



MiTek USA, Inc.  
16023 Swingley Ridge Rd  
Chesterfield, MO 63017  
314-434-1200

Re: 2585378  
Summit/70 Pikewood

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 (Valley Center).

Pages or sheets covered by this seal: I45641952 thru I45641957

My license renewal date for the state of Missouri is December 31, 2021.

Missouri COA: Engineering 001193



April 14, 2021

Sevier, Scott ,Engineer

**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

Job 2585378	Truss B1	Truss Type Common	Qty 3	Ply 1	Summit/70 Pikewood	145641952
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						Job Reference (optional)

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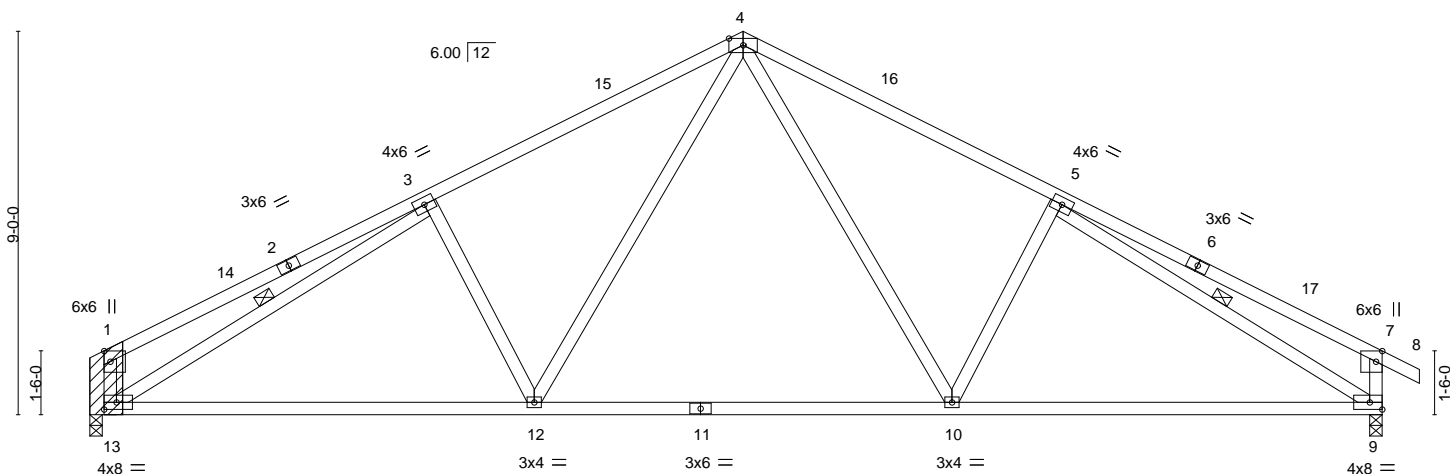
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7-7-12	15-0-0	22-4-4	30-0-0	30-10-8
7-7-12	7-4-4	7-4-4	7-7-12	0-10-8

REPAIR: EXTEND LEFT END 4"

4x8 =

Scale = 1:54.1



ATTACH 2X10 SPF NO.2 SCAB TO ONE FACE OF TRUSS WITH A CLUSTER OF (3) (0.131" X 3") NAILS INTO EACH CHORD AND 2 ROWS OF NAILS SPACED 2" OC IN THE VERTICAL. USE 2" END DISTANCE.

Plate Offsets (X,Y)-- [7:0-3-0,Edge]		10-1-3		19-10-13		30-0-0	
		10-1-3		9-9-11		10-1-3	
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.57	Vert(LL)	-0.20 12-13	>999	240
TCDL 10.0	Lumber DOL	1.15	BC 0.80	Vert(CT)	-0.41 12-13	>868	180
BCLL 0.0	Rep Stress Incr	YES	WB 0.59	Horz(CT)	0.07 9	n/a	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS				
				<b>PLATES</b>		<b>GRIP</b>	
				MT20		197/144	
				Weight: 130 lb		FT = 20%	

#### 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, except end verticals.  
BOT CHORD Rigid ceiling directly applied.  
WEBS 1 Row at midpt 3-13, 5-9

#### REACTIONS.

(size) 13=0-3-8, 9=0-3-8  
Max Horz 13=-154(LC 8)  
Max Uplift 13=-217(LC 12), 9=-240(LC 13)  
Max Grav 13=1336(LC 1), 9=1410(LC 1)

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

TOP CHORD 1-3=-406/131, 3-4=-1714/381, 4-5=-1708/377, 5-7=-453/169, 1-13=-372/142, 7-9=-475/191  
BOT CHORD 12-13=-297/1560, 10-12=-90/1157, 9-10=-201/1552  
WEBS 4-10=-170/587, 5-10=-351/264, 4-12=-171/596, 3-12=-359/266, 3-13=-1556/232, 5-9=-1503/198

#### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 15-0-0, Exterior(2R) 15-0-0 to 18-0-0, Interior(1) 18-0-0 to 30-10-8 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 217 lb uplift at joint 13 and 240 lb uplift at joint 9.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



April 14, 2021

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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, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job 2585378	Truss E1	Truss Type Half Hip	Qty 1	Ply 1	Summit/70 Pikewood 145641953
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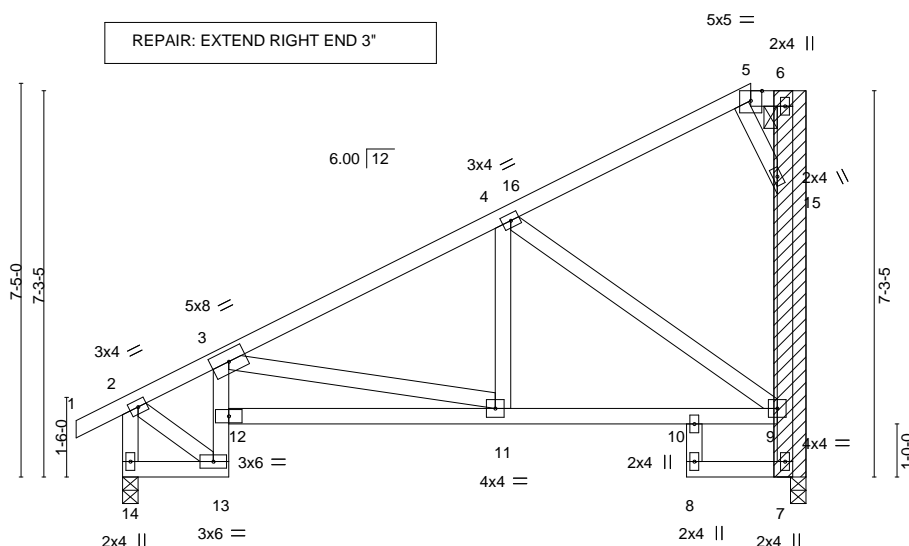
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 13 16:53:49 2021 Page 1

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



Scale = 1:43.4



APPLY 2 X 8 SPF NO.2 SCAB TO ONE FACE OF TRUSS  
AS SHOWN. ATTACH WITH (0.131" X 3") NAILS PER THE  
FOLLOWING NAIL SCHEDULE: 2 ROWS SPACED @ 2" O.C.  
USE 3" MEMBER END DISTANCE.

2-0-0 7-2-0 10-7-8 12-7-8  
2-0-0 5-2-0 3-5-8 2-0-0

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.28	Vert(LL)	0.05 11-12	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.55	Vert(CT)	-0.07 11-12	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.43	Horz(CT)	0.06 7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 66 lb	FT = 20%

**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, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 5-6.  
BOT CHORD Rigid ceiling directly applied.

**REACTIONS.** (size) 7=0-3-8, 14=0-3-8  
Max Horz 14=234(LC 12)  
Max Uplift 7=193(LC 12), 14=71(LC 12)  
Max Grav 7=552(LC 1), 14=629(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-491/79, 3-4=-640/79, 7-9=-526/253, 2-14=-677/174  
BOT CHORD 13-14=-277/144, 11-12=-504/789, 10-11=-229/503, 9-10=-249/517  
WEBS 2-13=-38/474, 4-11=-12/282, 3-11=-312/287, 4-9=-581/257

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 1-10-4, Interior(1) 1-10-4 to 11-10-0, Exterior(2E) 11-10-0 to 12-5-12 zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- 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 193 lb uplift at joint 7 and 71 lb uplift at joint 14.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 14, 2021

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/70 Pikewood	I45641954
2585378	E2	Half Hip	1	1		

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

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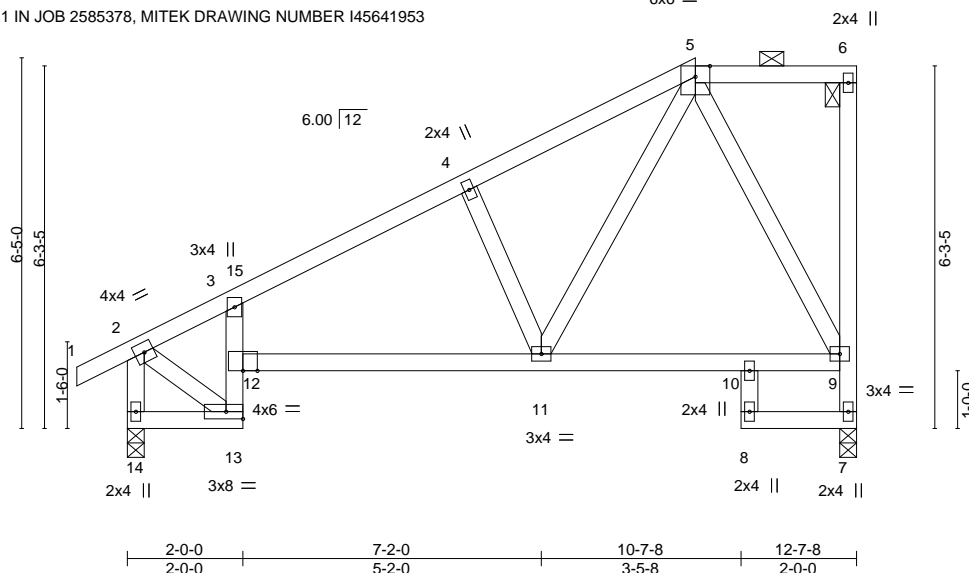
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0-10-8	2-0-0	5-11-0	9-10-0	10-7-8	12-7-8
0-10-8	2-0-0	3-11-0	3-11-0	0-9-8	2-0-0

SAME REPAIR AS TRUSS E1 IN JOB 2585378, MITEK DRAWING NUMBER I45641953

6x6 =

Scale = 1:39.9



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.25	Vert(LL)	0.08 11-12	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.48	Vert(CT)	-0.11 11-12	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.27	Horz(CT)	0.07 7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 62 lb	FT = 20%

#### 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, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.

BOT CHORD Rigid ceiling directly applied.

#### REACTIONS.

(size) 7=0-3-8, 14=0-3-8

Max Horz 14=254(LC 9)

Max Uplift 7=126(LC 9), 14=116(LC 12)

Max Grav 7=552(LC 1), 14=629(LC 1)

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

TOP CHORD 2-3=-472/123, 3-4=-688/175, 4-5=-590/204, 7-9=-530/253, 2-14=-667/212

BOT CHORD 13-14=-390/299, 11-12=-424/592, 10-11=-211/283, 9-10=-228/294

WEBS 2-13=-79/409, 5-9=-485/286, 5-11=-247/499, 4-11=-317/251

#### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 9-10-0, Exterior(2E) 9-10-0 to 12-5-12 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
- 3) Provide adequate drainage to prevent water ponding.
- 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 126 lb uplift at joint 7 and 116 lb uplift at joint 14.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 14, 2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/70 Pikewood	I45641955
2585378	E3	Half Hip	1	1		

Builders FirstSource (Valley Center), Valley Center, KS - 67147,

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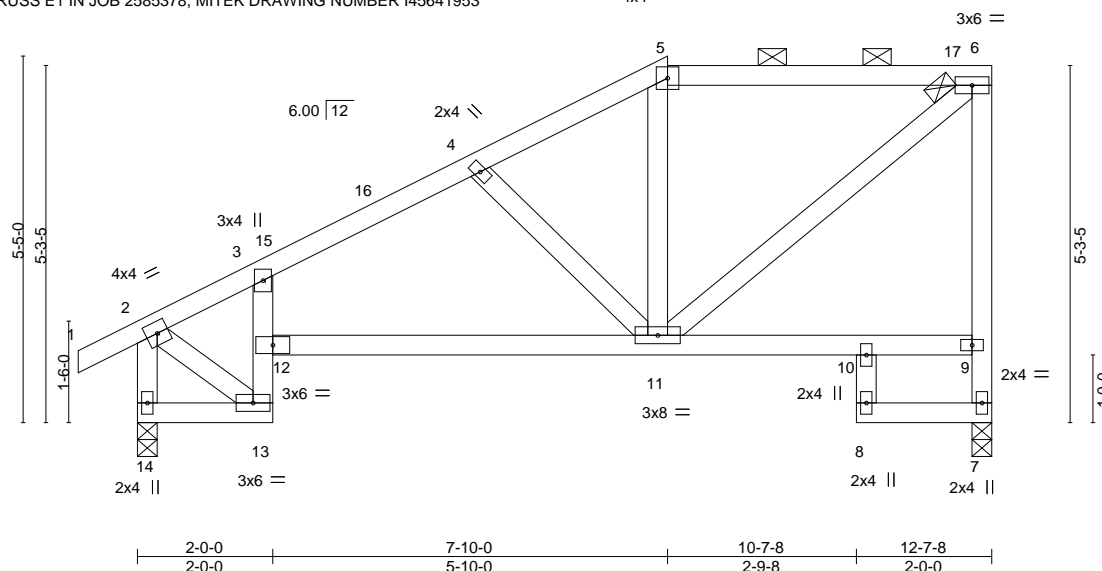
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SAME REPAIR AS TRUSS E1 IN JOB 2585378, MITEK DRAWING NUMBER I45641953

4x4 =

Scale = 1:34.0



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.28	Vert(LL)	0.07 11-12	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.46	Vert(CT)	-0.10 11-12	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.17	Horz(CT)	0.06 7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 60 lb	FT = 20%

#### 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, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.  
BOT CHORD Rigid ceiling directly applied.

#### REACTIONS.

(size) 7=0-3-8, 14=0-3-8  
Max Horz 14=212(LC 9)  
Max Uplift 7=130(LC 9), 14=115(LC 12)  
Max Grav 7=552(LC 1), 14=629(LC 1)

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

TOP CHORD 2-3=-470/132, 3-4=-704/225, 4-5=-534/178, 5-6=-444/182, 7-9=-529/215, 6-9=-513/223,  
2-14=-669/223  
BOT CHORD 13-14=-333/257, 11-12=-444/614  
WEBS 6-11=-260/542, 2-13=-87/398

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 7-10-0, Exterior(2R) 7-10-0 to 12-0-15, Interior(1) 12-0-15 to 12-5-12 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
- Provide adequate drainage to prevent water ponding.
- 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 130 lb uplift at joint 7 and 115 lb uplift at joint 14.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 14, 2021

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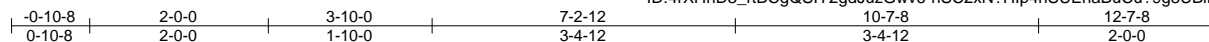




Job 2585378	Truss E5	Truss Type Half Hip Girder	Qty 1	Ply 1	Summit/70 Pikewood	I45641957
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Apr 13 16:53:54 2021 Page 1  
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SAME REPAIR AS TRUSS E1 IN JOB 2585378, MITEK DRAWING NUMBER I45641953

Scale = 1:25.8

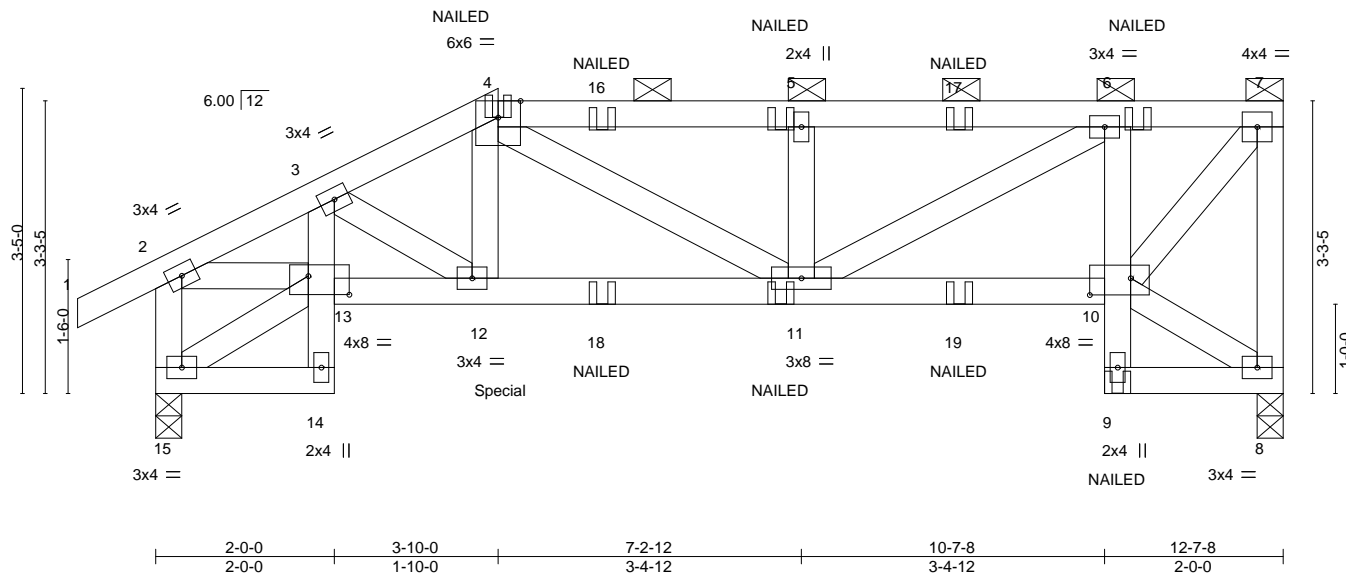


Plate Offsets (X,Y)-- [10:0-5-8,0-2-4], [13:0-5-8,0-2-8]												
<b>LOADING</b> (psf)		<b>SPACING-</b> 2-0-0		<b>CSI.</b>		<b>DEFL.</b> in (loc) l/defl L/d			<b>PLATES</b>	<b>GRIP</b>		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	0.04	11-12	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.06	11-12	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.27	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 63 lb	FT = 20%

#### 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 5-0-9 oc purlins, except end verticals, and 2-0-0 oc purlins (4-11-2 max.): 4-7.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 7-7-7 oc bracing: 12-13  
7-8-9 oc bracing: 11-12.

#### REACTIONS.

(size) 8=0-3-8, 15=0-3-8  
Max Horz 15=129(LC 28)  
Max Uplift 8=331(LC 5), 15=321(LC 8)  
Max Grav 8=785(LC 1), 15=899(LC 1)

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

TOP CHORD 2-3=-1291/574, 3-4=-1341/593, 4-5=-1332/581, 5-6=-1330/579, 6-7=-633/272, 7-8=-751/341, 2-15=-846/335  
BOT CHORD 12-13=-607/1171, 11-12=-590/1187, 10-11=-338/678, 6-10=-623/311  
WEBS 5-11=-336/171, 6-11=-334/749, 7-10=-439/945, 2-13=-467/1106

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- 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 331 lb uplift at joint 8 and 321 lb uplift at joint 15.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 219 lb down and 151 lb up at 3-10-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-2=-70, 2-4=-70, 4-7=-70, 14-15=-20, 10-13=-20, 8-9=-20  
Concentrated Loads (lb)  
Vert: 4=-31(B) 6=-42(B) 12=-219(B) 5=-31(B) 11=-32(B) 10=-21(B) 16=-31(B) 17=-31(B) 18=-32(B) 19=-32(B)



April 14, 2021

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

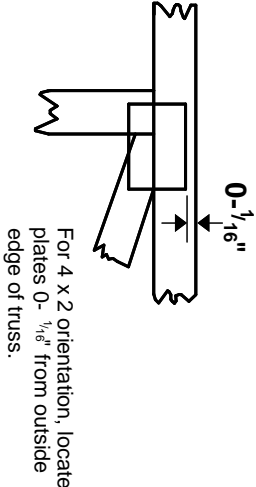
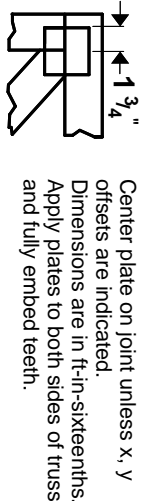
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

# 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.

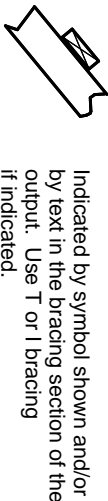
For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

## PLATE SIZE

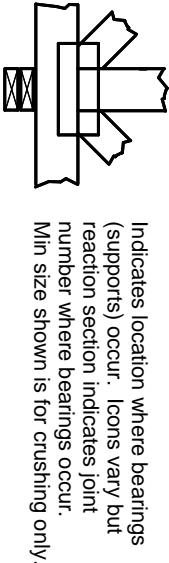
4 X 4

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

## LATERAL BRACING LOCATION



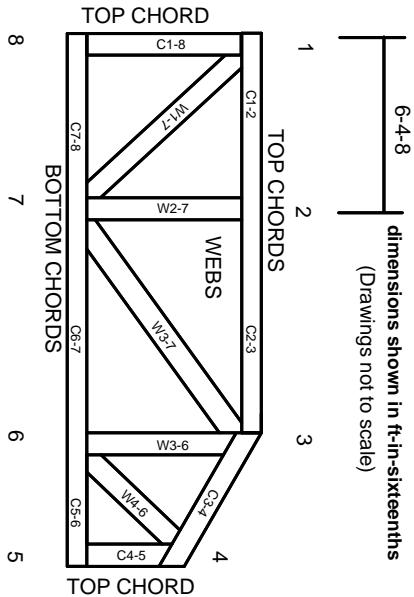
## BEARING



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/TPI 1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing.  
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:  
ESR-1311, ESR-1352, ESR1988  
ER-3907, ESR-2362, ESR-1397, ESR-3282

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

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

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Mitek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

# 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.
21. The design does not take into account any dynamic or other loads other than those expressly stated.