



RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI

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

Re: H3-92
SUMMIT #148312 6/1/21 (MM)

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

Pages or sheets covered by this seal: I48228969 thru I48228973

My license renewal date for the state of Missouri is December 31, 2022.

Missouri COA: Engineering 001193



October 6, 2021

Fox, Steve, 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	SUMMIT #148312 6/1/21 (MM)	148228969
H3-92	T7	Piggyback Base	1	1	Job Reference (optional)	

Mid America Truss, Jefferson City, MO - 65101,

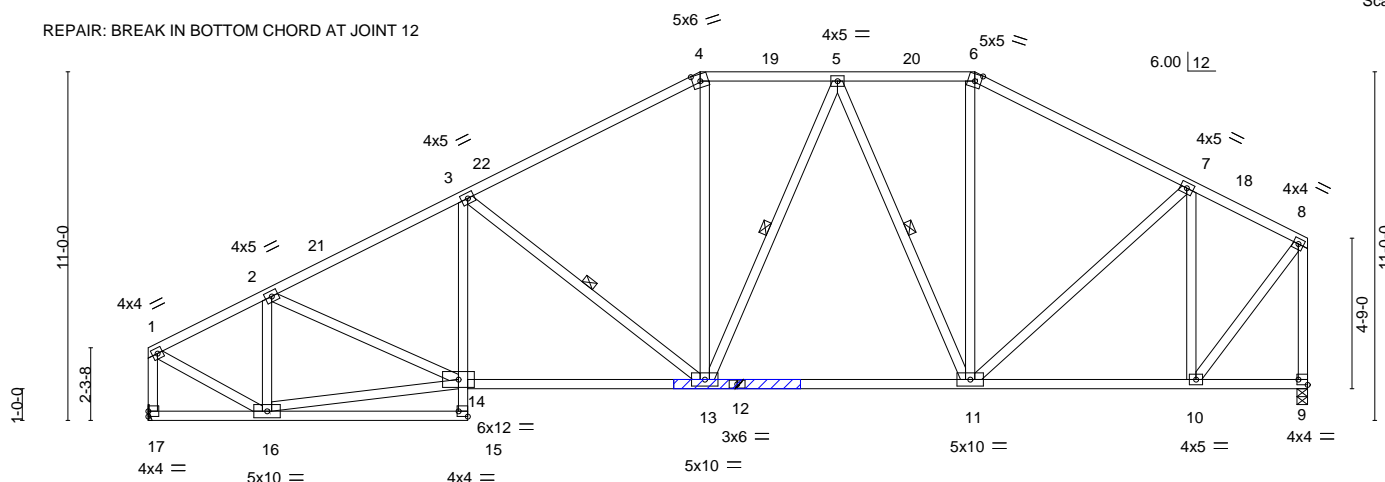
8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 07:37:42 2021 Page 1

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-1_?6FDT2xz77QhMA52ZoCALWVLMakleE7UdXltyWCFd

3-9-0	10-1-0	17-5-0	21-9-0	26-1-0	32-11-0	36-7-0
3-9-0	6-4-0	7-4-0	4-4-0	4-4-0	6-10-0	3-8-0

Scale = 1:72.7

REPAIR: BREAK IN BOTTOM CHORD AT JOINT 12



APPLY 2 X 4 X 4' SP NO.2 SCAB(S) TO EACH FACE OF TRUSS CENTERED ON DAMAGE. ATTACH WITH (0.131" X 3") NAILS PER THE FOLLOWING NAIL SCHEDULE: 2 x 3'S - 1 ROW, 2 x 4'S - 2 ROWS, 2 x 6'S AND LARGER - 3 ROWS: SPACED @ 4" O.C. STAGGER NAIL SPACING FROM FRONT FACE AND BACK FACE FOR A NET 2" O.C SPACING IN THE TRUSS. USE 2" MEMBER END DISTANCE.

3-9-0	10-1-0	17-5-0	26-1-0	32-11-0	36-7-0
3-9-0	6-4-0	7-4-0	8-8-0	6-10-0	3-8-0

Plate Offsets (X,Y)-- [4:0-2-15,0-2-9], [6:0-2-6,0-2-11], [9:Edge,0-2-0], [15:Edge,0-2-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL	1.15	TC 0.93	Vert(LL)	-0.09 13-14	>999	360	MT20	244/190
Snow (Pf/Pg) 20.4/20.0	Lumber DOL	1.15	BC 0.73	Vert(CT)	-0.23 13-14	>999	240		
TCDL 10.0	Rep Stress Incr	YES	WB 0.69	Horz(CT)	-0.08 17	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-SH						
BCDL 10.0								Weight: 265 lb	FT = 3%

LUMBER-

TOP CHORD 2x4 SP No.2 *Except*
1-4: 2x4 SP No.1
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 9-10.
WEBS 1 Row at midpt 5-11, 5-13, 3-13

REACTIONS.

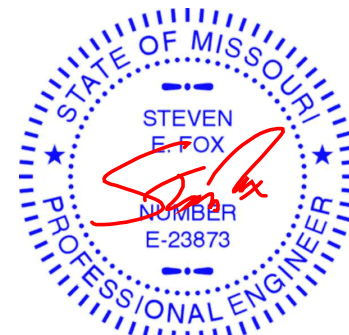
(size) 9=0-4-0, 17=Mechanical
Max Horz 9=223(LC 8)
Max Uplift 17=14(LC 11)
Max Grav 9=1634(LC 33), 17=1559(LC 33)

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

TOP CHORD 6-7=-1465/49, 7-8=-987/21, 4-5=-1452/89, 5-6=-1182/57, 1-2=-1572/24, 2-3=-2314/56,
3-4=-1783/66, 8-9=-1610/0, 1-17=-1531/25
BOT CHORD 13-14=0/2025, 11-13=0/1327, 10-11=-36/871
WEBS 7-10=-1005/59, 7-11=-17/509, 6-11=0/297, 5-11=-518/78, 5-13=-34/318, 4-13=0/348,
3-13=-733/131, 14-16=0/1304, 2-14=0/683, 2-16=-886/71, 8-10=0/1413, 1-16=0/1573

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=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- Plates checked for a plus or minus 3 degree rotation about its center.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 17.
- 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.



October 6, 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/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 #148312 6/1/21 (MM)	148228970
H3-92	T8	Piggyback Base	2	1	Job Reference (optional)	

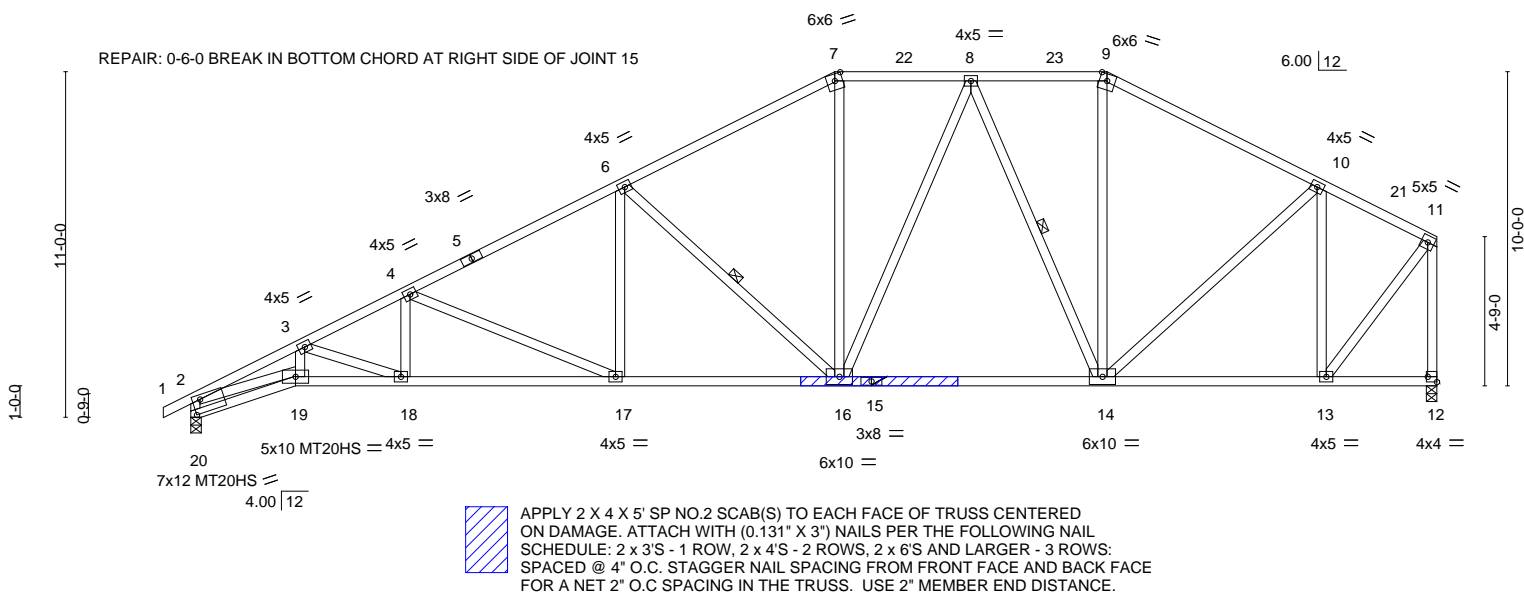
Mid America Truss, Jefferson City, MO - 65101,

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ID:Fpza38BVdcFyJDKwxgHN8dztCCb-zM7sguVJSaNg?WZDTbHlbQrD81IC8Wxao6eMlyWCFb

0-10-8	3-4-0	6-10-0	13-8-0	20-6-0	24-10-0	29-2-0	36-0-0	39-8-0
0-10-8	3-4-0	3-6-0	6-10-0	6-10-0	4-4-0	4-4-0	6-10-0	3-8-0

Scale = 1:73.3



	3-4-0	6-10-0	13-8-0	20-6-0	29-2-0	36-0-0	39-8-0
	3-4-0	3-6-0	6-10-0	6-10-0	8-8-0	6-10-0	3-8-0

Plate Offsets (X,Y)-- [7:0-2-15,0-2-9], [9:0-2-14,0-2-10], [12:Edge,0-2-0], [20:0-3-0,0-5-4]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL	1.15	TC 0.97	Vert(LL)	-0.22 17-18	>999	360	MT20	244/190
Snow (Pi/Pg) 20.4/20.0	Lumber DOL	1.15	BC 0.78	Vert(CT)	-0.46 17-18	>999	240	MT20HS	187/143
TCDL 10.0	Rep Stress Incr	YES	WB 0.92	Horz(CT)	-0.21 20	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-SH						
BCDL 10.0								Weight: 269 lb	FT = 3%

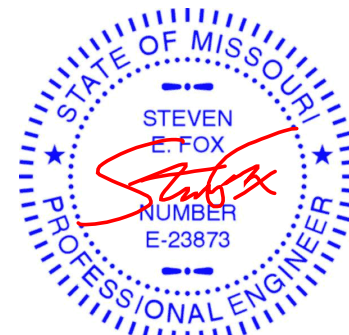
LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x4 SP No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
15-19: 2x4 SP No.1	WEBS 1 Row at midpt 8-14, 6-16
WEBS 2x4 SP No.2	

REACTIONS. (size) 12=0-4-0, 20=0-4-0
Max Horz 12=235(LC 8)
Max Uplift 20=37(LC 11)
Max Grav 12=1762(LC 34), 20=1693(LC 34)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 9-10=-1619/51, 10-11=-1067/22, 7-8=-1697/92, 8-9=-1322/58, 2-3=-4750/52,
3-4=-3751/54, 4-6=-2898/60, 6-7=-2042/73, 11-12=-1737/0, 2-20=-1754/61
BOT CHORD 18-19=-9/4090, 17-18=0/3360, 16-17=0/2511, 14-16=0/1521, 13-14=0/942,
19-20=-22/468
WEBS 10-13=-1099/53, 10-14=-12/587, 9-14=0/361, 8-14=-644/74, 8-16=-35/444, 7-16=0/490,
6-16=-1105/126, 6-17=0/491, 4-17=-920/85, 4-18=0/403, 3-18=-803/43, 3-19=0/695,
11-13=0/1528, 2-19=0/3766

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=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- Plates checked for a plus or minus 3 degree rotation about its center.
- Bearing at joint(s) 20 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 37 lb uplift at joint 20.
- 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.



October 6, 2021

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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 #148312 6/1/21 (MM)	148228971
H3-92	T10A	Piggyback Base	1	1	Job Reference (optional)	

Mid America Truss,
Jefferson City, MO - 65101,
8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 07:37:36 2021 Page 1
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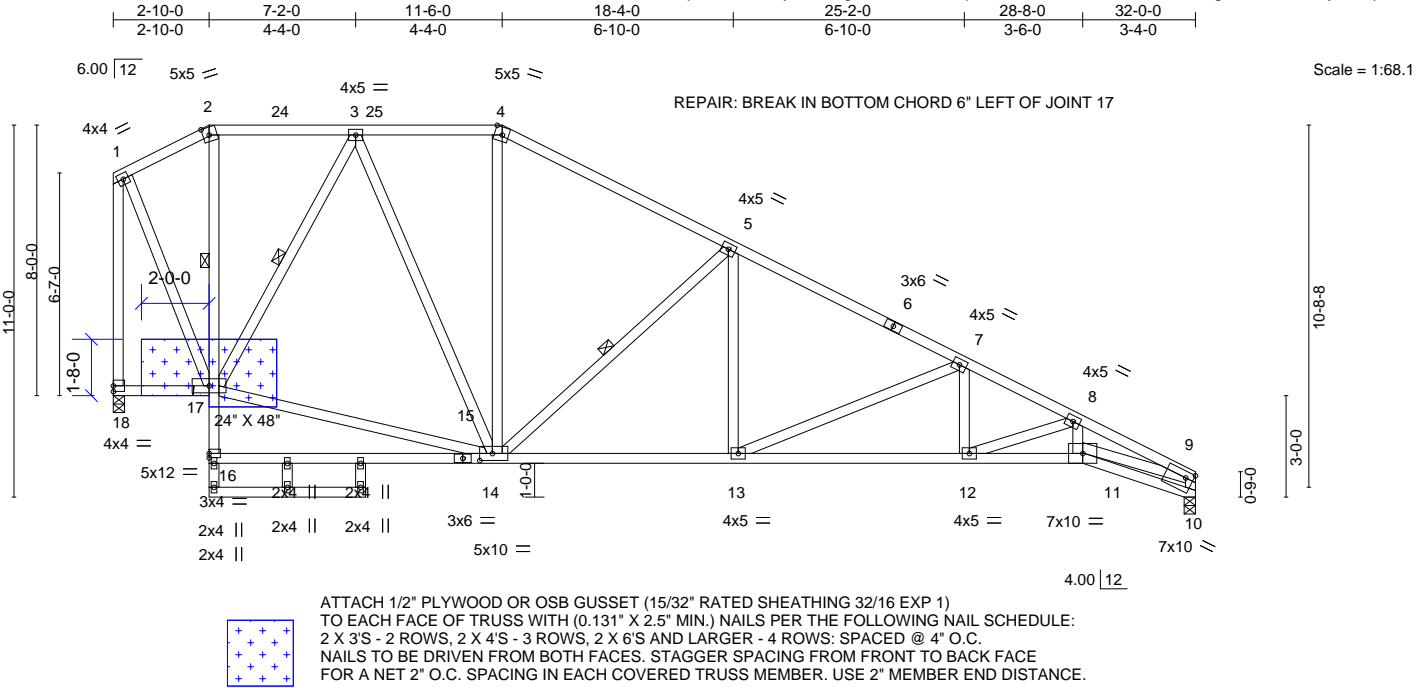


Plate Offsets (X,Y)--	2-10-0 2-10-0	7-5-8 4-7-8	11-6-0 4-0-8	18-4-0 6-10-0	25-2-0 6-10-0	28-8-0 3-6-0	32-0-0 3-4-0
	[2:0-2-3,0-2-11], [4:0-2-12,Edge], [10:Edge,0-2-4], [14:0-4-8,0-2-8]						

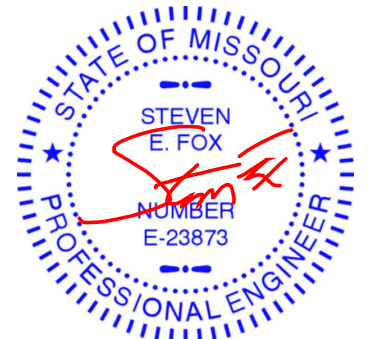
LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.15	TC 0.96	Vert(LL) -0.16	12-13	>999	360	MT20	244/190
Snow (Pf/Pg) 20.4/20.0	Lumber DOL 1.15	BC 0.89	Vert(CT) -0.34	12-13	>999	240		
TCDL 10.0	Rep Stress Incr YES	WB 0.81	Horz(CT) 0.13	10	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014	Matrix-SH						
BCDL 10.0							Weight: 245 lb	FT = 3%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
WEBS 2x4 SP No.2	1 Row at midpt 2-17
	1 Row at midpt 3-17, 5-14

REACTIONS.	(size) 18=0-4-0, 10=0-4-0
	Max Horz 18=285(LC 7)
	Max Uplift 10=39(LC 12)
	Max Grav 18=1268(LC 2), 10=1314(LC 33)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-509/64, 2-3=-425/61, 3-4=-989/120, 4-5=-1251/105, 5-7=-2116/95, 7-8=-2910/96, 8-9=-3764/108, 1-18=-1226/11, 9-10=-1339/64
BOT CHORD	13-14=0/1812, 12-13=-17/2603, 11-12=-71/3242, 10-11=-24/320
WEBS	14-17=0/774, 3-17=-778/98, 3-14=-55/599, 5-14=-1096/128, 5-13=0/470, 7-13=-857/91, 7-12=0/369, 8-12=-717/57, 8-11=0/553, 1-17=-27/1030, 9-11=-52/3037

- 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=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - Provide adequate drainage to prevent water ponding.
 - Plates checked for a plus or minus 3 degree rotation about its center.
 - Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 39 lb uplift at joint 10.
 - 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.



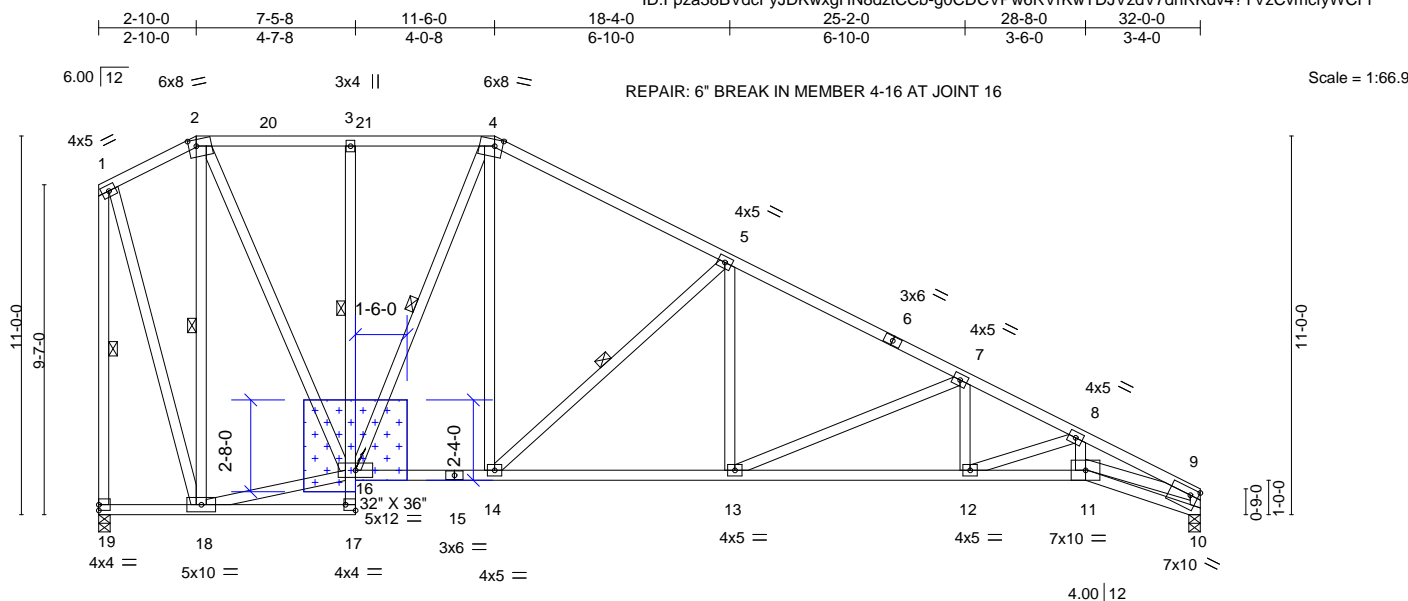
October 6,2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT #148312 6/1/21 (MM)	148228972
H3-92	T10B	PIGGYBACK BASE	5	1	Job Reference (optional)	

Mid America Truss, Jefferson City, MO - 65101,

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ID:Fpza38BVdcFyJDKwXgHN8dztCCb-g0CDCVPw6RVrKwTDJvZdV7dhRKdv4?YvZvmcfyWCFI



ATTACH 1/2" PLYWOOD OR OSB GUSSET (15/32" RATED SHEATHING 32/16 EXP 1)
TO EACH FACE OF TRUSS WITH (0.131" X 2.5" MIN.) NAILS PER THE FOLLOWING NAIL SCHEDULE:
2 X 3'S - 2 ROWS, 2 X 4'S - 3 ROWS, 2 X 6'S AND LARGER - 4 ROWS: SPACED @ 4" O.C.
NAILS TO BE DRIVEN FROM BOTH FACES. STAGGER SPACING FROM FRONT TO BACK FACE
FOR A NET 2" O.C. SPACING IN EACH COVERED TRUSS MEMBER. USE 2" MEMBER END DISTANCE.



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Plate Offsets (X,Y)-- [2:0-2-11,0-2-3], [4:0-2-13,0-2-4], [10:Edge,0-2-4], [17:Edge,0-2-0]														
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.		in (loc) l/defl L/d		PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL		1.15		TC	0.88	Vert(LL)	-0.17	12-13	>999	360	MT20	244/190
Snow (Pf/Pg)	20.4/20.0	Lumber DOL		1.15		BC	0.89	Vert(CT)	-0.36	12-13	>999	240		
TCDL	10.0	Rep Stress Incr		YES		WB	0.81	Horz(CT)	0.18	10	n/a	n/a		
BCLL	0.0	Code IRC2018/TPI2014				Matrix-SH							Weight: 258 lb	FT = 3%
BCDL	10.0													

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

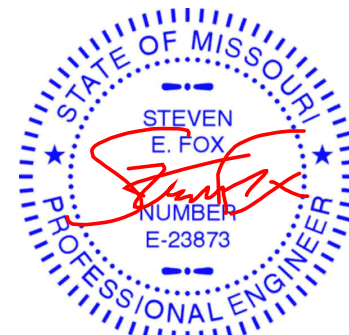
BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
1 Row at midpt 3-16
WEBS 1 Row at midpt 2-18, 4-16, 5-14, 1-19

REACTIONS. (size) 19=0-4-0, 10=0-4-0
Max Horz 19=-322(LC 7)
Max Uplift 19=-19(LC 7), 10=-26(LC 12)
Max Grav 19=1268(LC 2), 10=1314(LC 33)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-386/97, 2-3=-734/78, 3-4=-735/78, 4-5=-1271/78, 5-7=-2117/63, 7-8=-2909/62,
8-9=-3765/66, 1-19=-1243/31, 9-10=-1339/50
BOT CHORD 18-19=-80/264, 3-16=-430/86, 14-16=0/1013, 13-14=0/1813, 12-13=0/2602,
11-12=-35/3242, 10-11=-21/320
WEBS 2-18=-1000/73, 16-18=-2/343, 2-16=-3/1045, 4-16=-756/51, 4-14=-8/852,
5-14=-1094/122, 5-13=0/477, 7-13=-855/90, 7-12=0/367, 8-12=-718/51, 8-11=0/555,
1-18=-55/1060, 9-11=-18/3037

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=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- Plates checked for a plus or minus 3 degree rotation about its center.
- Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint 19 and 26 lb uplift at joint 10.
- 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.



October 6, 2021

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

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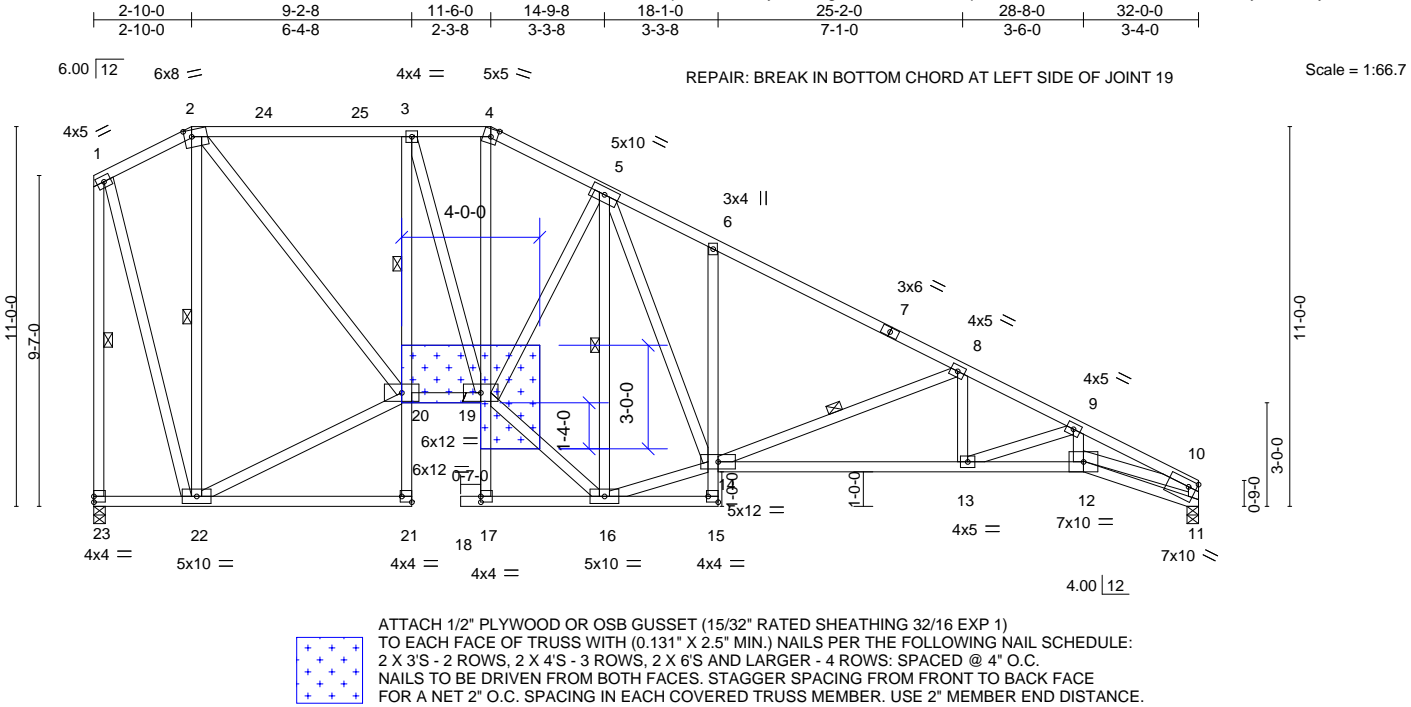


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT #148312 6/1/21 (MM)	148228973
H3-92	T11	Piggyback Base	1	1	Job Reference (optional)	

Mid America Truss,
Jefferson City, MO - 65101,
8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Oct 6 07:37:40 2021 Page 1

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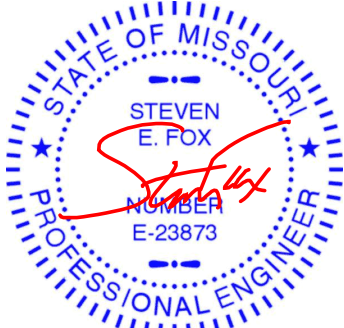
	2-10-0	9-2-8	11-2-8	14-9-8	18-1-0	25-2-0	28-8-0	32-0-0				
	2-10-0	6-4-8	2-0-0	3-7-0	3-3-8	7-1-0	3-6-0	3-4-0				
Plate Offsets (X,Y)--	[2:0-2-9,0-2-5], [4:0-2-5,0-2-10], [11:Edge,0-2-4], [15:Edge,0-2-0], [17:0-0-0,0-2-0], [21:Edge,0-2-0]											
LOADING (psf)	SPACING-		2-0-0	CSI.		DEFL.		in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL		1.15	TC	0.78	Vert(LL)	-0.19	13-14	>999	360	MT20	244/190
Snow (Pf/Pg) 20.4/20.0	Lumber DOL		1.15	BC	0.90	Vert(CT)	-0.42	13-14	>900	240		
TCDL 10.0	Rep Stress Incr		YES	WB	0.74	Horz(CT)	0.24	11	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014			Matrix-SH							Weight: 294 lb	FT = 3%
BCDL 10.0												

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-5-1 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
WEBS 2x4 SP No.2	1 Row at midpt 3-20
	10-0-0 oc bracing: 17-19
	WEBS 1 Row at midpt 2-22, 5-16, 8-14, 1-23

REACTIONS. (size) 23=0-4-0, 11=0-4-0
Max Horz 23=-322(LC 7)
Max Uplift 23=-13(LC 7), 11=-23(LC 12)
Max Grav 23=1278(LC 2), 11=1319(LC 33)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-391/93, 2-3=-1097/28, 3-4=-1253/41, 4-5=-1460/31, 5-6=-2021/134, 6-8=-2072/57, 8-9=-2950/53, 9-10=-3761/55, 1-23=-1263/18, 10-11=-1346/49
BOT CHORD 22-23=-80/264, 3-20=-711/101, 19-20=0/1096, 4-19=0/495, 6-14=-492/140, 13-14=0/2650, 12-13=-24/3238, 11-12=-22/329
WEBS 2-22=-1087/16, 20-22=0/402, 2-20=0/1255, 3-19=-50/585, 16-19=0/1596, 5-19=-27/300, 5-16=-1335/0, 14-16=0/1210, 5-14=-73/1398, 8-14=-961/96, 8-13=0/377, 9-13=-677/45, 9-12=0/545, 1-22=-48/1093, 10-12=-6/3022

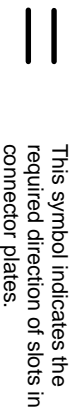
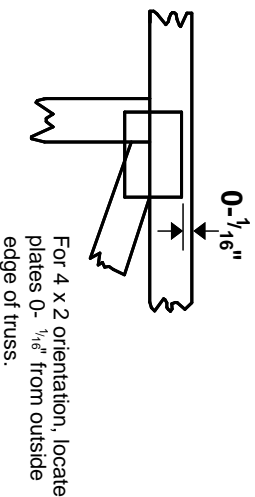
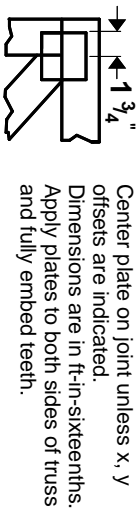
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - Provide adequate drainage to prevent water ponding.
 - Plates checked for a plus or minus 3 degree rotation about its center.
 - Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 13 lb uplift at joint 23 and 23 lb uplift at joint 11.
 - 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.



October 6,2021

Symbols

PLATE LOCATION AND ORIENTATION



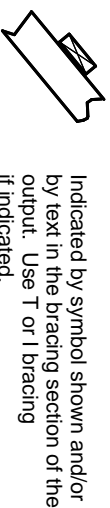
* Plate location details available in **MiTek 20/20** software or upon request.

PLATE SIZE

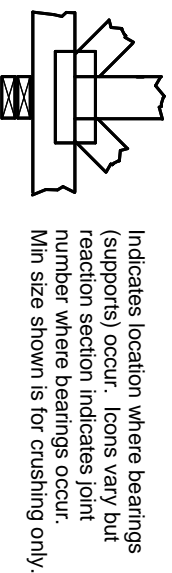
4 X 4

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

LATERAL BRACING LOCATION

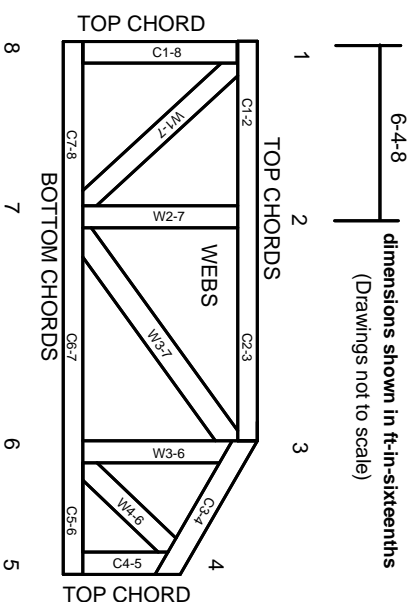


BEARING



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.