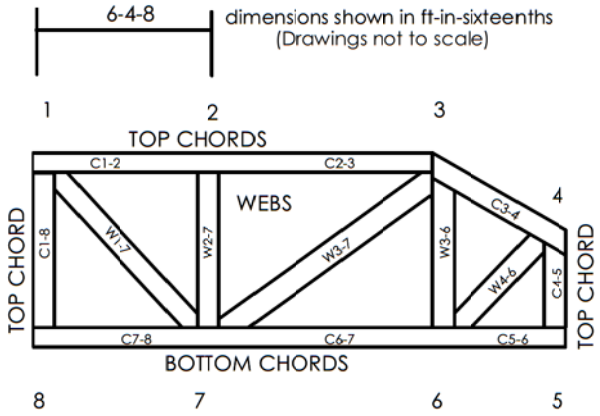


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

Southern Pine lumber designations are as follows:

SYP represents values as published by AWC in the 2005/2012 NDS
SP represents ALSC approved/new values with effective date of June 1, 2013

MiTek

MiTek Engineering Reference Sheet: MII-7473 rev. 01/29/2013

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.