



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

Re: 220012
Hook Farms Pool House/MO

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

Pages or sheets covered by this seal: I50732957 thru I50732962

My license renewal date for the state of Missouri is December 31, 2023.

Missouri COA: Engineering 001193

Leigh & O'Kane Shop Drawing Review	
Review is for general compliance with Contract Documents. No responsibility is assumed for correctness of dimensions or details.	
REVIEWED (NO EXCEPTIONS NOTED)	
By: aokane	Date: 03/21/2022



March 14, 2022

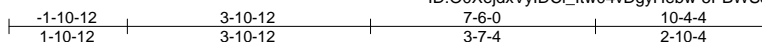
Sevier, Scott ,Engineer

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	Truss	Truss Type	Qty	Ply	Hook Farms Pool House/MO	150732957
220012	01	Common	4	1	Job Reference (optional)	

Heartland Truss, Inc., Plattsburg, MO - 64477,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 11 09:10:48 2022 Page 1
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4x5 =

Scale = 1:36.9

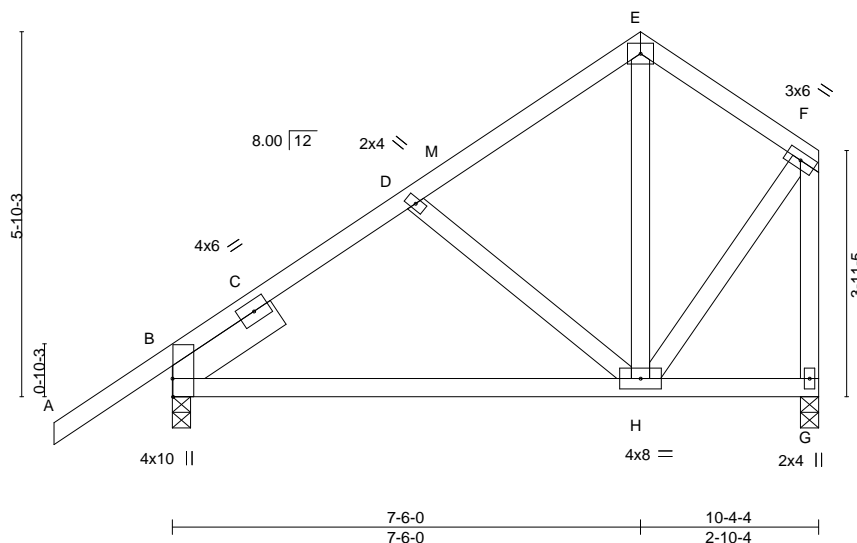


Plate Offsets (X,Y)-- [B:0-3-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0 (Roof Snow=25.0)	2-0-0	TC 0.52	Vert(LL)	-0.05	H-K	>999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.34	Vert(CT)	-0.10	H-K	>999		
BCLL 0.0	Rep Stress Incr YES	WB 0.14	Horz(CT)	0.01	B	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS						
							Weight: 68 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.1 2-0-0

BRACING-

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

REACTIONS.

(size) B=0-3-8, G=0-3-8
Max Horz B=201(LC 11)
Max Uplift B=-88(LC 12), G=-59(LC 12)
Max Grav B=650(LC 19), G=467(LC 20)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-D=-441/158, D-E=-349/123, E-F=-272/136, F-G=-461/106
BOT CHORD B-H=-91/405
WEBS D-H=-271/142, F-H=-19/331

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-12 to 1-1-4, Interior(1) 1-1-4 to 4-6-0, Exterior(2R) 4-6-0 to 7-6-0, Exterior(2E) 7-6-0 to 10-2-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) B, G.
- 7) 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.



March 14, 2022

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

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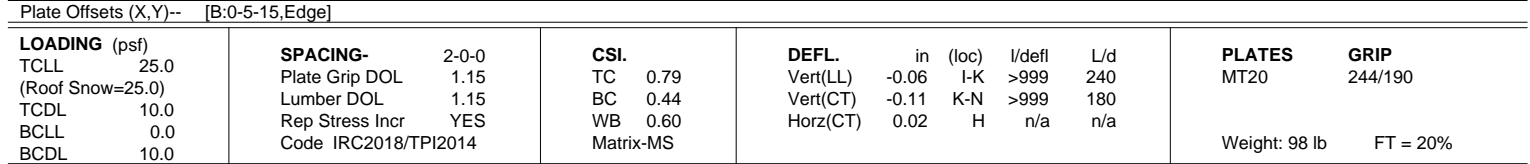
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Heartland Truss, Inc, Plattsburg, MO - 64477, 8.430 s Aug 16 2021 MITek Industries, Inc. Fri Mar 11 09:10:49 2022 Page 1
ID:00XeJdxVylDCi_ltw04vDgyHebw-ZckufT3CWgtP8RnXT4mxRvh1JOTe18o_fIlJNzoc1u4

-1-10-12	3-10-12	7-6-0	12-5-3	17-0-0
1-10-12	3-10-12	3-7-4	4-11-3	4-6-13



BRACING- TOP CHORD	Structural wood sheathing directly applied or 3-5-10 oc purlins, except end verticals, and 2-0-0 oc purlins (4-4-5 max.): F-G.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD B-D=-1023/170, D-E=-814/142, E-F=-924/134, F-G=-1333/162, G-H=-784/113
 BOT CHORD B-K=-99/791, I-K=-136/1297
 WEBS D-K=-275/127, E-K=-23/455, F-K=-736/125, F-I=-567/119, G-I=-139/1448

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-12 to 1-1-4, Interior(1) 1-1-4 to 4-6-0, Exterior(2R) 4-6-0 to 10-6-0, Interior(1) 10-6-0 to 13-10-4, Exterior(2E) 13-10-4 to 16-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCDL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 20.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
- 5) Provide adequate drainage to prevent water ponding.
- 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) H except (jt=lb) B=110.
- 8) 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.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

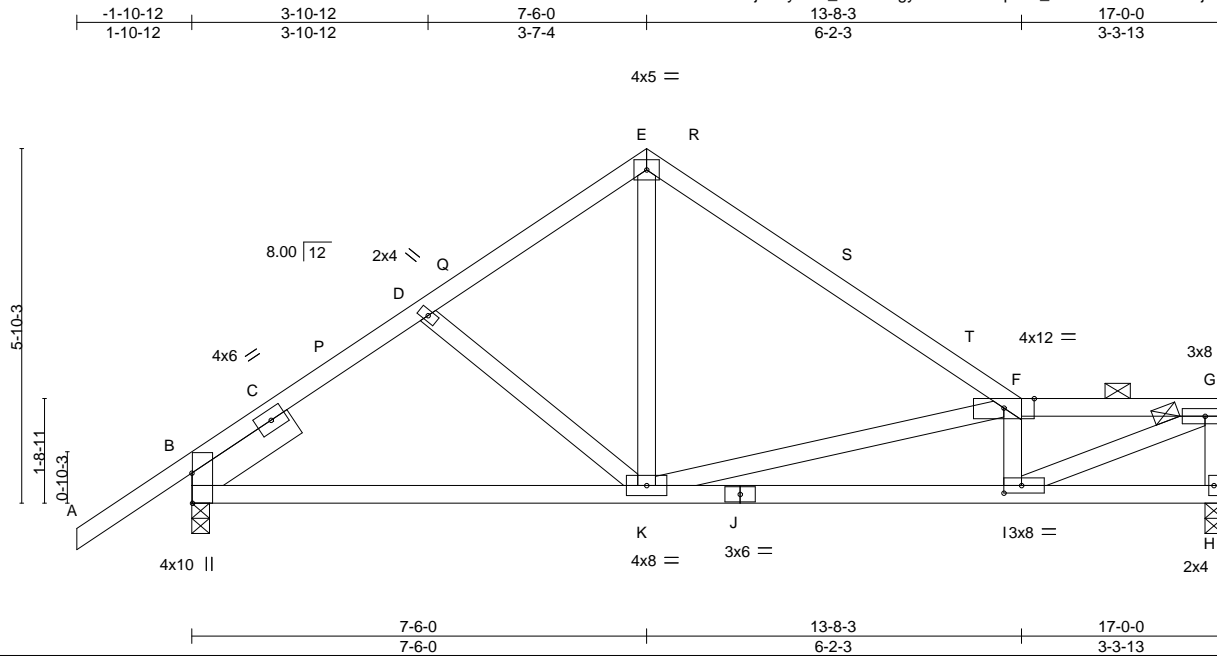


March 14, 2022

Job 220012	Truss 03	Truss Type Roof Special	Qty 2	Ply 1	Hook Farms Pool House/MO	150732959
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Heartland Truss, Inc., Plattsburg, MO - 64477,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 11 09:10:50 2022 Page 1
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Scale = 1:38.0

Plate Offsets (X,Y)-- [B:0-5-15,Edge], [I:0-3-8,0-1-8]																					
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 0.86		Vert(LL)		-0.08		I-K		>999		240		MT20		244/190	
(Roof Snow=25.0)		Lumber DOL		1.15		BC 0.60		Vert(CT)		-0.15		I-K		>999		180					
TCDL 10.0		Rep Stress Incr		YES		WB 0.81		Horz(CT)		0.02		H		n/a		n/a					
BCLL 0.0		Code IRC2018/TPI2014				Matrix-MS															
BCDL 10.0																		Weight: 95 lb		FT = 20%	

LUMBER-

TOP CHORD 2x4 SP No.2 *Except*
E-F: 2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.1 2-0-0

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (3-11-1 max.): F-G.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) H=0-3-8, B=0-3-8
Max Horz B=172(LC 11)
Max Uplift H=85(LC 13), B=110(LC 12)
Max Grav H=837(LC 20), B=974(LC 19)

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

TOP CHORD B-D=-1025/196, D-E=-820/141, E-F=-1033/124, F-G=-1804/188, G-H=-792/95
BOT CHORD B-K=-96/791, I-K=-169/1732
WEBS D-K=-264/126, E-K=-9/441, F-K=-1077/186, F-I=-710/139, G-I=-187/1942

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-12 to 1-1-4, Interior(1) 1-1-4 to 4-6-0, Exterior(2R) 4-6-0 to 10-6-0, Interior(1) 10-6-0 to 13-8-3, Exterior(2E) 13-8-3 to 16-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 20.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
- 5) Provide adequate drainage to prevent water ponding.
- 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) H except (jt=lb) B=110.
- 8) 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.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 14, 2022

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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



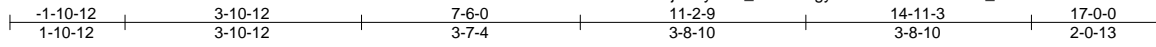
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220012	Truss 04	Truss Type Roof Special	Qty 2	Ply 1	Hook Farms Pool House/MO 150732960
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Heartland Truss, Inc., Plattsburg, MO - 64477,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 11 09:10:52 2022 Page 1

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4x5 =

Scale = 1:38.0

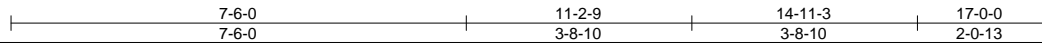
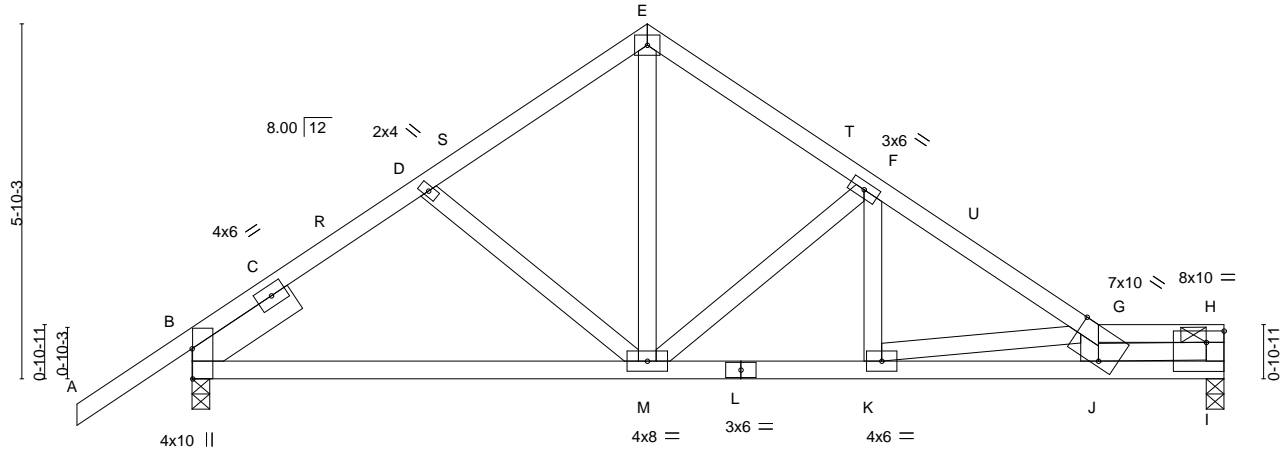


Plate Offsets (X,Y)-- [B:0-5-15,Edge], [G:0-6-11,Edge], [H:Edge,0-2-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.52	in (loc) l/defl L/d	MT20	244/190
(Roof Snow=25.0)	Plate Grip DOL 1.15	BC 0.89	Vert(LL) -0.10 J-K >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.87	Vert(CT) -0.16 J-K >999 180		
BCLL 0.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.03 I n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 98 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.1 2-0-0

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-2-7 oc purlins, except end verticals, and 2-0-0 oc purlins (3-8-2 max.): G-J, G-H.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) I=0-3-8, B=0-3-8
Max Horz B=161(LC 11)
Max Uplift I=82(LC 13), B=110(LC 12)
Max Grav I=913(LC 33), B=974(LC 19)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-D=-1019/149, D-E=-820/140, E-F=-954/145, F-G=-1596/154, G-J=-762/108, G-H=-2262/174, H-I=-747/76
BOT CHORD B-M=-95/791, K-M=-64/1272, J-K=-216/2526, I-J=-28/258
WEBS D-M=-284/130, E-M=-53/607, F-M=-781/160, F-K=0/324, G-K=-1271/153, H-J=-159/2100

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-12 to 1-1-4, Interior(1) 1-1-4 to 4-6-0, Exterior(2R) 4-6-0 to 10-6-0, Interior(1) 10-6-0 to 14-11-3, Exterior(2E) 14-11-3 to 16-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 20.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
- 5) Provide adequate drainage to prevent water ponding.
- 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) I except (it=lb) B=110.
- 8) 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.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 14, 2022

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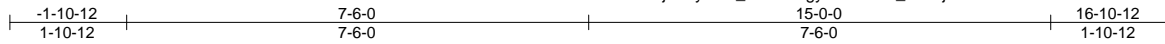
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220012	Truss 05	Truss Type Common	Qty 10	Ply 1	Hook Farms Pool House/MO	150732961
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Heartland Truss, Inc., Plattsburg, MO - 64477,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 11 09:10:53 2022 Page 1

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4x5 =

Scale = 1:37.4

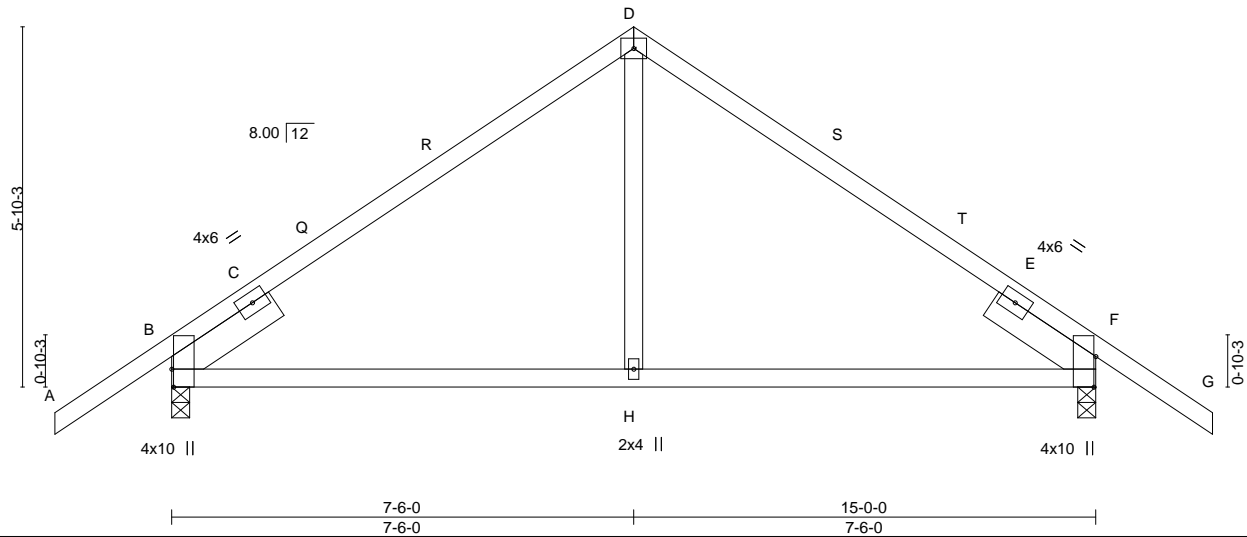


Plate Offsets (X,Y)-- [B:0-3-8,Edge], [F:0-5-15,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.81	in (loc) l/defl L/d	MT20	244/190
(Roof Snow=25.0)	Plate Grip DOL 1.15	BC 0.71	Vert(LL) -0.15 H-K >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.12	Vert(CT) -0.21 H-K >874 180		
BCLL 0.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.06 B n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 74 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.1 2-0-0, Right 2x6 SP No.1 2-0-0

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-1-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) B=0-3-8, F=0-3-8
Max Horz B=-156(LC 10)
Max Uplift B=-106(LC 12), F=-106(LC 13)
Max Grav B=904(LC 19), F=904(LC 20)

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

TOP CHORD B-D=-751/401, D-F=-751/401
BOT CHORD B-H=0/522, F-H=0/522
WEBS D-H=0/320

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-12 to 1-1-4, Interior(1) 1-1-4 to 4-6-0, Exterior(2R) 4-6-0 to 10-6-0, Interior(1) 10-6-0 to 13-10-12, Exterior(2E) 13-10-12 to 16-10-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) B=106, F=106.
- 7) 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.



March 14, 2022

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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



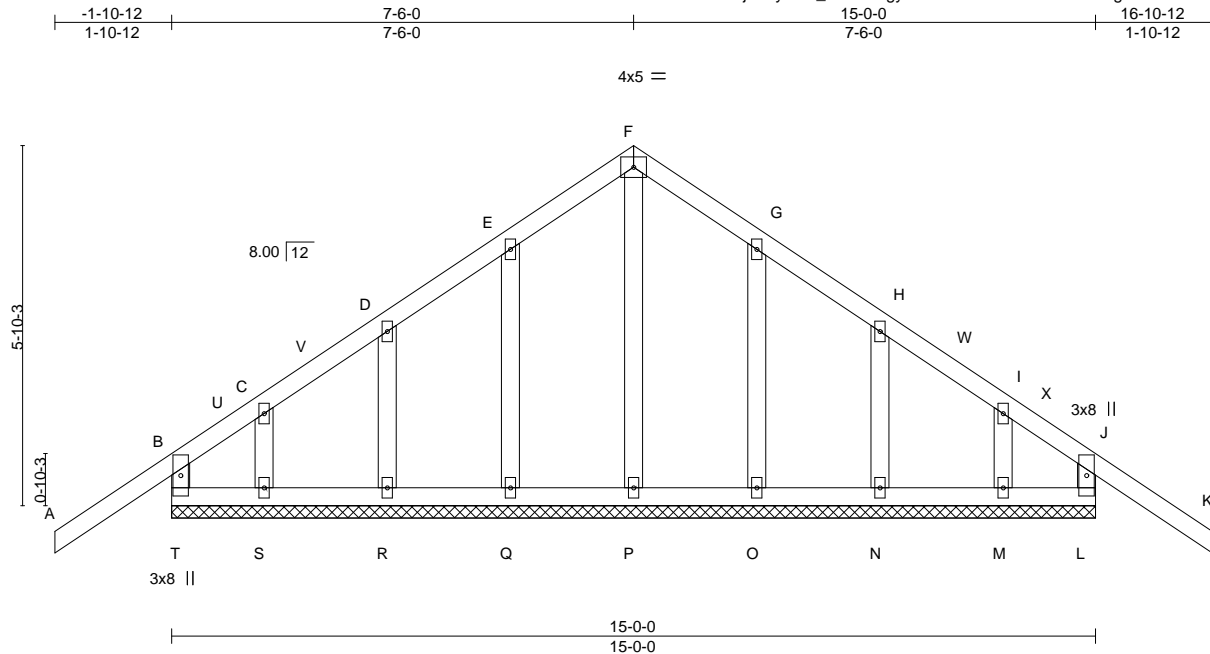
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220012	Truss 06	Truss Type Common Supported Gable	Qty 2	Ply 1	Hook Farms Pool House/MO 150732962
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Heartland Truss, Inc., Plattsburg, MO - 64477,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Mar 11 09:10:54 2022 Page 1

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Scale = 1:37.4

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0 (Roof Snow=25.0)	Plate Grip DOL 1.15		TC 0.61	Vert(LL) 0.03	K	n/r	120		MT20	244/190
TCDL 10.0	Lumber DOL 1.15		BC 0.05	Vert(CT) 0.01	K	n/r	90			
BCLL 0.0	Rep Stress Incr YES		WB 0.12	Horz(CT) 0.00	L	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R							
									Weight: 89 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 15'-0".

(lb) - Max Horz T=-179(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) T, L, Q, R, S, O, N, M

Max Grav All reactions 250 lb or less at joint(s) P, S, M except T=334(LC 18), L=334(LC 18), Q=290(LC 19), R=284(LC 19), O=290(LC 20), N=284(LC 20)

FORCES.

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

TOP CHORD B-T=-306/200, J-L=-306/200

WEBS E-Q=-252/108, G-O=-252/108

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-10-12 to 1-1-4, Exterior(2N) 1-1-4 to 4-6-0, Corner(3R) 4-6-0 to 10-6-0, Exterior(2N) 10-6-0 to 13-10-12, Corner(3E) 13-10-12 to 16-10-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.33 plate grip DOL=1.33
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-16; Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable requires continuous bottom chord bearing.
- 8) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 9) Gable studs spaced at 2'-0"-0" oc.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) T, L, Q, R, S, O, N, M.
- 12) 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.



March 14, 2022

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

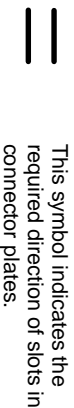
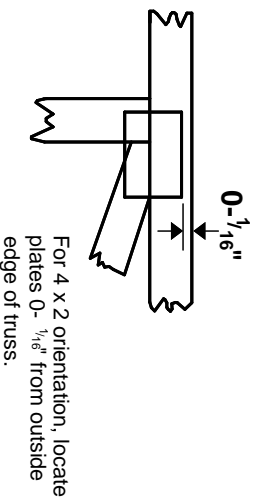
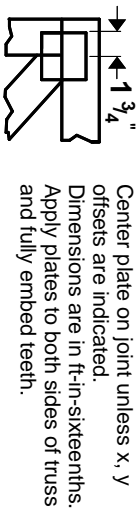
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



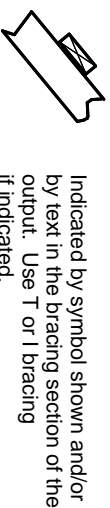
* Plate location details available in **MiTek 20/20** software or upon request.

PLATE SIZE

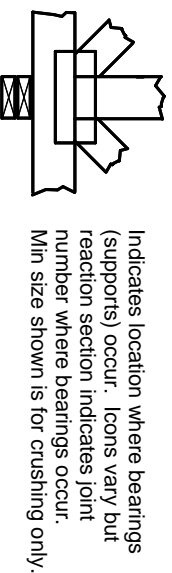
4 X 4

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

LATERAL BRACING LOCATION

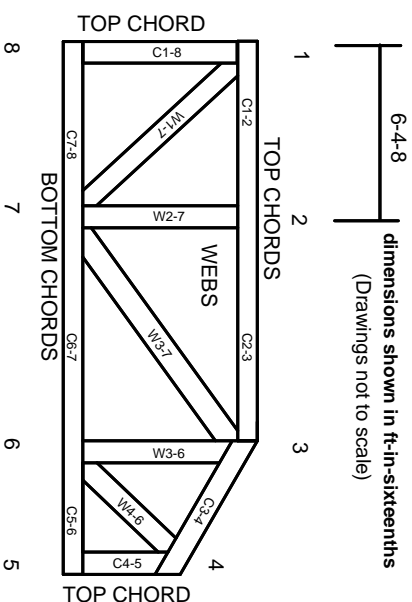


BEARING



Industry Standards:
ANSI/TPI 1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: 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.