



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

Re: 211674
1626 Plan

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: I51377027 thru I51377027

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

Missouri COA: Engineering 001193



April 15, 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 211674	Truss A1G	Truss Type Piggyback Base	Qty 1	Ply 1	1626 Plan	Units: 1.0 Eng: JRC	151377027
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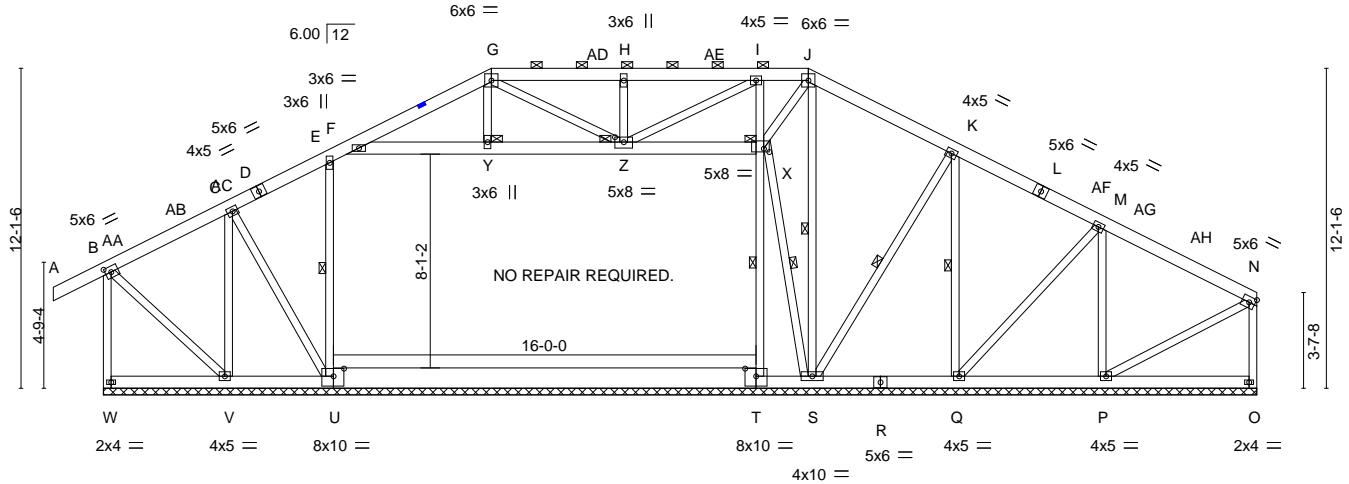
Heartland Truss, Inc, Plattsburg, MO - 64477,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Apr 14 09:25:12 2022 Page 1
ID:0FUyeDdDlxuQTqjlxexWhyTED?H26B3zpI8RhY5_Cztdz0VjZ02QzPuiDyhw1tunzQrMr

1-10-12	4-8-14	9-2-4	14-8-4	19-8-6	24-10-4	26-8-4	32-3-0	37-9-12	43-8-0
1-10-12	4-8-14	4-5-6	5-6-0	5-0-2	5-1-14	1-10-0	5-6-12	5-6-12	5-10-4

REPAIR: 0-3-8 WIDE BY 0-1-8 DEEP NOTCH IN TOP CHORD CENTERED 12-0-4 FROM LEFT END

Scale = 1:87.2



LUMBER MUST BE CUT CLEANLY AND ACCURATELY.
REMAINING LUMBER MUST BE UNDAMAGED AND UNDISTURBED.

4-8-14	9-2-4	14-8-4	24-10-4	26-8-4	32-3-0	37-9-12	43-8-0
4-8-14	4-5-6	5-6-0	10-2-0	1-10-0	5-6-12	5-6-12	5-10-4

Plate Offsets (X,Y)-- [B:0-2-11,0-2-8], [T:0-5-0,0-3-8], [U:0-4-12,0-3-8], [X:0-2-8,0-1-8], [Z:0-4-0,0-2-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0 (Roof Snow=25.0)	2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15	TC 0.33 BC 0.24 WB 0.52 Matrix-S	in (loc) l/def L/d Vert(LL) 0.00 A n/r 120 Vert(CT) 0.00 A n/r 90 Horz(CT) 0.00 O n/a n/a	MT20	244/190
TCDL 10.0	Rep Stress Incr YES				
BCLL 0.0	Code IRC2018/TPI2014				
BCDL 10.0				Weight: 462 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP 2400F 2.0E *Except*
T-U: 2x10 SP 2400F 2.0E, O-R: 2x6 SP No.1
WEBS 2x4 SP No.3 *Except*
I-T,B-V,N-P: 2x4 SP No.2, F-X: 2x6 SP No.1

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): G-J.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: V-W,U-V.
WEBS 1 Row at midpt E-U, T-X, S-X, J-S, K-S, K-Q
JOINTS 1 Brace at Jt(s): X, Y, Z

REACTIONS.

All bearings 43-8-0.
(lb) - Max Horz W=246(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) W, V, O, P except U=110(LC 12), S=206(LC 8), Q=102(LC 13)
Max Grav All reactions 250 lb or less at joint(s) except W=586(LC 34), U=1349(LC 34), V=297(LC 34), T=874(LC 33), O=418(LC 34), S=658(LC 33), Q=676(LC 34), P=578(LC 34)

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

TOP CHORD E-F=-423/263, F-G=-1211/367, G-H=-1183/420, H-I=-1182/420, J-K=-147/253, K-M=-256/179, M-N=-269/107, B-W=-535/171, N-O=-368/132
WEBS C-V=-370/53, E-U=-1064/263, T-X=-526/82, I-X=-1119/201, S-X=-623/161, F-Y=-98/935, Y-Z=-100/932, G-Z=-284/140, H-Z=-627/155, I-Z=-196/1261, J-X=-287/56, K-Q=-459/116, M-P=-551/177

NOTES-

- 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 3-0-14, Exterior(2N) 3-0-14 to 9-8-10, Corner(3R) 9-8-10 to 19-8-6, Exterior(2N) 19-8-6 to 21-8-10, Corner(3R) 21-8-10 to 31-7-14, Exterior(2N) 31-7-14 to 38-6-10, Corner(3E) 38-6-10 to 43-6-4 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
- 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
- Unbalanced snow loads have been considered for this design.
- 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.
- Provide adequate drainage to prevent water ponding.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Ceiling dead load (5.0 psf) on member(s) E-F, F-Y, Y-Z, X-Z
- Bearing at joint(s) W, O 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 100 lb uplift at joint(s) W, V, O, P except (jt=lb) U=110, S=206, Q=102.
- 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.
- Attic room checked for L/360 deflection.



April 15, 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



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