



MiTek USA, Inc.

16023 Swingley Ridge Rd
Chesterfield, MO 63017
314-434-1200

Re: 2720415
Roeser/1483 Winterset

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: I45716356 thru I45716469

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

Missouri COA: Engineering 001193



April 20, 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	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	A01	Roof Special	1	1	

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

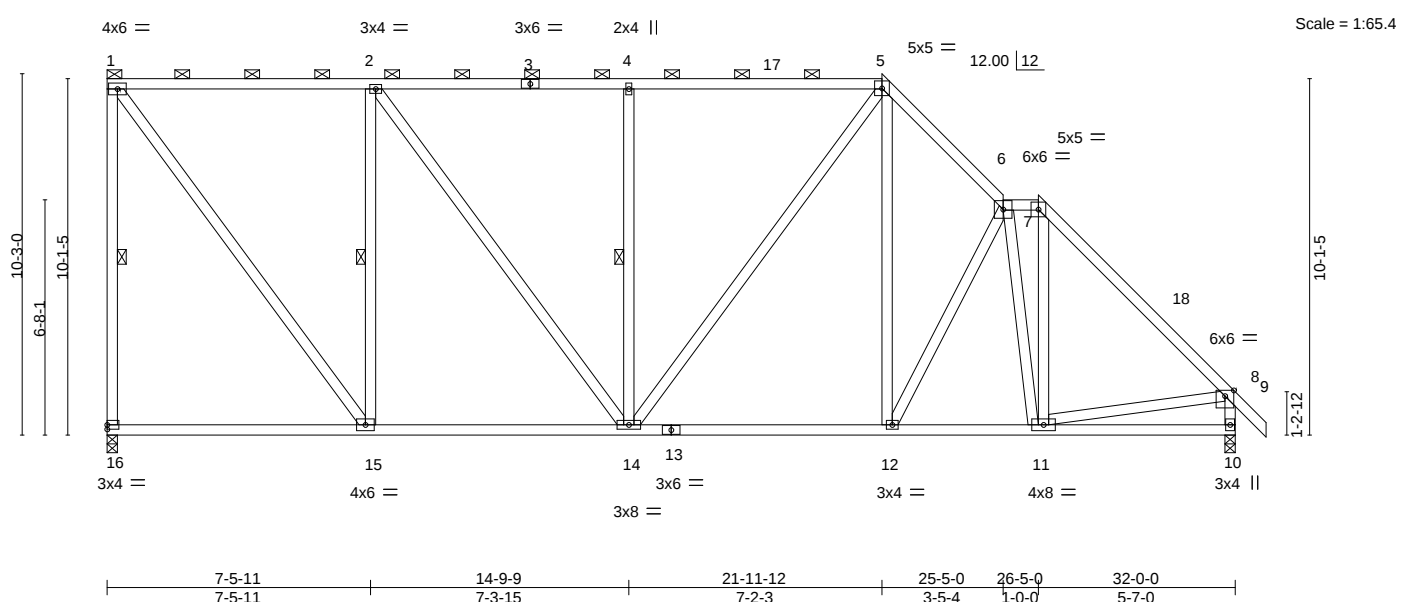
DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

45716356

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:11 2021 Page 1

ID:ja0L6Z4CEmlyeqhDgBS87bzZkif-lTgQgcGE1gw8cVoUd_Vv8kxy/PDF2KPU_A0g6ZP80E



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 0.99	Vert(LL)	-0.08 15-16	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.47	Vert(CT)	-0.18 12-14	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.96	Horz(CT)	0.03 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS					Weight: 192 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD 2x4 SPF No.2		TOP CHORD	Structural wood sheathing directly applied or 4-3-7 oc purlins, except end verticals, and 2-0-0 oc purlins (4-2-6 max.): 1-5, 6-7.
BOT CHORD 2x4 SPF No.2		BOT CHORD	Rigid ceiling directly applied or 9-11-3 oc bracing.
WEBS 2x4 SPF No.2		WEBS	1 Row at midpt 1-16, 2-15, 4-14

REACTIONS. (size) 16=0-3-8, 10=0-3-8
Max Horz 16=-407(LC 10)
Max Uplift 16=-357(LC 8), 10=-183(LC 13)
Max Grav 16=1426(LC 1), 10=1499(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-16=-1361/372, 1-2=-865/278, 2-4=-1186/325, 4-5=-1187/325, 5-6=-1466/361, 6-7=-1020/253, 7-8=-1579/267, 8-10=-1442/266
BOT CHORD 15-16=-338/449, 14-15=-262/865, 12-14=-149/1003, 11-12=-112/1139
WEBS 1-15=-365/1426, 2-15=-987/374, 2-14=-171/538, 4-14=-537/227, 5-14=-195/408, 5-12=-156/402, 6-12=-317/229, 7-11=-91/689, 8-11=-139/849, 6-11=-770/159

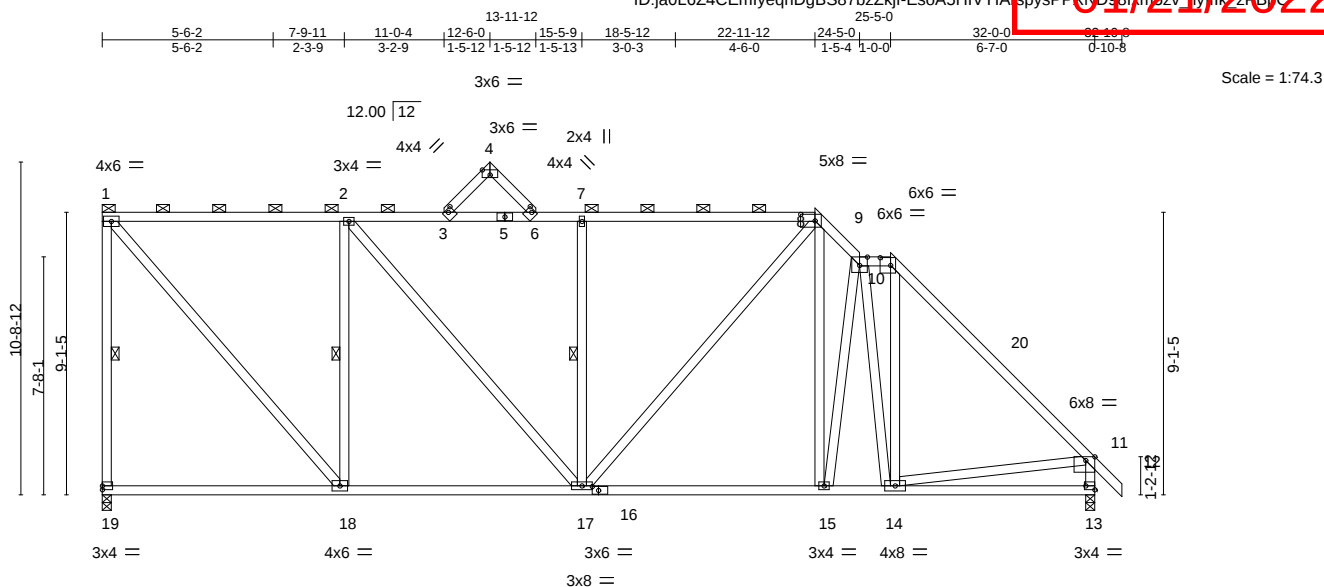
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-4-2, Interior(1) 3-4-2 to 21-11-12, Exterior(2E) 21-11-12 to 25-5-0, Interior(1) 25-5-0 to 26-5-0, Exterior(2R) 26-5-0 to 29-7-6, Interior(1) 29-7-6 to 32-10-8 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) 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 100 lb uplift at joint(s) except (jt=lb) 16=357, 10=183.
 - 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 20,2021

Builders FirstSource (Valley Center).	Valley Center, KS - 67147.
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8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:13 2021 Page
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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 0.84	Vert(LL) -0.10 18-19	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.51	Vert(CT) -0.21 15-17	>999	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.84	Horz(CT) 0.03 13	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS				Weight: 194 lb	FT = 20%

REACTIONS. (size) 19=0-3-8, 13=0-3-8
 Max Horz 19=-408(LC 8)
 Max Uplift 19=-334(LC 12), 13=-186(LC 13)
 Max Grav 19=1426(LC 1), 13=1499(LC 1)

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

TOP CHORD
1-19=-1357/354, 1-2=-994/286, 2-3=-1328/331, 3-6=-1240/323, 6-7=-1328/341,
7-8=-1328/342, 8-9=-1418/363, 9-10=-1010/269, 10-11=-1594/273, 11-13=-1434/270

BOT CHORD
18-19=-303/407, 17-18=-127/994, 15-17=-25/1054, 14-15=-33/1090, 13-14=-208/288

WEBS
8-15=-171/372, 9-15=-266/212, 9-14=-593/82, 10-14=-37/541, 11-14=-71/749,
2-18=-964/345, 7-17=-549/219, 8-17=-86/423, 1-18=-352/1492, 2-17=-161/509

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCFL=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 3-4-2, Interior(1) 3-4-2 to 12-6-0, Exterior(2E) 12-6-0 to 13-11-12 ; Interior(1) 22-11-12 to 25-5-0, Exterior(2R) 25-5-0 to 28-7-6, Interior(1) 28-7-6 to 32-10-8 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) 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 100 lb uplift at joint(s) except (jt=lb) 19=334, 13=186.
- 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 20, 2021



WARNING – Velly design parameters are READ-ONLY on this and INCLUDED WITH REFERENCE PAGE MH-1413 (Rev. 3/29/2020) 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	Roeser/1483 Winterset
2720415	A03	Roof Special	1	1	

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:15 2021 Page 1

01/21/2022

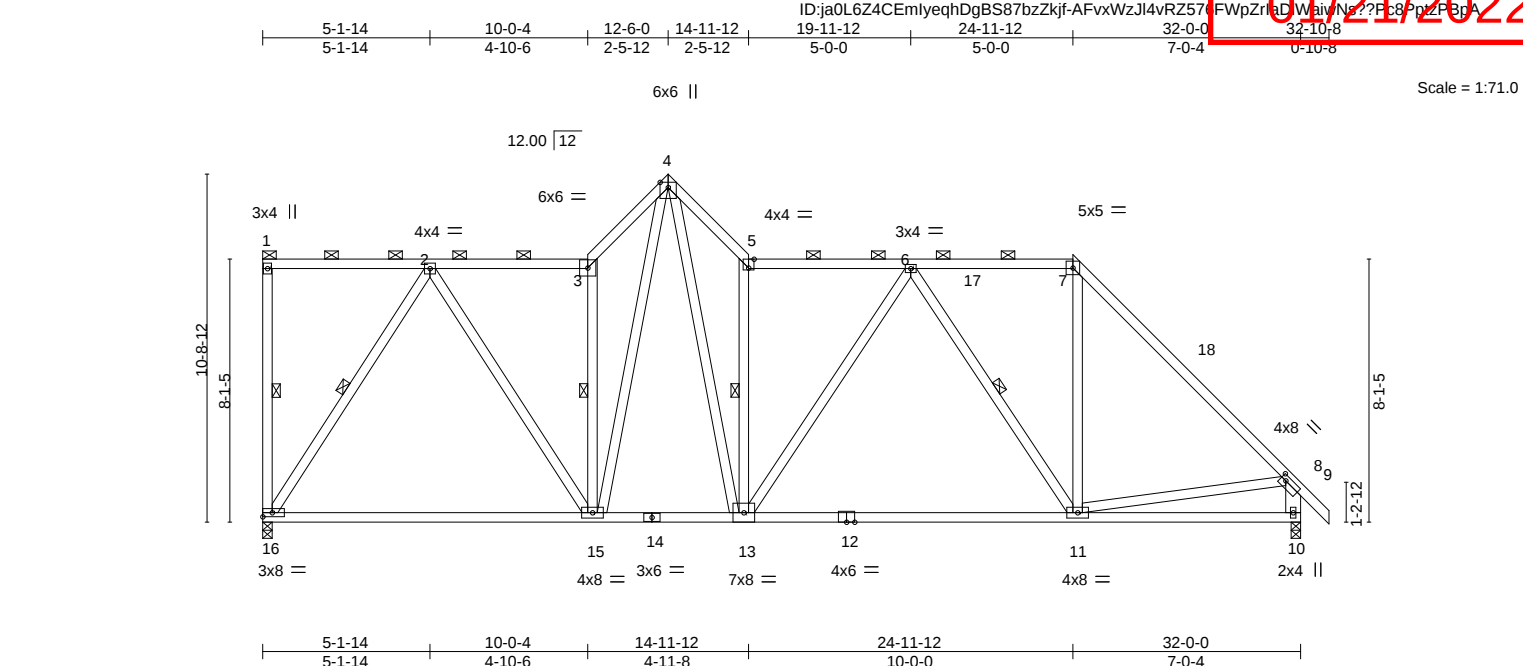


Plate Offsets (X,Y)-- [5:0-2-0,Edge], [8:0-2-0,0-1-12]										
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.33 15-16	>999	240	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.67 15-16	>566	180	
BCLL	0.0	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.05 10	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS						Weight: 190 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (4-6-0 max.): 1-3, 5-7.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2 *Except* 8-10: 2x6 SPF No.2	WEBS 1 Row at midpt 1-16, 3-15, 5-13, 2-16, 6-11

REACTIONS. (size) 16=0-3-8, 10=0-3-8
Max Horz 16=-395(LC 8)
Max Uplift 16=-242(LC 12), 10=-273(LC 13)
Max Grav 16=1422(LC 1), 10=1502(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1265/298, 3-4=-1821/492, 4-5=-2075/536, 5-6=-1446/338, 6-7=-996/315, 7-8=-1597/303, 8-10=-1454/293
BOT CHORD 15-16=-189/773, 13-15=-140/1044, 11-13=-187/1350, 10-11=-260/314
WEBS 3-15=-1466/417, 5-13=-1657/464, 7-11=-54/625, 8-11=-166/723, 2-15=-160/911, 2-16=-1409/291, 4-13=-486/1688, 4-15=-284/883, 6-11=-653/193, 6-13=-2/253

- 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 3-4-2, Interior(1) 3-4-2 to 12-6-0, Exterior(2E) 12-6-0 to 14-11-12, Interior(1) 14-11-12 to 24-11-12, Exterior(2R) 24-11-12 to 28-2-2, Interior(1) 28-2-2 to 32-10-8 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) 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 100 lb uplift at joint(s) except (jt=lb) 16=242, 10=273.
 - 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:41:17 2021 Page 1
 ID:ja0L6Z4CEmlyeqhDgBS87bzZKjf-7d1hxfL?cWhHKQCdEcD336DhNOpf5l1wcWzFBr8
 4-7-14 9-0-4 12-6-0 15-11-12 20-11-12 25-11-12 32-0-0 32-10-8
 4-7-14 4-4-6 3-5-12 3-5-12 5-0-0 5-0-0 6-0-4 6-10-8

[illegible]

LUMBER-		BRACING-
TOP CHORD	2x4 SPF No.2	TOP CHORD
BOT CHORD	2x4 SPF No.2	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-2-5 max.): 1-3, 5-7.
WEBS	2x4 SPF No.2	BOT CHORD
		Rigid ceiling directly applied.
REACTIONS.	(size) 14=0-3-8, 10=0-3-8	WEBS
	Max Horz 14=-380(LC 8)	1 Row at midpt
	Max Uplift 14=-230(LC 12), 10=-273(LC 13)	2-14, 3-13, 5-12, 4-12, 6-11
	Max Grav 14=1426(LC 1), 10=1499(LC 1)	

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

TOP CHORD	2-3=-1369/303, 3-4=-1976/524, 4-5=-2411/589, 5-6=-1679/362, 6-7=-1030/304, 7-8=-1610/298, 8-10=-1462/286
BOT CHORD	13-14=-190/815, 12-13=-126/1046, 11-12=-193/1499
WEBS	2-14=-1444/280, 2-13=-171/1003, 3-13=-1578/449, 5-12=-1914/520, 7-11=-53/670, 8-11=-140/852, 4-12=-518/1936, 4-13=-300/945, 6-11=-789/187, 6-12=-22/315

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDF=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 3-4-2, Interior(1) 3-4-2 to 12-6-0, Exterior(2E) 12-6-0 to 15-11-12, Interior(1) 15-11-12 to 25-11-12, Exterior(2R) 25-11-12 to 29-2-2, Interior(1) 29-2-2 to 32-10-8 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) 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 100 lb uplift at joint(s) except (jt=lb) 14=230, 10=273.
- 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 20, 2021



WARNING – verify design parameters and READ NOTES ON THIS AND INCLUDED WELDER REFERENCE PAGE MH-1413 (Rev. 3/25/2020) BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for the 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, 2671 Crain Highway, Suite 203 Waldorf, MD 20601.



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset	RELEASE FOR CONSTRUCTION
2720415	A05	Roof Special	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:35:18 2021 Page 1

ID:ja0L6Z4CEmlyeqhDgBS87bzZkif-bqb38?LdNqp8yaqdt7YwD-Dnija4WR5a-N3PCZF87
4-1-14 8-0-4 12-6-0 16-11-12 21-11-12 26-11-12 32-0-0 34-10-8
4-1-14 3-10-6 4-5-12 4-5-12 5-0-0 5-0-0 5-0-4 0-10-8

4x8 ||

Scale = 1:73.6

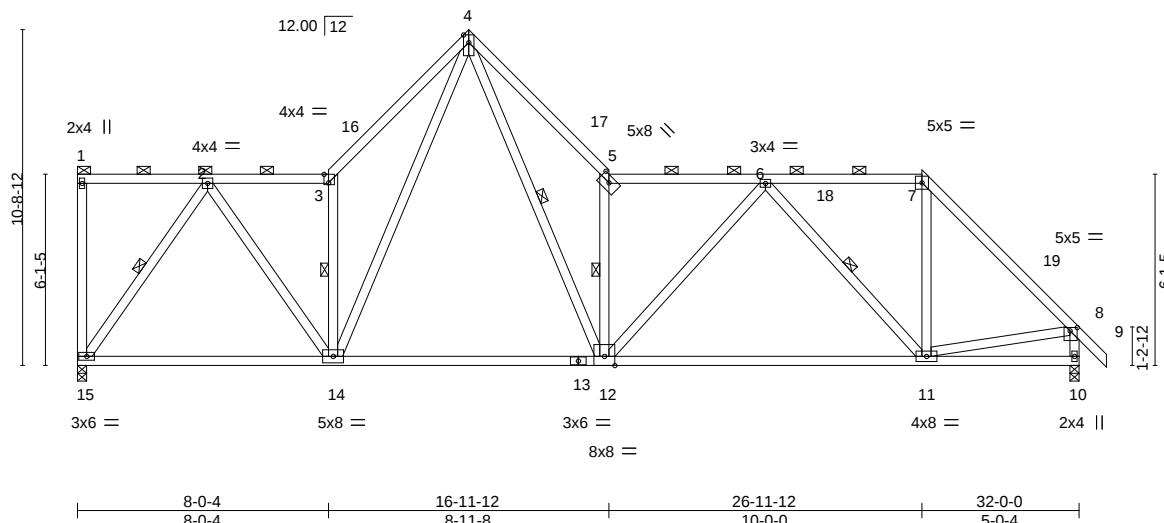


Plate Offsets (X,Y)-- [3:0-1-12,Edge], [5:0-4-0,0-2-5], [8:0-2-12,0-1-4]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.26 11-12 >999	240	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.57 11-12 >671	180	
BCLL	0.0	Rep Stress Incr	YES	WB	0.67	Horz(CT)	0.05 10 n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS					
Weight: 171 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 2-11-4 oc purlins, except end verticals, and 2-0-0 oc purlins (3-10-6 max.): 1-3, 5-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 2-15, 3-14, 5-12, 6-11, 4-12

REACTIONS.

(size) 15=0-3-8, 10=0-3-8
Max Horz 15=-366(LC 8)
Max Uplift 15=-219(LC 12), 10=-273(LC 13)
Max Grav 15=1426(LC 1), 10=1499(LC 1)

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

TOP CHORD 2-3=-1494/300, 3-4=-2168/540, 4-5=-2826/646, 5-6=-1968/382, 6-7=-1035/282, 7-8=-1591/291, 8-10=-1478/280
BOT CHORD 14-15=-192/865, 12-14=-113/1040, 11-12=-200/1674
WEBS 2-15=-1503/283, 2-14=-176/1108, 3-14=-1724/464, 5-12=-2227/579, 7-11=-66/719, 8-11=-116/943, 6-11=-977/184, 6-12=-40/442, 4-14=-305/1066, 4-12=-566/2262

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) 0-1-12 to 3-4-2, Interior(1) 3-4-2 to 12-6-0, Exterior(2R) 12-6-0 to 15-8-6, Interior(1) 15-8-6 to 26-11-12, Exterior(2R) 26-11-12 to 30-2-2, Interior(1) 30-2-2 to 32-10-8 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
- 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 100 lb uplift at joint(s) except (jt=lb) 15=219, 10=273.
- 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.



April 20,2021

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



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Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset	RELEASE FOR CONSTRUCTION
2720415	A06	ROOF SPECIAL	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						DEVELOPMENT SERVICES
8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:35:19 2021 Page 1						LEE'S SUMMIT, MISSOURI
ID:ja0L6Z4CEmlyeqhDgBS87bzZkjf-309RMLMG88x?akl0lfenTC00Dv33UJwBKE66jvzFBr6						45716361

7-0-4	12-6-0	17-11-12	23-1-8	27-11-12	32-0-0	34-10-8
7-0-4	5-5-12	5-5-12	5-1-12	4-10-4	4-0-4	0-10-8

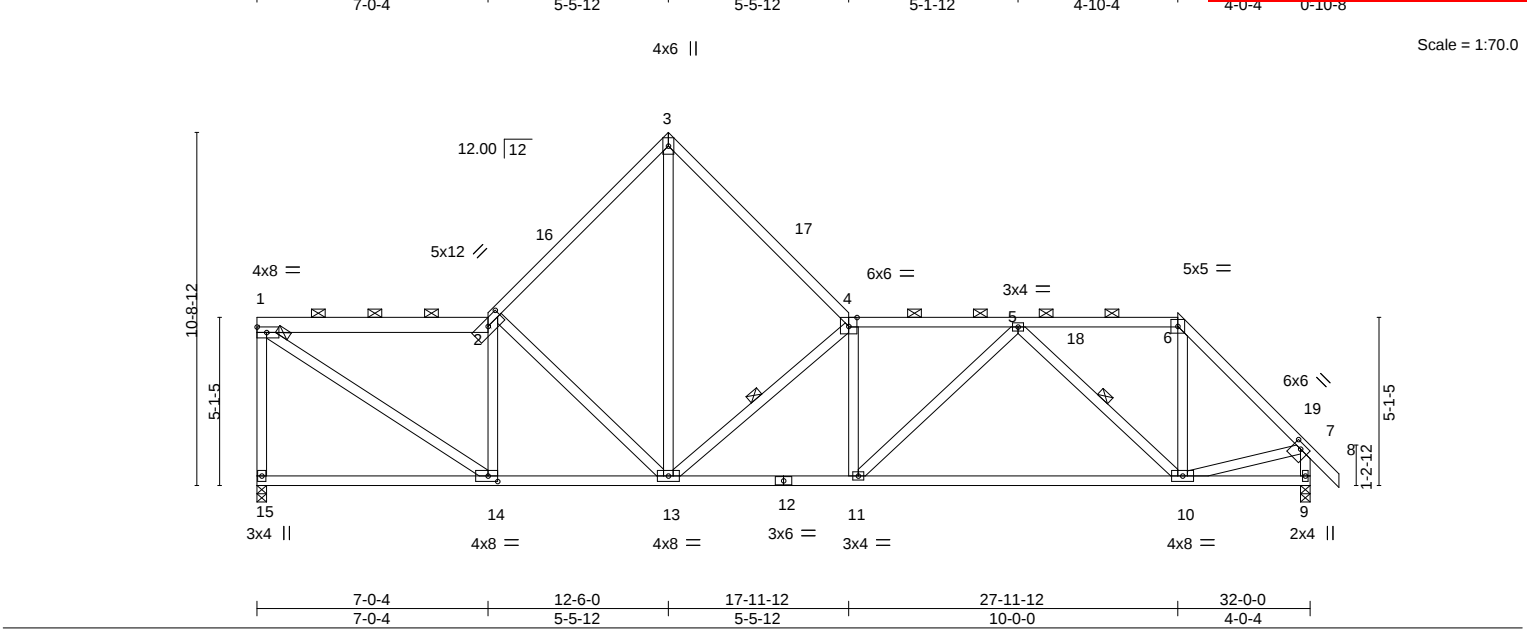


Plate Offsets (X,Y)--	[2:0-6-0,0-2-5], [4:0-3-0,Edge], [7:0-3-0,0-1-15], [14:0-3-8,0-2-0]					
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl
TCLL 25.0	Plate Grip DOL	1.15	TC 0.61	Vert(LL)	-0.24	10-11
TCDL 10.0	Lumber DOL	1.15	BC 0.80	Vert(CT)	-0.53	10-11
BCLL 0.0	Rep Stress Incr	YES	WB 0.73	Horz(CT)	0.07	9
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S		n/a	n/a
						PLATES MT20
						GRIP 197/144
						Weight: 165 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except*	TOP CHORD Structural wood sheathing directly applied or 3-4-15 oc purlins, except end verticals, and 2-0-0 oc purlins (3-6-6 max.): 1-2, 4-6.
1-2: 2x6 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
BOT CHORD 2x4 SPF No.2	6-0-0 oc bracing: 9-10.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 4-13, 5-10
REACTIONS.	
(size) 15=0-3-8, 9=0-3-8	
Max Horz 15=-272(LC 13)	
Max Uplift 15=-204(LC 12), 9=-267(LC 13)	
Max Grav 15=1426(LC 1), 9=1499(LC 1)	

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-15=-1359/241, 1-2=-1666/268, 2-3=-1630/358, 3-4=-1620/340, 4-5=-2323/390, 5-6=-1006/250, 6-7=-1546/269, 7-9=-1499/264
BOT CHORD	14-15=-229/272, 13-14=-181/1633, 11-13=-231/2329, 10-11=-218/1878
WEBS	1-14=-320/1976, 2-14=-968/241, 2-13=-778/223, 3-13=-316/1729, 4-13=-1711/419, 4-11=-253/124, 5-11=-71/616, 5-10=-1213/203, 6-10=-64/750, 7-10=-85/1013

- 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) 0-1-12 to 3-4-2, Interior(1) 3-4-2 to 12-6-0, Exterior(2R) 12-6-0 to 15-8-6, Interior(1) 15-8-6 to 27-11-12, Exterior(2R) 27-11-12 to 31-2-2, Interior(1) 31-2-2 to 32-10-8 zone; cantilever left and right exposed ; end vertical 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 100 lb uplift at joint(s) except (jt=lb) 15=204, 9=267.
 - 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.

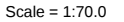


April 20,2021

01/21/2022

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:31:20 2021 Page 1

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Weight: 164 lb FT = 20%

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-1-9 max.): 1-2, 4-6.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 4-13, 5-10

(size) 15=0-3-8, 9=0-3-8
 Max Horz 15=-336(LC 8)
 Max Uplift 15=-203(LC 12), 9=-275(LC 13)
 Max Grav 15=1426(LC 1), 9=1499(LC 1)

TOP CHORD 1-15=-1367/231, 1-2=-1795/311, 2-3=-1668/364, 3-4=-1662/350, 4-5=-2888/481,
5-6=-985/228, 6-7=-1476/256, 7-9=-1531/358

BOT CHORD 14-15=-251/292, 13-14=-223/1835, 11-13=-359/2902, 10-11=-312/2188

WEBS 1-14=-328/2102, 2-14=-1047/245, 2-13=-880/236, 3-13=-276/1650, 4-13=-2119/492,
4-11=-364/130, 5-11=-90/881, 5-10=-1515/276, 6-10=-63/726, 7-10=-72/1093

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCFL=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 3-4-2, Interior(1) 3-4-2 to 12-6-0, Exterior(2R) 12-6-0 to 15-8-6, Interior(1) 15-8-6 to 28-11-12, Exterior(2R) 28-11-12 to 32-2-2, Interior(1) 32-2-2 to 32-10-8 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) 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 100 lb uplift at joint(s) except (jt=lb) 15=203, 9=275.
- 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 20, 2021



WARNING – verify design parameters and READ NOTES ON THIS AND INCLUDED WELDER REFERENCE PAGE MH-1413 (Rev. 3/25/2020) BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for the 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, 2671 Crain Highway, Suite 203 Waldorf, MD 20601.



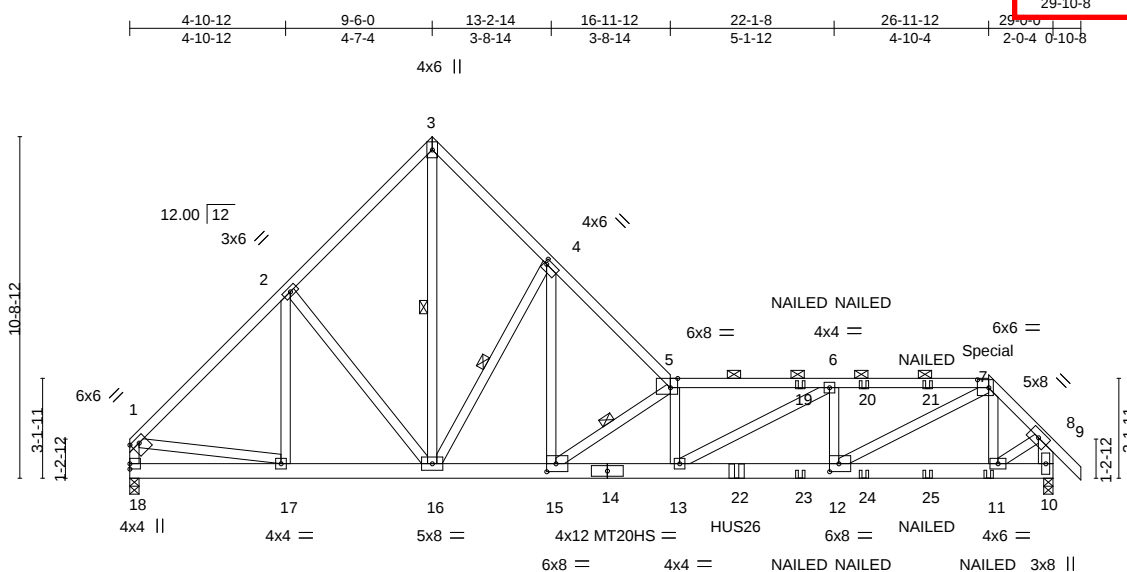
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job Reference (optional)

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Mon Apr 19 09:31:22 2021 Page 1
BU530rsO4qW2B10CLHYzzFBp3
29-10-8



Scale = 1:72.4

	4-10-12	9-6-0	13-2-14	16-11-12	22-1-8	26-11-12	29-0-0
Plate Offsets (X,Y)--	4-10-12	4-7-4	3-8-14	3-8-14	5-1-12	4-10-4	2-0-4

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 0.89	Vert(LL) -0.30 12-13	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.85	Vert(CT) -0.53 12-13	>644	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr NO	WB 0.89	Horz(CT) 0.05 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S				Weight: 171 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2 *Except* 5-7: 2x4 SPF 1650F 1.5E	TOP CHORD	Structural wood sheathing directly applied or 3-0-9 oc purlins, except end verticals, and 2-0-0 oc purlins (2-4-4 max.): 5-7.
BOT CHORD	2x6 SPF 2100F 1.8E	BOT CHORD	Rigid ceiling directly applied or 9-8-5 oc bracing.
WEBS	2x4 SPF No.2 *Except* 8-10: 2x6 SPF No.2	WEBS	1 Row at midpt 3-16, 4-16, 5-15

REACTIONS. (size) 18=0-3-8, 10=0-3-8
 Max Horz 18=-299(LC 4)
 Max Uplift 18=-283(LC 9), 10=-546(LC 9)
 Max Grav 18=1678(LC 1), 10=2400(LC 1)

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

TOP CHORD 1-2=1861/365, 2-3=1765/471, 3-4=1736/459, 4-5=3140/621, 5-6=5648/1139,
6-7=4606/1025, 7-8=2021/462, 1-18=1607/294, 8-10=2360/527

BOT CHORD 17-18=281/366, 16-17=240/1240, 15-16=306/2155, 13-15=1040/5637,
12-13=929/4604, 11-12=284/1468

WEBS 2-16=273/271, 3-16=552/2048, 4-16=2009/587, 4-15=508/2473, 5-15=4343/976,
5-13=408/400, 6-13=172/191, 6-12=1223/363, 7-12=744/3617, 7-11=765/249,
1-17=142/1110, 8-11=311/1617

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDD=6.0psf; BCDD=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
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 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) 18=283, 10=546.
- 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.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) Use Simpson Strong-Tie HUS26 (14-10d Girder, 6-10d Truss, Single Ply Girder) or equivalent at 19-0-12 from the left end to connect truss(es) to front face of bottom chord.
- 10) Fill all nail holes where hanger is in contact with lumber.
- 11) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 140 lb down and 118 lb up at 26-11-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

Continued on page 2

LOAD CASE(S) Standard



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 personnel 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 Code**

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



April 20, 2021



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	A08	ROOF SPECIAL GIRDER	1	1	Job Reference (optional)

Builders FirstSource (Valley Center),
Valley Center, KS - 67147,
8.430 s Mar 22 2021 MiTek Industries, Inc.
Mon Apr 19 09:34:22 2021 Page 2
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RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

45716363
01/21/2022

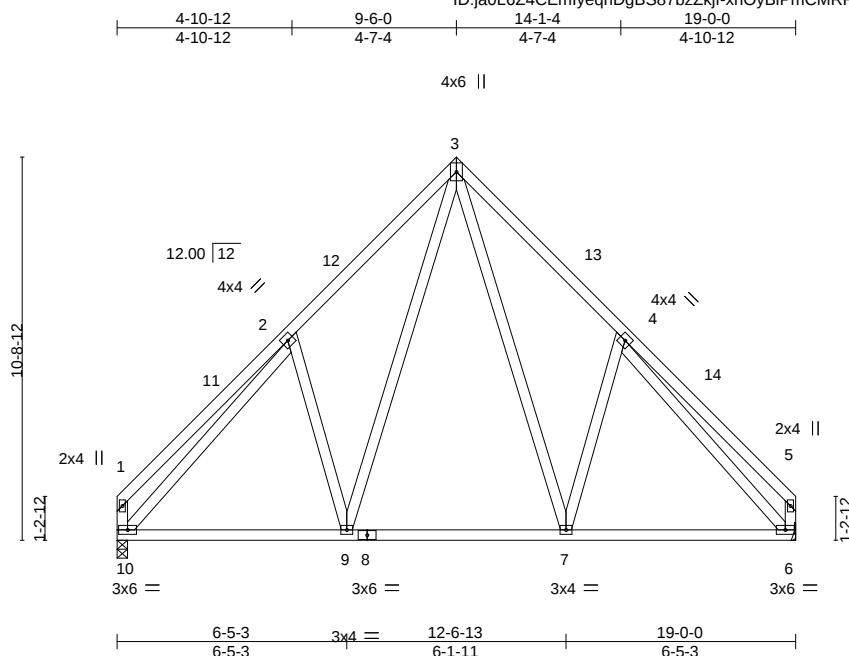
LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 3-5=-70, 5-7=-70, 7-8=-70, 8-9=-70, 10-18=-20
Concentrated Loads (lb)
Vert: 7=-85(F) 11=-52(F) 19=-85(F) 20=-85(F) 21=-85(F) 22=-902(F) 23=-43(F) 24=-43(F) 25=-43(F)



Builders FirstSource (Valley Center).	Valley Center, KS - 67147.
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8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:31:23 2021 Page
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01/21/2022



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) -0.04 6-7 >999 240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.31	Vert(CT) -0.08 6-7 >999 180		
BCLL 0.0	Rep Stress Incr YES	WB 0.62	Horz(CT) 0.01 6 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS		Weight: 108 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	2x4 SPF No.2		
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 10=0-3-8, 6=Mechanical
 Max Horz 10=283(LC 9)
 Max Uplift 10=-116(LC 13), 6=-116(LC 12)
 Max Grav 10=842(LC 1), 6=842(LC 1)

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

TOP CHORD 1-2=-273/165, 2-3=-810/327, 3-4=-810/327, 4-5=-273/165, 1-10=-271/156,
5-6=-271/155

BOT CHORD 9-10=-141/628, 7-9=-55/430, 6-7=-69/543

WEBS 3-7=-246/411, 4-7=-279/304, 3-9=-246/411, 2-9=-279/304, 2-10=-690/65, 4-6=-690/65

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=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 9-6-0, Exterior(2R) 9-6-0 to 12-6-0, Interior(1) 12-6-0 to 18-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=116, 6=116.
- 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.



April 20, 2021



WARNING – Velly design parameters are READ-ONLY on this and INCLUDED WITH REFERENCE PAGE MH-1413 (Rev. 3/29/2020) 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	Roeser/1483 Winterset
2720415	A09A	Common	1	1	

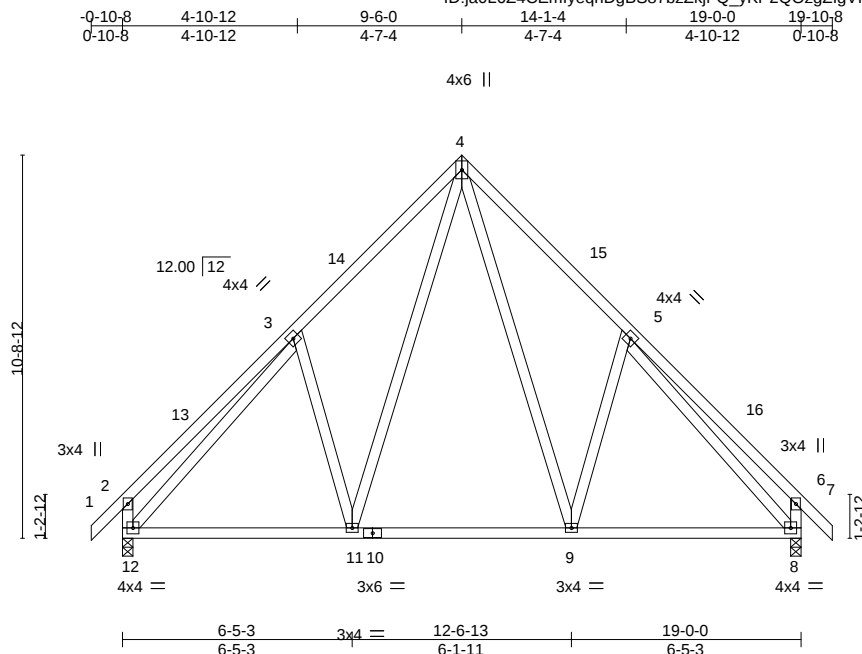
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:24 2021 Page 1

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DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
145716365

01/21/2022



Scale: 3/16"=1'

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 0.27	Vert(LL)	-0.04	8-9	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.31	Vert(CT)	-0.08	8-9	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.59	Horz(CT)	0.01	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS						Weight: 110 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 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 12=0-3-8, 8=0-3-8
Max Horz 12=-310(LC 10)
Max Uplift 12=-124(LC 12), 8=-124(LC 13)
Max Grav 12=913(LC 1), 8=913(LC 1)

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

TOP CHORD 2-3=-307/222, 3-4=-799/328, 4-5=-799/328, 5-6=-307/222, 2-12=-368/224, 6-8=-368/224
BOT CHORD 11-12=-131/634, 9-11=-45/440, 8-9=-25/534
WEBS 4-9=-244/403, 5-9=-270/302, 4-11=-244/403, 3-11=-270/302, 3-12=-659/31, 5-8=-659/30

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=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 9-6-0, Exterior(2R) 9-6-0 to 12-6-0, Interior(1) 12-6-0 to 19-10-8 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
- 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 100 lb uplift at joint(s) except (jt=lb) 12=124, 8=124.
- 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.



April 20, 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	Roeser/1483 Winterset
2720415	A10	COMMON SUPPORTED GAB	1	1	

RELEASE FOR CONSTRUCTION
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Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:25 2021 Page 1
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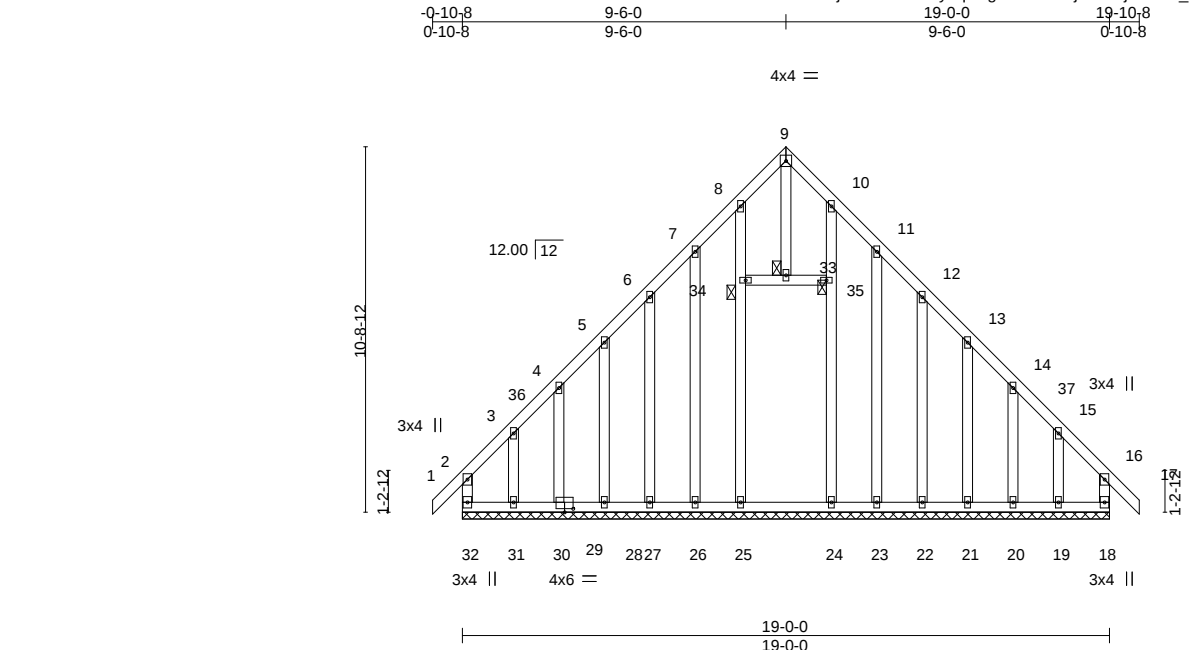


Plate Offsets (X,Y)-- [29:0-3-0,0-1-4]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	-0.00 17 n/r 120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.01 17 n/r 120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.01 18 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S				Weight: 140 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2	JOINTS 1 Brace at Jt(s): 33, 34, 35
OTHERS 2x4 SPF No.2	

REACTIONS. All bearings 19-0-0.
(lb) - Max Horz 32=310(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 27, 28, 30, 22, 21, 20 except 32=-189(LC 10), 18=-159(LC 11), 26=-123(LC 12), 31=-313(LC 12), 23=-124(LC 13), 19=-304(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 25, 26, 27, 28, 30, 24, 23, 22, 21, 20, 19 except 32=313(LC 20), 18=298(LC 22), 31=262(LC 10)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-298/224, 7-8=-160/315, 8-9=-150/275, 9-10=-150/275, 10-11=-160/315, 15-16=-285/197

- 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 Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 9-6-0, Corner(3R) 9-6-0 to 12-6-0, Exterior(2N) 12-6-0 to 19-10-8 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) 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 2x4 MT20 unless otherwise indicated.
 - 5) Gable requires continuous bottom chord bearing.
 - 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - 7) Gable studs spaced at 1-4-0 oc.
 - 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 27, 28, 30, 22, 21, 20 except (jt=lb) 32=189, 18=159, 26=123, 31=313, 23=124, 19=304.
 - 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.



April 20,2021

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	B01	Hip	1	1	

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES

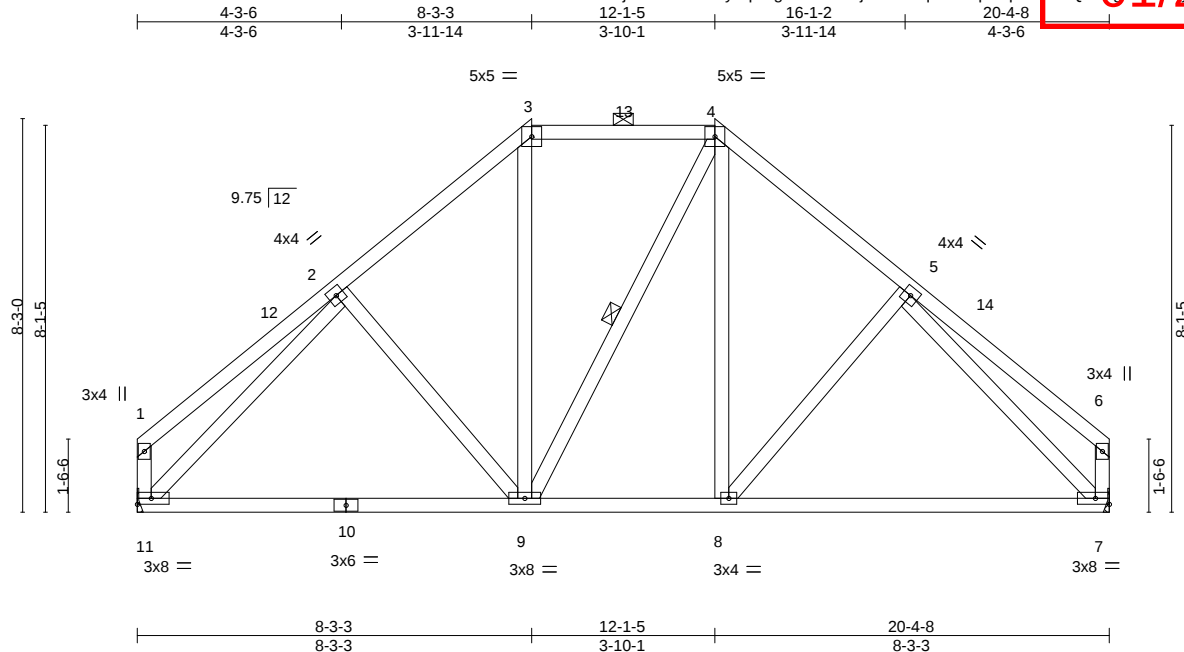
LEE'S SUMMIT, MISSOURI

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:26 2021 Page 1

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01/21/2022



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 0.27	Vert(LL)	-0.10	7-8	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.44	Vert(CT)	-0.21	7-8	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.50	Horz(CT)	0.02	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 108 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.): 3-4.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-9

REACTIONS.

(size) 11=Mechanical, 7=Mechanical
Max Horz 11=221(LC 11)
Max Uplift 11=-136(LC 12), 7=-136(LC 13)
Max Grav 11=904(LC 1), 7=904(LC 1)

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

TOP CHORD 1-2=-256/86, 2-3=-834/223, 3-4=-575/222, 4-5=-833/226, 5-6=-256/85
BOT CHORD 9-11=-162/651, 8-9=-54/575, 7-8=-107/639
WEBS 2-11=-786/130, 5-7=-786/145

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) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 8-3-3, Exterior(2E) 8-3-3 to 12-1-5, Exterior(2R) 12-1-5 to 16-2-14, Interior(1) 16-2-14 to 20-2-12 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=136, 7=136.
- 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 20,2021

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	Roeser/1483 Winterset
2720415	B02	Hip	1	1	

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:27 2021 Page 1

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01/21/2022

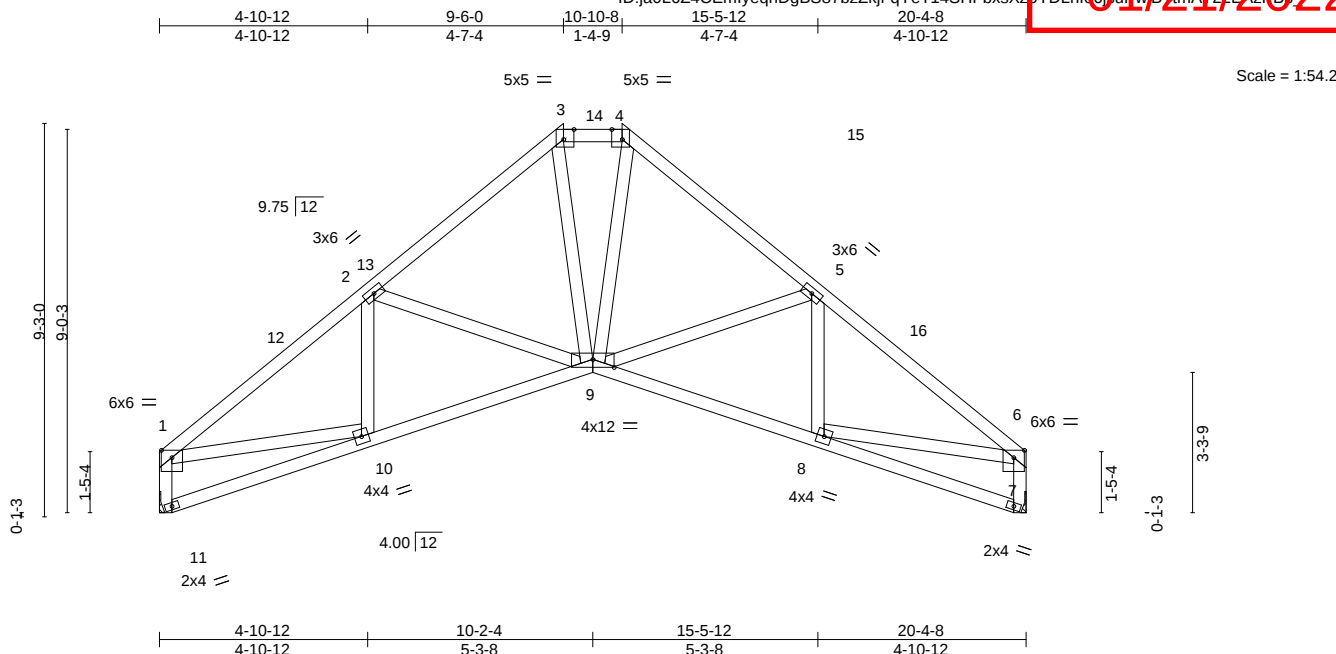


Plate Offsets (X,Y)-- [3:0-2-15,Edge], [4:0-2-15,Edge], [9:0-6-0,0-2-4]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	-0.04	9	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.09	8-9	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.07	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 99 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x4 SPF No.2	2-0-0 oc purlins (6-0-0 max.): 3-4.
WEBS 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
OTHERS 2x4 SPF No.2	

REACTIONS. (size) 11=Mechanical, 7=Mechanical
Max Horz 11=-245(LC 10)
Max Uplift 11=-129(LC 12), 7=-129(LC 13)
Max Grav 11=904(LC 1), 7=904(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1360/234, 2-3=-1125/218, 3-4=-848/227, 4-5=-1125/231, 5-6=-1360/215,
1-11=-886/191, 6-7=-886/161
BOT CHORD 10-11=-260/318, 9-10=-220/1109, 8-9=-135/1047
WEBS 2-9=-253/204, 3-9=-74/444, 4-9=-114/477, 5-9=-275/215, 1-10=-65/889, 6-8=-80/889

- 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 9-6-0, Exterior(2E) 9-6-0 to 10-10-8, Exterior(2R) 10-10-8 to 15-1-7, Interior(1) 15-1-7 to 20-2-12 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) Refer to girder(s) for truss to truss connections.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=129, 7=129.
 - 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.
 - 8) 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.
 - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 20,2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	B03	Scissor	10	1	
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:28 2021 Page 1

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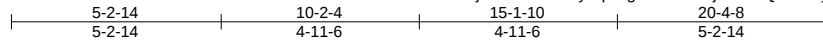
RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

01/21/2022



4x4 =

Scale = 1:57.5

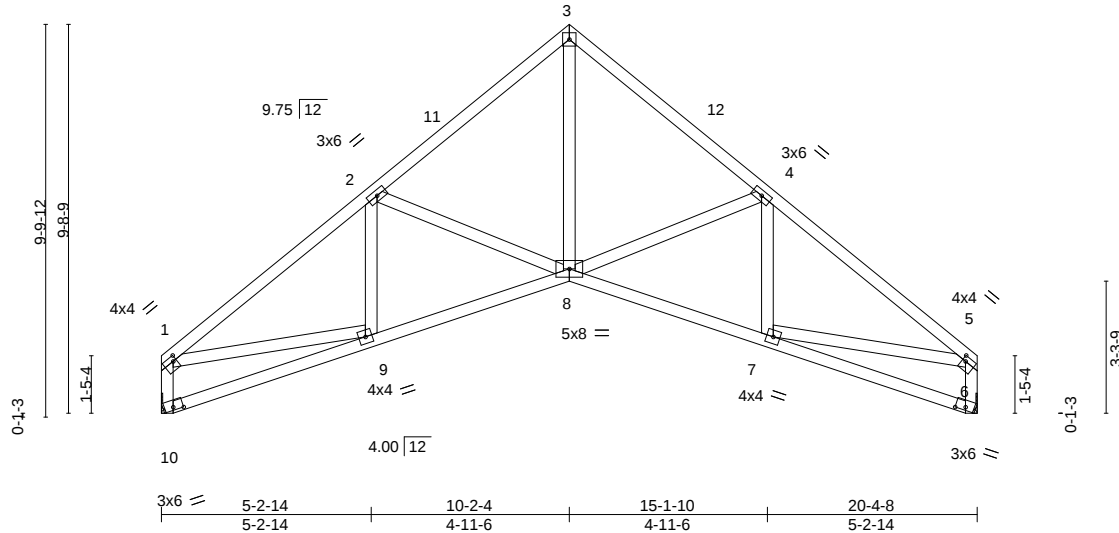


Plate Offsets (X,Y)-- [1:0-1-0,0-1-8], [5:0-1-0,0-1-8], [6:0-3-0,0-0-15], [10:0-3-0,0-0-15]

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 0.26	Vert(LL)	-0.05	8	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.27	Vert(CT)	-0.09	7-8	>999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.23	Horz(CT)	0.08	6	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 95 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.

REACTIONS.

(size) 10=Mechanical, 6=Mechanical
Max Horz 10=-261(LC 10)
Max Uplift 10=-124(LC 12), 6=-124(LC 13)
Max Grav 10=904(LC 1), 6=904(LC 1)

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

TOP CHORD 1-2=-1372/232, 2-3=-1106/224, 3-4=-1106/237, 4-5=-1372/224, 1-10=-886/194,
5-6=-886/168
BOT CHORD 9-10=-278/348, 8-9=-224/1142, 7-8=-135/1049
WEBS 3-8=-165/926, 4-8=-308/232, 2-8=-287/222, 1-9=-51/878, 5-7=-75/878

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) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 10-2-4, Exterior(2R) 10-2-4 to 13-2-4, Interior(1) 13-2-4 to 20-2-12 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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=124, 6=124.
- 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.



April 20,2021

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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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

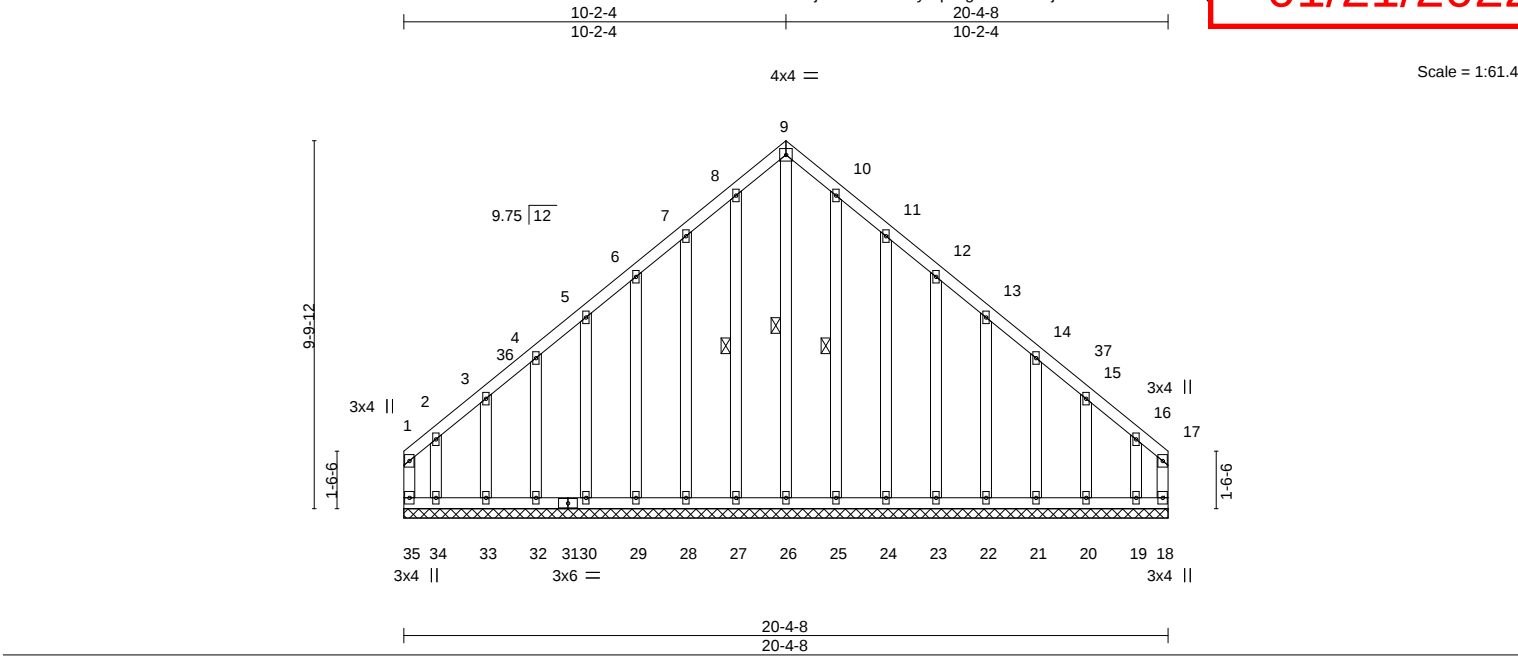
Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	B04	Common Supported Gable	1	1	Job Reference (optional)

Builders FirstSource (Valley Center),
Valley Center, KS - 67147,
8.430 s Mar 22 2021 MiTek Industries, Inc.

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RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

145716370
01/21/2022



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 0.15	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.15	Horz(CT)	0.00	18	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R					Weight: 145 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD 2x4 SPF No.2		TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2		BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2		WEBS	1 Row at midpt 9-26, 8-27, 10-25
OTHERS 2x4 SPF No.2			

REACTIONS. All bearings 20-4-8.

(lb) - Max Horz 35=263(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 27, 28, 29, 30, 32, 33, 25, 24, 23, 22, 21, 20 except 35=-346(LC 10), 18=-301(LC 11), 34=-332(LC 9), 19=-297(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 27, 28, 29, 30, 32, 33, 25, 24, 23, 22, 21, 20 except 35=386(LC 9), 18=341(LC 8), 26=288(LC 13), 34=365(LC 10), 19=330(LC 11)

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

TOP CHORD 6-7=-144/270, 7-8=-182/341, 8-9=-195/368, 9-10=-195/368, 10-11=-182/341, 11-12=-144/270

WEBS 9-26=-375/161

- 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 Corner(3E) 0-1-12 to 3-1-12, Exterior(2N) 3-1-12 to 10-2-4, Corner(3R) 10-2-4 to 13-2-4, Exterior(2N) 13-2-4 to 20-2-12 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
 - 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.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - Gable studs spaced at 1-4-0 oc.
 - 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 100 lb uplift at joint(s) 27, 28, 29, 30, 32, 33, 25, 24, 23, 22, 21, 20 except (jt=lb) 35=346, 18=301, 34=332, 19=297.
 - 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.



April 20,2021

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	B05	Common	1	1	
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					
Job Reference (optional)					

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

145716371

01/21/2022

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4x6 ||

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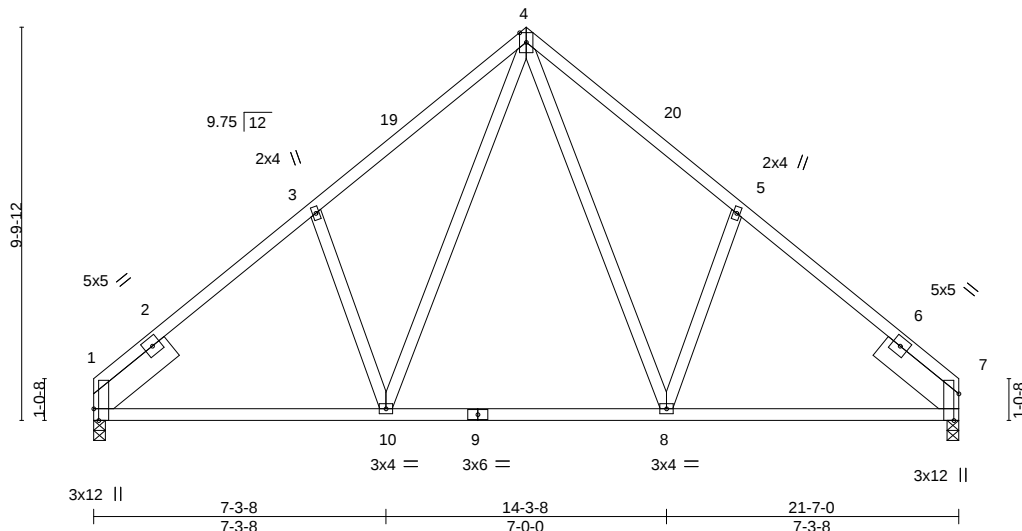


Plate Offsets (X, Y)--		[1:0-3-8,Edge], [7:0-8-0,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.26
TCDL 10.0	Lumber DOL	1.15	BC 0.36
BCLL 0.0	Rep Stress Incr	YES	WB 0.39
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.05 8-10 >999 240
			Vert(CT) -0.11 8-10 >999 180
			Horz(CT) 0.03 7 n/a n/a
			PLATES
			MT20
			GRIP
			197/144
			Weight: 107 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x4 SPF No.2
 SLIDER Left 2x8 SP 2400F 2.0E -t 2-6-0, Right 2x8 SP 2400F 2.0E -t 2-6-0

BRACING-

TOP CHORD Structural wood sheathing directly applied.
 BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 1=0-3-8, 7=0-3-8
 Max Horz 1=-229(LC 8)
 Max Uplift 1=-136(LC 12), 7=-136(LC 13)
 Max Grav 1=971(LC 1), 7=971(LC 1)

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

TOP CHORD 1-3=-1103/209, 3-4=-1019/313, 4-5=-1019/313, 5-7=-1103/209
 BOT CHORD 1-10=-192/835, 8-10=-28/572, 7-8=-79/789
 WEBS 4-8=-218/464, 5-8=-313/268, 4-10=-218/464, 3-10=-313/268

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) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 10-9-8, Exterior(2R) 10-9-8 to 13-9-8, Interior(1) 13-9-8 to 21-7-0 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 100 lb uplift at joint(s) except (jt=lb) 1=136, 7=136.
- 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 20,2021

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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

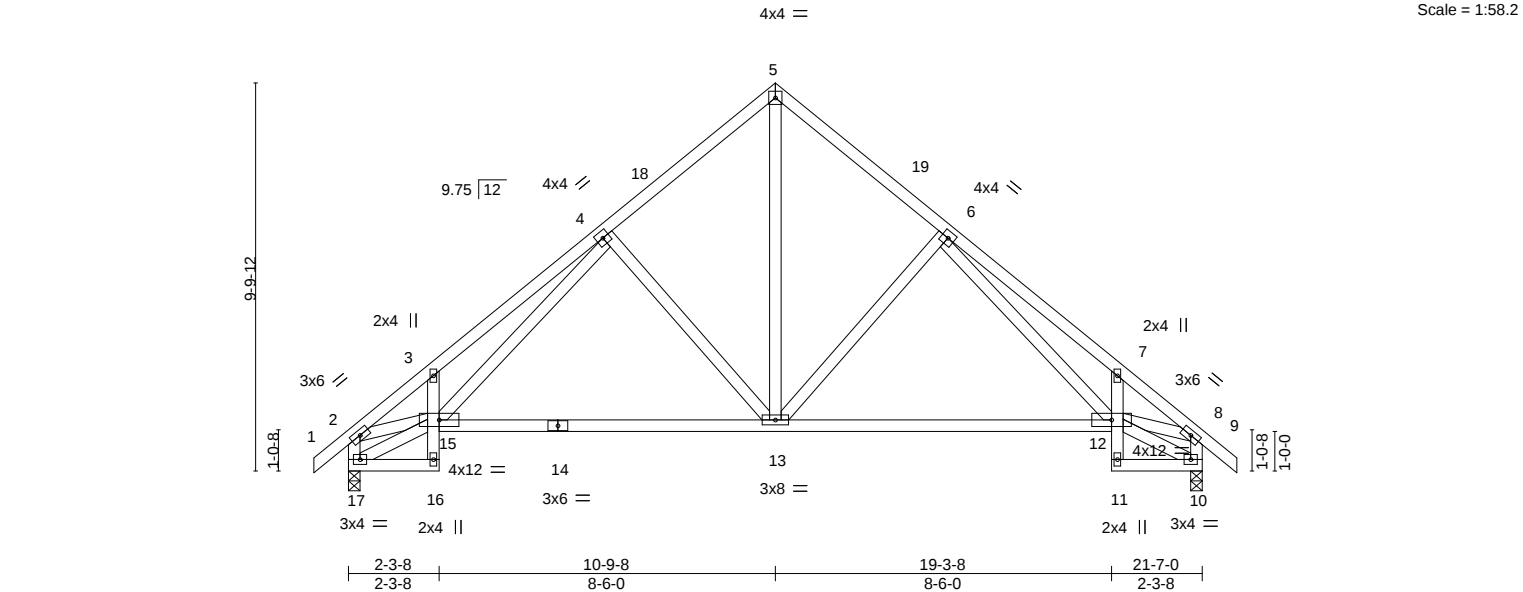
Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset	RELEASE FOR CONSTRUCTION
2720415	B06	Roof Special	3	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW
						DEVELOPMENT SERVICES
						LEE'S SUMMIT, MISSOURI

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

8.430 s Mar 22 2021 MiTek Industries, Inc.
Mon Apr 19 09:34:33 2021 Page 1
ID:ja0L6Z4CEmlyeqhDgBS87bzZkjf-fi?kl7X2rRi0FuUiahu31uzJqj259_eYFVMOzRBJu

0-10-8
2-3-8
6-6-8
10-9-8
15-0-8
19-3-8
21-7-0
22-5-8
0-10-8
2-3-8
4-3-0
4-3-0
4-3-0
2-3-8
0-10-8

01/21/2022



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 0.23	Vert(LL)	-0.11 13-15	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.61	Vert(CT)	-0.25 13-15	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.31	Horz(CT)	0.09 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 112 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SPF No.2		

REACTIONS. (size) 17=0-3-8, 10=0-3-8
Max Horz 17=-279(LC 10)
Max Uplift 17=-158(LC 12), 10=-158(LC 13)
Max Grav 17=1030(LC 1), 10=1030(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1537/295, 3-4=-1656/437, 4-5=-911/233, 5-6=-911/243, 6-7=-1656/322, 7-8=-1537/190, 2-17=-1005/212, 8-10=-1005/165
BOT CHORD 13-15=-155/933, 12-13=-52/866
WEBS 5-13=-185/734, 6-13=-386/236, 6-12=-157/550, 4-13=-413/254, 4-15=-251/691, 15-17=-220/299, 2-15=-189/1108, 8-12=-110/1108

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=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 2-0-10, Interior(1) 2-0-10 to 10-9-8, Exterior(2R) 10-9-8 to 13-9-8, Interior(1) 13-9-8 to 22-5-8 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 100 lb uplift at joint(s) except (jt=lb) 17=158, 10=158.
 - 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 20,2021

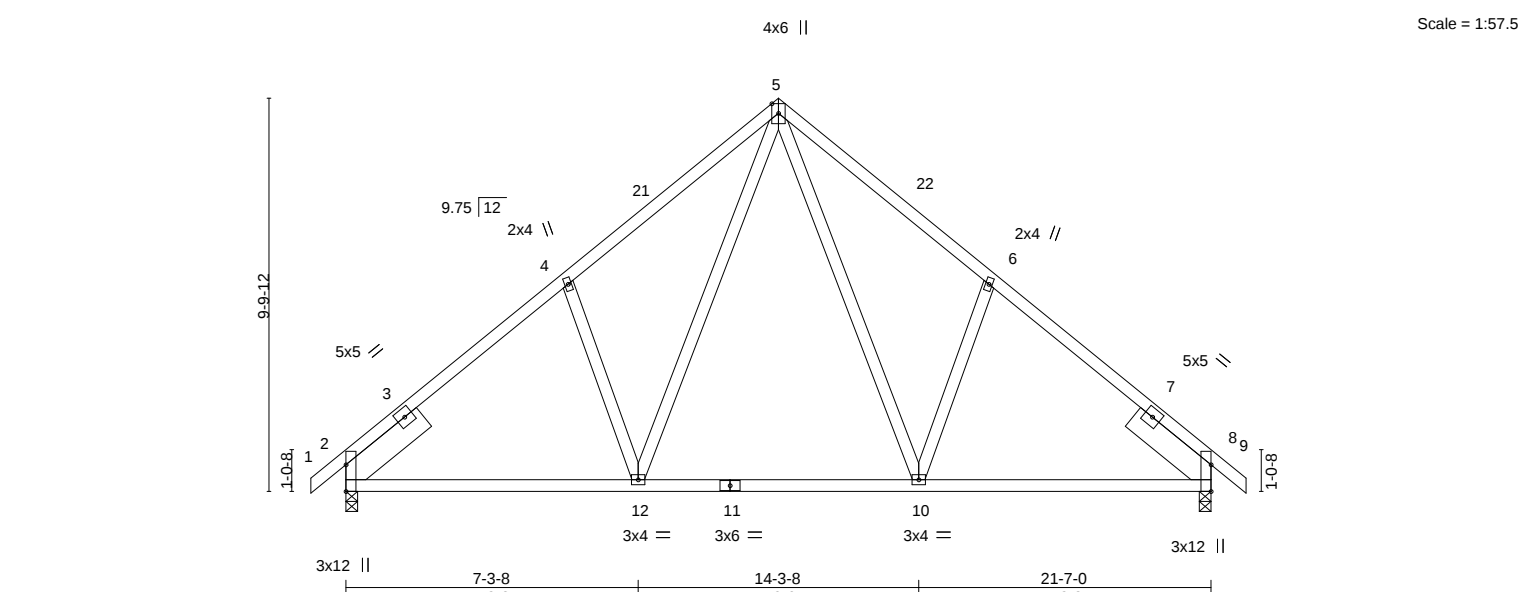
Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	B07	Common	1	1	

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:39 2021 Page 1

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01/21/2022



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 10-12	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.36	Vert(CT)	-0.11 10-12	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.39	Horz(CT)	0.03 8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 109 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	
SLIDER Left 2x8 SP 2400F 2.0E -t 2-6-0, Right 2x8 SP 2400F 2.0E -t 2-6-0	

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=248(LC 11)
Max Uplift 2=-156(LC 12), 8=-156(LC 13)
Max Grav 2=1033(LC 1), 8=1033(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1098/209, 4-5=-1012/313, 5-6=-1012/313, 6-8=-1098/209
BOT CHORD 2-12=-180/840, 10-12=-16/579, 8-10=-67/783
WEBS 5-10=-218/460, 6-10=-309/268, 5-12=-218/460, 4-12=-309/268

- 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 10-9-8, Exterior(2R) 10-9-8 to 13-9-8, Interior(1) 13-9-8 to 22-5-8 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
 - 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 100 lb uplift at joint(s) except (jt=lb) 2=156, 8=156.
 - 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.



April 20, 2021

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	B08	Common Supported Gable	1	1	
Job Reference (optional)					

AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
145716374

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:44 2021 Page 1

ID:ja0L6Z4CEmlyeqhDgBS87bzZkif-qq9ucugxFp4S4adpiPbe_jvnXcmfAG4dgrJizPBbi

0-10-8 10-9-8 21-7-0 22-5-8
0-10-8 10-9-8 10-9-8 0-10-8

01/21/2022

4x4 =

Scale = 1:61.4

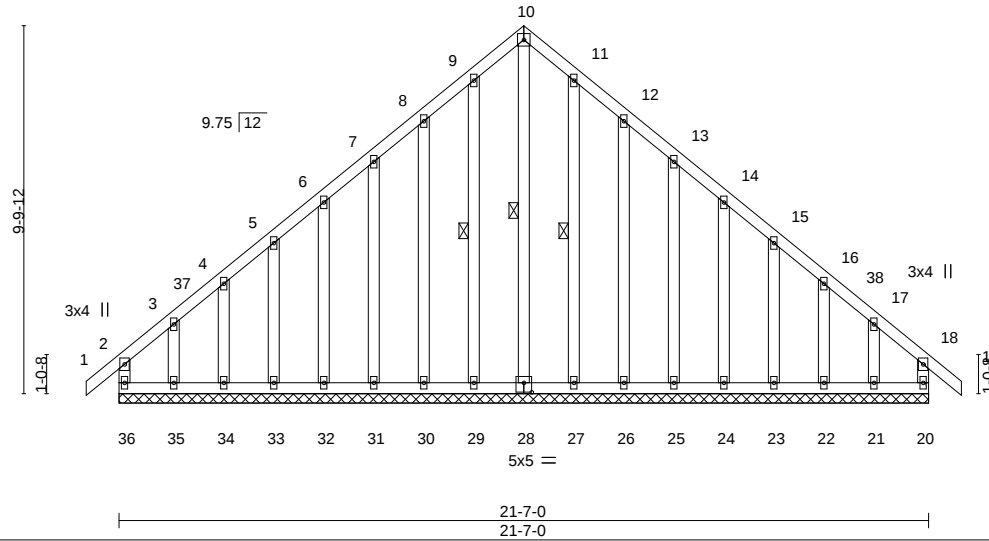


Plate Offsets (X,Y)-- [28:0-2-8,0-3-0]

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 0.10	Vert(LL)	-0.00	19	n/r	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	-0.00	19	n/r		
BCLL 0.0	Rep Stress Incr	YES	WB 0.14	Horz(CT)	0.01	20	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R					Weight: 150 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

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.
WEBS 1 Row at midpt 10-28, 9-29, 11-27

REACTIONS.

All bearings 21-7-0.
(lb) - Max Horz 36=-279(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 29, 30, 31, 32, 33, 34, 27, 26, 25, 24, 23, 22 except 36=-168(LC 8), 20=-119(LC 9), 35=-196(LC 12), 21=-181(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 20, 29, 30, 31, 32, 33, 34, 35, 27, 26, 25, 24, 23, 22, 21 except 36=257(LC 20), 28=284(LC 13)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 8-9=-169/314, 9-10=-183/342, 10-11=-183/342, 11-12=-169/314
WEBS 10-28=-346/148

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 Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 10-9-8, Corner(3R) 10-9-8 to 13-9-8, Exterior(2N) 13-9-8 to 22-5-8 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
- 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.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- 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 100 lb uplift at joint(s) 29, 30, 31, 32, 33, 34, 27, 26, 25, 24, 23, 22 except (jt=lb) 36=168, 20=119, 35=196, 21=181.
- 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.



April 20,2021

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	Roeser/1483 Winterset
2720415	C01	Roof Special	1	1	
Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:46 2021 Page 1					
Job Reference (optional)					

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

145716375

01/21/2022

0-10-8 4-7-0 5-7-0 11-0-4 17-8-8
0-10-8 4-7-0 1-0-0 5-5-4 6-8-4

6x6 =

5x8 =

Scale = 1:62.5

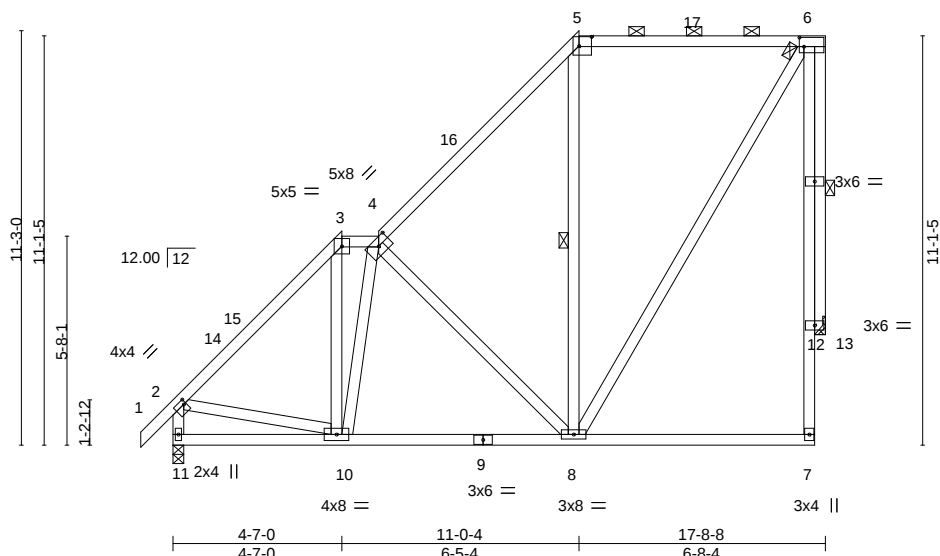


Plate Offsets (X,Y)-- [2:0-0-12,0-1-8], [4:0-4-0,0-2-5], [5:0-4-1,0-3-0], [6:0-1-8,0-3-0]

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 0.61	Vert(LL)	-0.04	7-8	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.34	Vert(CT)	-0.09	7-8	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.69	Horz(CT)	-0.13	13	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS						Weight: 119 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

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.): 3-4, 5-6.
BOT CHORD Rigid ceiling directly applied or 8-1-12 oc bracing.
WEBS 1 Row at midpt 5-8, 6-13

REACTIONS.

(size) 11=0-3-8, 13=Mechanical
Max Horz 11=364(LC 12)
Max Uplift 11=-48(LC 12), 13=-214(LC 12)
Max Grav 11=857(LC 1), 13=756(LC 1)

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

TOP CHORD 2-3=-814/35, 3-4=-495/94, 4-5=-577/80, 5-6=-320/140, 2-11=-819/70
BOT CHORD 10-11=-531/407, 8-10=-343/562
WEBS 3-10=-2/341, 4-10=-327/18, 4-8=-364/254, 6-8=-250/563, 2-10=0/402, 6-13=-756/258

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 4-7-0, Exterior(2E) 4-7-0 to 5-7-0, Interior(1) 5-7-0 to 11-0-4, Exterior(2R) 11-0-4 to 14-0-4, Interior(1) 14-0-4 to 17-3-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11 except (it=lb) 13=214.
- 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.



April 20,2021

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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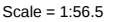


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job Reference (optional)

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:31:48 2021 Page 1

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Weight: 111 lb FT = 20%

Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (4-9-13 max.): 3-4, 5-6.
Rigid ceiling directly applied or 8-8-13 oc bracing.
1 Row at midpt 5-8

(size) 11=0-3-8, 13=Mechanical
Max Horz 11=321(LC 12)
Max Uplift 11=-66(LC 12), 13=-190(LC 9)
Max Grav 11=857(LC 1), 13=756(LC 1)

TOP CHORD 2-3=-789/58, 3-4=-485/94, 4-5=-649/96, 5-6=-375/147, 2-11=-832/86
BOT CHORD 10-11=-461/334, 8-10=-357/599
WEBS 3-10=-51/404, 4-10=-462/71, 4-8=-325/237, 6-8=-227/543, 2-10=0/469, 6-13=-757/234

- 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 3-7-0, Exterior(2E) 3-7-0 to 4-7-0, Interior(1) 4-7-0 to 9-11-5, Exterior(2R) 9-11-5 to 12-11-5, Interior(1) 12-11-5 to 17-3-4 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11 except (jt=lb) 13=190.
- 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.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 20, 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	Roeser/1483 Winterset
2720415	C03	PIGGYBACK BASE	1	1	

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

45716377

01/21/2022

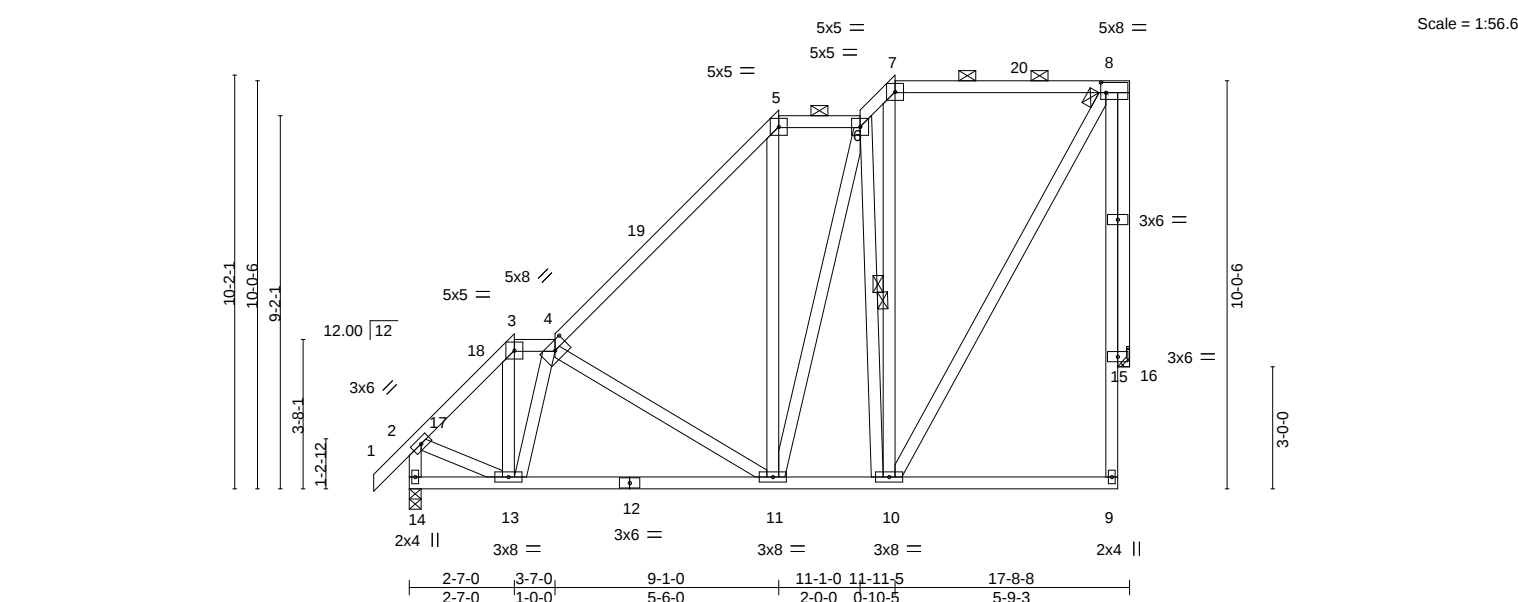
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc.

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Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	C04	Piggyback Base	1	1	

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:51 2021 Page 1

0-10-8 1-7-0 2-7-0 8-1-0 10-1-0 11-11-5 17-8-8
0-10-8 1-7-0 1-0-0 5-6-0 2-0-0 1-10-5 5-9-3

5x5 = 5x5 =

Scale = 1:57.4

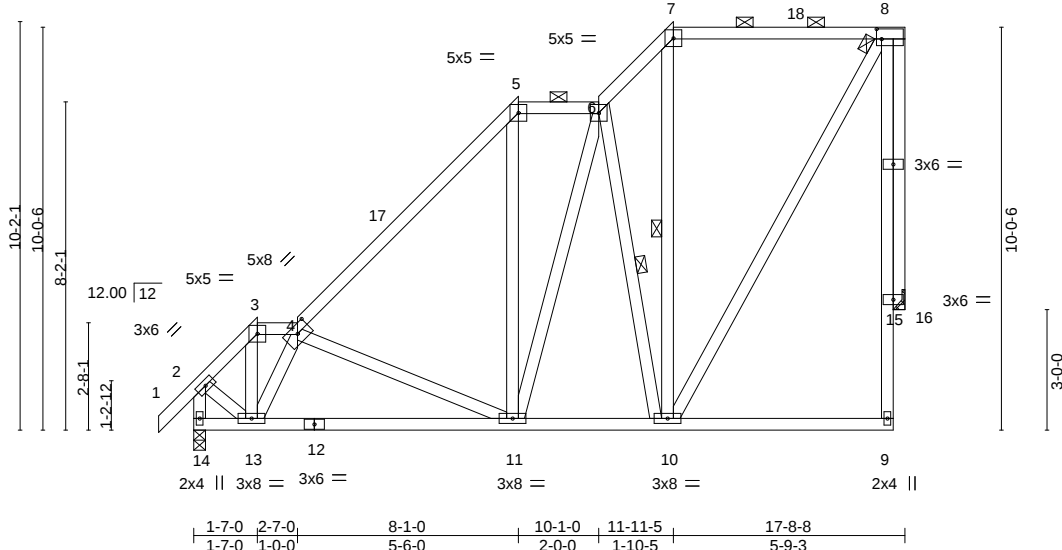


Plate Offsets (X,Y)--		[4:0-4-0,0-2-5], [8:0-1-8,0-3-0]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.44	Vert(LL)	-0.04 11-13	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.32	Vert(CT)	-0.09 11-13	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.58	Horz(CT)	-0.11 16	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS					Weight: 129 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 5-7-1 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4, 5-6, 7-8.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 6-10, 7-10
OTHERS 2x4 SPF No.2	

REACTIONS. (size) 14=0-3-8, 16=Mechanical
 Max Horz 14=320(LC 12)
 Max Uplift 14=-80(LC 12), 16=-199(LC 12)
 Max Grav 14=857(LC 1), 16=756(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-632/45, 3-4=-400/43, 4-5=-771/69, 5-6=-447/146, 6-7=-459/121, 7-8=-324/123, 2-14=-887/60
 BOT CHORD 13-14=-427/279, 11-13=-428/713, 10-11=-216/420
 WEBS 3-13=-111/427, 4-13=-723/166, 4-11=-306/214, 6-10=-451/252, 8-10=-223/593, 2-13=0/559, 8-16=-757/237

- 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 2-7-0, Interior(1) 2-7-0 to 8-1-0, Exterior(2E) 8-1-0 to 10-1-0, Interior(1) 10-1-0 to 11-11-5, Exterior(2R) 11-11-5 to 14-11-5, Interior(1) 14-11-5 to 17-3-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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) Refer to girder(s) for truss to truss connections.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14 except (jt=lb) 16=199.
 - 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.
 - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 20,2021

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	C05	PIGGYBACK BASE	1	1	Job Reference (optional)

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:55 2021 Page 1

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01/21/2022

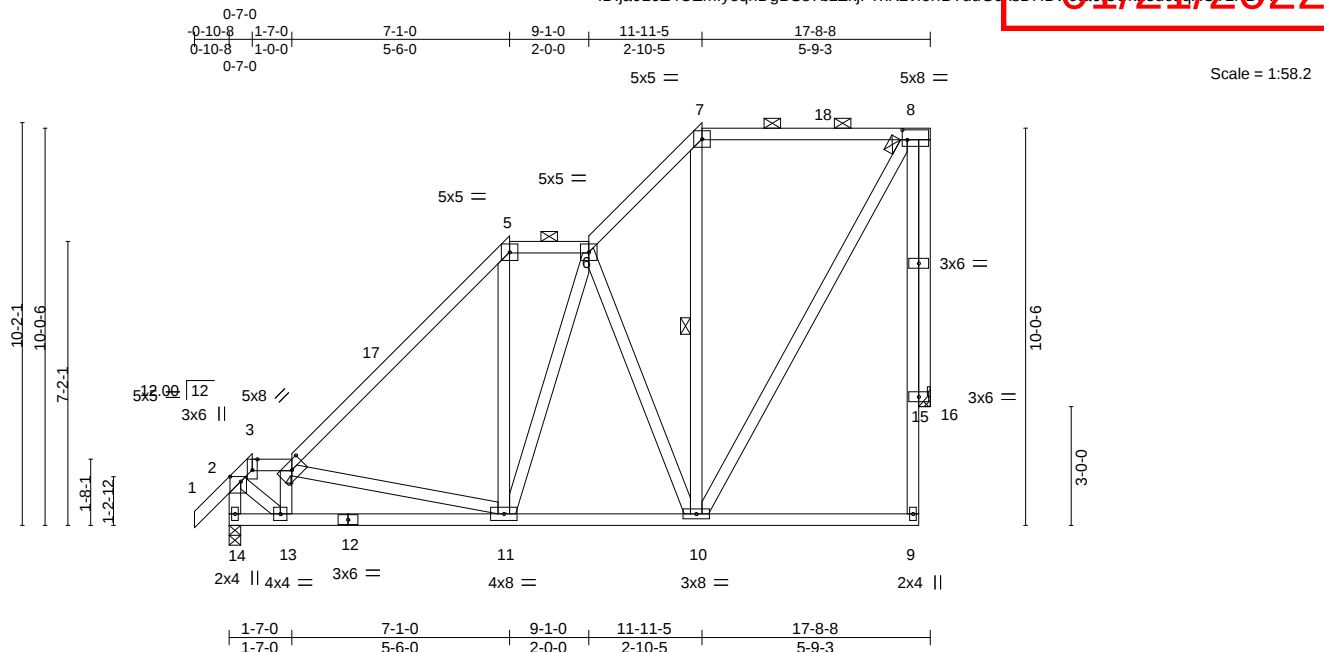


Plate Offsets (X,Y)--		[2:0-3-4,0-1-8], [3:0-3-4,Edge], [4:0-4-0,0-2-5], [8:0-1-8,0-3-0]													
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.		in (loc) l/defl L/d		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL		1.15		TC	0.47	Vert(LL)	-0.03	9-10	>999	240	MT20	197/144	
TCDL	10.0	Lumber DOL		1.15		BC	0.28	Vert(CT)	-0.06	11-13	>999	180			
BCLL	0.0	Rep Stress Incr		YES		WB	0.58	Horz(CT)	0.08	16	n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014				Matrix-S							Weight: 121 lb	FT = 20%	

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-3-6 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4, 5-6, 7-8.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 7-10

REACTIONS.

(size) 14=0-3-8, 16=Mechanical
Max Horz 14=378(LC 12)
Max Uplift 14=-75(LC 12), 16=-204(LC 12)
Max Grav 14=857(LC 1), 16=756(LC 1)

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

TOP CHORD 2-3=-627/34, 3-4=-708/86, 4-5=-833/50, 5-6=-491/134, 6-7=-493/96, 7-8=-325/119, 2-14=-852/58
BOT CHORD 13-14=-334/137, 11-13=-442/764, 10-11=-205/488
WEBS 4-13=-580/130, 4-11=-306/202, 6-10=-451/244, 8-10=-224/591, 2-13=-121/1040, 8-16=-757/234

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 1-7-0, Interior(1) 1-7-0 to 7-1-0, Exterior(2E) 7-1-0 to 9-1-0, Interior(1) 9-1-0 to 11-11-5, Exterior(2R) 11-11-5 to 14-11-5, Interior(1) 14-11-5 to 17-3-4 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14 except (jt=lb) 16=204.
- 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.



April 20,2021

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	Roeser/1483 Winterset
2720415	C06	Piggyback Base	1	1	
Job Reference (optional)					

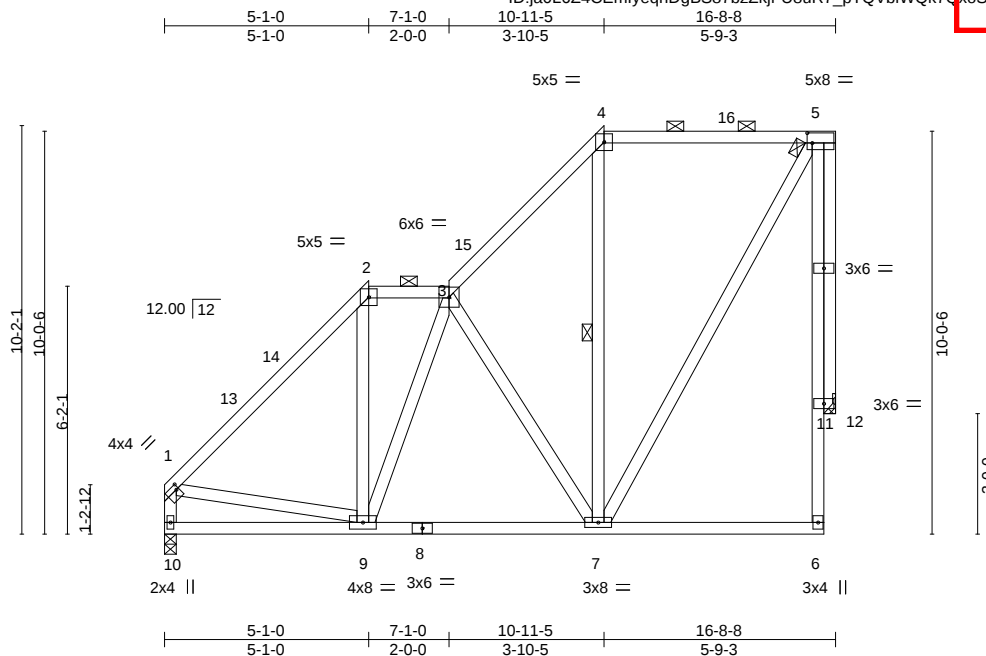
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:56 2021 Page 1

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RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
145716380

01/21/2022



Scale = 1:57.4

Plate Offsets (X,Y)-- [1:0-0-12,0-1-8], [5:0-1-8,0-3-0]												
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	0.43	Vert(LL)	-0.02	6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.05	6-7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.53	Horz(CT)	-0.11	12	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 111 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

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.): 2-3, 4-5.
BOT CHORD Rigid ceiling directly applied or 8-6-15 oc bracing.
WEBS 1 Row at midpt 4-7

REACTIONS.

(size) 10=0-3-8, 12=Mechanical
Max Horz 10=285(LC 12)
Max Uplift 10=-39(LC 12), 12=-196(LC 12)
Max Grav 10=739(LC 1), 12=713(LC 1)

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

TOP CHORD 1-2=-760/43, 2-3=-452/116, 3-4=-509/89, 4-5=-301/123, 1-10=-695/56
BOT CHORD 9-10=-478/377, 7-9=-289/503
WEBS 3-7=-379/230, 5-7=-235/549, 1-9=-16/352, 5-12=-714/249

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 5-1-0, Exterior(2E) 5-1-0 to 7-1-0, Interior(1) 7-1-0 to 10-11-5, Exterior(2R) 10-11-5 to 13-11-5, Interior(1) 13-11-5 to 16-3-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10 except (jt=lb) 12=196.
- 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.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 20,2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	C07	Roof Special	1	1	

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:57 2021 Page 1
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01/21/2022

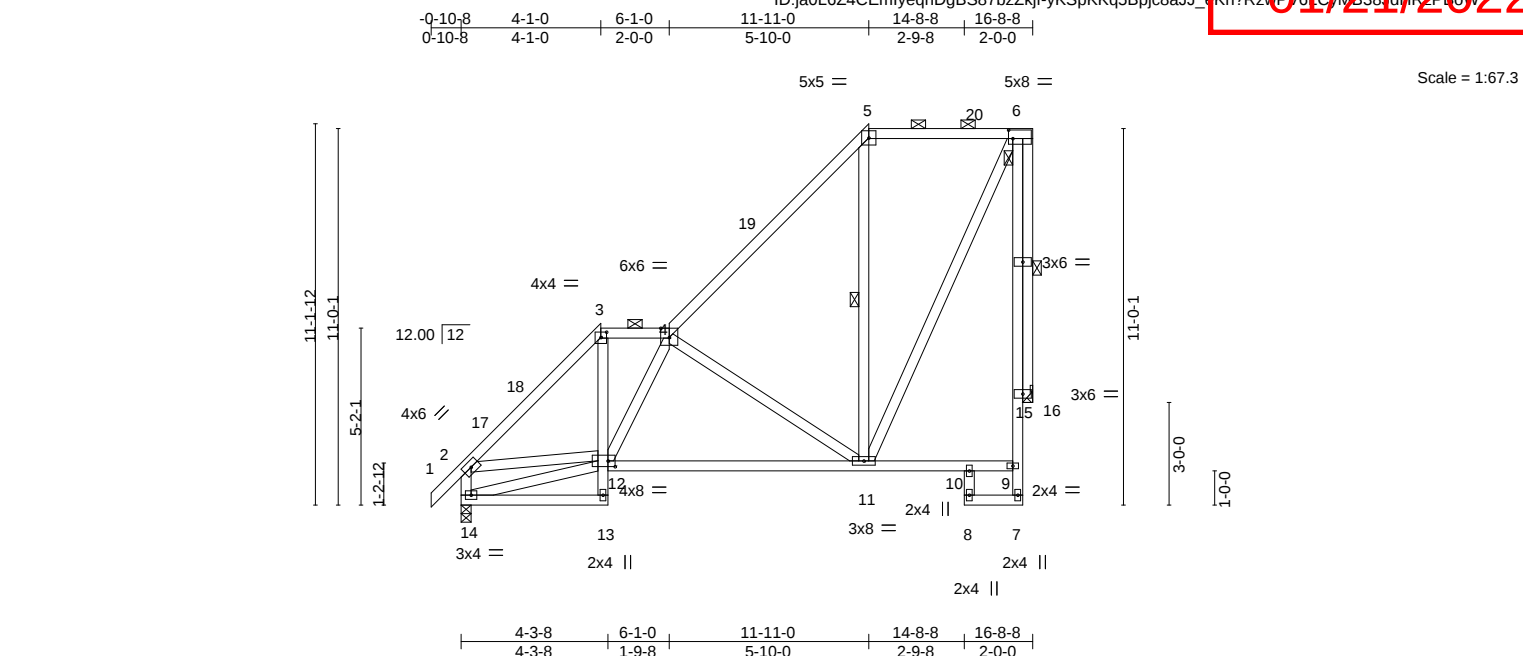


Plate Offsets (X,Y)--	[3:0-2-0,0-1-14], [4:0-3-0,Edge], [6:0-1-8,0-3-0], [12:0-2-8,0-2-0]			
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES
TCLL 25.0	2-0-0	TC 0.48	in (loc) l/defl L/d	MT20
TCDL 10.0	Plate Grip DOL 1.15	BC 0.51	Vert(LL) -0.11 11-12 >999 240	GRIP 197/144
BCLL 0.0	Lumber DOL 1.15	WB 0.53	Vert(CT) -0.23 11-12 >849 180	
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.03 16 n/a n/a	
	Code IRC2018/TPI2014			Weight: 117 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	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.): 3-4, 5-6.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 5-11, 6-16
OTHERS 2x4 SPF No.2	

REACTIONS. (size) 14=0-3-8, 16=Mechanical
Max Horz 14=360(LC 12)
Max Uplift 14=-44(LC 12), 16=-233(LC 12)
Max Grav 14=810(LC 1), 16=710(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-896/142, 3-4=-586/165, 4-5=-538/35, 5-6=-281/121, 2-14=-781/164
BOT CHORD 11-12=-430/718
WEBS 3-12=-52/399, 4-12=-317/0, 4-11=-532/316, 6-11=-267/601, 12-14=-531/391, 2-12=0/472, 6-16=-710/271

- 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 4-1-0, Exterior(2E) 4-1-0 to 6-1-0, Interior(1) 6-1-0 to 11-11-0, Exterior(2R) 11-11-0 to 14-11-0, Interior(1) 14-11-0 to 16-3-4 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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) Refer to girder(s) for truss to truss connections.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14 except (jt=lb) 16=233.
 - 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.
 - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 20,2021

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	C08	Roof Special	1	1	
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

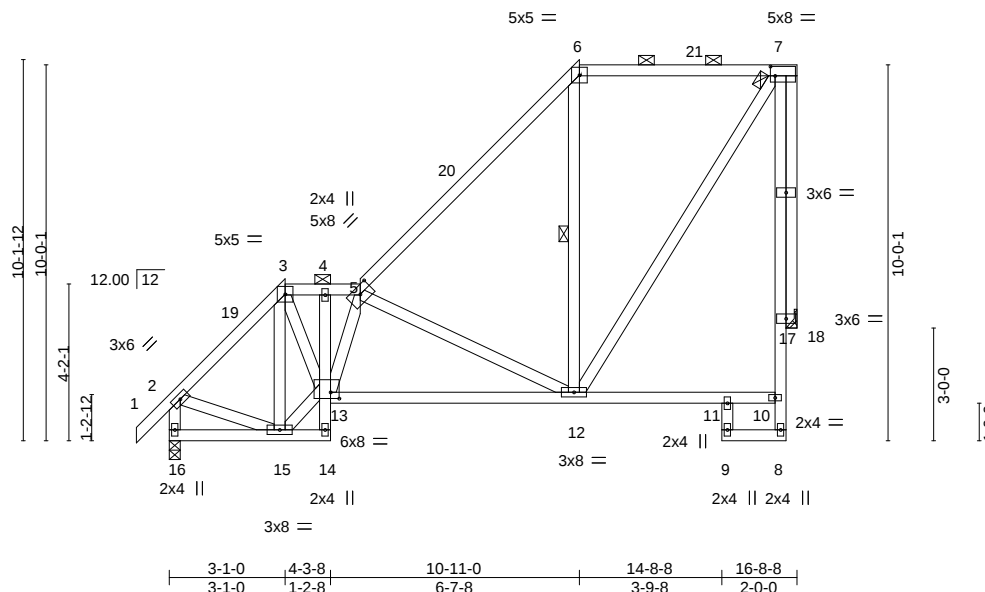
LEE'S SUMMIT, MISSOURI

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8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:58 2021 Page 1
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01/21/2022

0-10-8 3-1-0 4-3-8 5-1-0 10-11-0 14-8-8 16-8-8
0-10-8 3-1-0 1-2-8 0-9-8 5-10-0 3-9-8 2-0-0



Scale = 1:61.3

Plate Offsets (X,Y)-- [5:0-4-0,0-2-5], [7:0-1-8,0-3-0], [13:0-2-12,0-2-0]									
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	0.47	Vert(LL)	-0.05 12-13 >999	240	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.11 12-13 >999	180	
BCLL	0.0	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.04 18 n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS					
								Weight: 113 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

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.): 3-5, 6-7.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 6-12

REACTIONS.

(size) 16=0-3-8, 18=Mechanical
Max Horz 16=319(LC 12)
Max Uplift 16=63(LC 12), 18=-195(LC 12)
Max Grav 16=812(LC 1), 18=711(LC 1)

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

TOP CHORD 2-3=-718/58, 3-4=-747/167, 4-5=-766/170, 5-6=-624/63, 6-7=-343/141, 2-16=-786/83
BOT CHORD 15-16=-457/326, 12-13=-487/905
WEBS 3-15=-479/264, 13-15=-438/673, 3-13=-214/792, 5-13=-448/135, 5-12=-633/327, 7-12=-248/571, 2-15=0/448, 7-18=-711/246

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 3-1-0, Exterior(2E) 3-1-0 to 5-1-0, Interior(1) 5-1-0 to 10-11-0, Exterior(2R) 10-11-0 to 13-11-0, Interior(1) 13-11-0 to 16-3-4 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- The Fabrication Tolerance at joint 5 = 16%
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16 except (jt=lb) 18=195.
- 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.



April 20,2021

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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	Roeser/1483 Winterset
2720415	C09	Roof Special	1	1	Job Reference (optional)

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

45716383

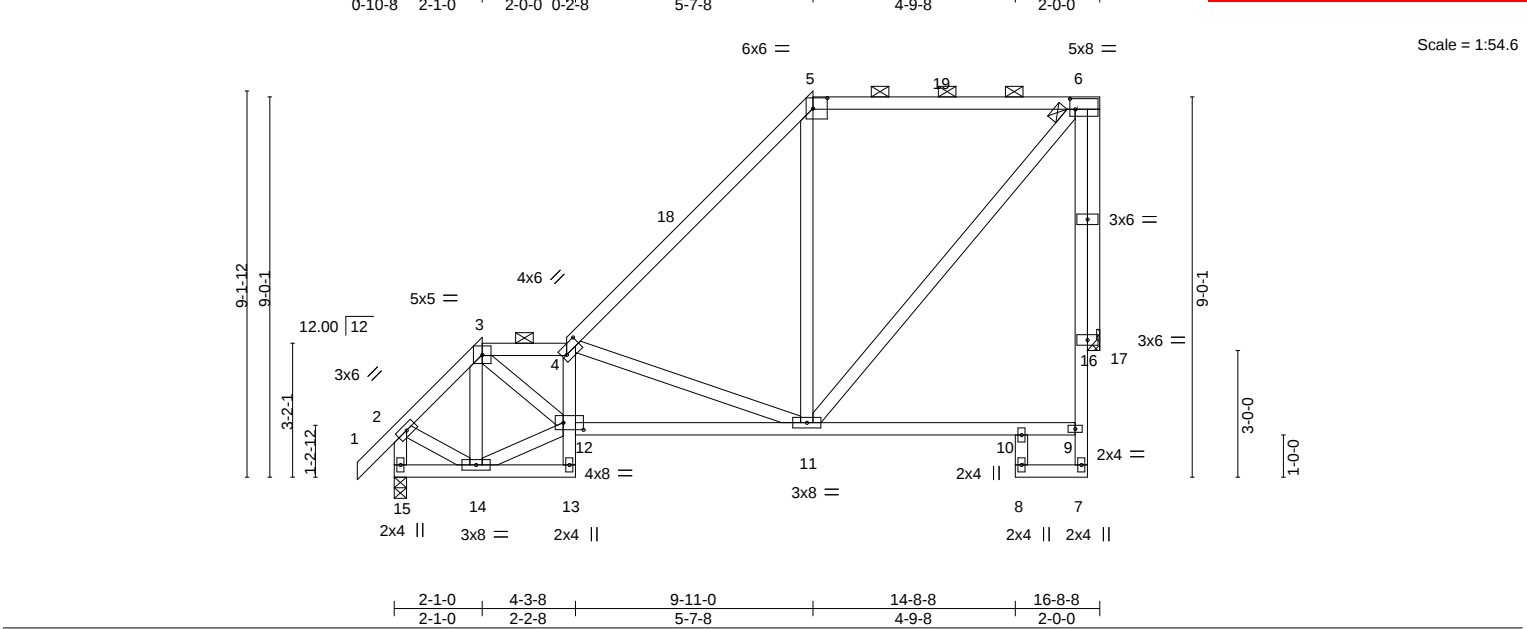
01/21/2022

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:32:00 2021 Page 1

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LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	-0.04 10-11 >999 240	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.09 10-11 >999 180				
BCLL	0.0	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.04 17 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							
								Weight: 102 lb		FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 5-7-14 oc purlins, except end verticals, and 2-0-0 oc purlins (5-4-15 max.): 3-4, 5-6.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS	2x4 SPF No.2		8-1-3 oc bracing: 11-12
OTHERS	2x4 SPF No.2		6-0-0 oc bracing: 7-8.

REACTIONS. (size) 15=0-3-8, 17=Mechanical
Max Horz 15=335(LC 12)
Max Uplift 15=-74(LC 12), 17=-166(LC 12)
Max Grav 15=812(LC 1), 17=711(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-639/75, 3-4=-1177/250, 4-5=-718/88, 5-6=-412/159, 2-15=-792/89
BOT CHORD 14-15=-342/213, 4-12=-394/46, 11-12=-532/1229
WEBS 3-14=-380/135, 12-14=-299/434, 3-12=-222/988, 6-11=-228/559, 2-14=0/472, 4-11=-863/408, 6-17=-712/217

- 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 4-1-0, Interior(1) 4-1-0 to 9-11-0, Exterior(2R) 9-11-0 to 12-11-0, Interior(1) 12-11-0 to 16-3-4 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.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15 except (jt=lb) 17=166.
 - 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.



Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	C10	Roof Special	1	1	
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

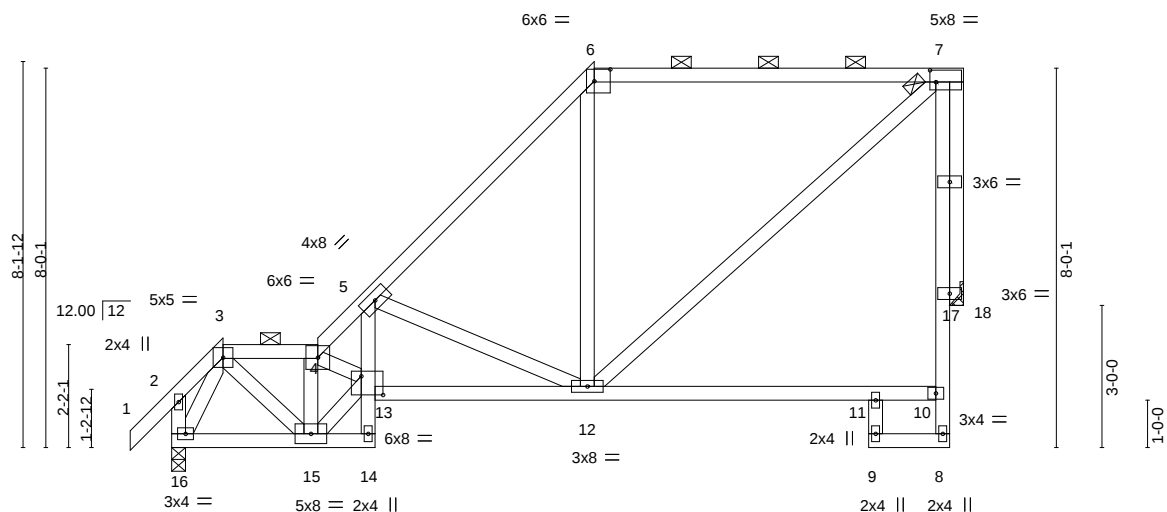
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8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:36:01 2021 Page 1

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01/21/2022

0-10-8 1-1-0 3-1-0 4-3-8 8-11-0 14-8-8 16-8-8
0-10-8 1-1-0 2-0-0 1-2-8 4-7-8 5-9-8 2-0-0



Scale = 1:48.6

1-1-0 3-1-0 4-3-8 8-11-0 14-8-8 16-8-8
1-1-0 2-0-0 1-2-8 4-7-8 5-9-8 2-0-0

Plate Offsets (X,Y)--	[6:0-4-1,0-3-0], [7:0-1-8,0-3-0], [13:0-5-8,0-4-12]						
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES
TCLL 25.0	Plate Grip DOL 1.15	TC 0.85	Vert(LL)	-0.08 11-12	>999	240	MT20
TCDL 10.0	Lumber DOL 1.15	BC 0.47	Vert(CT)	-0.16 11-12	>999	180	GRIP
BCLL 0.0	Rep Stress Incr YES	WB 0.43	Horz(CT)	0.05 18	n/a	n/a	197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS					Weight: 97 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-3-9 oc purlins, except end verticals, and 2-0-0 oc purlins (4-1-9 max.): 3-4, 6-7.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

(size) 16=0-3-8, 18=Mechanical
Max Horz 16=242(LC 9)
Max Uplift 16=-92(LC 12), 18=-167(LC 9)
Max Grav 16=812(LC 1), 18=711(LC 1)

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

TOP CHORD 3-4=-861/88, 4-5=-1814/437, 5-6=-792/134, 6-7=-487/164
BOT CHORD 15-16=-338/537, 5-13=-300/960, 12-13=-628/1450
WEBS 3-15=-41/757, 4-15=-1509/420, 13-15=-506/1343, 4-13=-233/421, 5-12=-986/439, 7-12=-203/556, 3-16=-689/42, 7-18=-713/197

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 3-1-0, Interior(1) 3-1-0 to 8-11-0, Exterior(2R) 8-11-0 to 11-11-0, Interior(1) 11-11-0 to 16-3-4 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16 except (jt=lb) 18=167.
- 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.



April 20,2021

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	C11	Roof Special	1	1	

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

01/21/2022

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:36:03 2021 Page 1

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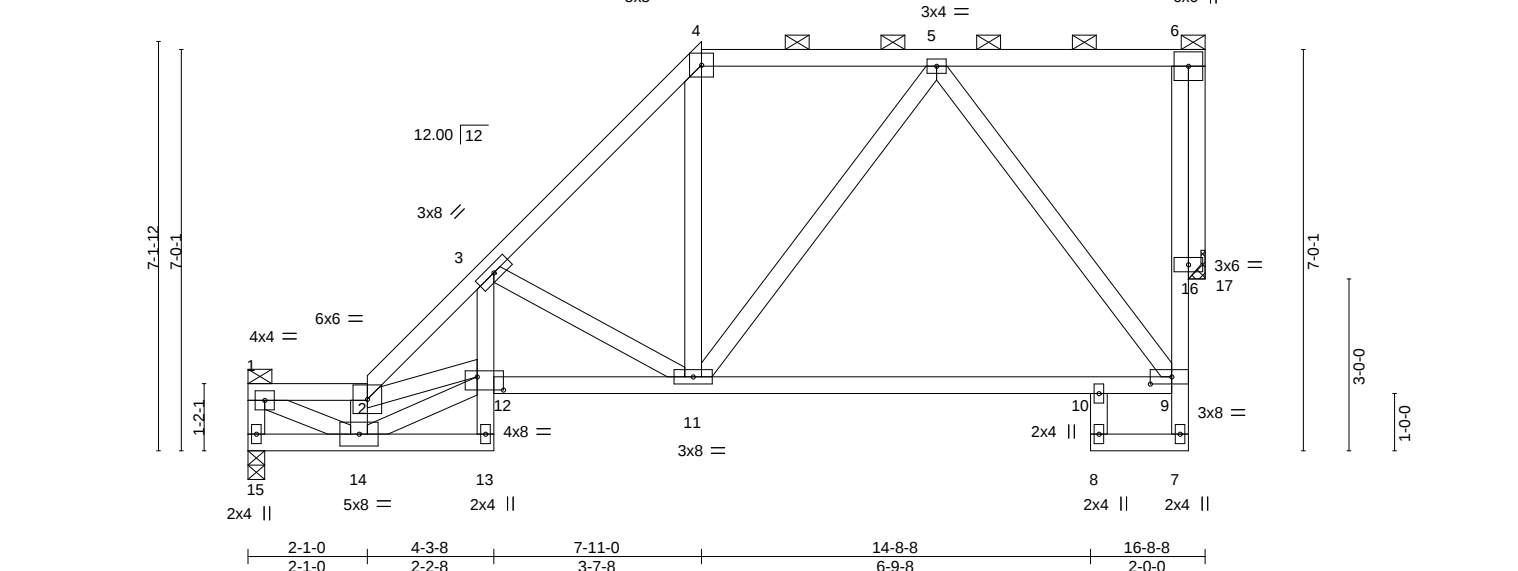


Plate Offsets (X,Y)-- [9:0-4-8,0-1-8], [12:0-5-8,0-2-12]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	-0.12 10-11 >999 240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.24 10-11 >812 180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.55	Horz(CT)	-0.04 17 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS				Weight: 92 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-7-11 oc purlins, except end verticals, and 2-0-0 oc purlins (5-3-7 max.): 1-2, 4-6.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SPF No.2	
OTHERS 2x4 SPF No.2	

REACTIONS. (size) 15=0-3-8, 17=Mechanical
Max Horz 15=202(LC 9)
Max Uplift 15=-77(LC 12), 17=-165(LC 9)
Max Grav 15=739(LC 1), 17=713(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1214/124, 2-3=-1572/331, 3-4=-887/169, 4-5=-556/170, 9-16=-138/583, 6-16=-138/583, 1-15=-664/88
BOT CHORD 14-15=-293/331, 3-12=-181/630, 11-12=-491/1184, 10-11=-189/452, 9-10=-185/502
WEBS 2-14=-1217/266, 12-14=-435/1400, 2-12=-328/23, 3-11=-662/299, 4-11=-22/318, 5-9=-618/212, 1-14=-138/1264, 6-17=-715/181

- 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 2-1-0, Interior(1) 2-1-0 to 7-11-0, Exterior(2R) 7-11-0 to 10-11-0, Interior(1) 10-11-0 to 16-3-4 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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) Refer to girder(s) for truss to truss connections.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15 except (jt=lb) 17=165.
 - 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.
 - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 20,2021

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	C12	Half Hip	1	1	

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:32:05 2021 Page 1

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01/21/2022

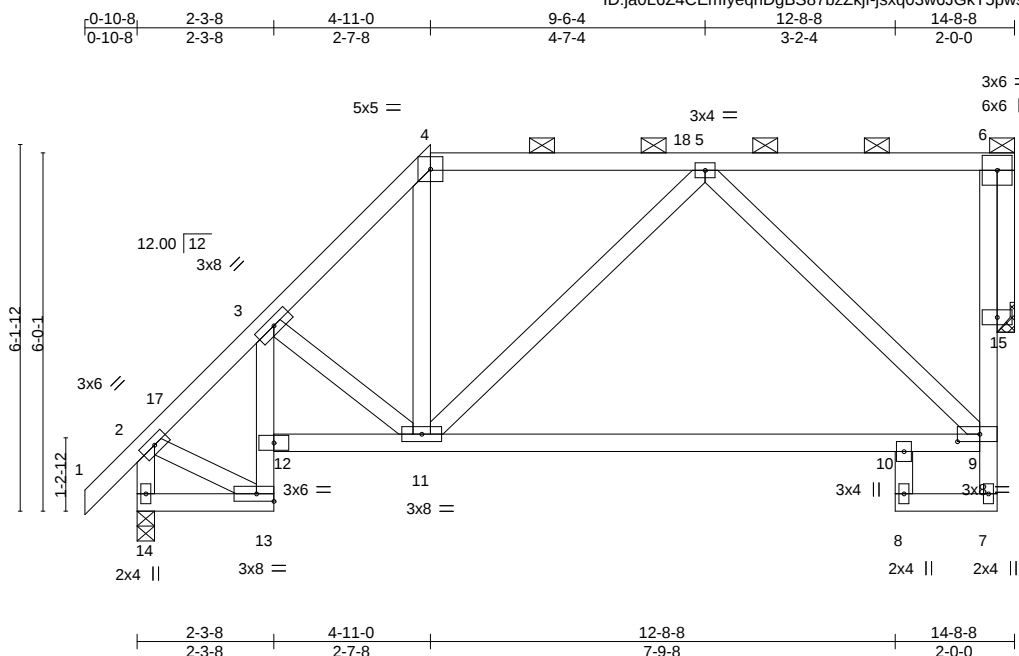


Plate Offsets (X,Y)--	[9:0-4-8,0-1-8]				
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc) l/defl L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.57	Vert(LL)	-0.16 10-11 >999 240
TCDL 10.0	Lumber DOL	1.15	BC 0.57	Vert(CT)	-0.31 10-11 >551 180
BCLL 0.0	Rep Stress Incr	YES	WB 0.42	Horz(CT)	-0.05 16 n/a n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS		
				PLATES	GRIP
				MT20	197/144
				Weight: 78 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 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.): 4-6.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 14=0-3-8, 16=Mechanical
Max Horz 14=196(LC 9)
Max Uplift 14=-74(LC 12), 16=-159(LC 9)
Max Grav 14=722(LC 1), 16=620(LC 1)

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

TOP CHORD 2-3=-624/163, 3-4=-724/216, 4-5=-472/204, 9-15=-132/470, 6-15=-132/470, 2-14=-766/188
BOT CHORD 13-14=-299/178, 11-12=-433/493, 10-11=-233/462, 9-10=-218/529
WEBS 4-11=-45/269, 2-13=-39/425, 5-9=-529/242, 6-16=-625/184

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 2-1-12, Interior(1) 2-1-12 to 4-11-0, Exterior(2R) 4-11-0 to 9-1-15, Interior(1) 9-1-15 to 14-3-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14 except (jt=lb) 16=159.
- 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 20,2021

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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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	Roeser/1483 Winterset	RELEASE FOR CONSTRUCTION
2720415	C13	Half Hip	1	1		AS NOTED FOR PLAN REVIEW
						DEVELOPMENT SERVICES
						LEE'S SUMMIT, MISSOURI

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:32:07 2021 Page 1

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01/21/2022

-1-10-8	2-3-8	3-11-0	9-0-4	12-8-8	14-8-8
1-10-8	2-3-8	1-7-8	5-1-4	3-8-4	2-0-0

Scale = 1:34.5

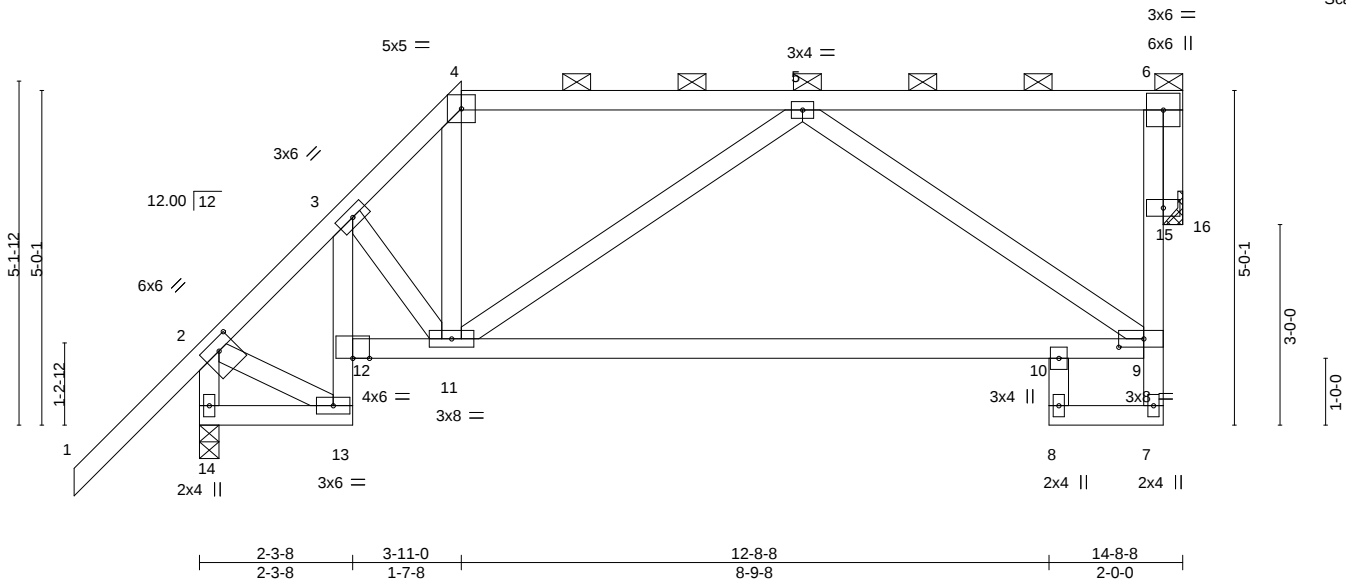


Plate Offsets (X,Y)-- [2:0-3-0,0-1-15], [9:0-4-8,0-1-8]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES	GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	-0.21	10-11	>820	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.42	10-11	>412	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.44	Horz(CT)	-0.05	16	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 75 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

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.): 4-6.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

(size) 14=0-3-8, 16=Mechanical
Max Horz 14=190(LC 9)
Max Uplift 14=-154(LC 12), 16=-154(LC 9)
Max Grav 14=800(LC 1), 16=613(LC 1)

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

TOP CHORD 2-3=-580/128, 3-4=-723/179, 4-5=-516/160, 9-15=-93/452, 6-15=-93/452, 2-14=-825/183
BOT CHORD 3-12=-312/0, 11-12=-295/563, 10-11=-245/605, 9-10=-218/694
WEBS 4-11=-38/320, 5-9=-598/234, 2-13=-20/433, 6-16=-624/157

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) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 3-11-0, Exterior(2R) 3-11-0 to 8-1-15, Interior(1) 8-1-15 to 14-3-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=154, 16=154.
- 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.



April 20,2021

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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

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	C14	Half Hip Girder	1	1	
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
45716388

01/21/2022

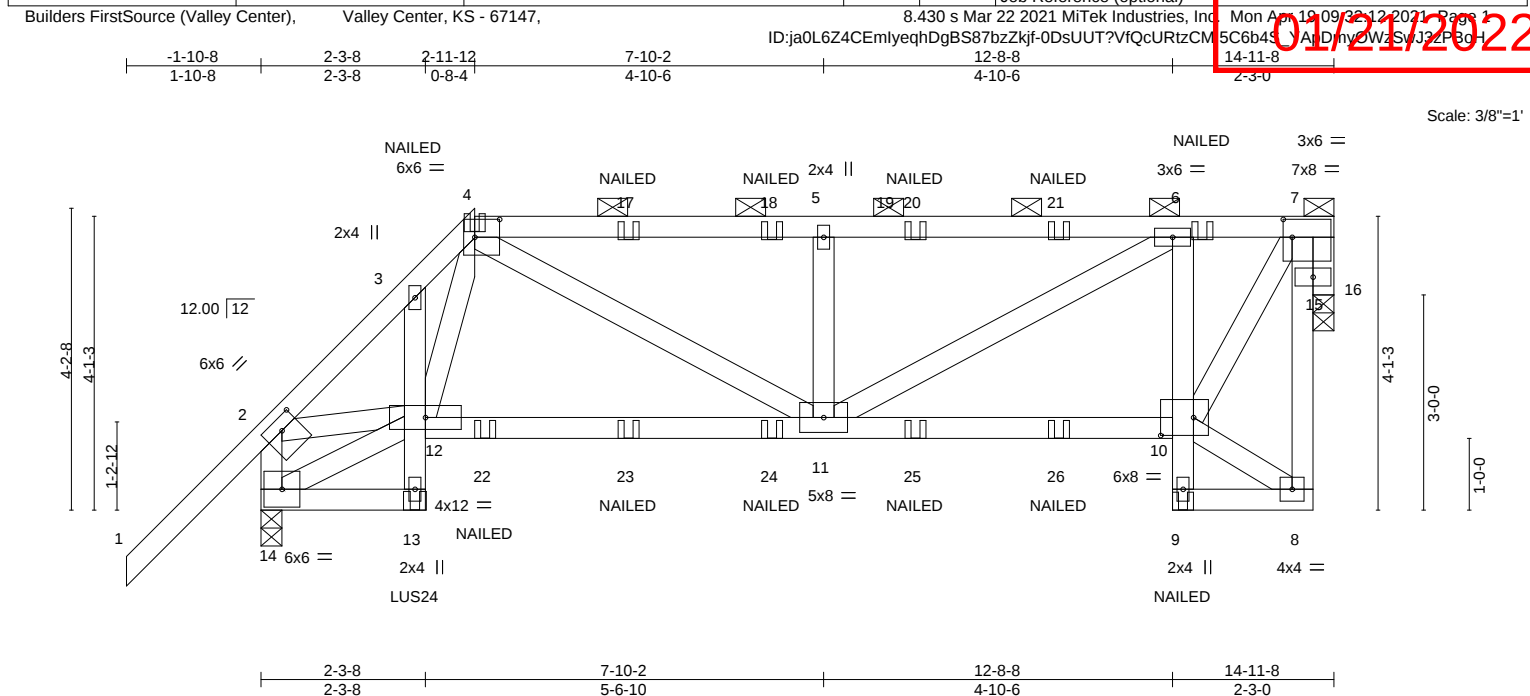


Plate Offsets (X,Y)-- [2:0-3-0,0-1-15], [4:0-4-3,0-3-0], [7:0-1-8,0-3-0], [10:0-5-8,0-3-0]										
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	0.09 11-12 >999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.17 11-12 >999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.41	Horz(CT)	0.06 16 n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS					Weight: 79 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-0-14 oc purlins, except end verticals, and 2-0-0 oc purlins (3-6-2 max.): 4-7.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

(size) 14=0-3-8, 16=0-3-8
Max Horz 14=169(LC 5)
Max Uplift 14=-497(LC 8), 16=-405(LC 5)
Max Grav 14=1622(LC 1), 16=1344(LC 1)

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

TOP CHORD 2-3=-1922/665, 3-4=-1744/644, 4-5=-2066/663, 5-6=-2066/663, 6-7=-964/290, 2-14=-1591/540
BOT CHORD 12-13=-119/287, 11-12=-508/1251, 10-11=-354/1014, 6-10=-1205/461
WEBS 4-11=-290/946, 5-11=-619/244, 6-11=-410/1207, 7-10=-545/1688, 4-12=-179/356, 2-12=-400/1318, 7-16=-1394/419

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.
- Bearing at joint(s) 16 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) except (jt=lb) 14=497, 16=405.
- 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.
- Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent at 2-1-12 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg.to the left, sloping 0.0 deg. down.
- Fill all nail holes where hanger is in contact with lumber.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 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



April 20,2021

Continued on page 2

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	C14	Half Hip Girder	1	1	Job Reference (optional)

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

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RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

145716388

LOAD CASE(S) Standard

1) 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, 13-14=-20, 10-12=-20, 8-9=-20

Concentrated Loads (lb)

Vert: 4=-97(F) 13=-273(F) 6=-149(F) 10=-68(F) 17=-97(F) 18=-97(F) 20=-97(F) 21=-97(F) 22=-112(F) 23=-112(F) 24=-112(F) 25=-112(F) 26=-112(F)

01/21/2022

 **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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	CJ01	Diagonal Hip Girder	1	1	

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES

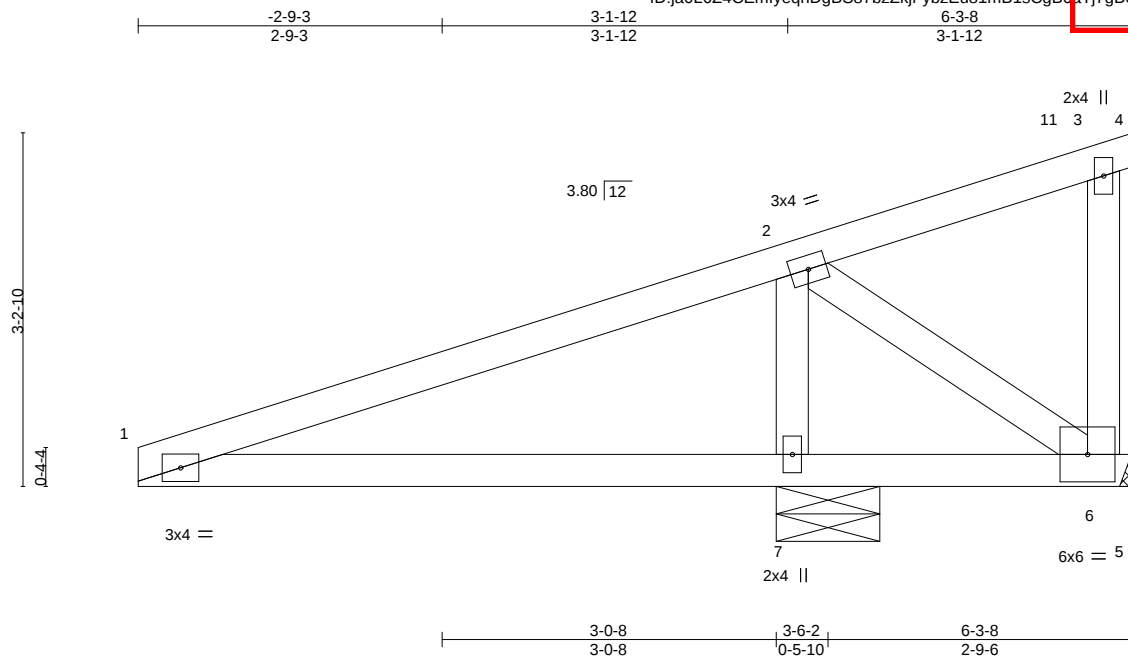
LEE'S SUMMIT, MISSOURI

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:32:14 2021 Page 1

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01/21/2022



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 0.61	Vert(LL)	-0.01	6-7	>999	240	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.39	Vert(CT)	0.01	6-7	>999	180	197/144
BCLL 0.0	Rep Stress Incr	NO	WB 0.19	Horz(CT)	-0.00	6	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						
								Weight: 30 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 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

(size) 7=0-11-5, 6=Mechanical
Max Horz 7=114(LC 21)
Max Uplift 7=-456(LC 4), 6=-424(LC 1)
Max Grav 7=1226(LC 1), 6=165(LC 4)

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

TOP CHORD 1-2=-303/744
BOT CHORD 1-7=-645/319, 6-7=-645/205
WEBS 2-7=-1044/394, 2-6=-248/781

NOTES-

- 1) 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=456, 6=424.
- 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 52 lb down and 97 lb up at 3-2-3 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 3-4=-20, 5-8=-20



April 20, 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	Roeser/1483 Winterset
2720415	CJ02	Jack-Open Structural Gable	1	1	Job Reference (optional)

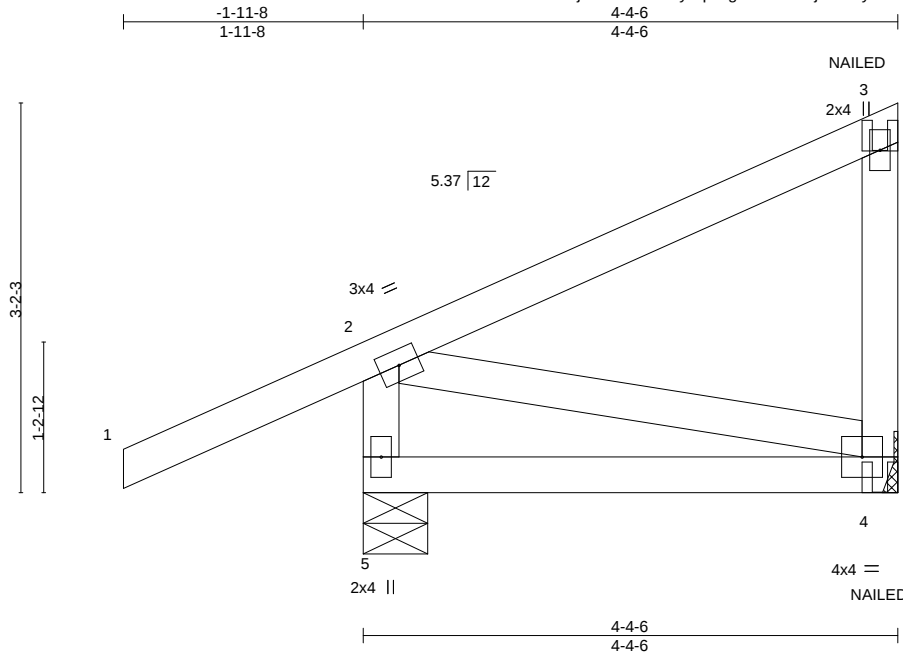
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:32:19 2021 Page 1

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01/21/2022



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 0.32	Vert(LL)	-0.02	4-5	>999	240	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.17	Vert(CT)	-0.03	4-5	>999	180	197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.05	Horz(CT)	-0.00	4	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 21 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.

REACTIONS.

(size) 4=Mechanical, 5=0-6-5
Max Horz 5=135(LC 9)
Max Uplift 4=102(LC 9), 5=84(LC 12)
Max Grav 4=237(LC 1), 5=368(LC 1)

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

TOP CHORD 2-5=-328/328
BOT CHORD 4-5=-287/177
WEBS 2-4=-139/256

NOTES-

- 1) 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 Corner(3) -1-11-8 to 2-3-7, Exterior(2R) 2-3-7 to 4-2-10 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
- 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) Gable studs spaced at 1-4-0 oc.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 4=102.
- 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.
- 8) 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.
- 9) "NAILED" indicates 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 10) 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

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 4-5=-20
Concentrated Loads (lb)
Vert: 3=-58(B) 4=-34(B)



April 20, 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	Roeser/1483 Winterset
2720415	CJ03	Jack-Open Structural Gable	1	1	Job Reference (optional)

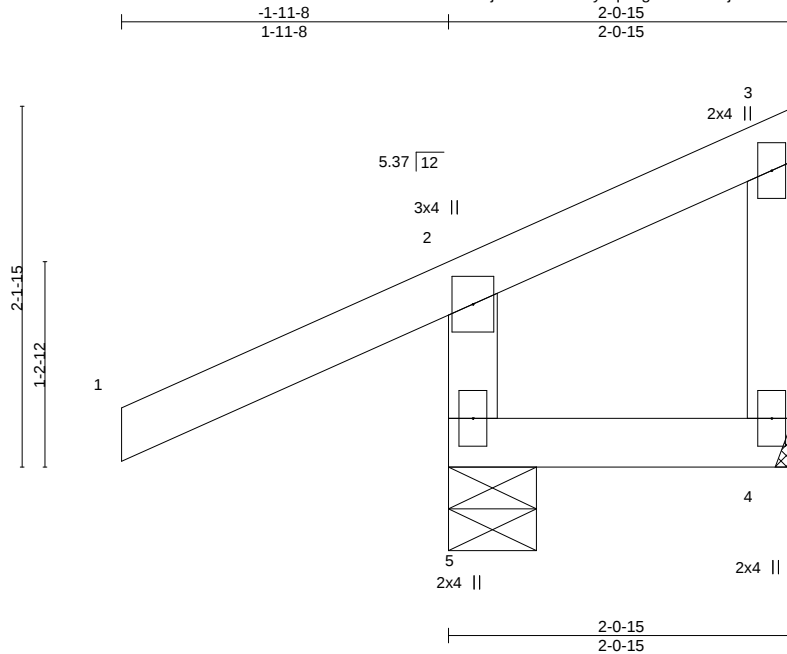
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
145716391

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:38:20 2021 Page 1

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01/21/2022



Scale = 1:13.8

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 0.33	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	-0.00	5	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MR						Weight: 10 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 2-0-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

(size) 4=Mechanical, 5=0-6-5
Max Horz 5=110(LC 11)
Max Uplift 4=36(LC 9), 5=85(LC 8)
Max Grav 4=29(LC 8), 5=314(LC 1)

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

TOP CHORD 2-5=-279/323

NOTES-

- 1) 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 Corner(3) 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
- 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) Gable studs spaced at 1-4-0 oc.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.
- 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.



April 20,2021

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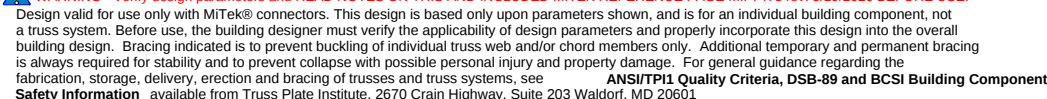
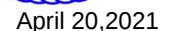
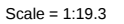
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



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Chesterfield, MO 63017

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Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	CJ05	Jack-Open	1	1	

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES

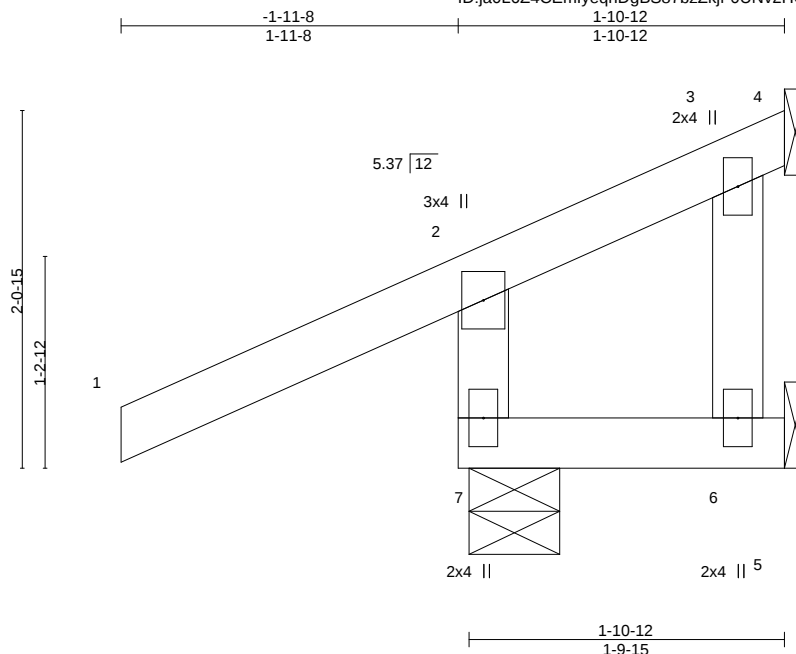
LEE'S SUMMIT, MISSOURI

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:32:29 2021 Page 1

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01/21/2022



Scale = 1:13.4

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 0.33	Vert(LL)	0.00	6	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	0.00	6	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.01	Horz(CT)	-0.01	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 10 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 1-10-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 4=Mechanical, 5=Mechanical, 7=0-6-5
Max Horz 7=59(LC 11)
Max Uplift 4=-20(LC 12), 5=-46(LC 1), 7=-66(LC 8)
Max Grav 4=34(LC 1), 5=23(LC 8), 7=314(LC 1)

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

TOP CHORD 2-7=-284/307

NOTES-

- 1) 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 Corner(3) 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5, 7.
- 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.



April 20,2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	CJ06	Jack-Open	1	1	Job Reference (optional)

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:32:36 2021 Page 1
ID:ja0L6Z4CEmlyeqhDgBS87bzZkjf-JqJYWglZ?oe4JZomKWrs4dqDW_rIMw1GC8gzFBrv

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
145716394

01/21/2022

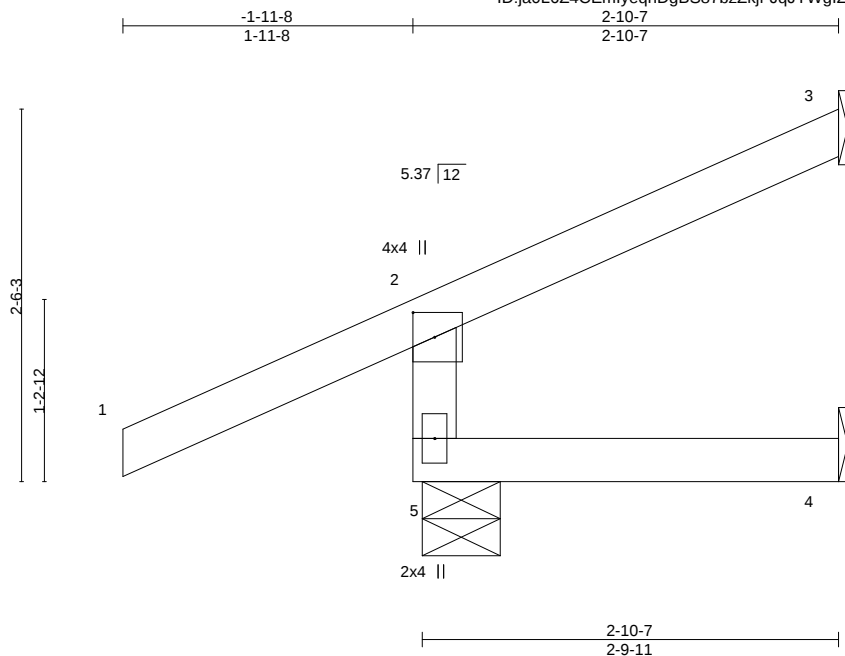


Plate Offsets (X,Y)-- [2:0-2-0,0-1-12]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	-0.00	4-5	>999	240	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.00	4-5	>999	180	
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MR							Weight: 10 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 2-10-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 5=0-6-5, 3=Mechanical, 4=Mechanical
Max Horz 5=72(LC 9)
Max Uplift 5=-62(LC 12), 3=-41(LC 12)
Max Grav 5=325(LC 1), 3=49(LC 1), 4=46(LC 3)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-284/286

NOTES-

- 1) 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 Corner(3) -1-11-8 to 2-3-7, Exterior(2R) 2-3-7 to 2-9-11 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
- 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.



April 20,2021

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

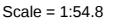


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job Reference (optional)

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Weight: 119 lb FT = 20%

TOP CHORD	Structural wood sheathing directly applied or 5-8-4 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4, 5-6, 7-8.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

(size) 16=0-3-8, 18=Mechanical
Max Horz 16=266(LC 12)
Max Uplift 16=-123(LC 12), 18=-170(LC 12)
Max Grav 16=924(LC 1), 18=831(LC 1)

TOP CHORD 4-5=-1041/115, 5-6=-666/146, 6-7=-730/101, 7-8=-458/128
BOT CHORD 14-16=-456/812, 13-14=-306/850
WEBS 5-14=0/395, 6-14=-279/41, 6-13=-636/239, 8-13=-196/682, 4-16=-1132/175,
8-18=-832/201

- 1) 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 1-3-12, Interior(1) 1-3-12 to 4-11-0, Exterior(2R) 4-11-0 to 7-11-0, Interior(1) 7-11-0 to 12-6-0, Exterior(2R) 12-6-0 to 15-6-0, Interior(1) 15-6-0 to 18-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=123, 18=170.
- 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 20, 2021



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 Code**

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	Roeser/1483 Winterset
2720415	D02	PIGGYBACK BASE	1	1	

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:32:39 2021 Page 1
ID:ja0L6Z4CEmlyeqhDgBS87bzZkf-jP_h8hKRlJ0eA1XORT4Yli4qFW02WfHJig/skZz0BJS

01/21/2022

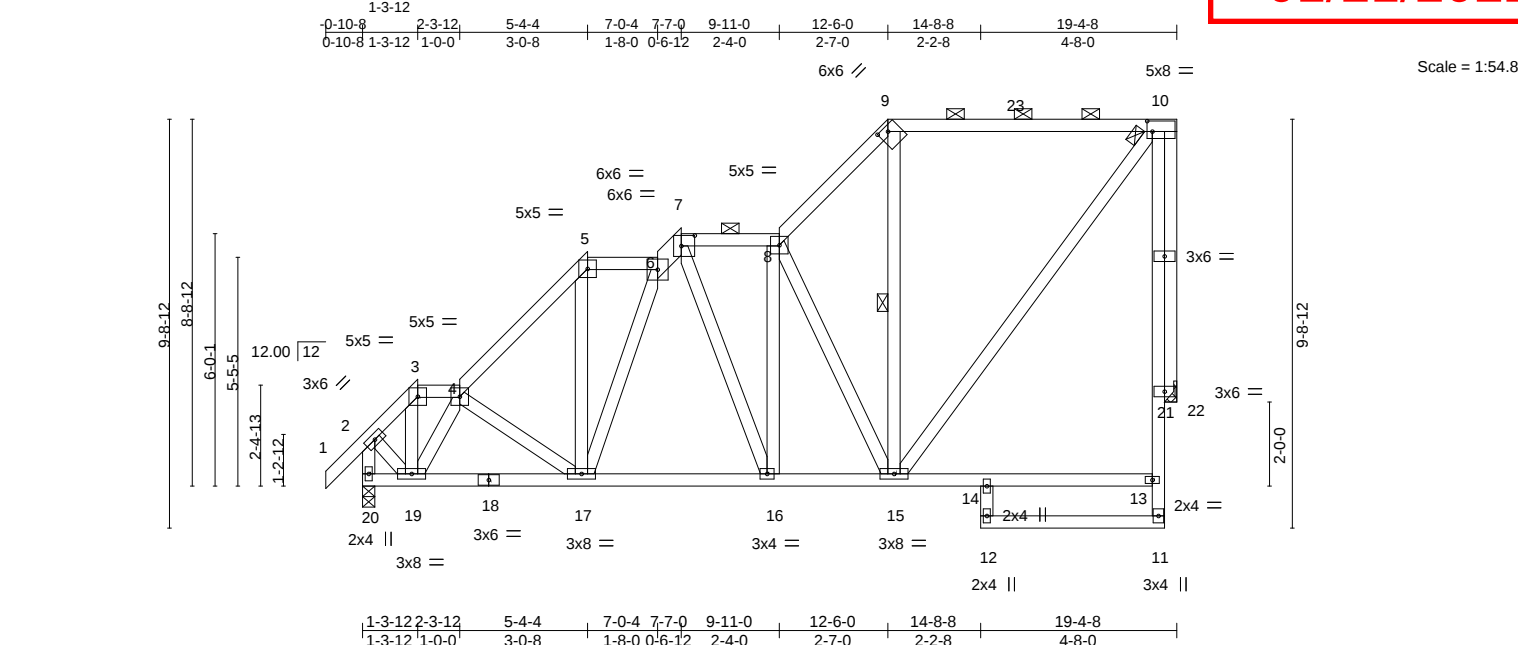


Plate Offsets (X,Y)-- [7:0-3-13,0-3-0], [9:0-2-12,0-1-8], [10:0-1-8,0-3-0]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	-0.03	16-17	>999	240	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.06	12	>999	180	
BCLL	0.0	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.04	22	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 137 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD	TOP CHORD
2x4 SPF No.2 *Except*	Structural wood sheathing directly applied, except end verticals, and
6-7: 2x6 SPF No.2	2-0-0 oc purlins (6-0-0 max.): 3-4, 5-6, 7-8, 9-10.
BOT CHORD	BOT CHORD
2x4 SPF No.2	Rigid ceiling directly applied.
WEBS	WEBS
2x4 SPF No.2	1 Row at midpt 9-15
OTHERS	
2x4 SPF No.2	

REACTIONS. (size) 20=0-3-8, 22=Mechanical
Max Horz 20=267(LC 12)
Max Uplift 20=124(LC 12), 22=170(LC 12)
Max Grav 20=932(LC 1), 22=831(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-593/85, 3-4=-389/71, 4-5=-961/141, 5-6=-637/155, 6-7=-654/73, 7-8=-712/117,
8-9=-660/115, 9-10=-457/130, 2-20=-915/120
BOT CHORD 19-20=-378/255, 17-19=-416/757, 16-17=-299/695, 15-16=-267/711
WEBS 3-19=-64/307, 5-17=-18/338, 10-15=-199/672, 2-19=-24/585, 4-19=-774/121,
8-15=-594/223, 10-22=-832/203

- 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 2-3-12, Interior(1) 2-3-12 to 5-4-4, Exterior(2E) 5-4-4 to 7-0-4, Interior(1) 7-0-4 to 7-7-0, Exterior(2E) 7-7-0 to 9-11-0, Interior(1) 9-11-0 to 12-6-0, Exterior(2R) 12-6-0 to 15-6-0, Interior(1) 15-6-0 to 18-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 20=124, 22=170.
 - 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 20,2021

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	D03	Piggyback Base	1	1	

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
145716397

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 11 09:32:46 2021 Page 1

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01/21/2022

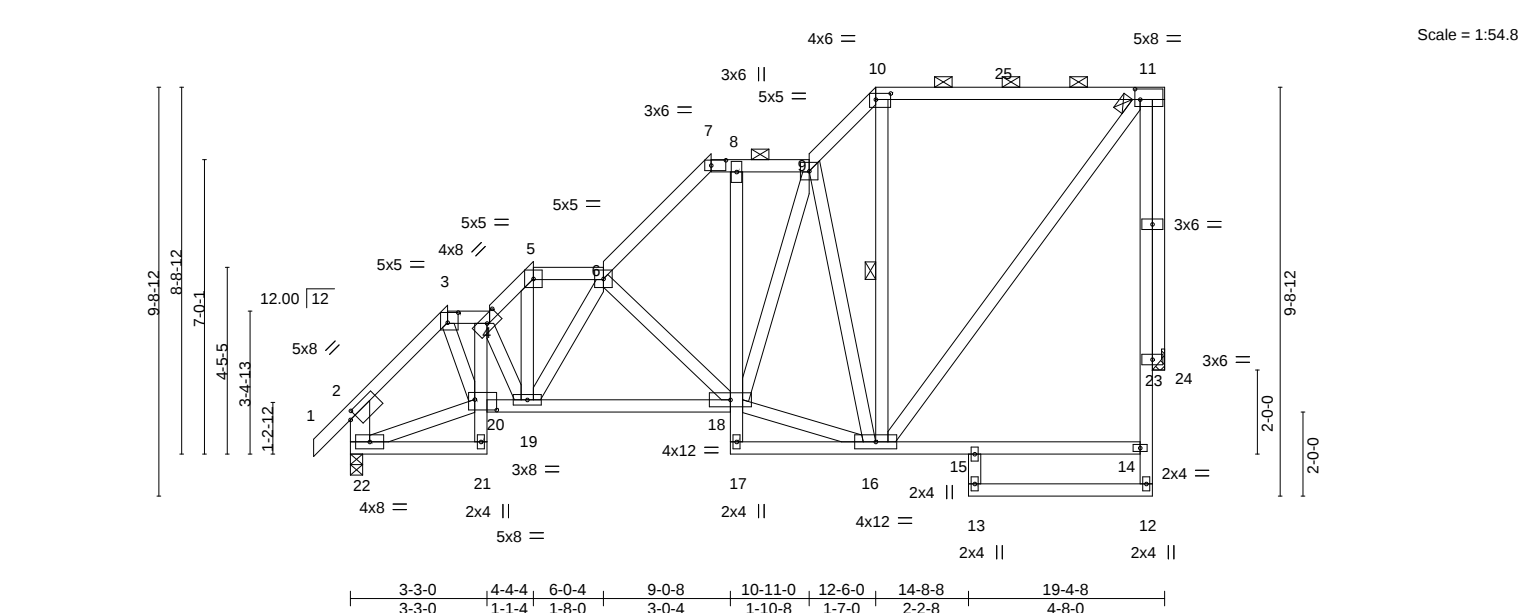


Plate Offsets (X,Y)--	[2:0-1-14,0-1-12], [3:0-3-0,0-2-14], [4:0-4-0,0-1-15], [7:0-4-3,0-1-8], [10:0-4-4,0-1-12], [11:0-1-8,0-3-0], [20:0-6-4,0-3-0]
-----------------------	---

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 0.88	Vert(LL)	-0.08 18-19	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.47	Vert(CT)	-0.15 18-19	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.67	Horz(CT)	0.08 24	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS						
								Weight: 144 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (5-11-12 max.): 3-4, 5-6, 7-9, 10-11.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SPF No.2 *Except*	WEBS 1 Row at midpt 10-16
OTHERS 2-22: 2x6 SPF No.2	
2x4 SPF No.2	

REACTIONS. (size) 22=0-3-8, 24=Mechanical
Max Horz 22=265(LC 12)
Max Uplift 22=-124(LC 12), 24=-169(LC 12)
Max Grav 22=934(LC 1), 24=827(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-998/262, 3-4=-838/260, 4-5=-1247/293, 5-6=-869/225, 6-7=-960/177, 7-8=-662/169, 8-9=-675/170, 9-10=-669/145, 10-11=-470/135, 2-22=-953/252
BOT CHORD 4-20=-805/42, 19-20=-538/974, 18-19=-454/1062, 8-18=-57/509
WEBS 5-19=-165/698, 6-18=-555/224, 16-18=-237/656, 9-16=-779/292, 11-16=-201/680, 20-22=-438/504, 3-20=-172/836, 6-19=-389/29, 11-24=-828/202

- 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 3-3-12, Interior(1) 3-3-12 to 4-4-4, Exterior(2E) 4-4-4 to 6-0-4, Interior(1) 6-0-4 to 8-7-0, Exterior(2E) 8-7-0 to 10-11-0, Interior(1) 10-11-0 to 12-6-0, Exterior(2R) 12-6-0 to 15-6-0, Interior(1) 15-6-0 to 18-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 22=124, 24=169.
 - 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.



April 20,2021

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	D04	PIGGYBACK BASE	1	1	
Job Reference (optional)					

AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:32:54 2021 Page 1

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01/21/2022

-0-10-8 2-4-4 3-3-0 5-0-4 9-0-8 9-7-0 11-11-0 12-6-0 14-8-8 19-4-8
0-10-8 2-4-4 0-10-12 1-9-4 4-0-4 0-6-8 2-4-0 0-7-0 2-2-8 4-8-0

Scale = 1:56.8

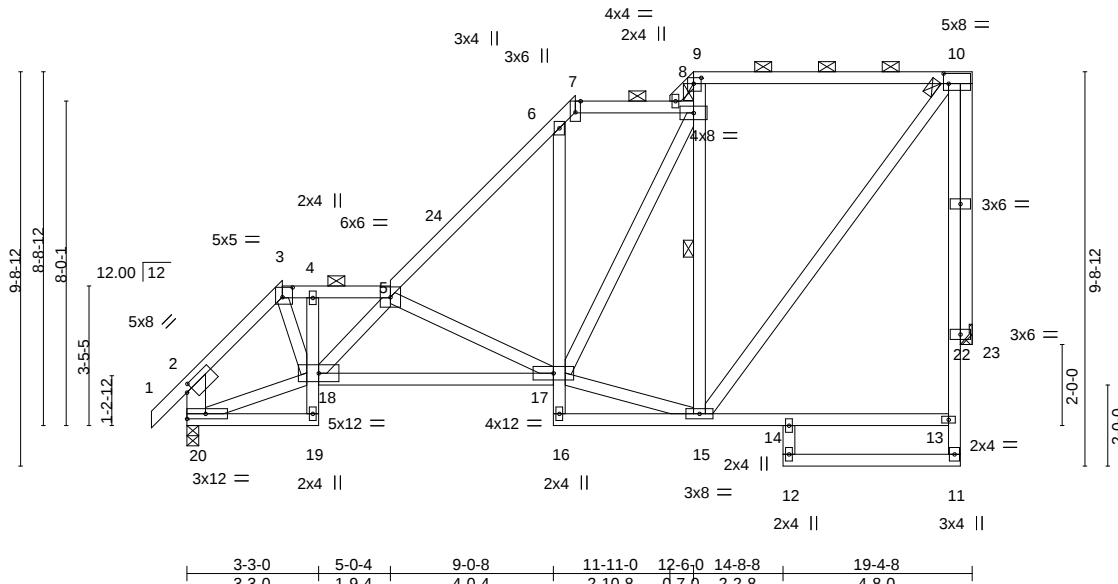


Plate Offsets (X,Y)-- [2:0-1-14,0-1-12], [3:0-3-0,0-2-14], [7:0-3-4,Edge], [9:0-2-4,0-1-12], [10:0-1-8,0-3-0]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES GRIP			
TCLL	25.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.10	17-18	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.20	17-18	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.07	23	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 133 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except*
2-20: 2x6 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-8-14 max.): 3-5, 7-8, 9-10.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 9-15

REACTIONS.

(size) 20=0-3-8, 23=Mechanical
Max Horz 20=244(LC 9)
Max Uplift 20=138(LC 12), 23=158(LC 12)
Max Grav 20=934(LC 1), 23=827(LC 1)

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

TOP CHORD 2-3=-1018/243, 3-4=-873/239, 4-5=-963/249, 5-6=-1022/179, 6-7=-598/199,
7-8=-628/205, 9-10=-435/116, 2-20=-968/236
BOT CHORD 4-18=-270/74, 17-18=-538/1399, 6-17=-0/341
WEBS 5-17=-852/320, 8-15=-551/226, 10-15=-174/628, 15-17=-132/464, 8-17=-175/332,
5-18=-659/120, 18-20=-388/582, 3-18=-153/963, 10-23=-828/184

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 5-0-4, Interior(1) 5-0-4 to 9-7-0, Exterior(2E) 9-7-0 to 12-7-12, Interior(1) 12-7-12 to 18-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 20=138, 23=158.
- 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 20,2021

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	Roeser/1483 Winterset
2720415	D05	Roof Special Girder	1	1	
Job Reference (optional)					

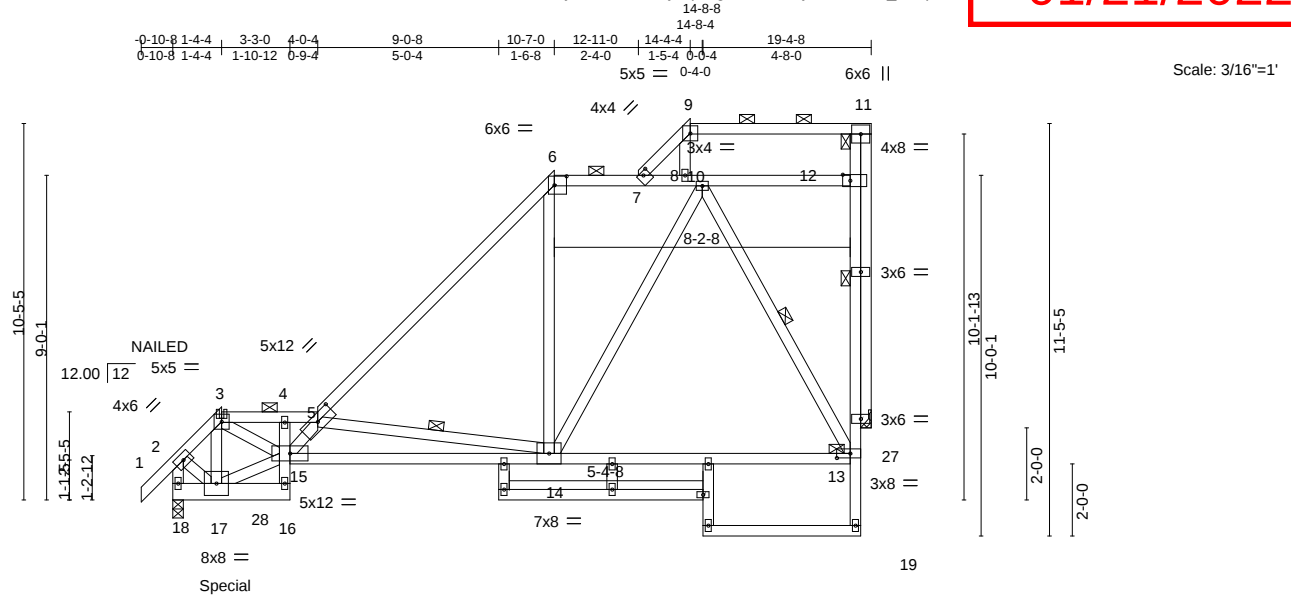
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 12 09:32:59 2021 Page 1

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01/21/2022



Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	D05	Roof Special Girder	1	1	Job Reference (optional)

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:32:59 2021 Page 2
ID:ja0L6Z4CEmlyeqhDgBS87bzZkjf-8FBFLXa_bsXpa63BcfREWVXQaV9ik99JKhLUSzF8ny

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
145716399

01/21/2022

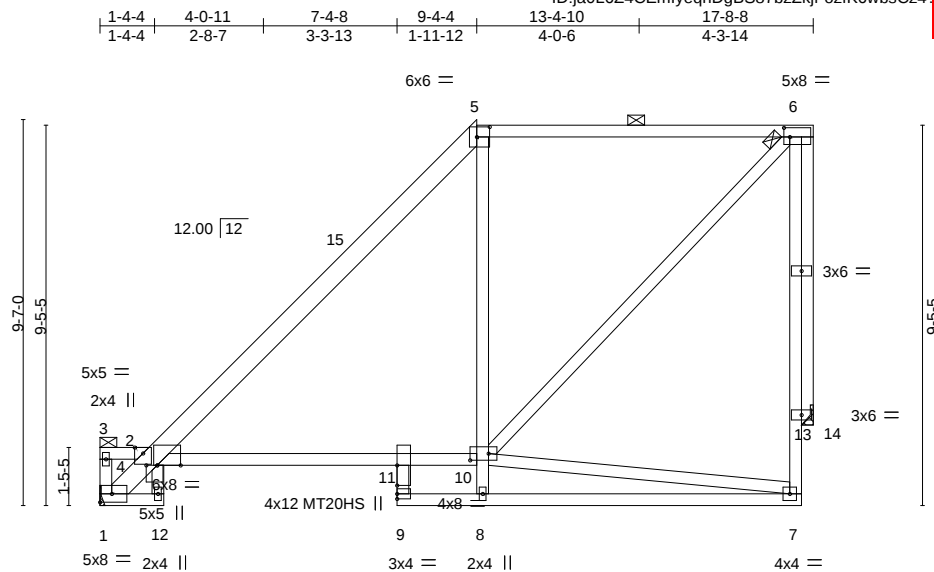
- LOAD CASE(S)** Standard
- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-2=-70, 2-3=-70, 3-5=-70, 5-6=-70, 6-7=-70, 7-9=-70, 9-11=-70, 16-18=-20, 13-15=-20
- Concentrated Loads (lb)
- Vert: 17=6(B) 28=-499(B)

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	D06	Roof Special	1	1	
					Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

ID:ja0L6Z4CEmlyeqhDgBS87bzZkf-ozfK6wbsCz4?FXbMVdpE1v21/??Li8?O?rpMa5z2QUM8

01/21/2022



Scale = 1:57.2

Plate Offsets (X,Y)-- [4:0-0-0,0-3-4], [4:0-7-0,0-0-0], [5:0-3-13,0-3-0], [6:0-1-12,0-2-12], [10:0-5-8,0-2-0], [11:0-6-0,0-0-0]

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 0.86	Vert(LL)	0.37	4-11	>568	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.85	Vert(CT)	-0.49	4-11	>428	MT20HS	148/108
BCLL 0.0	Rep Stress Incr	YES	WB 0.48	Horz(CT)	0.22	14	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS						
									Weight: 108 lb FT = 20%

LUMBER-			BRACING-		
TOP CHORD	2x4 SPF No.2 *Except*		TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-4, 5-6, 6-7, 2-3.	
	1-5: 2x6 SPF No.2			Except:	
BOT CHORD	2x4 SPF No.2 *Except*			1 Row at midpt 5-6	
	4-10: 2x4 SPF 1650F 1.5E		BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.	
WEBS	2x4 SPF No.2				
OTHERS	2x4 SPF No.2				

REACTIONS. (size) 1=Mechanical, 14=Mechanical
Max Horz 1=362(LC 12)
Max Uplift 1=-58(LC 12), 14=-90(LC 12)
Max Grav 1=898(LC 1), 14=425(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-432/23, 2-4=0/449, 4-15=-645/0, 5-15=-445/0, 5-6=-398/147
BOT CHORD 4-11=-151/400, 10-11=-293/795, 8-9=-395/142, 7-8=-378/136
WEBS 8-10=0/445, 7-10=-136/393, 6-10=-215/559, 6-14=-426/91

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) 0-1-12 to 1-4-8, Interior(1) 0-1-12 to 9-4-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 58 lb uplift at joint 1 and 90 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



April 20,2021

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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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	D07	Half Hip	1	1	

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

01/21/2022

Builders FirstSource (Valley Center),
Valley Center, KS - 67147,
8.430 s Mar 22 2021 MiTek Industries, Inc.

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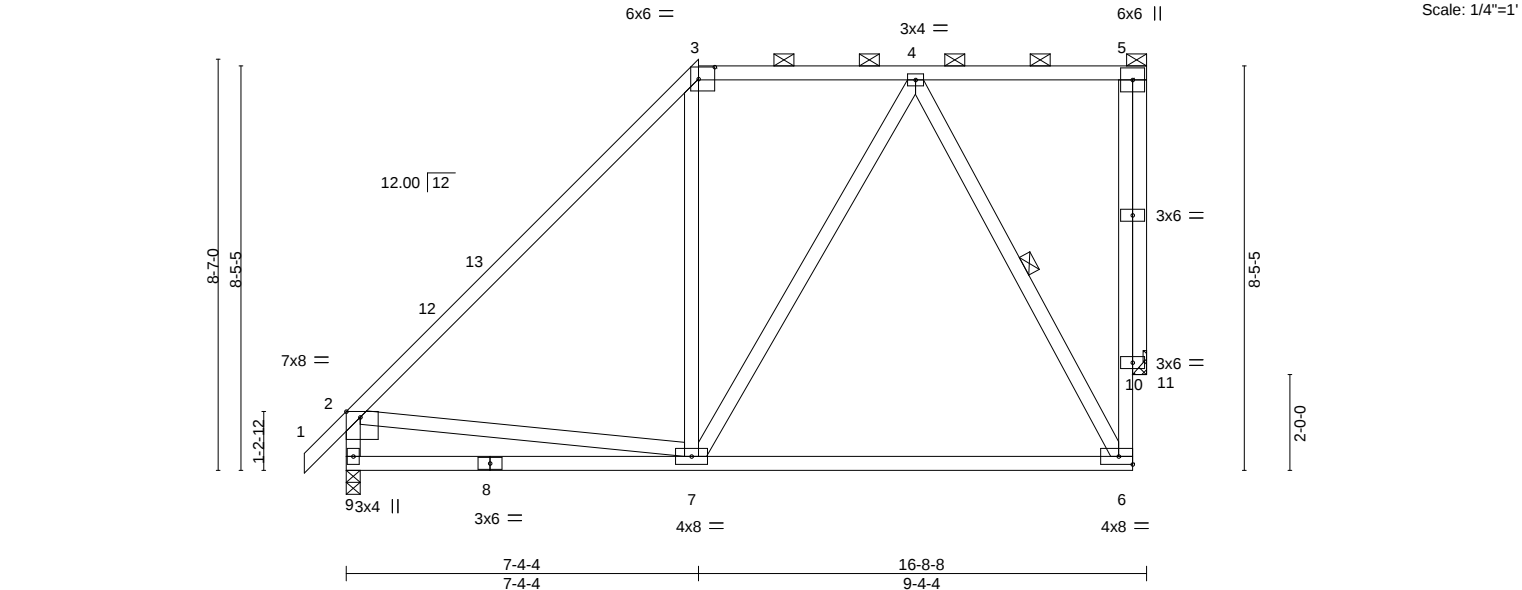


Plate Offsets (X,Y)--		[2:0-3-8,Edge], [3:0-4-1,0-3-0]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.51
TCDL 10.0	Lumber DOL	1.15	BC 0.55
BCLL 0.0	Rep Stress Incr	YES	WB 0.37
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-AS
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.16 6-7 >999 240
			Vert(CT) -0.31 6-7 >629 180
			Horz(CT) -0.06 11 n/a n/a
			PLATES
			MT20
			GRIP
			197/144
			Weight: 97 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and
BOT CHORD 2x4 SPF No.2	2-0-0 oc purlins (6-0-0 max.): 3-5.
WEBS 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
OTHERS 2x4 SPF No.2	WEBS 1 Row at midpt 4-6

REACTIONS. (size) 9=0-3-8, 11=Mechanical
Max Horz 9=275(LC 12)
Max Uplift 9=-66(LC 12), 11=-183(LC 9)
Max Grav 9=812(LC 1), 11=711(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-755/90, 3-4=400/166, 6-10=-160/570, 5-10=-160/570, 2-9=-752/126
BOT CHORD 7-9=-587/470, 6-7=-145/304
WEBS 4-7=-140/255, 4-6=-551/216, 2-7=-185/427, 5-11=-711/208

- 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 7-4-4, Exterior(2R) 7-4-4 to 11-10-10, Interior(1) 11-10-10 to 16-3-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - The Fabrication Tolerance at joint 2 = 12%
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9 except (jt=lb) 11=183.
 - 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 20,2021

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	D08	Half Hip	1	1	

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

01/21/2022

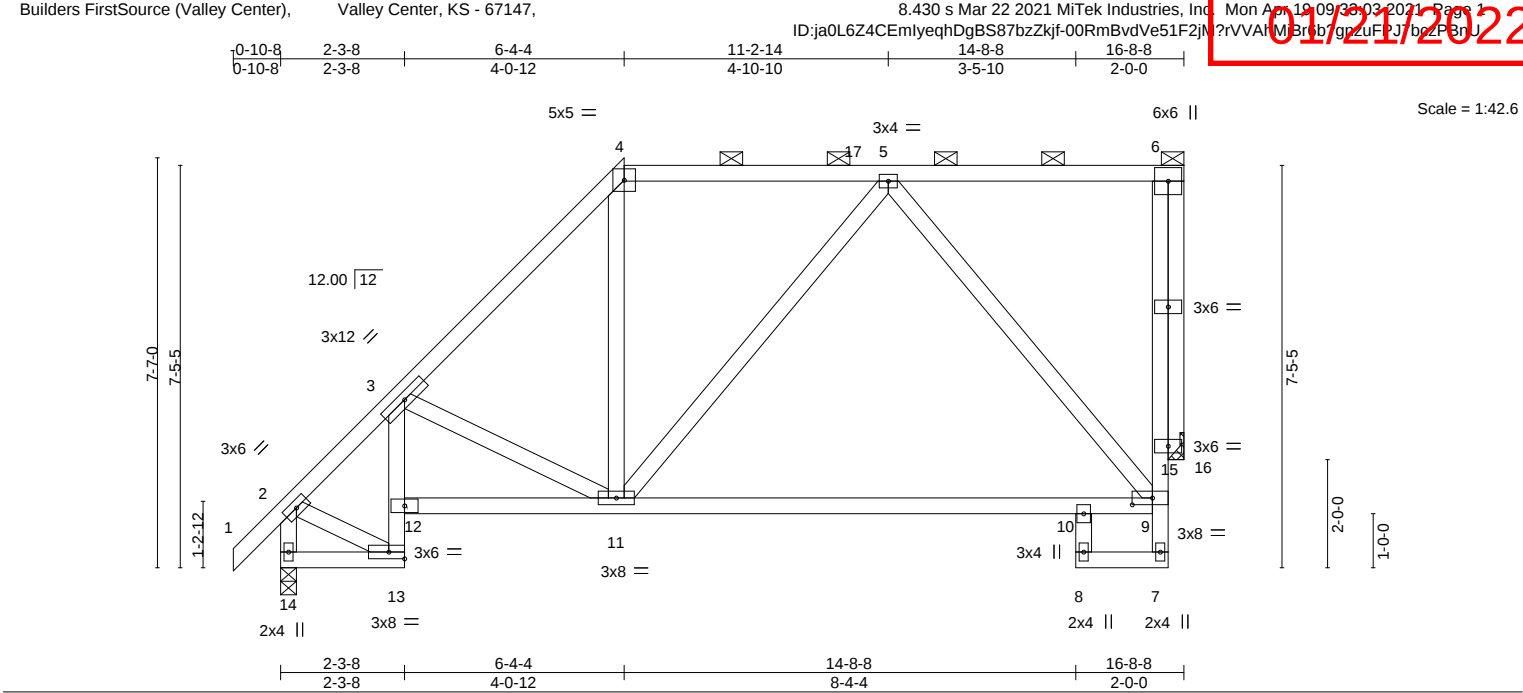


Plate Offsets (X,Y)--		[9:0-4-8,0-1-8]							
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.54	in (loc)	l/defl	L/d	GRIP
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(LL)	-0.22 10-11	>902	197/144
BCLL	0.0	Rep Stress Incr	YES	WB	0.65	Vert(CT)	-0.44 10-11	>451	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS		Horz(CT)	-0.05 16	n/a	
								Weight: 94 lb FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and
BOT CHORD	2x4 SPF No.2	BOT CHORD	2-0-0 oc purlins (6-0-0 max.): 4-6.
WEBS	2x4 SPF No.2		Rigid ceiling directly applied.
OTHERS	2x4 SPF No.2		

REACTIONS. (size) 14=0-3-8, 16=Mechanical
Max Horz 14=234(LC 12)
Max Uplift 14=-116(LC 12), 16=-179(LC 9)
Max Grav 14=812(LC 1), 16=711(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-719/149, 3-4=-806/180, 4-5=-498/194, 9-15=-137/550, 6-15=-137/550, 2-14=-871/178
BOT CHORD 13-14=-292/161, 11-12=-472/620, 10-11=-189/439, 9-10=-166/501
WEBS 3-11=-208/267, 4-11=-3/268, 5-9=-581/231, 2-13=-59/516, 6-16=-712/189

- 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 2-1-12, Interior(1) 2-1-12 to 6-4-4, Exterior(2R) 6-4-4 to 10-7-3, Interior(1) 10-7-3 to 16-3-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=116, 16=179.
 - 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 20,2021

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	D09	Half Hip	1	1	

RELEASE FOR CONSTRUCTION

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DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

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

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01/21/2022

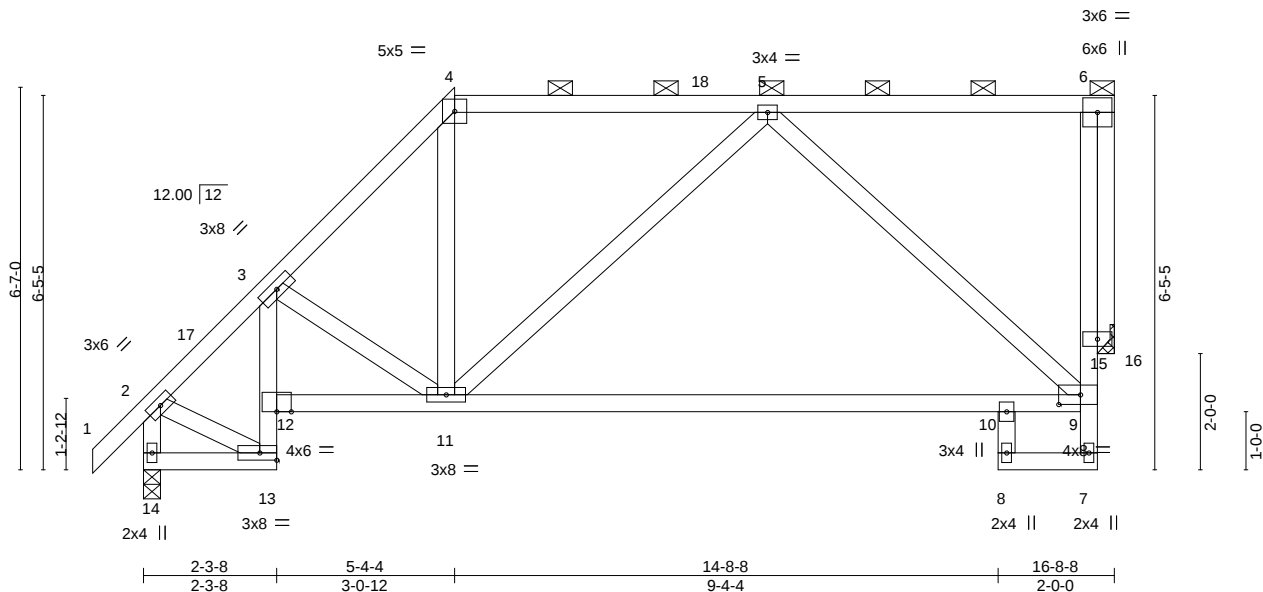


Plate Offsets (X,Y)--	[9:0-4-8,0-2-0]								
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.68	Vert(LL)	-0.29 10-11	>683	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.78	Vert(CT)	-0.58 10-11	>342	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.62	Horz(CT)	-0.05 16	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 88 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 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.): 4-6.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 14=0-3-8, 16=Mechanical
Max Horz 14=194(LC 12)
Max Uplift 14=-129(LC 12), 16=-176(LC 9)
Max Grav 14=812(LC 1), 16=711(LC 1)

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

TOP CHORD 2-3=-716/160, 3-4=-849/201, 4-5=-554/195, 9-15=-116/534, 6-15=-116/534,
2-14=-866/183
BOT CHORD 13-14=-267/152, 11-12=-411/576, 10-11=-214/552, 9-10=-181/639
WEBS 4-11=-30/319, 5-9=-620/238, 2-13=-46/496, 6-16=-713/177

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 2-1-12, Interior(1) 2-1-12 to 5-4-4, Exterior(2R) 5-4-4 to 9-7-3, Interior(1) 9-7-3 to 16-3-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=129, 16=176.
- 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 20,2021

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

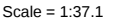
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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

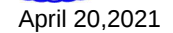
Builders FirstSource (Valley Center),	Valley Center, KS - 67147,	8.430 s Mar 22 2021 MiTek Industries,
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1) Unbalanced roof live loads have been considered for this design.

- ~~10~~ ~~11~~ ~~12~~ ~~13~~ ~~14~~ ~~15~~ ~~16~~ ~~17~~ ~~18~~ ~~19~~ ~~20~~ ~~21~~ ~~22~~ ~~23~~ ~~24~~ ~~25~~ ~~26~~ ~~27~~ ~~28~~ ~~29~~ ~~30~~ ~~31~~ ~~32~~ ~~33~~ ~~34~~ ~~35~~ ~~36~~ ~~37~~ ~~38~~ ~~39~~ ~~40~~ ~~41~~ ~~42~~ ~~43~~ ~~44~~ ~~45~~ ~~46~~ ~~47~~ ~~48~~ ~~49~~ ~~50~~ ~~51~~ ~~52~~ ~~53~~ ~~54~~ ~~55~~ ~~56~~ ~~57~~ ~~58~~ ~~59~~ ~~60~~ ~~61~~ ~~62~~ ~~63~~ ~~64~~ ~~65~~ ~~66~~ ~~67~~ ~~68~~ ~~69~~ ~~70~~ ~~71~~ ~~72~~ ~~73~~ ~~74~~ ~~75~~ ~~76~~ ~~77~~ ~~78~~ ~~79~~ ~~80~~ ~~81~~ ~~82~~ ~~83~~ ~~84~~ ~~85~~ ~~86~~ ~~87~~ ~~88~~ ~~89~~ ~~90~~ ~~91~~ ~~92~~ ~~93~~ ~~94~~ ~~95~~ ~~96~~ ~~97~~ ~~98~~ ~~99~~ ~~100~~ ~~101~~ ~~102~~ ~~103~~ ~~104~~ ~~105~~ ~~106~~ ~~107~~ ~~108~~ ~~109~~ ~~110~~ ~~111~~ ~~112~~ ~~113~~ ~~114~~ ~~115~~ ~~116~~ ~~117~~ ~~118~~ ~~119~~ ~~120~~ ~~121~~ ~~122~~ ~~123~~ ~~124~~ ~~125~~ ~~126~~ ~~127~~ ~~128~~ ~~129~~ ~~130~~ ~~131~~ ~~132~~ ~~133~~ ~~134~~ ~~135~~ ~~136~~ ~~137~~ ~~138~~ ~~139~~ ~~140~~ ~~141~~ ~~142~~ ~~143~~ ~~144~~ ~~145~~ ~~146~~ ~~147~~ ~~148~~ ~~149~~ ~~150~~ ~~151~~ ~~152~~ ~~153~~ ~~154~~ ~~155~~ ~~156~~ ~~157~~ ~~158~~ ~~159~~ ~~160~~ ~~161~~ ~~162~~ ~~163~~ ~~164~~ ~~165~~ ~~166~~ ~~167~~ ~~168~~ ~~169~~ ~~170~~ ~~171~~ ~~172~~ ~~173~~ ~~174~~ ~~175~~ ~~176~~ ~~177~~ ~~178~~ ~~179~~ ~~180~~ ~~181~~ ~~182~~ ~~183~~ ~~184~~ ~~185~~ ~~186~~ ~~187~~ ~~188~~ ~~189~~ ~~190~~ ~~191~~ ~~192~~ ~~193~~ ~~194~~ ~~195~~ ~~196~~ ~~197~~ ~~198~~ ~~199~~ ~~200~~ ~~201~~ ~~202~~ ~~203~~ ~~204~~ ~~205~~ ~~206~~ ~~207~~ ~~208~~ ~~209~~ ~~210~~ ~~211~~ ~~212~~ ~~213~~ ~~214~~ ~~215~~ ~~216~~ ~~217~~ ~~218~~ ~~219~~ ~~220~~ ~~221~~ ~~222~~ ~~223~~ ~~224~~ ~~225~~ ~~226~~ ~~227~~ ~~228~~ ~~229~~ ~~230~~ ~~231~~ ~~232~~ ~~233~~ ~~234~~ ~~235~~ ~~236~~ ~~237~~ ~~238~~ ~~239~~ ~~240~~ ~~241~~ ~~242~~ ~~243~~ ~~244~~ ~~245~~ ~~246~~ ~~247~~ ~~248~~ ~~249~~ ~~250~~ ~~251~~ ~~252~~ ~~253~~ ~~254~~ ~~255~~ ~~256~~ ~~257~~ ~~258~~ ~~259~~ ~~260~~ ~~261~~ ~~262~~ ~~263~~ ~~264~~ ~~265~~ ~~266~~ ~~267~~ ~~268~~ ~~269~~ ~~270~~ ~~271~~ ~~272~~ ~~273~~ ~~274~~ ~~275~~ ~~276~~ ~~277~~ ~~278~~ ~~279~~ ~~280~~ ~~281~~ ~~282~~ ~~283~~ ~~284~~ ~~285~~ ~~286~~ ~~287~~ ~~288~~ ~~289~~ ~~290~~ ~~291~~ ~~292~~ ~~293~~ ~~294~~ ~~295~~ ~~296~~ ~~297~~ ~~298~~ ~~299~~ ~~300~~ ~~301~~ ~~302~~ ~~303~~ ~~304~~ ~~305~~ ~~306~~ ~~307~~ ~~308~~ ~~309~~ ~~310~~ ~~311~~ ~~312~~ ~~313~~ ~~314~~ ~~315~~ ~~316~~ ~~317~~ ~~318~~ ~~319~~ ~~320~~ ~~321~~ ~~322~~ ~~323~~ ~~324~~ ~~325~~ ~~326~~ ~~327~~ ~~328~~ ~~329~~ ~~330~~ ~~331~~ ~~332~~ ~~333~~ ~~334~~ ~~335~~ ~~336~~ ~~337~~ ~~338~~ ~~339~~ ~~340~~ ~~341~~ ~~342~~ ~~343~~ ~~344~~ ~~345~~ ~~346~~ ~~347~~ ~~348~~ ~~349~~ ~~350~~ ~~351~~ ~~352~~ ~~353~~ ~~354~~ ~~355~~ ~~356~~ ~~357~~ ~~358~~ ~~359~~ ~~360~~ ~~361~~ ~~362~~ ~~363~~ ~~364~~ ~~365~~ ~~366~~ ~~367~~ ~~368~~ ~~369~~ ~~370~~ ~~371~~ ~~372~~ ~~373~~ ~~374~~ ~~375~~ ~~376~~ ~~377~~ ~~378~~ ~~379~~ ~~380~~ ~~381~~ ~~382~~ ~~383~~ ~~384~~ ~~385~~ ~~386~~ ~~387~~ ~~388~~ ~~389~~ ~~390~~ ~~391~~ ~~392~~ ~~393~~ ~~394~~ ~~395~~ ~~396~~ ~~397~~ ~~398~~ ~~399~~ ~~400~~ ~~401~~ ~~402~~ ~~403~~ ~~404~~ ~~405~~ ~~406~~ ~~407~~ ~~408~~ ~~409~~ ~~410~~ ~~411~~ ~~412~~ ~~413~~ ~~414~~ ~~415~~ ~~416~~ ~~417~~ ~~418~~ ~~419~~ ~~420~~ ~~421~~ ~~422~~ ~~423~~ ~~424~~ ~~425~~ ~~426~~ ~~427~~ ~~428~~ ~~429~~ ~~430~~ ~~431~~ ~~432~~ ~~433~~ ~~434~~ ~~435~~ ~~436~~ ~~437~~ ~~438~~ ~~439~~ ~~440~~ ~~441~~ ~~442~~ ~~443~~ ~~444~~ ~~445~~ ~~446~~ ~~447~~ ~~448~~ ~~449~~ ~~450~~ ~~451~~ ~~452~~ ~~453~~ ~~454~~ ~~455~~ ~~456~~ ~~457~~ ~~458~~ ~~459~~ ~~460~~ ~~461~~ ~~462~~ ~~463~~ ~~464~~ ~~465~~ ~~466~~ ~~467~~ ~~468~~ ~~469~~ ~~470~~ ~~471~~ ~~472~~ ~~473~~ ~~474~~



Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	D11	Half Hip Girder	1	1	

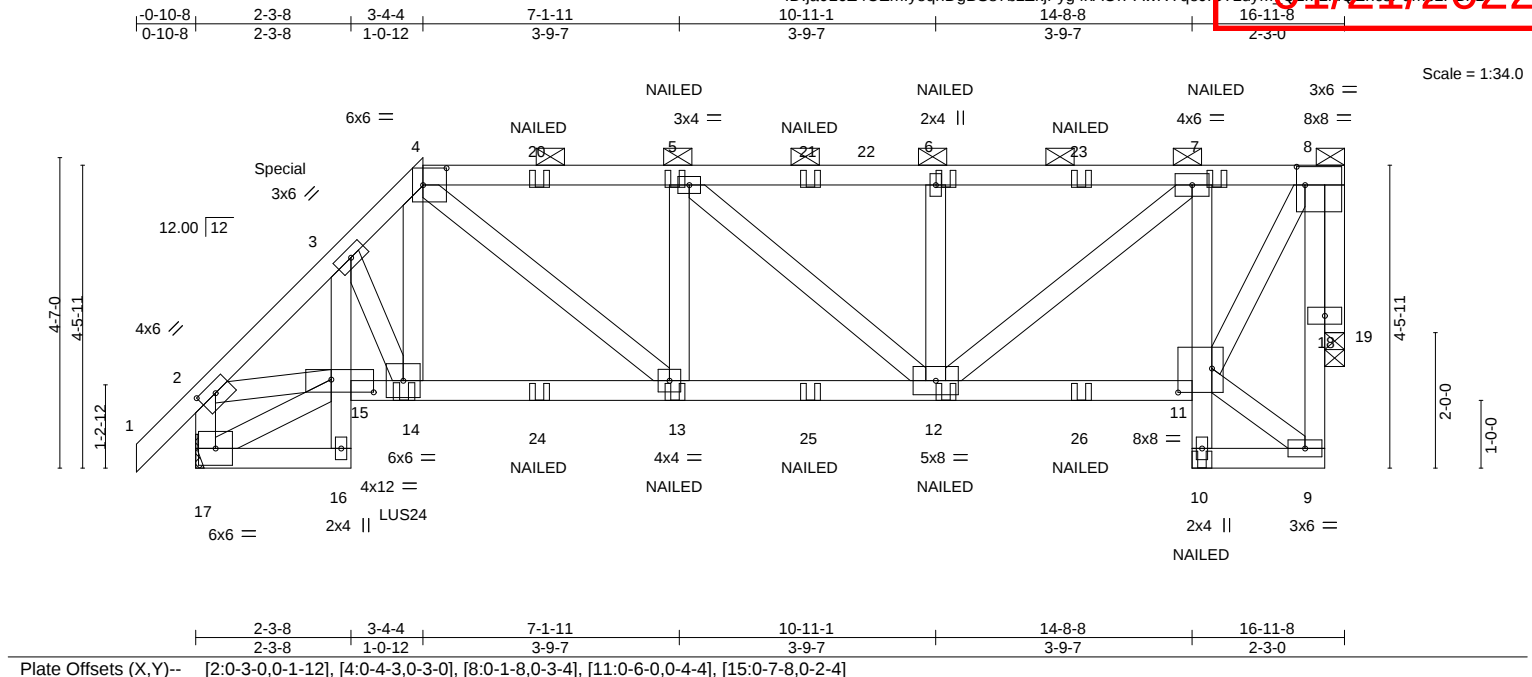
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:36:22 2021 Page 1

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01/21/2022



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 0.54	Vert(LL)	-0.07	12-13	>999	240	
TCDL 10.0	Lumber DOL	1.15	BC 0.80	Vert(CT)	-0.13	12-13	>999	180	
BCLL 0.0	Rep Stress Incr	NO	WB 0.48	Horz(CT)	0.10	19	n/a	n/a	
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-MS						
								Weight: 95 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-7-7 oc purlins, except end verticals, and 2-0-0 oc purlins (3-3-11 max.): 4-8.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

(size) 17=Mechanical, 19=0-3-8
Max Horz 17=144(LC 26)
Max Uplift 17=540(LC 8), 19=491(LC 5)
Max Grav 17=1910(LC 1), 19=1675(LC 1)

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

TOP CHORD 2-3=-2493/793, 3-4=-2242/725, 4-5=-2435/745, 5-6=-2256/674, 6-7=-2256/674, 7-8=-1096/329, 2-17=-1851/597
BOT CHORD 14-15=-631/1708, 13-14=-561/1622, 12-13=-776/2435, 11-12=-374/1145, 7-11=-1366/446
WEBS 4-14=-237/573, 4-13=-317/1075, 5-13=-375/155, 6-12=-503/185, 7-12=-431/1440, 8-11=-603/1961, 2-15=-492/1674, 8-19=-1688/495

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.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 19 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) except (jt=lb) 17=540, 19=491.
- 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.
- Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent at 3-0-14 from the left end to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.
- "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) 317 lb down and 169 lb up at 2-2-13 on top 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).



April 20, 2021

LOAD CASE(S) Standard

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	Roeser/1483 Winterset
2720415	D11	Half Hip Girder	1	1	Job Reference (optional)

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

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DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

145716495

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-70, 2-4=-70, 4-8=-70, 16-17=-20, 11-15=-20, 9-10=-20

Concentrated Loads (lb)

Vert: 3=-267(B) 7=-133(B) 14=-317(B) 13=-123(B) 5=-120(B) 6=-120(B) 12=-123(B) 11=-110(B) 20=-120(B) 21=-120(B) 23=-120(B) 24=-123(B) 25=-123(B)

26=-123(B)

 **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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	E01	PIGGYBACK BASE	1	1	
Job Reference (optional)					

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

8.430 s Mar 22 2021 MiTek Industries, Inc.
Mon Apr 19 09:38:28 2021 Page 1
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0-10-8
3-11-0
7-11-0
12-6-0
19-4-8

0-10-8
3-11-0
4-0-0
4-7-0
6-10-8

4x6 =
5x8 =

5
18
6

12.00
12
15
16
17
3x6 =
3x6 =
3x6 =
12
13

11
10
9
8
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2x4 ||
3x8 = 3x6 =
3x8 =
2x4 ||

3-11-0
7-11-0
12-6-0
19-4-8

3-11-0
4-0-0
4-7-0
6-10-8

9-8-12
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9-8-12
3-0-0

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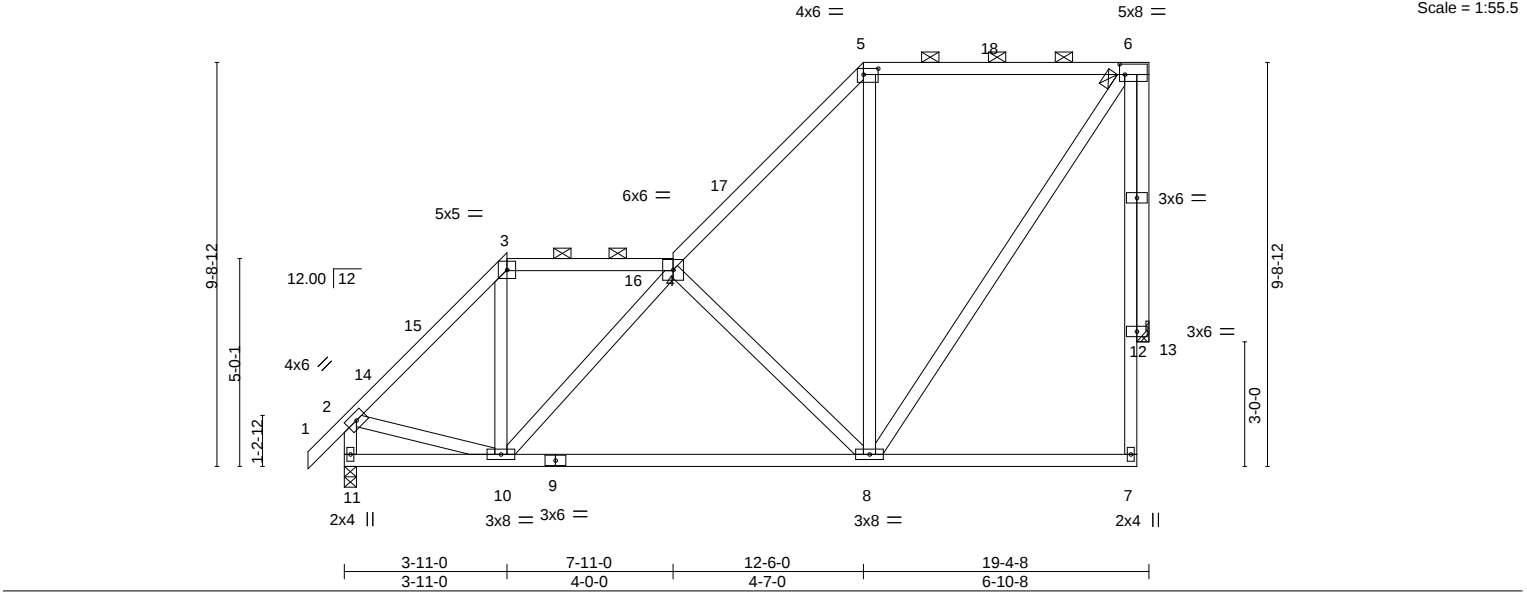


Plate Offsets (X,Y)--		[5:0-4-4,0-1-12], [6:0-1-8,0-3-0]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.64	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.54	Vert(LL) -0.12 8-10 >999 240
BCLL 0.0	Rep Stress Incr YES	WB 0.65	Vert(CT) -0.26 8-10 >887 180
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT) -0.12 13 n/a n/a
		PLATES MT20	
		GRIP 197/144	
		Weight: 115 lb FT = 20%	

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	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.): 3-4, 5-6.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 8-7-5 oc bracing.
WEBS 2x4 SPF No.2	
OTHERS 2x4 SPF No.2	

REACTIONS. (size) 11=0-3-8, 13=Mechanical
Max Horz 11=307(LC 12)
Max Uplift 11=-108(LC 12), 13=-186(LC 12)
Max Grav 11=932(LC 1), 13=831(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-902/95, 3-4=-561/127, 4-5=-693/90, 5-6=-415/133, 2-11=-924/109
BOT CHORD 10-11=-464/327, 8-10=-321/821
WEBS 3-10=0/331, 4-8=-577/252, 6-8=-215/672, 2-10=-23/544, 4-10=-395/32, 6-13=-832/220

- NOTES-**
- 1) 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 3-11-0, Exterior(2R) 3-11-0 to 6-11-0, Interior(1) 6-11-0 to 12-6-0, Exterior(2R) 12-6-0 to 15-6-0, Interior(1) 15-6-0 to 18-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Provide adequate drainage to prevent water ponding.
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) Refer to girder(s) for truss to truss connections.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=108, 13=186.
 - 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 20,2021

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	E02	PIGGYBACK BASE	1	1	
Job Reference (optional)					

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:38:31 2021 Page 1

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RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

145716497

01/21/2022

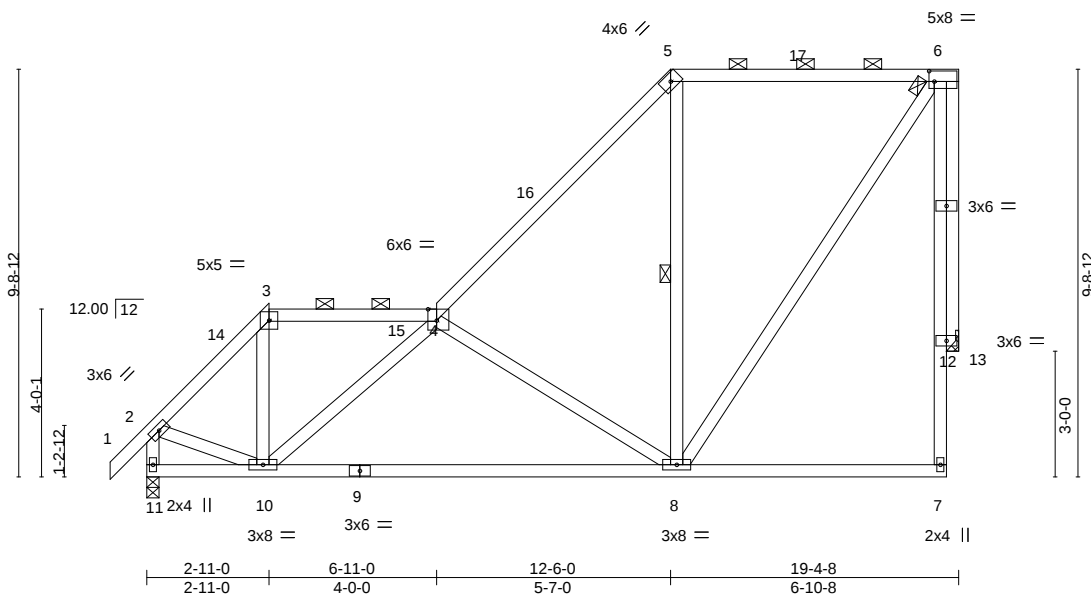


Plate Offsets (X,Y)-- [4:0-2-8,Edge], [6:0-1-8,0-3-0]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	-0.18 8-10 >999	240	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.38 8-10 >601	180	
BCLL	0.0	Rep Stress Incr	YES	WB	0.65	Horz(CT)	-0.12 13 n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 112 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-9-11 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4, 5-6.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 5-8

REACTIONS.

(size) 11=0-3-8, 13=Mechanical
Max Horz 11=307(LC 12)
Max Uplift 11=-108(LC 12), 13=-186(LC 12)
Max Grav 11=932(LC 1), 13=831(LC 1)

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

TOP CHORD 2-3=-877/80, 3-4=-562/100, 4-5=-727/73, 5-6=-420/135, 2-11=-963/93
BOT CHORD 10-11=-437/279, 8-10=-360/990
WEBS 3-10=0/365, 4-8=-683/274, 6-8=-219/681, 2-10=0/623, 4-10=-577/57, 6-13=-832/218

NOTES-

- 1) 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 2-11-0, Exterior(2R) 2-11-0 to 5-11-0, Interior(1) 5-11-0 to 12-6-0, Exterior(2R) 12-6-0 to 15-6-0, Interior(1) 15-6-0 to 18-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=108, 13=186.
- 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 20, 2021

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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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	Roeser/1483 Winterset
2720415	E03	PIGGYBACK BASE	1	1	
Job Reference (optional)					

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

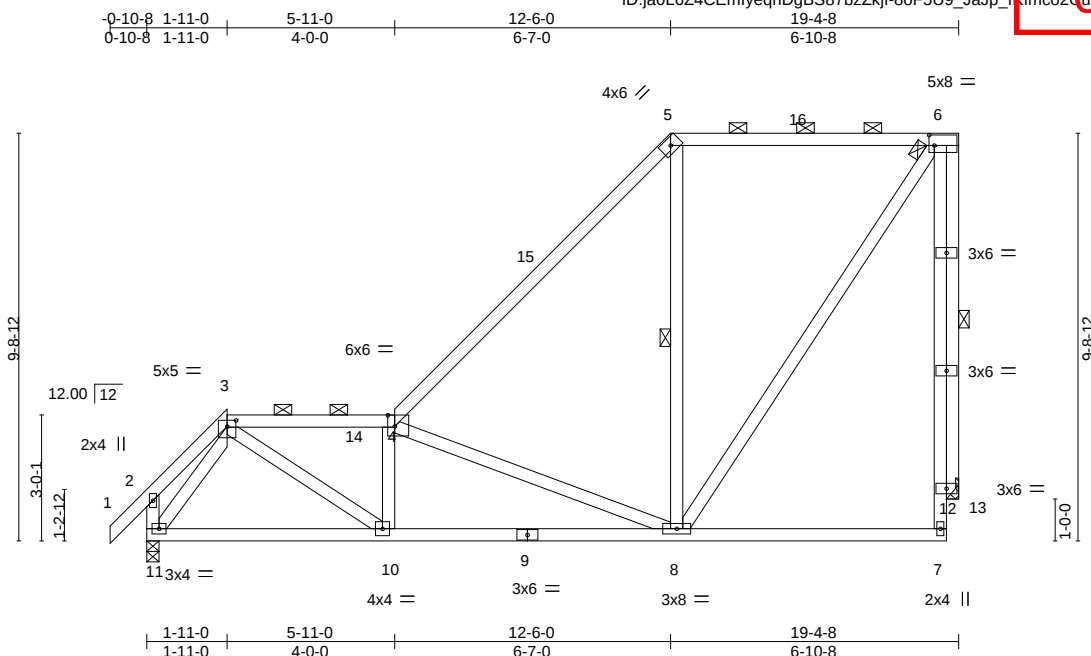
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

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01/21/2022



Scale = 1:55.0

Plate Offsets (X,Y)--	[3:0-2-8,0-1-12], [4:0-2-0,Edge], [6:0-1-8,0-3-0]					
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	L/defl
TCLL 25.0	Plate Grip DOL	1.15	TC 0.67	Vert(LL)	-0.04	8-10
TCDL 10.0	Lumber DOL	1.15	BC 0.47	Vert(CT)	-0.11	8-10
BCLL 0.0	Rep Stress Incr	YES	WB 0.91	Horz(CT)	0.02	13
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-S		n/a	n/a
						PLATES
						MT20
						GRIP
						197/144
						Weight: 113 lb
						FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-2-2 oc purlins, except end verticals, and 2-0-0 oc purlins (5-0-6 max.): 3-4, 5-6.
BOT CHORD Rigid ceiling directly applied or 9-5-12 oc bracing.
WEBS 1 Row at midpt 5-8, 6-13

REACTIONS.

(size) 11=0-3-8, 13=Mechanical
Max Horz 11=347(LC 12)
Max Uplift 11=-104(LC 12), 13=-190(LC 12)
Max Grav 11=932(LC 1), 13=831(LC 1)

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

TOP CHORD 3-4=-1287/127, 4-5=-751/48, 5-6=-417/136
BOT CHORD 10-11=-348/507, 8-10=-387/1308
WEBS 3-10=-43/967, 4-10=-433/81, 4-8=-963/288, 6-8=-234/678, 3-11=-826/57, 6-13=-831/212

NOTES-

- 1) 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 1-11-0, Exterior(2R) 1-11-0 to 4-11-0, Interior(1) 4-11-0 to 12-6-0, Exterior(2R) 12-6-0 to 15-6-0, Interior(1) 15-6-0 to 18-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) The Fabrication Tolerance at joint 4 = 8%, joint 5 = 4%
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=104, 13=190.
- 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.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 20, 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



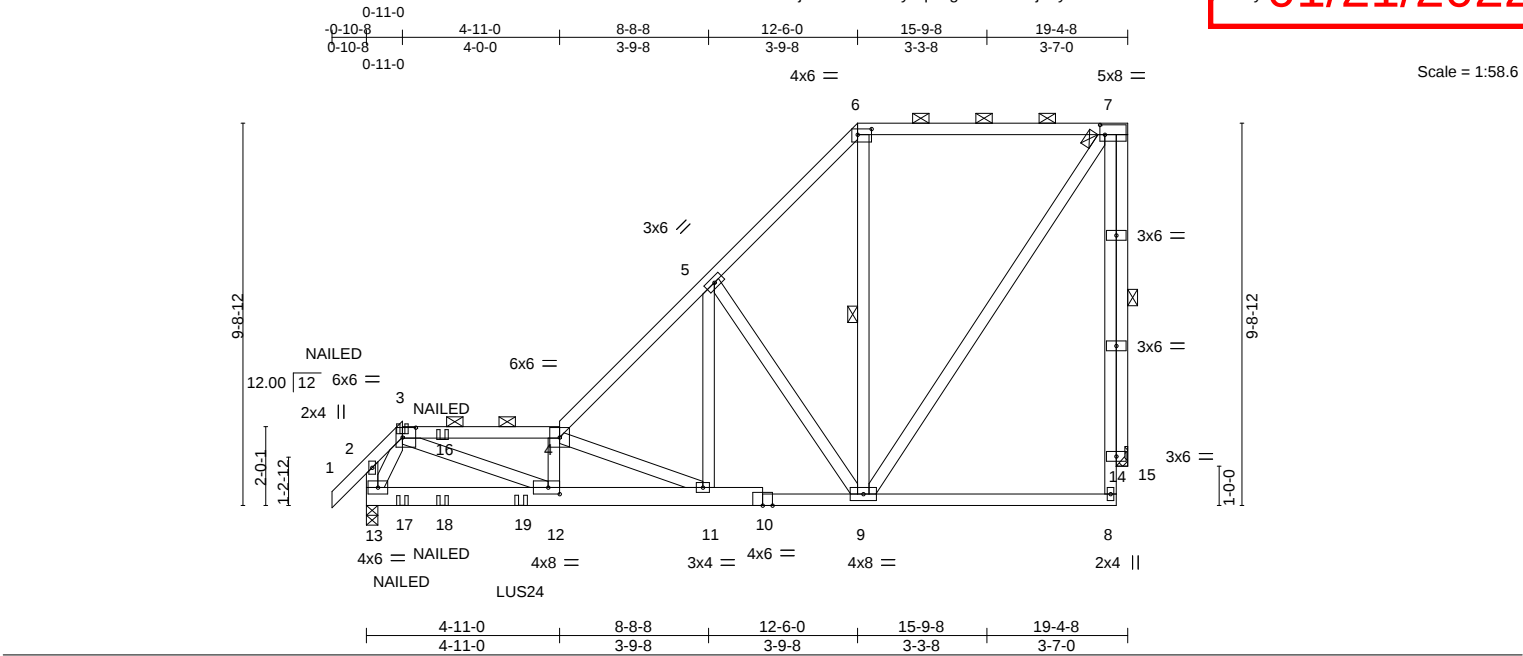
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	E04	Piggyback Base Girder	1	1	
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					
8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:36:39 2021 Page 1					
ID:ja0L6Z4CEmlyeqhDgBS87bzZKjf-zycNkC34A8a8NF6w/39c8yEHsdv7652BWC11fXZ-PlmWw					
Job Reference (optional)					

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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 0.72	Vert(LL)	-0.07 11-12	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.51	Vert(CT)	-0.13 11-12	>999	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.57	Horz(CT)	0.02 15	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS						
									Weight: 126 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-11-11 oc purlins, except end verticals, and 2-0-0 oc purlins (3-6-13 max.): 3-4, 6-7.
BOT CHORD 2x4 SPF No.2 *Except* 10-13: 2x6 SPF No.2	BOT CHORD Rigid ceiling directly applied or 9-10-15 oc bracing.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 6-9, 7-15
OTHERS 2x4 SPF No.2	

REACTIONS. (size) 13=0-3-8, 15=Mechanical
Max Horz 13=349(LC 8)
Max Uplift 13=-193(LC 8), 15=-204(LC 8)
Max Grav 13=1145(LC 1), 15=886(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-2276/259, 4-5=-1292/97, 5-6=-720/114, 6-7=-444/137
BOT CHORD 12-13=-405/513, 11-12=-561/2319, 9-11=-286/847
WEBS 3-12=-165/1917, 4-12=-533/104, 4-11=-1604/300, 5-11=-94/713, 5-9=-701/287, 7-9=-233/722, 3-13=-929/128, 7-15=-887/204

- 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.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=193, 15=204.
 - 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.
 - Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent at 3-11-4 from the left end to connect truss(es) to front face of bottom chord.
 - Fill all nail holes where hanger is in contact with lumber.
 - "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
 - 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
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15



April 20,2021

Continued on page 2

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Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	E04	Piggyback Base Girder	1	1	Job Reference (optional)

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:38:39 2021 Page 2

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DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

145716499

01/21/2022

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-6=-70, 6-7=-70, 8-13=-20

Concentrated Loads (lb)

Vert: 16=-14(F) 17=28(F) 18=-11(F) 19=-271(F)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	E05	Piggyback Base	1	1	
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:38:41 2021 Page 1

ID:ja0L6Z4CEmlyeqhDgBS87bzZkf-vKk79u4KimqrcZGJ4UE4DNGg0DckaALUKV8vP2Plmu

01/21/2022

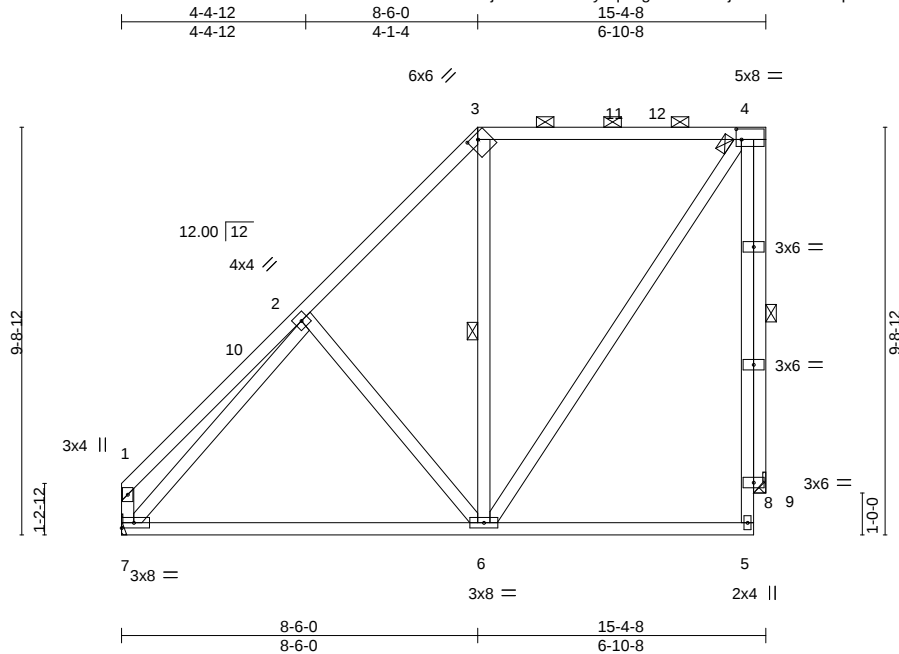


Plate Offsets (X,Y)-- [3:0-2-12,0-1-8], [4:0-1-8,0-3-0]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES	GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	-0.11	6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.22	6-7	>825	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.02	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 97 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x4 SPF No.2
 OTHERS 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.): 3-4.
 BOT CHORD Rigid ceiling directly applied.
 WEBS 1 Row at midpt 3-6, 4-9

REACTIONS.

(size) 7=Mechanical, 9=Mechanical
 Max Horz 7=312(LC 12)
 Max Uplift 7=-29(LC 12), 9=-216(LC 12)
 Max Grav 7=678(LC 1), 9=653(LC 1)

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

TOP CHORD 1-2=-334/136, 2-3=-512/99, 3-4=-292/143, 1-7=-310/125
 BOT CHORD 6-7=-316/415
 WEBS 4-6=-236/455, 2-7=-382/11, 4-9=-653/254

NOTES-

- 1) 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 8-6-0, Exterior(2R) 8-6-0 to 12-8-15, Interior(1) 12-8-15 to 14-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 9=216.
- 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 20, 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	Roeser/1483 Winterset
2720415	E06	Piggyback Base	1	1	Job Reference (optional)

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

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RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
145716411

01/21/2022

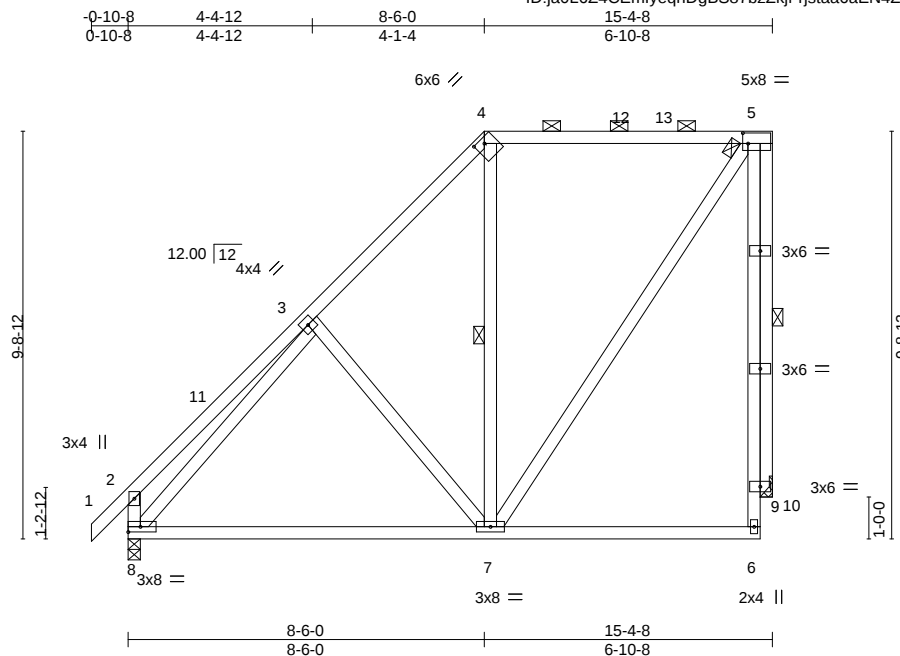


Plate Offsets (X,Y)-- [4:0-2-12,0-1-8], [5:0-1-8,0-3-0]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	-0.11 7-8 >999	240	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.22 7-8 >824	180	
BCLL	0.0	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.01 10 n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 99 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 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.): 4-5.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-7, 5-10

REACTIONS.

(size) 8=0-3-8, 10=Mechanical
Max Horz 8=348(LC 12)
Max Uplift 8=-52(LC 12), 10=-217(LC 12)
Max Grav 8=752(LC 1), 10=650(LC 1)

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

TOP CHORD 2-3=-338/165, 3-4=-508/99, 4-5=-290/143, 2-8=-383/174
BOT CHORD 7-8=-316/409
WEBS 5-7=-237/453, 3-8=-381/6, 5-10=-651/254

NOTES-

- 1) 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 8-6-0, Exterior(2R) 8-6-0 to 12-8-15, Interior(1) 12-8-15 to 14-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb) 10=217.
- 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 20,2021

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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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	E07	PIGGYBACK BASE	2	1	Job Reference (optional)

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

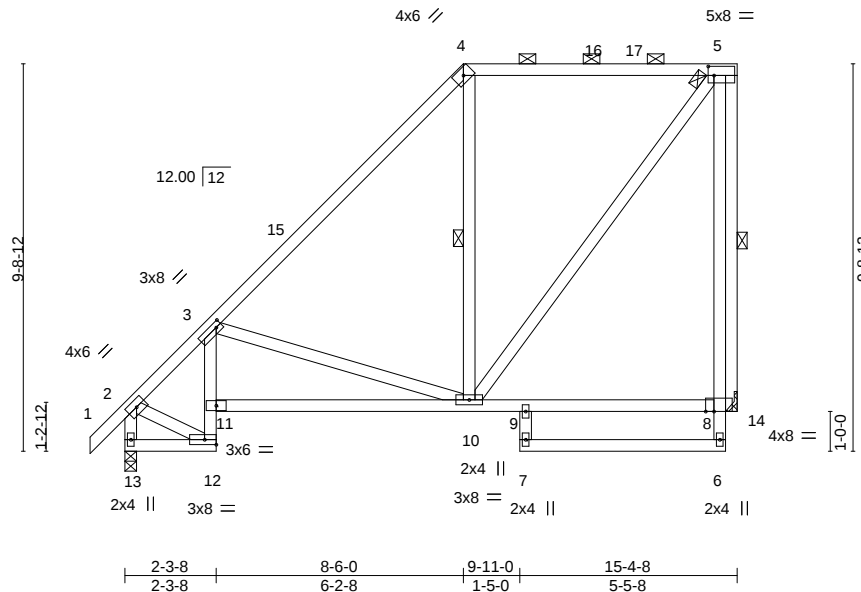
8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:38:45 2021 Page 1

0-10-8 2-3-8 8-6-0 9-11-0 15-4-8
0-10-8 2-3-8 6-2-8 1-5-0 5-5-8

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RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

01/21/2022



Scale = 1:57.9

Plate Offsets (X,Y)-- [3:0-1-12,0-1-8], [5:0-1-12,0-2-12], [8:0-2-8,0-0-0]										
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	0.60	Vert(LL)	-0.06 10-11 >999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.13 10-11 >999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	-0.07 14 n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 101 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

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.): 4-5.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 4-10, 5-14

REACTIONS.

(size) 13=0-3-8, 14=Mechanical
Max Horz 13=364(LC 12)
Max Uplift 13=-32(LC 12), 14=-180(LC 12)
Max Grav 13=752(LC 1), 14=650(LC 1)

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

TOP CHORD 2-3=-655/95, 3-4=-625/92, 4-5=-322/168, 2-13=-799/121
BOT CHORD 12-13=-333/146, 10-11=-583/746
WEBS 3-10=-475/442, 2-12=-64/519, 5-10=-259/476, 5-14=-651/254

NOTES-

- 1) 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 2-1-12, Interior(1) 2-1-12 to 8-6-0, Exterior(2R) 8-6-0 to 12-8-15, Interior(1) 12-8-15 to 14-11-4 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
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13 except (jt=1b) 14=180.
- 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 20,2021

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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	Roeser/1483 Winterset
2720415	E08	PIGGYBACK BASE	2	1	
Job Reference (optional)					

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

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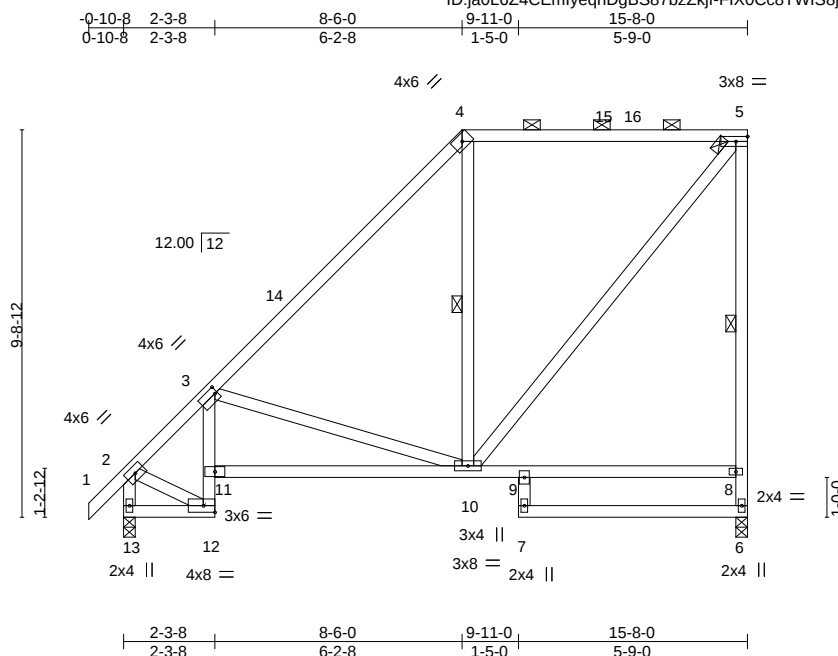
RELEASE FOR CONSTRUCTION

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DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

01/21/2022



Scale = 1:57.9

Plate Offsets (X,Y)--		[3:0-0-12,0-2-0]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.78	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.68	Vert(LL) -0.06 10-11 >999 240
BCLL 0.0	Rep Stress Incr YES	WB 0.67	Vert(CT) -0.13 10-11 >999 180
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT) 0.07 6 n/a n/a
			PLATES GRIP
			MT20 197/144
			Weight: 94 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 6'-0" oc purlins, except end verticals, and 2'-0" oc purlins (6'-0" max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 6'-0" oc bracing.
WEBS 1 Row at midpt 5-6, 4-10

REACTIONS.

(size) 6'-0"-3'-8, 13'-0"-3'-8
Max Horz 13=392(LC 9)
Max Uplift 6=-233(LC 9), 13=-93(LC 12)
Max Grav 6=690(LC 1), 13=766(LC 1)

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

TOP CHORD 2-3=-668/145, 3-4=-644/188, 4-5=-338/220, 6-8=-632/332, 5-8=-627/321,
2-13=-813/181
BOT CHORD 12-13=-530/376, 10-11=-808/875, 8-9=-324/307
WEBS 3-10=-494/492, 2-12=-127/525, 5-10=-326/508

NOTES-

- 1) 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"-12, Interior(1) 2'-1"-12 to 8'-6"-0, Exterior(2R) 8'-6"-0 to 12'-8"-15, Interior(1) 12'-8"-15 to 15'-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=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) The Fabrication Tolerance at joint 4 = 8%
- 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 100 lb uplift at joint(s) 13 except (jt=lb) 6=233.
- 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 20, 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	Roeser/1483 Winterset
2720415	E09	GABLE	1	1	

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LEE'S SUMMIT, MISSOURI

01/21/2022

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc.

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Self_Spjr3HfwDjAJWbU3gvZP8m

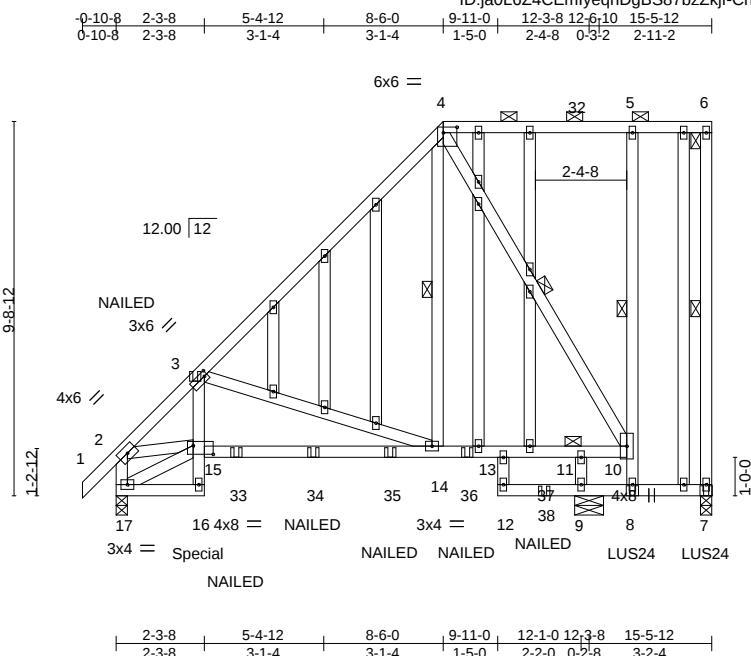


Plate Offsets (X,Y)-- [3:0-1-0,0-1-8], [4:0-4-4,0-1-12], [15:0-6-4,0-2-12]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	0.08 14-15 >999 240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.13 14-15 >999 180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.48	Horz(CT)	-0.04 9 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS				Weight: 146 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 5-10-7 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-6.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except:
WEBS 2x4 SPF No.2	10-0-0 oc bracing: 13-14,7-8.
OTHERS 2x4 SPF No.2	1 Row at midpt 6-7, 4-10, 4-14, 5-8
	WEBS JOINTS 1 Brace at Jt(s): 6, 11

REACTIONS. (size) 7=0-3-8, 17=0-3-8, 9=0-9-0
Max Horz 17=365(LC 8)
Max Uplift 7=-201(LC 8), 17=-262(LC 8), 9=-329(LC 8)
Max Grav 7=600(LC 1), 17=686(LC 35), 9=750(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-910/601, 3-4=-427/105, 2-17=-689/418
BOT CHORD 15-16=-451/176, 3-15=-492/368, 14-15=-850/853
WEBS 15-17=-300/125, 2-15=-444/673, 4-10=-429/327, 4-14=-168/328, 3-14=-653/712, 8-10=-677/332

- NOTES-**
- 1) 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 exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 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) Provide adequate drainage to prevent water ponding.
 - 4) All plates are 2x4 MT20 unless otherwise indicated.
 - 5) Gable studs spaced at 1-4-0 oc.
 - 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) except (jt=lb) 7=201, 17=262, 9=329.
 - 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.
 - 10) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 1-11-0 oc max. starting at 13-5-0 from the left end to 15-4-0 to connect truss(es) to front face of bottom chord.
 - 11) Fill all nail holes where hanger is in contact with lumber.
 - 12) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
 - 13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 168 lb down and 475 lb up at 2-1-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - 14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).



April 20,2021

LOAD CASE(S) Standard

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

MiTek

16023 Swingley Ridge Rd

Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	E09	GABLE	1	1	Job Reference (optional)

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

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DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
 - Vert: 1-2=-70, 2-4=-70, 4-6=-70, 16-17=-20, 13-15=-20, 7-12=-20
- Concentrated Loads (lb)
 - Vert: 7=-283(F) 16=120(F) 10=-276(F)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	F01	Jack-Closed	2	1	
Job Reference (optional)					

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:38:49 2021 Page 1

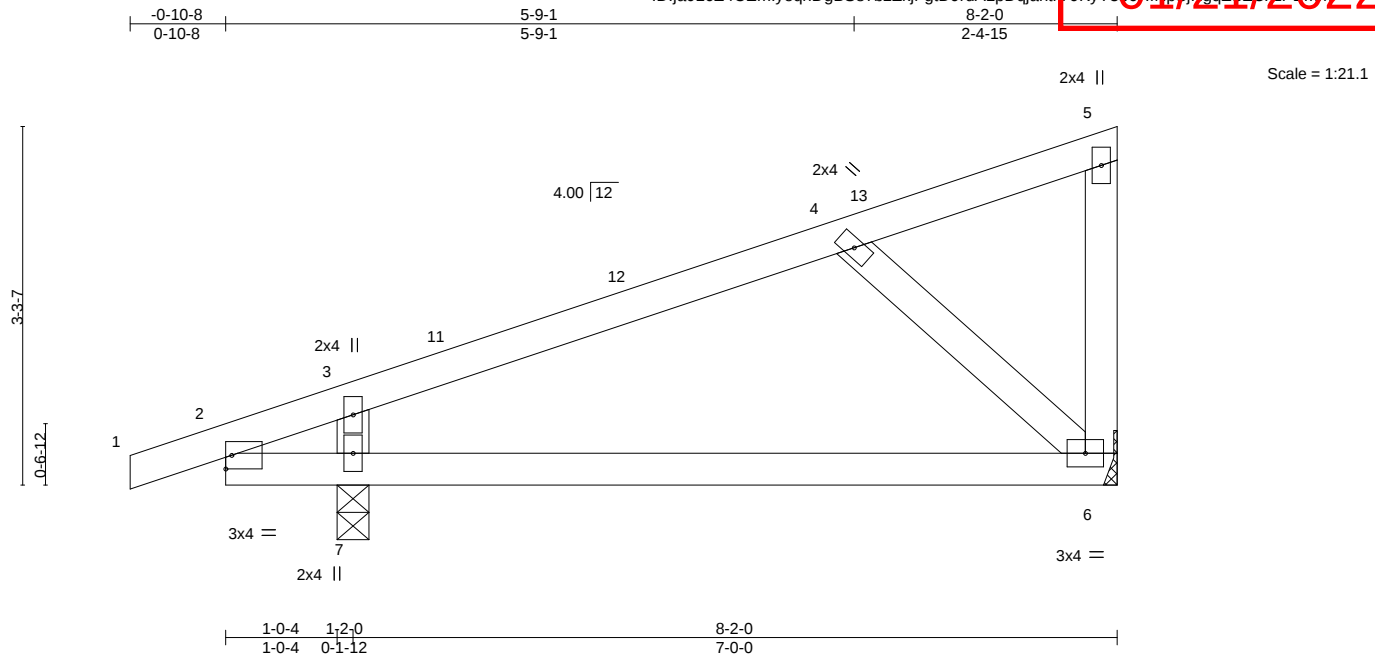
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DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

01/21/2022



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)	-0.08	6-7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.36	Vert(CT)	-0.15	6-7	>551	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 27 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.

REACTIONS.

(size) 6=Mechanical, 7=0-3-8
Max Horz 7=133(LC 11)
Max Uplift 6=-69(LC 8), 7=-154(LC 8)
Max Grav 6=285(LC 1), 7=498(LC 1)

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

TOP CHORD 3-4=-263/97
WEBS 4-6=-263/251, 3-7=-330/365

NOTES-

- 1) 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 8-0-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 7=154.
- 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 20, 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	Roeser/1483 Winterset
2720415	F02	Jack-Closed	5	1	

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LEE'S SUMMIT, MISSOURI

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

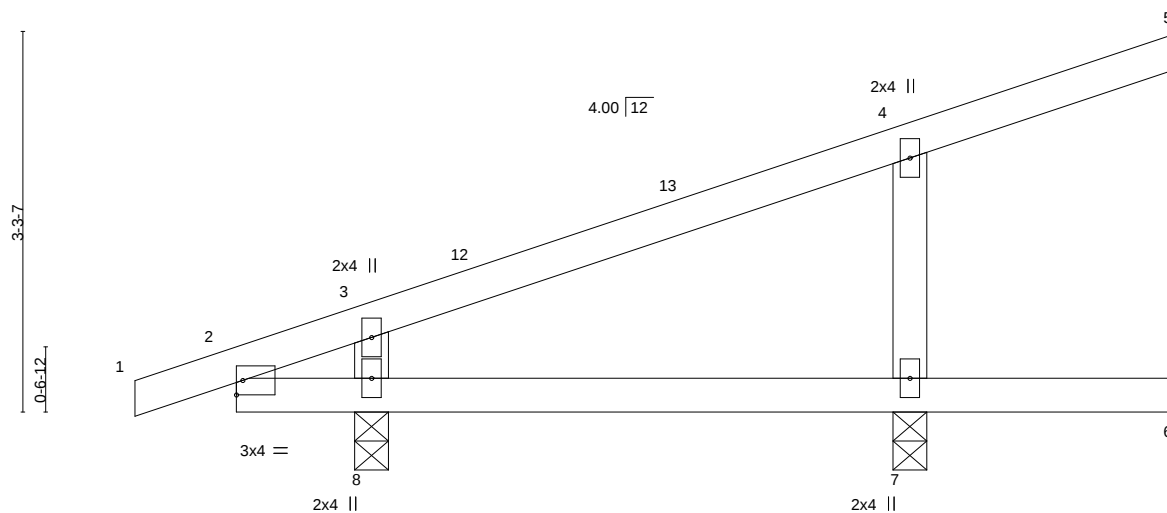
8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:38:50 2021 Page 1

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01/21/2022

-0-10-8	1-2-0	3-11-15	5-9-12	8-2-0
0-10-8	1-2-0	2-9-15	1-9-13	2-4-4

Scale = 1:19.9



1-0-4	1-2-0	5-9-12	8-2-0
1-0-4	0-1-12	4-7-12	2-4-4

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 0.36	Vert(LL)	0.01	7-8	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.20	Vert(CT)	-0.02	7-8	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00		n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS							
									Weight: 23 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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 7=0-3-8, 8=0-3-8
Max Horz 8=122(LC 8)
Max Uplift 7=108(LC 8), 8=104(LC 8)
Max Grav 7=440(LC 1), 8=356(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 4-7=-346/327, 3-8=-275/197

NOTES-

- 1) 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 8-2-0 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=108, 8=104.
- 4) 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.
- 5) 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 20, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	F03	Jack-Open Structural Gable	1	1	Job Reference (optional)

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:38:53 2021 Page 1

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RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

01/21/2022

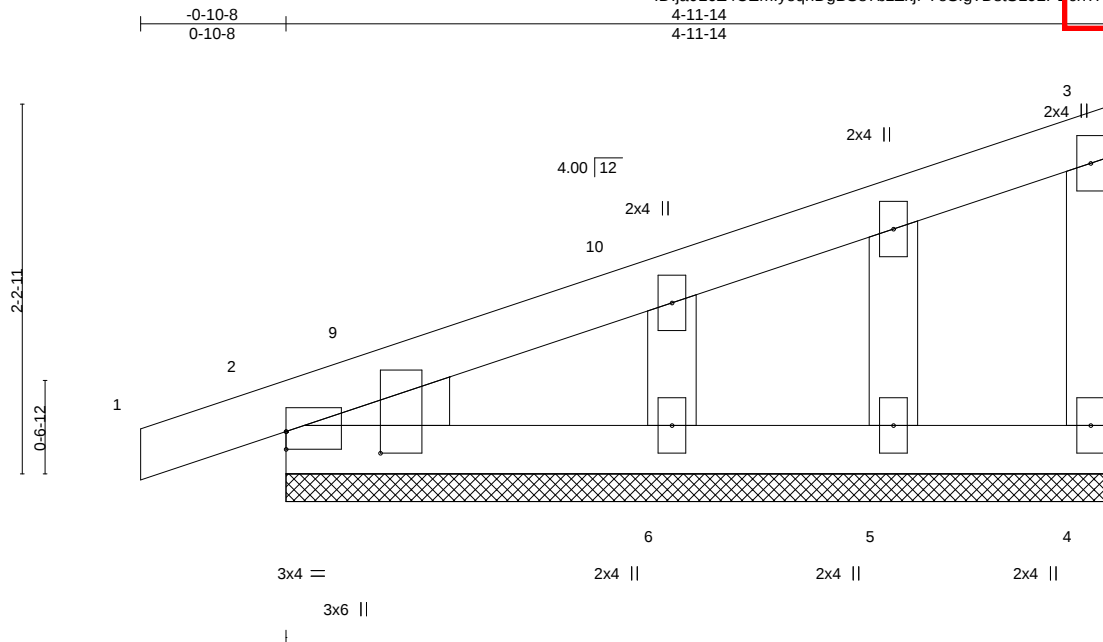


Plate Offsets (X,Y)--		[2:0-0-0,0-1-4], [2:0-1-9,0-6-13]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.42
TCDL 10.0	Lumber DOL	1.15	BC 0.03
BCLL 0.0	Rep Stress Incr	YES	WB 0.00
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-P
			DEFL. in (loc) l/defl L/d
			Vert(LL) -0.00 1 n/r 120
			Vert(CT) 0.01 1 n/r 120
			Horz(CT) 0.00 4 n/a n/a
			PLATES MT20
			GRIP 197/144
			Weight: 18 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-11-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

All bearings 4-11-14.
(lb) - Max Horz 2=84(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 4, 2
Max Grav All reactions 250 lb or less at joint(s) 4, 5, 6 except 2=255(LC 1)

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

NOTES-

- 1) 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 4-10-2 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
- 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) Gable requires continuous bottom chord bearing.
- 4) Gable studs spaced at 1-4-0 oc.
- 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) 4, 2.
- 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.



April 20, 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	Roeser/1483 Winterset
2720415	G01	Jack-Open Girder	1	1	Job Reference (optional)

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:38:54 2021 Page 1

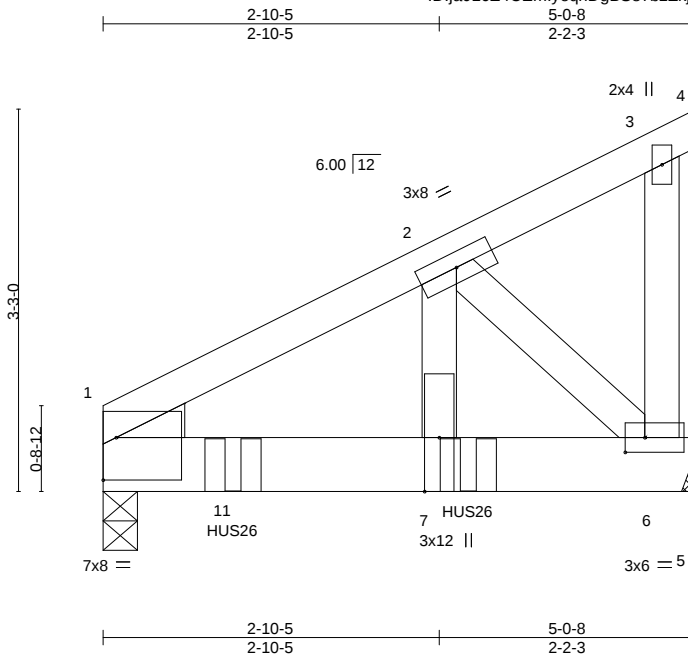
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RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

01/21/2022



Scale = 1:19.6

Plate Offsets (X,Y)-- [1:Edge,0-4-5], [6:0-2-0,0-1-8]											
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	0.17	Vert(LL)	-0.01 7-10	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.02 7-10	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.28	Horz(CT)	0.00 1	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 23 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 1=0-3-8, 6=Mechanical
Max Horz 1=102(LC 25)
Max Uplift 1=-161(LC 8), 6=-192(LC 8)
Max Grav 1=1187(LC 1), 6=922(LC 1)

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

TOP CHORD 1-2=-1050/134
BOT CHORD 1-7=-185/935, 6-7=-185/935
WEBS 2-7=-163/1124, 2-6=-1279/253

NOTES-

- 1) 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=161, 6=192.
- 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) Use Simpson Strong-Tie HUS26 (14-10d Girder, 6-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 1-1-4 from the left end to 3-1-4 to connect truss(es) to back face of bottom chord.
- 7) Fill all nail holes where hanger is in contact with lumber.
- 8) 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

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 3-4=-20, 5-8=-20
Concentrated Loads (lb)
Vert: 7=-835(B) 11=-835(B)



April 20,2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	G02	Jack-Open	3	1	
Job Reference (optional)					

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:38:55 2021 Page 1

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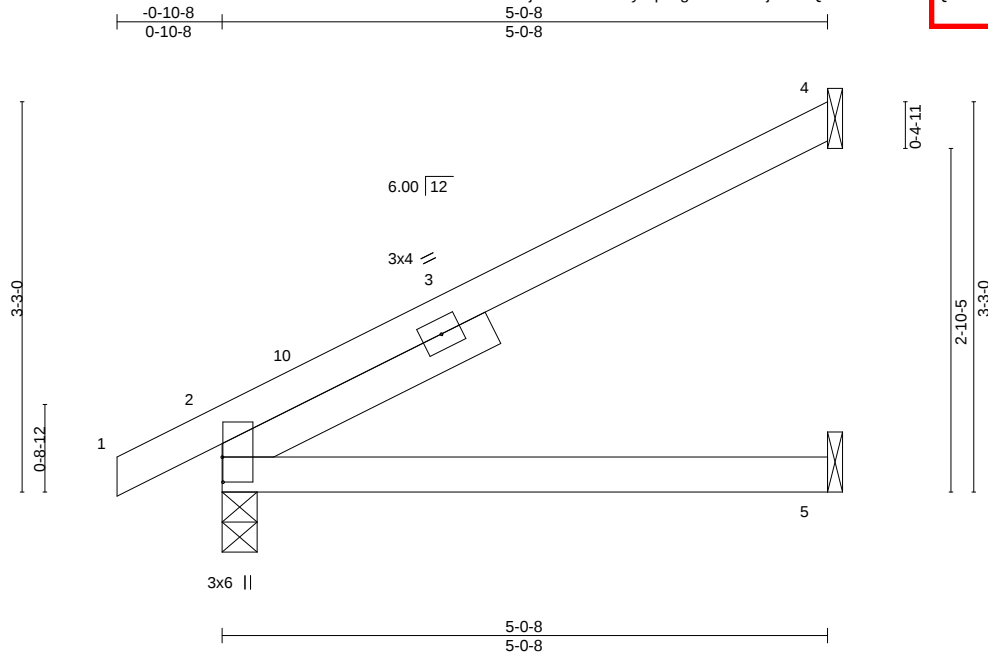
RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

01/21/2022



Scale = 1:19.2

Plate Offsets (X,Y)-- [2:0-2-8,0-0-1]												
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	0.34	Vert(LL)	0.04	5-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.06	5-8	>985	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.02	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 16 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 -t 2-6-0

BRACING-

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=117(LC 12)
Max Uplift 4=-84(LC 12), 2=-38(LC 12)
Max Grav 4=155(LC 1), 2=291(LC 1), 5=88(LC 3)

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

NOTES-

- 1) 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 4-11-12 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- 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 20,2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	G03	Jack-Open	1	1	
Job Reference (optional)					

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:38:56 2021 Page 1

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RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

01/21/2022

0-10-8 4-7-5
0-10-8 4-7-5

Scale = 1:18.0

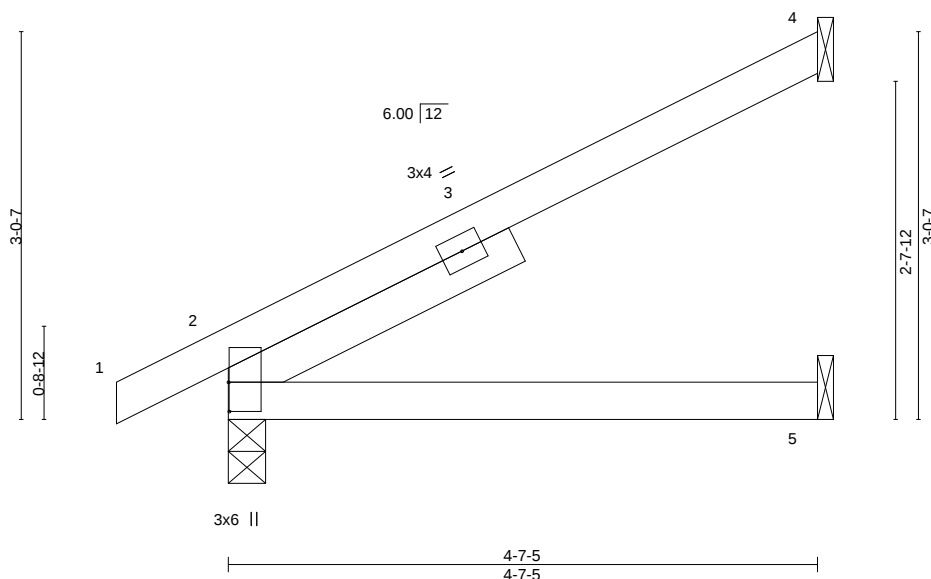


Plate Offsets (X,Y)--		[2:0-2-12,0-0-1]								
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0		Plate Grip DOL 1.15		TC 0.28		Vert(LL) 0.03 5-8	>999	240	MT20	197/144
TCDL 10.0		Lumber DOL 1.15		BC 0.20		Vert(CT) -0.04 5-8	>999	180		
BCLL 0.0		Rep Stress Incr YES		WB 0.00		Horz(CT) 0.01 2	n/a	n/a		
BCDL 10.0		Code IRC2018/TPI2014		Matrix-AS					Weight: 15 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 -t 2-6-0

BRACING-

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=108(LC 12)
Max Uplift 4=-77(LC 12), 2=-36(LC 12)
Max Grav 4=141(LC 1), 2=272(LC 1), 5=80(LC 3)

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

NOTES-

- 1) 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 4-6-9 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- 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 20, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	G04	Jack-Open	1	1	Job Reference (optional)

Builders FirstSource (Valley Center),

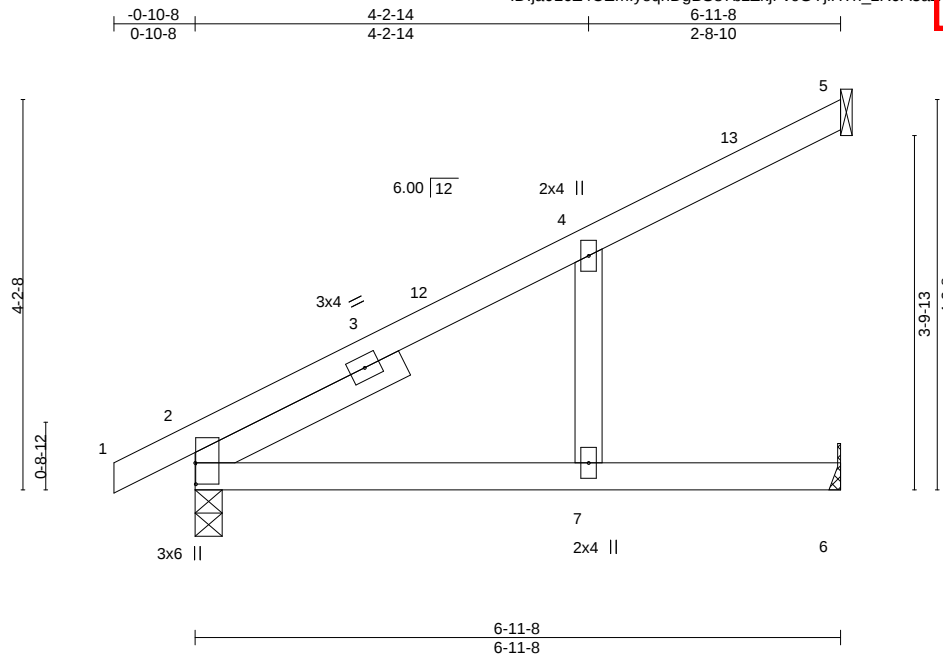
Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:38:58 2021 Page 1

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RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
45716421

01/21/2022



Scale = 1:24.8

Plate Offsets (X,Y)-- [2:0-2-12,0-0-1]											
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	0.53	Vert(LL)	0.19 7-10	>436	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.29 7-10	>285	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.05 2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 24 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 - t 2-6-0

BRACING-

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 5=Mechanical, 2=0-3-8, 6=Mechanical
Max Horz 2=150(LC 12)
Max Uplift 5=-64(LC 12), 2=-50(LC 12), 6=-36(LC 12)
Max Grav 5=173(LC 1), 2=375(LC 1), 6=134(LC 1)

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

TOP CHORD 2-4=-432/222

NOTES-

- 1) 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 6-10-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2, 6.
- 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.



April 20, 2021

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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

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	G05	Jack-Open	5	1	

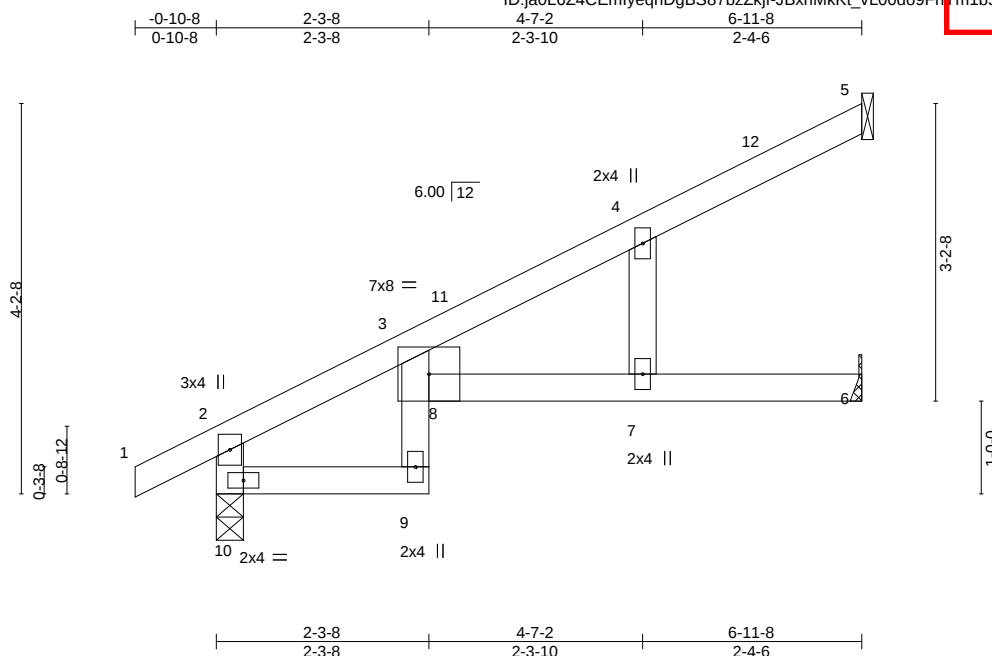
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:01 2021 Page 1

ID:ja0L6Z4CEmlyeqhDgBS87bzZkif-JBxhMkKt_vL00do9Fhym1b559UPtG95RaRMB6FZP8ma

01/21/2022



Scale = 1:24.8

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 0.54	Vert(LL)	0.18 7-8	>460	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.58	Vert(CT)	-0.26 7-8	>309	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.10 6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 22 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.

REACTIONS.

(size) 5=Mechanical, 6=Mechanical, 10=0-3-8
Max Horz 10=143(LC 12)
Max Uplift 5=-64(LC 12), 6=-35(LC 12), 10=-51(LC 12)
Max Grav 5=167(LC 1), 6=132(LC 1), 10=381(LC 1)

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

TOP CHORD 2-10=-359/175, 2-3=-311/45

NOTES-

- 1) 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 2-0-15, Interior(1) 2-0-15 to 6-10-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Refer to girder(s) for truss to truss connections.
- 5) 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.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6, 10.
- 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.
- 8) 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 20, 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	Roeser/1483 Winterset
2720415	G06	Half Hip Girder	1	1	
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:02 2021 Page 1

ID:ja0L6Z4CEmlyeqhDgBS87bzZkif-nNV3Z4KVIDTtdnLoO3?notICjup?agap559bZP8mZ

01/21/2022

-0-10-8 5-4-0 6-11-8
0-10-8 5-4-0 1-7-8

Scale = 1:22.2

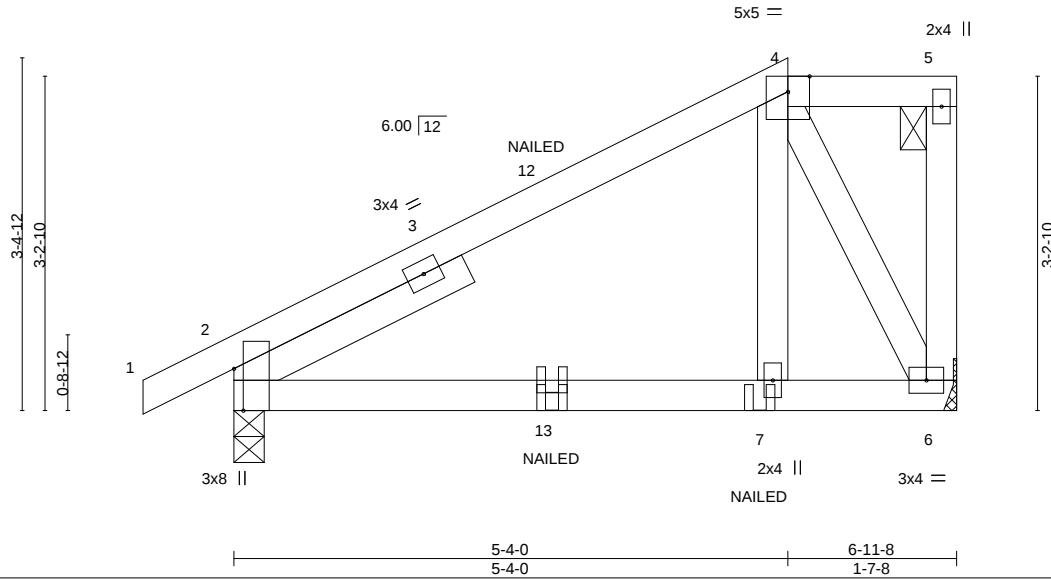


Plate Offsets (X,Y)--		[2:0-4-13,Edge]									
LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	0.04	7-10	>999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.38	Vert(CT)	-0.04	7-10	>999		
BCLL	0.0	Rep Stress Incr	NO	WB	0.06	Horz(CT)	0.02	2	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							
										Weight: 30 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 - t 2-6-0

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 2=0-3-8, 6=Mechanical
Max Horz 2=124(LC 7)
Max Uplift 2=-129(LC 8), 6=-157(LC 5)
Max Grav 2=356(LC 1), 6=287(LC 1)

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

WEBS 4-6=-323/209

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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=129, 6=157.
- 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.
- 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: 1-4=-70, 4-5=-70, 6-8=-20
Concentrated Loads (lb)
Vert: 7=6(B) 13=26(B)



April 20,2021

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	Roeser/1483 Winterset
2720415	G07	Jack-Partial	1	1	Job Reference (optional)

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:03 2021 Page 1

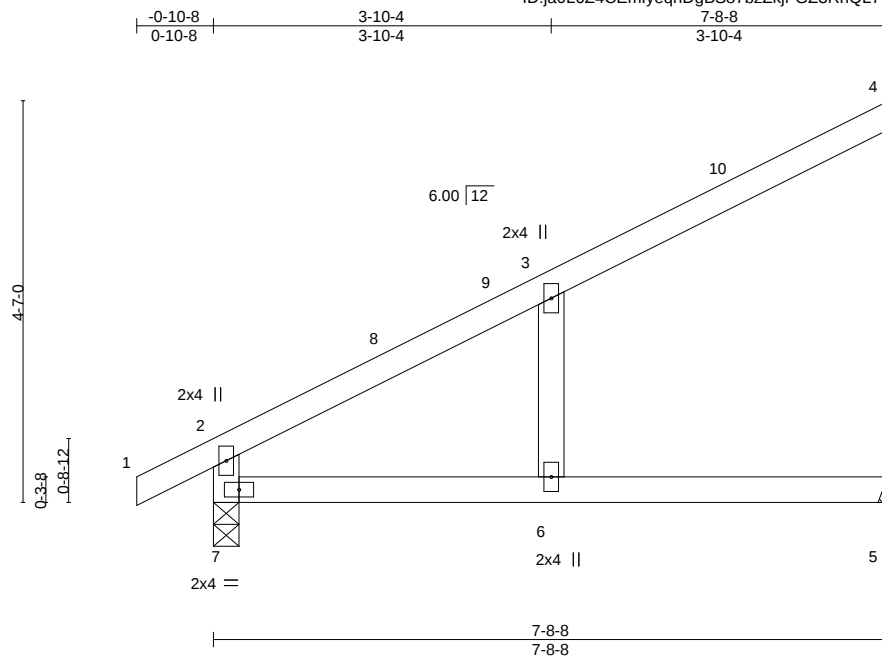
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RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

01/21/2022



Scale = 1:26.3

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 0.57	Vert(LL)	0.26	6	>343	240	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.75	Vert(CT)	-0.41	6	>217	180	197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.08	4	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 23 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.

REACTIONS.

(size) 4=Mechanical, 5=Mechanical, 7=0-3-8
Max Horz 7=154(LC 12)
Max Uplift 4=-76(LC 12), 5=-24(LC 12), 7=-56(LC 12)
Max Grav 4=203(LC 1), 5=130(LC 1), 7=414(LC 1)

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

TOP CHORD 2-7=-284/120

NOTES-

- 1) 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 7-7-12 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5, 7.
- 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.
- 8) 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 20, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	G08	Jack-Partial	5	1	
Job Reference (optional)					

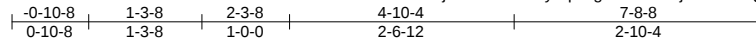
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:03 2021 Page 1

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Scale = 1:26.3

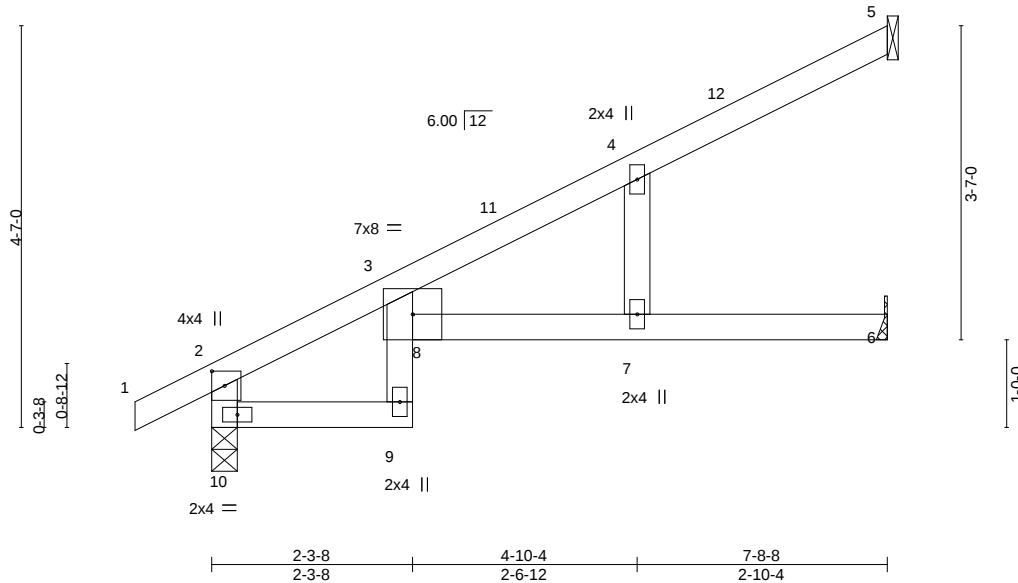


Plate Offsets (X,Y)-- [2:0-2-0,0-1-12]

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 0.67	Vert(LL)	0.25	7-8	>355	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.74	Vert(CT)	-0.41	7-8	>221	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.15	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 23 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.

REACTIONS.

(size) 5=Mechanical, 6=Mechanical, 10=0-3-8
Max Horz 10=154(LC 12)
Max Uplift 5=-67(LC 12), 6=-33(LC 12), 10=-56(LC 12)
Max Grav 5=190(LC 1), 6=143(LC 1), 10=414(LC 1)

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

TOP CHORD 2-10=-393/176, 2-3=-354/45

NOTES-

- 1) 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 2-0-15, Interior(1) 2-0-15 to 7-7-12 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Refer to girder(s) for truss to truss connections.
- 5) 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.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6, 10.
- 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.
- 8) 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 20, 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

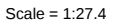


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Builders FirstSource (Valley Center),	Valley Center, KS - 67147,	8.430 s Mar 22 2021 MiTek Industries,
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01/21/2022



LUMBER	BRACING

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-374/200
WEBS 5-7=-268/222

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCFL=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 2-0-15, Interior(1) 2-0-15 to 7-0-5, Exterior(2E) 7-0-5 to 7-6-12 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
- 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) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 7=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.
- 8) 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.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 20, 2021



WARNING – verify design parameters and READ NOTES ON THIS AND INCLUDED WELDER REFERENCE PAGE MH-1413 (Rev. 3/25/2020) BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for the 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, 2671 Crain Highway, Suite 203 Waldorf, MD 20601.



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	G10	Half Hip Girder	1	1	
Job Reference (optional)					

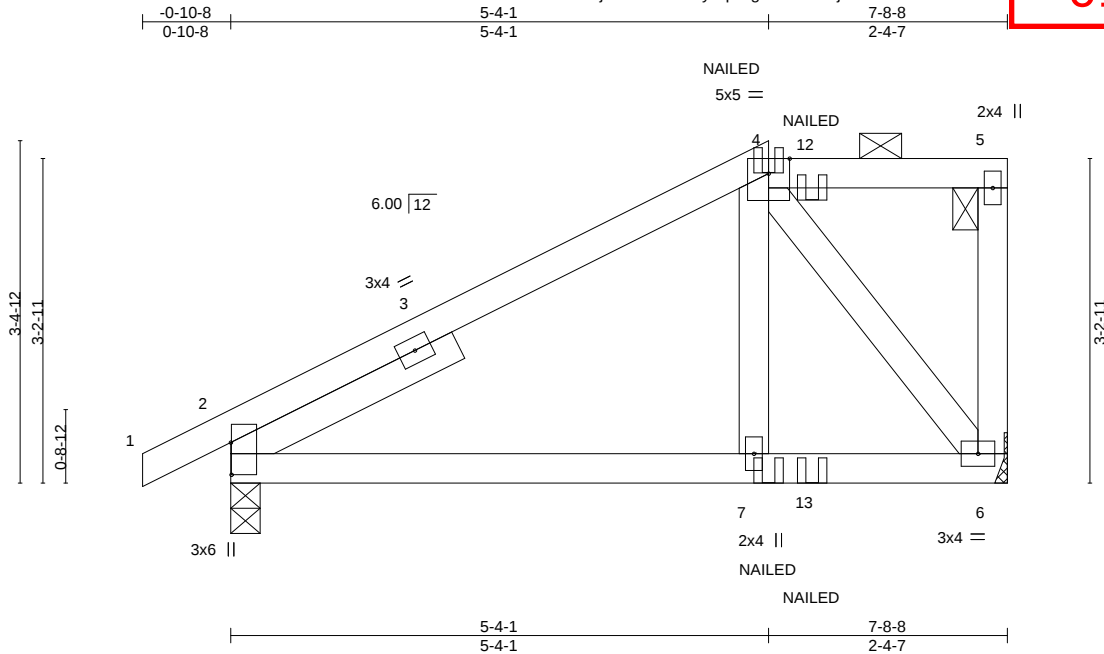
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:16 2021 Page 1

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01/21/2022



Scale = 1:22.9

Plate Offsets (X,Y)-- [2:0-3-13,0-0-1]												
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	0.39	Vert(LL)	0.03	7-10	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.05	7-10	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.09	Horz(CT)	0.02	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							Weight: 32 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x4 SPF No.2
 SLIDER Left 2x4 SPF No.2 -t 2-6-0

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.): 4-5.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 2=0-3-8, 6=Mechanical
 Max Horz 2=124(LC 28)
 Max Uplift 2=-107(LC 8), 6=-143(LC 5)
 Max Grav 2=405(LC 1), 6=337(LC 1)

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

WEBS 4-6=-339/153

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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=107, 6=143.
- 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 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 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: 1-4=-70, 4-5=-70, 6-8=-20
 Concentrated Loads (lb)
 Vert: 7=0(F) 13=-0(F)



April 20,2021

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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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	G11	Jack-Closed Girder	1	1	Job Reference (optional)

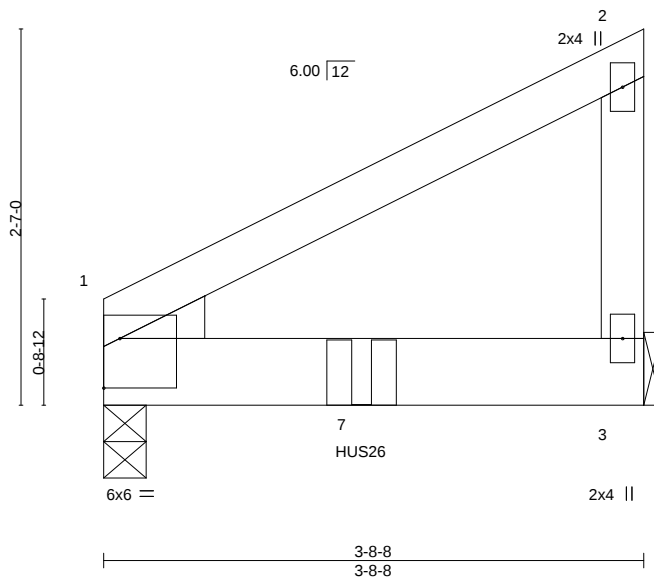
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:17 2021 Page 1

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RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
145716438

01/21/2022



Scale = 1:15.8

Plate Offsets (X,Y)--		[1:Edge,0-4-1]							
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 0.29	Vert(LL)	-0.02	3-6	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.69	Vert(CT)	-0.04	3-6	>975		
BCLL 0.0	Rep Stress Incr	NO	WB 0.00	Horz(CT)	0.01	1	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP					Weight: 14 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-8-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 3=Mechanical, 1=0-3-8
Max Horz 1=84(LC 7)
Max Uplift 3=-77(LC 8), 1=-52(LC 8)
Max Grav 3=544(LC 1), 1=548(LC 1)

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

NOTES-

- 1) 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 1.
- 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) Use Simpson Strong-Tie HUS26 (14-10d Girder, 6-10d Truss, Single Ply Girder) or equivalent at 1-9-4 from the left end to connect truss(es) to back face of bottom chord.
- 7) Fill all nail holes where hanger is in contact with lumber.
- 8) 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

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 3-4=-20
Concentrated Loads (lb)
Vert: 7=-771(B)



April 20,2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	G13	Jack-Open Girder	1	1	
Job Reference (optional)					

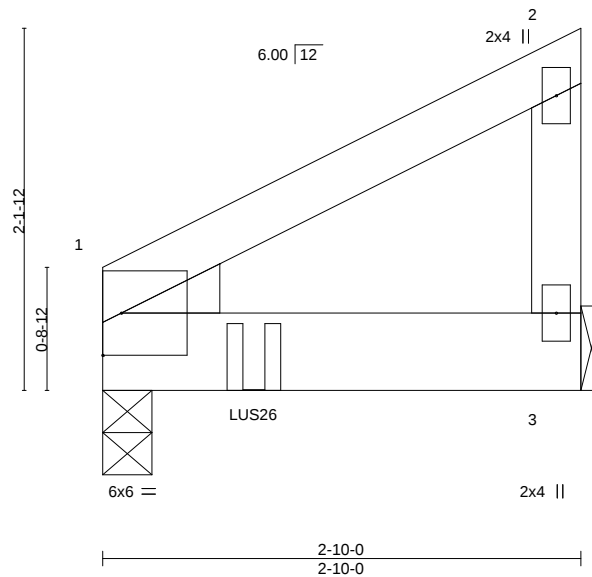
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:18 2021 Page 1

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01/21/2022

Scale = 1:13.7



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 0.15	Vert(LL)	-0.01	3-6	>999	240	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.32	Vert(CT)	-0.01	3-6	>999	180	197/144
BCLL 0.0	Rep Stress Incr	NO	WB 0.01	Horz(CT)	0.00	1	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						
									Weight: 11 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x6 SPF No.2
 WEBS 2x4 SPF No.2
 WEDGE
 Left: 2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 3=Mechanical, 1=0-3-8
 Max Horz 1=55(LC 25)
 Max Uplift 3=-57(LC 8), 1=-34(LC 8)
 Max Grav 3=291(LC 1), 1=610(LC 1)

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

NOTES-

- 1) 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 1.
- 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) Use Simpson Strong-Tie LUS26 (4-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent at 0-10-12 from the left end to connect truss(es) to front face of bottom chord.
- 7) Fill all nail holes where hanger is in contact with lumber.
- 8) 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

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-2=-70, 3-4=-20
 Concentrated Loads (lb)
 Vert: 6=-660(F)



April 20, 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	Roeser/1483 Winterset
2720415	G14	Jack-Open	1	1	Job Reference (optional)

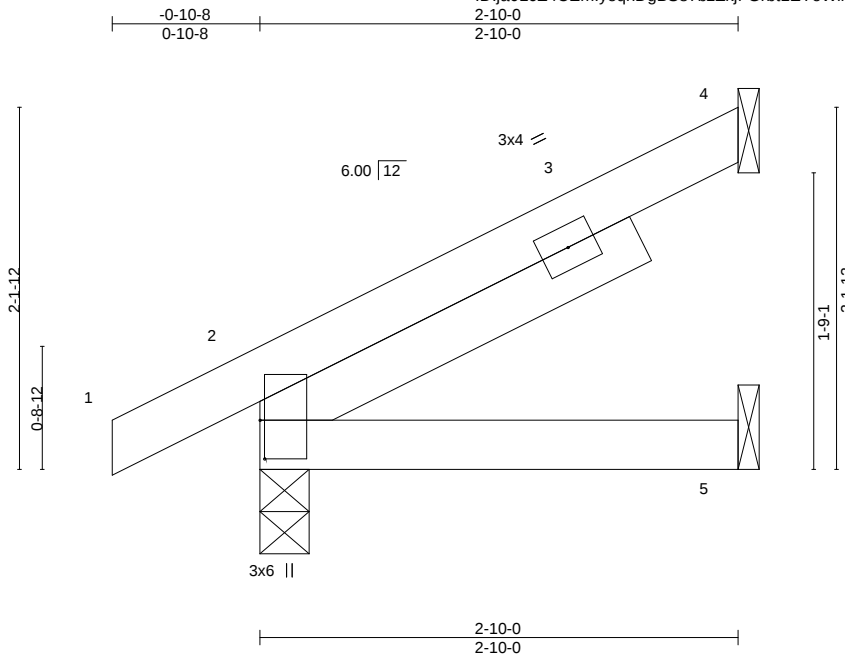
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:20 2021 Page 1

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RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
145716430

01/21/2022



Scale = 1:13.7

Plate Offsets (X,Y)-- [2:0-2-12,0-0-5]										
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	0.09	Vert(LL)	-0.00 8 >999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.00 5-8 >999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00 2 n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP					Weight: 11 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 -t 2-6-0

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=72(LC 12)
Max Uplift 4=-49(LC 12), 2=-28(LC 12)
Max Grav 4=84(LC 1), 2=196(LC 1), 5=46(LC 3)

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

NOTES-

- 1) 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 2-9-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- 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.



April 20,2021

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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	Roeser/1483 Winterset	RELEASE FOR CONSTRUCTION
2720415	GR01	Piggyback Base Girder	1	2	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:26 2021 Page 1
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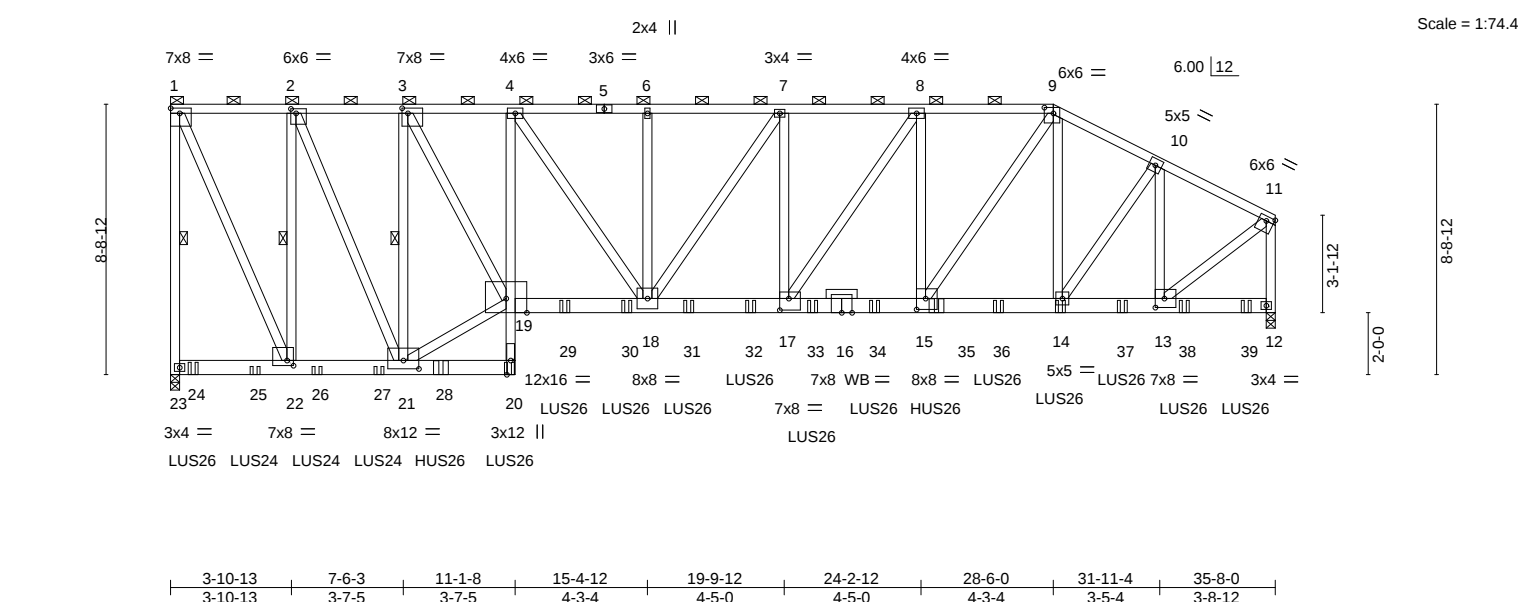


Plate Offsets (X,Y)--		[1:Edge,0-2-0], [2:0-2-0,0-1-12], [3:0-2-4,0-2-0], [9:0-3-8,0-2-4], [11:Edge,0-1-12], [13:0-3-8,0-3-8], [15:0-3-8,0-4-4], [17:0-3-8,0-4-8], [21:0-6-0,0-3-4], [22:0-2-8,0-2-0]								
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	-0.35 18-19 >999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.62 18-19 >685	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.90	Horz(CT)	0.20 12 n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS					Weight: 508 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-0-11 oc purlins, except end verticals, and 2-0-0 oc purlins (2-10-0 max.): 1-9.
BOT CHORD 2x6 SPF 2100F 1.8E *Except* 20-23: 2x6 SPF No.2, 4-20: 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2 *Except* 1-23,1-22,2-22,3-21,3-19: 2x4 SPF 1650F 1.5E	WEBS 1 Row at midpt 1-23, 2-22, 3-21
OTHERS 2x4 SPF No.2	

REACTIONS.	(size) 23=0-3-8, 12=0-3-8
	Max Horz 23=-312(LC 6)
	Max Uplift 23=-2255(LC 4), 12=-1945(LC 4)
	Max Grav 23=8280(LC 1), 12=8337(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-23=-7600/2022, 1-2=-3382/963, 2-3=-5905/1560, 3-4=-10276/2614, 4-6=-11782/2915, 6-7=-11782/2915, 7-8=-11837/2887, 8-9=-10412/2538, 9-10=-8457/2056, 10-11=-6626/1588, 11-12=-7641/1789
BOT CHORD	21-22=-967/3382, 19-20=-243/1090, 4-19=-2388/608, 18-19=-2633/10337, 17-18=-2891/11837, 15-17=-2542/10412, 14-15=-1823/7523, 13-14=-1400/5871
WEBS	1-22=-2179/8198, 2-22=-6131/1585, 2-21=-1576/6360, 3-21=-8051/1988, 19-21=-1778/6710, 3-19=-2162/8968, 4-18=-598/2569, 6-18=-304/133, 8-17=-612/2497, 8-15=-2354/633, 9-15=-1289/5179, 9-14=-787/224, 10-14=-720/2814, 10-13=-3368/801, 11-13=-1730/7373

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-5-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - 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.
 - 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.
 - Bearing at joint(s) 23, 12 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) except (jt=lb) 23=2255, 12=1945.

Continued on page 2

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

April 20,2021

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	GR01	Piggyback Base Girder	1	2	Job Reference (optional)

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:26 2021 Page 2

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RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

NOTES-

- 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.
- Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss, Single Ply Girder) or equivalent at 0-8-12 from the left end to connect truss(es) to back face of bottom chord.
- Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-8-12 from the left end to 6-8-12 to connect truss(es) to back face of bottom chord.
- Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 16-0-0 oc max. starting at 8-8-12 from the left end to 24-8-12 to connect truss(es) to back face of bottom chord.
- Use Simpson Strong-Tie LUS26 (4-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 10-11-12 from the left end to 22-8-12 to connect truss(es) to back face of bottom chord.
- Use Simpson Strong-Tie LUS26 (4-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 26-8-12 from the left end to 34-8-12 to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-9=-70, 9-11=-70, 20-23=-20, 12-19=-20
 - Concentrated Loads (lb)
 - Vert: 20=-811(B) 14=-691(B) 24=-635(B) 25=-630(B) 26=-638(B) 27=-639(B) 28=-865(B) 29=-811(B) 30=-811(B) 31=-811(B) 32=-811(B) 33=-811(B) 34=-811(B) 35=-849(B) 36=-738(B) 37=-691(B) 38=-691(B) 39=-693(B)

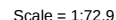
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Chesterfield, MO 63017

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:33 2021, Page 1
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 4-1-0 7-10-8 8-6-0 11-1-8 15-5-10 19-9-12 24-1-14 28-6-0 31-11-4 35-8-0
 4-1-0 3-8-8 0-7-8 2-7-8 4-4-2 4-4-2 4-4-2 4-4-2 3-5-4 3-8-12



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 0.87	Vert(LL) -0.31 19-20	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.59	Vert(CT) -0.54 19-20	>781	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr NO	WB 0.97	Horz(CT) 0.20 13	n/a	n/a	MT18HS	197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS				Weight: 543 lb	FT = 20%

TOP CHORD 2x6 SPF No.2 *Except*
1-3,10-12: 2x4 SPF No.2

BOT CHORD 2x6 SPF 2100F 1.8E *Except*
21-24: 2x6 SPF No.2, 5-21: 2x4 SPF No.2

WEBS 2x4 SPF No.2 *Except*
4-20: 2x4 SPF 1650F 1.5E

TOP CHORD	Structural wood sheathing directly applied or 3-10-12 oc purlins, except end verticals, and 2-0-0 oc purlins (4-2-11 max.): 1-3, 4-10.	
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.	
WEBS	1 Row at midpt	1-24, 2-23, 4-22

(size) 24=0-3-8 (req. 0-4-13), 13=0-3-8
 Max Horz 24=-300(LC 6)
 Max Uplift 24=-1396(LC 4), 13=-1425(LC 4)
 Max Grav 24=6107(LC 1), 13=8613(LC 1)

SUPPLEMENTARY BEARING PLATES, SPECIAL ANCHORAGE, OR OTHER MEANS TO ALLOW FOR THE MINIMUM REQUIRED SUPPORT WIDTH (SUCH AS COLUMN CAPS, BEARING BLOCKS, ETC.) ARE THE RESPONSIBILITY OF THE TRUSS MANUFACTURER OR THE BUILDING DESIGNER

TOP CHORD 1-24=6054/1386, 1-2=-2911/722, 2-3=-5496/1282, 3-4=-6162/1441, 4-5=-9865/2272,
5-6=-11867/2453, 6-7=-11867/2453, 7-9=-12166/2366, 9-10=-10962/2040,
10-11=-8963/1609, 11-12=-7107/1232, 12-13=-8195/1382

BOT CHORD 22-23=-732/2911, 20-21=-627/1006, 5-20=-2959/411, 19-20=-2295/9955,
18-19=-2373/12166, 16-18=-2045/10960, 15-16=-1424/7986, 14-15=-1080/6300

WEBS 1-23=-1500/6587, 2-23=-5844/1410, 20-22=-1664/7165, 4-20=-2280/10077,
5-19=-378/3352, 6-19=-359/144, 7-19=-526/0, 7-18=-164/299, 9-18=-577/2159,
9-16=-2208/634, 10-16=-1098/5304, 10-15=-540/238, 11-15=-583/2935, 11-14=-3402/645,
12-14=-1329/7918, 3-22=-2987/7721, 2-22=-1406/6162, 4-22=-6624/1478

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-5-0 oc, 2x4 - 1 row at 0-9-0 oc.
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 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 7-16; 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
- 5) Provide adequate drainage to prevent water ponding.
- 6) All plates are MT20 plates unless otherwise indicated.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) WARNING: Required bearing size at joint(s) 24 greater than input bearing size.
- 9) Bearing at joint(s) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.



April 20, 2021



WARNING: Velly design parameters are READ NOTES ON THIS AND INCLUDED WITH REFERENCE PAGE MM-1475 (Rev. 3/25/2020) 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	Roeser/1483 Winterset
2720415	GR02	Piggyback Base Girder	1	2	Job Reference (optional)

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:33 2021 Page 2

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AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

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NOTES-

- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 24=1396, 13=1425.
- 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.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 4-0-0 oc max. starting at 10-11-12 from the left end to 33-7-4 to connect truss(es) to front face of bottom chord.
- 14) Fill all nail holes where hanger is in contact with lumber.
- 15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 884 lb down and 149 lb up at 13-7-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-70, 3-4=-70, 4-10=-70, 10-12=-70, 21-24=-20, 13-20=-20

Concentrated Loads (lb)

Vert: 21=-931(F) 17=-884(F) 19=-884(F) 18=-884(F) 25=-884(F) 26=-884(F) 27=-884(F) 28=-884(F) 29=-884(F) 30=-884(F) 31=-884(F) 32=-884(F) 33=-884(F)

 **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	Roeser/1483 Winterset
2720415	GR03	Common Girder	1	2	Job Reference (optional)

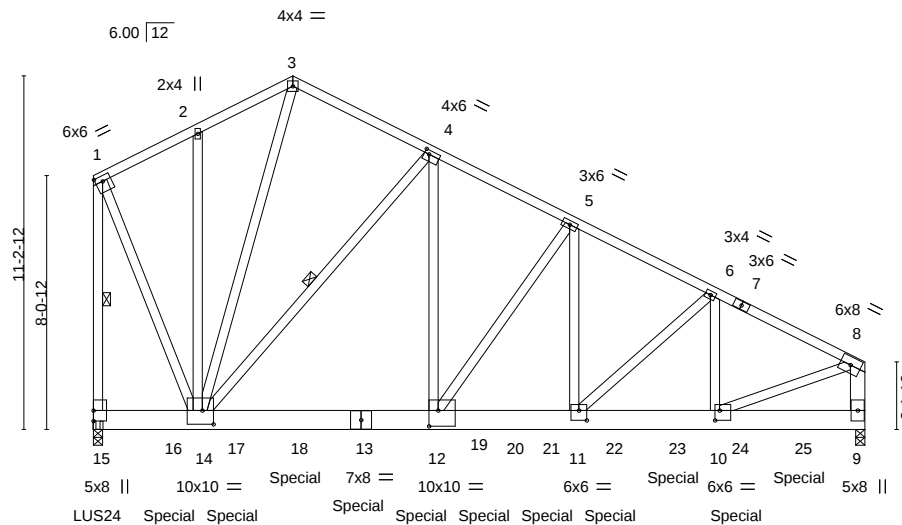
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

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

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3-3-12	6-4-0	10-9-10	15-3-4	19-8-14	24-6-0
3-3-12	3-0-4	4-5-10	4-5-10	4-5-10	4-9-2



Scale = 1:73.2

3-3-12	10-9-10	15-3-4	19-8-14	24-6-0
3-3-12	7-5-14	4-5-10	4-5-10	4-9-2

Plate Offsets (X,Y)-- [1:0-2-12,0-2-0], [4:0-1-12,0-1-8], [10:0-1-12,0-3-12], [11:0-3-0,0-3-12], [12:0-3-8,0-6-0], [14:0-4-4,0-5-4]											
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	0.66	Vert(LL)	-0.12	12-14	>999	240	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.22	12-14	>999	180	
BCLL	0.0	Rep Stress Incr	NO	WB	0.99	Horz(CT)	0.02	9	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 402 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SPF No.2 *Except*
8-9: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-7-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-14, 1-15

REACTIONS.

(size) 15=0-3-8, 9=0-3-8
Max Horz 15=-353(LC 4)
Max Uplift 15=-1051(LC 9), 9=-931(LC 9)
Max Grav 15=6742(LC 1), 9=6041(LC 1)

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

TOP CHORD 1-2=-2354/461, 2-3=-2316/487, 3-4=-1896/381, 4-5=-5271/887, 5-6=-6529/1055,
6-8=-6662/1033, 1-15=-5960/954, 8-9=-5306/840
BOT CHORD 14-15=-125/290, 12-14=-580/4653, 11-12=-819/5779, 10-11=-894/5892, 9-10=-80/355
WEBS 3-14=-303/1603, 4-14=-4617/838, 4-12=-722/4678, 5-12=-1956/412, 5-11=-287/1851,
6-10=-251/182, 1-14=-779/5219, 8-10=-877/5955

NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 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.
- 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
- 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 100 lb uplift at joint(s) except (jt=lb) 15=1051, 9=931.
- 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.
- Use Simpson Strong-Tie LUS24 (4-SD9112 Girder, 2-SD9212 Truss, Single Ply Girder) or equivalent at 0-1-12 from the left end to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 884 lb down and 148 lb up at 2-5-4, 884 lb down and 144 lb up at 4-5-4, 884 lb down and 144 lb up at 6-5-4, 884 lb down and 144 lb up at 8-5-4, 884 lb down and 144 lb up at 10-5-4, 884 lb down and 144 lb up at 12-5-4, 884 lb down and 144 lb up at 14-5-4, 884 lb down and 144 lb up at 16-5-4, 884 lb down and 144 lb up at 18-5-4, and 884 lb down and 144 lb up at 20-5-4, and 884 lb down and 144 lb up at 22-5-4

Continued on next page. The design/selection of such connection device(s) is the responsibility of others.



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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	Roeser/1483 Winterset
2720415	GR03	Common Girder	1	2	Job Reference (optional)

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

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RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

45716433

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-70, 3-8=-70, 9-15=-20

Concentrated Loads (lb)

Vert: 15=-891(B) 13=-884(B) 16=-884(B) 17=-884(B) 18=-884(B) 19=-884(B) 20=-884(B) 21=-884(B) 22=-884(B) 23=-884(B) 24=-884(B) 25=-884(B)

 **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	Roeser/1483 Winterset
2720415	GR04	Common Girder	1	2	

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DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

01/21/2022

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc.

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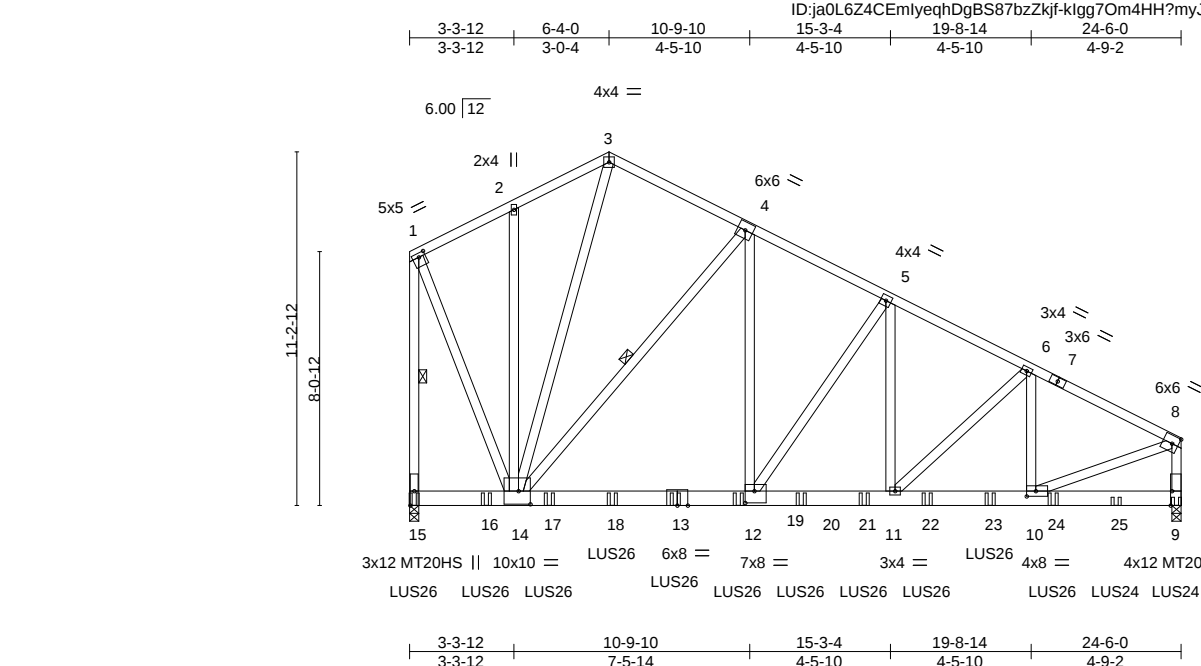


Plate Offsets (X,Y)--										[1:0-2-8,0-1-8], [9:0-5-8,Edge], [10:0-3-8,0-2-0], [12:0-3-8,0-4-8], [14:0-4-8,0-5-0]									
LOADING (psf)		SPACING- 2-0-0				CSI.		DEFL. in (loc) l/defl L/d				PLATES		GRIP					
TCLL	25.0	Plate Grip DOL 1.15				TC	0.49	Vert(LL)	-0.14	12-14	>999	240	MT20	197/144					
TCDL	10.0	Lumber DOL 1.15				BC	0.54	Vert(CT)	-0.26	12-14	>999	180	MT20HS	148/108					
BCLL	0.0	Rep Stress Incr NO				WB	0.83	Horz(CT)	0.03	9	n/a	n/a							
BCDL	10.0	Code IRC2018/TPI2014				Matrix-MS								Weight: 341 lb FT = 20%					

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 5-1-4 oc purlins, except end verticals.
BOT CHORD 2x6 SPF 2100F 1.8E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 4-14, 1-15
REACTIONS.	SUPPLEMENTARY BEARING PLATES, SPECIAL ANCHORAGE, OR OTHER MEANS TO ALLOW FOR THE MINIMUM REQUIRED SUPPORT WIDTH (SUCH AS COLUMN CAPS, BEARING BLOCKS, ETC.) ARE THE RESPONSIBILITY OF THE TRUSS MANUFACTURER OR THE BUILDING DESIGNER.
(size) 15=0-3-8 (req. 0-3-10), 9=0-3-8	
Max Horz 15=-356(LC 4)	
Max Uplift 15=-1528(LC 9), 9=-1413(LC 9)	
Max Grav 15=5709(LC 1), 9=5513(LC 1)	
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD 1-2=-2006/628, 2-3=-1973/650, 3-4=-1634/507, 4-5=-4398/1247, 5-6=-5412/1469, 6-8=-5557/1430, 1-15=-5120/1384, 8-9=-4494/1166	
BOT CHORD 14-15=-1277/291, 12-14=-900/3873, 11-12=-1188/4778, 10-11=-1249/4905	
WEBS 3-14=-434/1330, 4-14=-3806/1161, 4-12=-1073/3801, 5-12=-1587/501, 5-11=-386/1448, 1-14=-1161/4475, 8-10=-1277/5107	

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - 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.
 - 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
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - WARNING:** Required bearing size at joint(s) 15 greater than input bearing size.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=1528, 9=1413.
 - 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.
 - Use Simpson Strong-Tie LUS26 (4-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent spaced at 2-3-8 oc max. starting at 0-1-12 from the left end to 20-5-4 to connect truss(es) to front face of bottom chord.
 - Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss) or equivalent spaced at 1-11-0 oc max. starting at 22-5-4 from the left end to 24-4-4 to connect truss(es) to front face of bottom chord.
 - Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard



April 20,2021

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	GR04	Common Girder	1	2	Job Reference (optional)

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:38 2021 Page 2

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RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-70, 3-8=-70, 9-15=-20

Concentrated Loads (lb)

Vert: 15=-743(F) 13=-743(F) 9=-604(F) 16=-736(F) 17=-736(F) 18=-736(F) 19=-693(F) 20=-691(F) 21=-691(F) 22=-691(F) 23=-691(F) 24=-693(F) 25=-600(F)

 **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	Roeser/1483 Winterset
2720415	GR05	Flat Girder	1	1	Job Reference (optional)

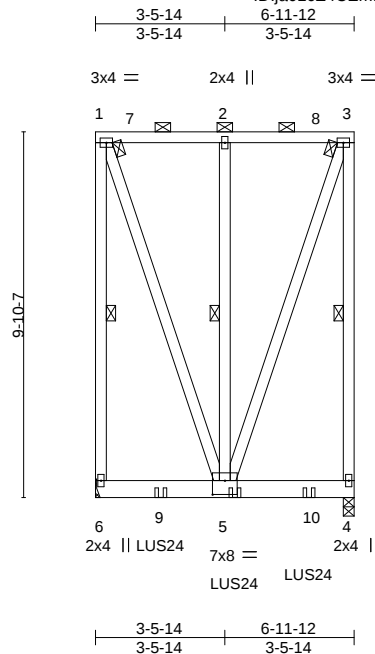
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:39 2021 Page 1

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RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
145716435

01/21/2022



Scale = 1:62.2

Plate Offsets (X,Y)-- [5:0-4:0,0-4-8]									
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	0.31	Vert(LL)	-0.02 5-6 >999	240	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.03 5-6 >999	180	
BCLL	0.0	Rep Stress Incr	NO	WB	0.46	Horz(CT)	0.00 4 n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP					Weight: 74 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x4 SPF No.2

BRACING-

TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-3, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 1-6, 3-4, 2-5

REACTIONS.

(size) 6=Mechanical, 4=0-3-8
Max Uplift 6=-359(LC 4), 4=-393(LC 4)
Max Grav 6=951(LC 1), 4=1026(LC 1)

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

TOP CHORD 1-6=-733/285, 3-4=-733/285
WEBS 1-5=-262/678, 2-5=-281/122, 3-5=-262/678

NOTES-

- 1) 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; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=359, 4=393.
- 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 8) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 1-9-2 from the left end to 5-9-2 to connect truss(es) to front face of bottom chord.
- 9) Fill all nail holes where hanger is in contact with lumber.
- 10) 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

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 4-6=-20
Concentrated Loads (lb)
Vert: 5=-458(F) 9=-458(F) 10=-458(F)



April 20,2021

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	Roeser/1483 Winterset
2720415	H01	Jack-Closed	3	1	
Job Reference (optional)					

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:40 2021 Page 1

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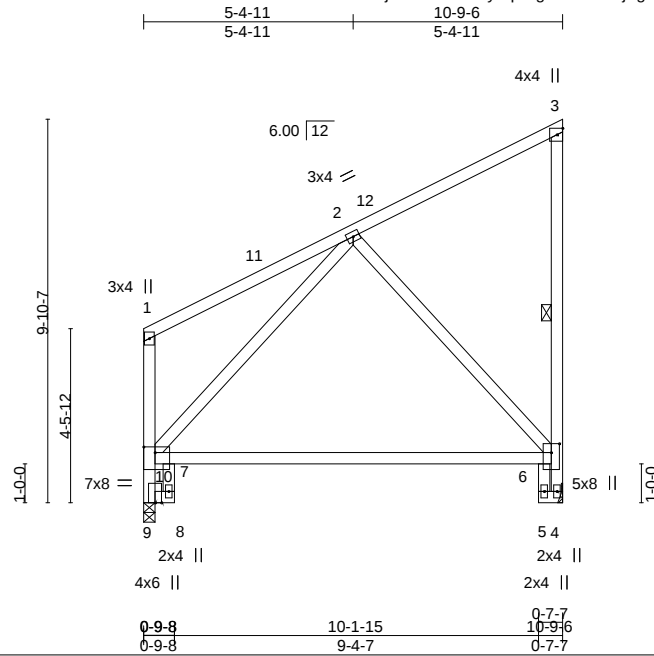
RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

145716436

01/21/2022



Scale = 1:59.3

Plate Offsets (X,Y)--		[6:0-2-12,0-2-8], [10:0-3-8,0-1-12]									
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)	-0.30	6-7	>419	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.68	Vert(CT)	-0.60	6-7	>211	180		
BCLL	0.0	Rep Stress Incr	YES	WB 0.40	Horz(CT)	0.19	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 61 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 3-4

REACTIONS.	(size) 4=Mechanical, 9=0-3-8
	Max Horz 9=380(LC 9)
	Max Uplift 4=-197(LC 9), 9=-55(LC 12)
	Max Grav 4=478(LC 1), 9=486(LC 20)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	9-10=-411/298, 1-2=-331/274, 4-6=-496/343
BOT CHORD	7-10=-369/411, 6-7=-369/411
WEBS	2-10=-369/302, 2-6=-373/365, 7-8=-462/318

- NOTES-**
- 1) 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 10-7-10 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
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) Refer to girder(s) for truss to truss connections.
 - 4) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9 except (jt=1b) 4=197.
 - 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.

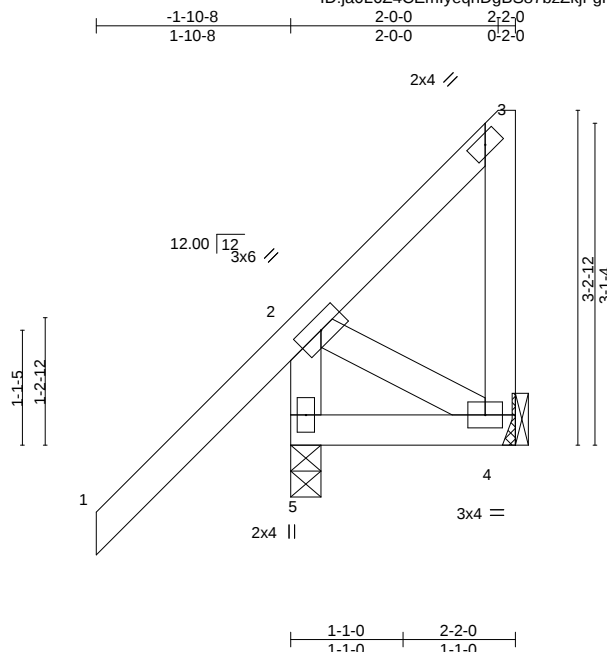


April 20,2021

Builders FirstSource (Valley Center).	Valley Center, KS - 67147.
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8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:40 2021 Page 1
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01/21/2022



Scale = 1:22.2

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	0.31	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00	4-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							Weight: 15 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 2-2-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 5=0-3-8, 4=Mechanical, 4=Mechanical
Max Horz 5=168(LC 11)
Max Uplift 5=-60(LC 12), 4=-84(LC 9)
Max Grav 5=302(LC 1), 4=80(LC 8), 4=8(LC 1)

FORCES.

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-283/155

NOTES-

- 1) 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) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 2-0-4 zone; cantilever left and right exposed ; and vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 4.
- 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.



April 20, 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

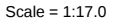


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Builders FirstSource (Valley Center),	Valley Center, KS - 67147,
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8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:41 2021 Page 1

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Weight: 15 lb FT = 20%

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
OTHERS	2x4 SPF No.2

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

(size) 5=Mechanical, 6=0-3-8
Max Horz 6=124(LC 7)
Max Uplift 5=-61(LC 5), 6=-105(LC 8)
Max Grav 5=53(LC 22), 6=302(LC 1)

TOP CHORD 2-6=-348/267

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDD=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
- 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) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 6=105.
- 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/TP1 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 3-4=-70, 5-6=-20



April 20, 2021



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



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Chesterfield, MO 63017

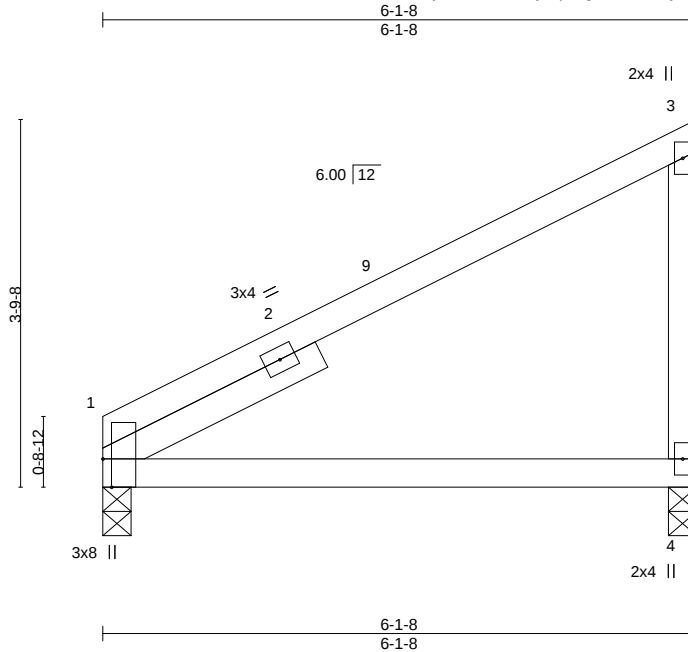
Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	H04	Monopitch	1	1	
Job Reference (optional)					

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:42 2021 Page 1

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01/21/2022



Scale: 1/2"=1'

Plate Offsets (X,Y)--		[1:0-3-8,Edge]									
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 0.50		Vert(LL)	0.08 4-7	>881	240	MT20	197/144
TCDL 10.0		Lumber DOL	1.15	BC 0.35		Vert(CT)	-0.13 4-7	>541	180		
BCLL 0.0		Rep Stress Incr	YES	WB 0.00		Horz(CT)	0.03 1	n/a	n/a		
BCDL 10.0		Code IRC2018/TPI2014		Matrix-AS						Weight: 21 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x4 SPF No.2
 SLIDER Left 2x4 SPF No.2 -t 2-6-0

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
 BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 1=0-3-8, 4=0-3-8
 Max Horz 1=136(LC 11)
 Max Uplift 1=-41(LC 12), 4=-81(LC 12)
 Max Grav 1=269(LC 1), 4=269(LC 1)

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

TOP CHORD 1-3=-343/121

NOTES-

- 1) 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) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 5-11-12 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4.
- 4) 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.
- 5) 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 20, 2021

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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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
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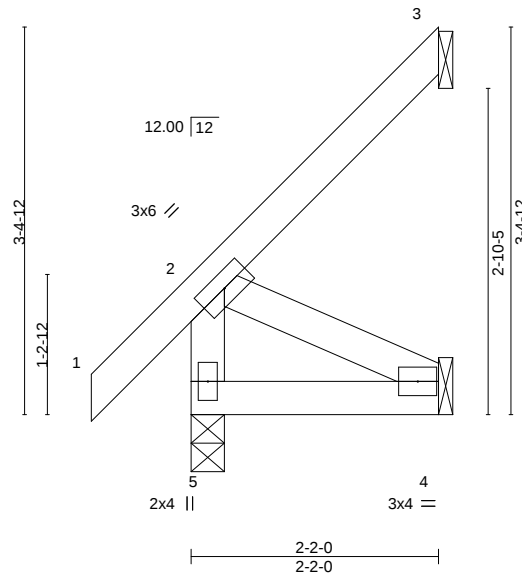
Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	J01	Jack-Open	1	1	Job Reference (optional)

AS NOTED FOR PLAN REVIEW
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:42 2021 Page 1

0-10-8 2-2-0
0-10-8 2-2-0



Scale = 1:20.2

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 0.13	Vert(LL)	-0.00	4-5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.00	4-5	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.06	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 11 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 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=101(LC 12)
Max Uplift 3=-53(LC 12), 4=-46(LC 12)
Max Grav 5=179(LC 1), 3=59(LC 19), 4=47(LC 10)

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

BOT CHORD 4-5=-295/107
WEBS 2-4=-120/330

NOTES-

- 1) 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) 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4.
- 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.



April 20, 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	Roeser/1483 Winterset
2720415	LG1	GABLE	1	1	Job Reference (optional)

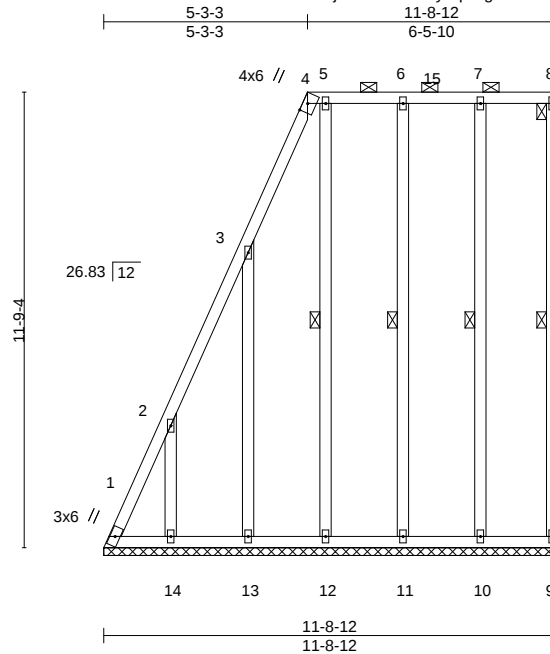
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:44 2021 Page 1

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RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
45716441

01/21/2022



Scale = 1:59.5

Plate Offsets (X,Y)--		[4:0-2-13,Edge]							
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d
TCLL	25.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	-	n/a
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a
BCLL	0.0	Rep Stress Incr	YES	WB	0.47	Horz(CT)	-0.00	9	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S					
						PLATES	GRIP		
						MT20	197/144		
						Weight: 98 lb	FT = 20%		

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-7-10 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 8-9, 7-10, 6-11, 5-12

REACTIONS.

All bearings 11-8-12.
(lb) - Max Horz 1=468(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 9, 10, 11 except 1=448(LC 10), 12=198(LC 12), 13=453(LC 12), 14=434(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 9, 10, 11, 12 except 1=922(LC 12), 13=346(LC 19), 14=335(LC 19)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1090/872, 2-3=-649/522
WEBS 5-12=-212/290, 3-13=-464/512, 2-14=-423/465

NOTES-

- 1) 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 Corner(3) 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
- 2) Provide adequate drainage to prevent water ponding.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 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) 9, 10, 11 except (jt=lb) 1=448, 12=198, 13=453, 14=434.
- 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.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 20,2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	LG2	GABLE	1	1	Job Reference (optional)

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:44 2021 Page 1

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RELEASE FOR CONSTRUCTION

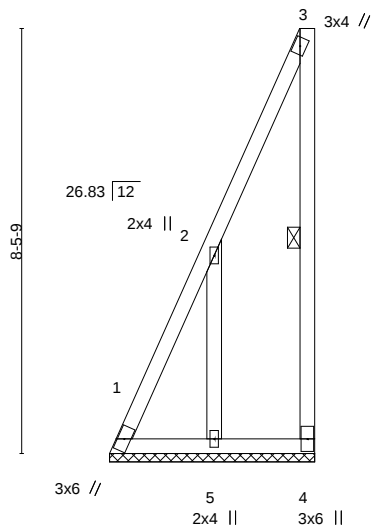
AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

01/21/2022

Scale = 1:45.9



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 0.75	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.16	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 29 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-1-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-4

REACTIONS.

(size) 1=4-1-0, 4=4-1-0, 5=4-1-0
Max Horz 1=324(LC 9)
Max Uplift 1=-364(LC 10), 4=-280(LC 11), 5=-512(LC 12)
Max Grav 1=490(LC 9), 4=253(LC 8), 5=397(LC 19)

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

TOP CHORD 1-2=-1127/961, 2-3=-484/463, 3-4=-455/458
WEBS 2-5=-579/684

NOTES-

- 1) 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 Corner(3) 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
- 2) Gable requires continuous bottom chord bearing.
- 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 100 lb uplift at joint(s) except (jt=lb) 1=364, 4=280, 5=512.
- 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.



April 20, 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

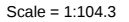


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Builders FirstSource (Valley Center),	Valley Center, KS - 67147,
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8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:45 2021 Page 1

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LUMBER-

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-11-0 oc purlins, except end verticals.	
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.	
WEBS	1 Row at midpt	9-15, 5-10, 4-11
	2 Rows at 1/3 pts	7-8
JOINTS	1 Brace at Jt(s): 15	

All bearings 10-1-14.

Max Uplift	All uplift 100 lb or less at joint(s) except 8=178(LC 12), 1=902(LC 10), 9=458(LC 12), 10=455(LC 12), 11=436(LC 12), 12=496(LC 12)
Max Grav	All reactions 250 lb or less at joint(s) 8 except 1=1823(LC 12), 9=356(LC 19), 10=347(LC 19), 11=335(LC 19), 12=381(LC 19)

TOP CHORD 1-2=-2223/1749, 2-4=-1709/1343, 4-5=-1216/959, 5-6=-717/569

WEBS 9-15=-481/538, 6-15=-481/538, 5-10=-467/523, 4-11=-460/516, 2-12=-485/540

- 1) 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 Corner(3) 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
- 2) All plates are 2x4 MT20 unless otherwise indicated.
- 3) Gable requires continuous bottom chord bearing.
- 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 178 lb uplift at joint 8, 902 lb uplift at joint 1, 458 lb uplift at joint 9, 455 lb uplift at joint 10, 436 lb uplift at joint 11 and 496 lb uplift at joint 12.
- 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.



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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	Roeser/1483 Winterset
2720415	LG4	GABLE	1	1	Job Reference (optional)

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:46 2021 Page 1

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RELEASE FOR CONSTRUCTION

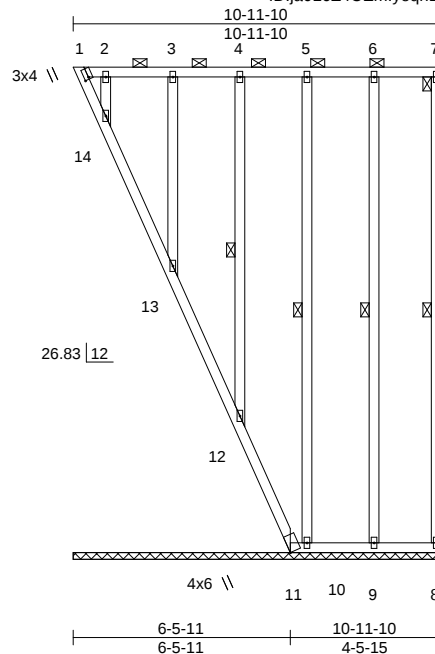
AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

145716444

01/21/2022



Scale = 1:68.7

Plate Offsets (X,Y)--	[1:0-0-13,0-1-8]								
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 0.04	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.13	Horz(CT)	-0.00	13	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 103 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-

TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-7, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
6-0-0 oc bracing: 1-14,13-14.
WEBS 1 Row at midpt 7-8, 6-9, 5-10, 4-12

REACTIONS.

All bearings 10-11-10.

(lb) - Max Uplift All uplift 100 lb or less at joint(s) 8, 9, 10, 12, 13, 14
Max Grav All reactions 250 lb or less at joint(s) 1, 8, 11, 9, 10, 12, 13, 14

FORCES.

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

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 Corner(3) 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.
- All plates are 2x4 MT20 unless otherwise indicated.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 9, 10, 12, 13, 14.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 12, 13, 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 20,2021

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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	Roeser/1483 Winterset
2720415	LG5	GABLE	1	1	
Job Reference (optional)					

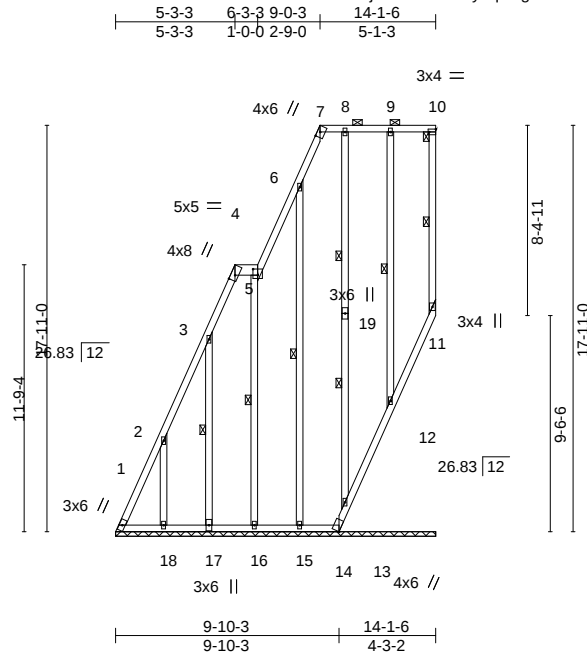
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:47 2021 Page 1

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01/21/2022



Scale = 1:101.6

Plate Offsets (X,Y)--		[4:0-3-0,Edge], [5:0-2-8,0-3-4], [7:0-2-13,Edge], [10:Edge,0-1-8]							
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d
TCLL 25.0		Plate Grip DOL	1.15	TC 0.53		Vert(LL)	n/a	-	n/a 999
TCDL 10.0		Lumber DOL	1.15	BC 0.20		Vert(CT)	n/a	-	n/a 999
BCLL 0.0		Rep Stress Incr	YES	WB 0.45		Horz(CT)	-0.02	11	n/a n/a
BCDL 10.0		Code IRC2018/TPI2014		Matrix-S					

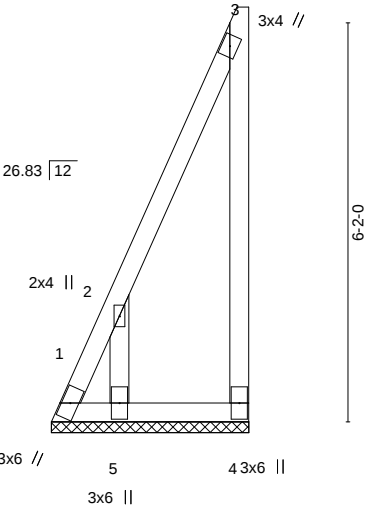
Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset	RELEASE FOR CONSTRUCTION
2720415	LG6	GABLE	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						DEVELOPMENT SERVICES
8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:48 2021 Page 1						LEE'S SUMMIT, MISSOURI

ID:ja0L6Z4CEmlyeqhDgBS87bzZkjf-RDHS DouMwLGL9suBV2uoRVWAJ RaupPWLOFFBmLZPB

2-10-7 3-0-10 0-2-3

01/21/2022

Scale = 1:35.6



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 0.36	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.10	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 20 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD 2x4 SPF No.2		TOP CHORD	Structural wood sheathing directly applied or 3-0-10 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2		BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2			
OTHERS 2x4 SPF No.2			

REACTIONS. (size) 1=3-0-10, 4=3-0-10, 5=3-0-10
Max Horz 1=234(LC 9)
Max Uplift 1=-341(LC 10), 4=-208(LC 11), 5=-415(LC 12)
Max Grav 1=407(LC 9), 4=202(LC 8), 5=323(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-941/791, 2-3=-424/391, 3-4=-392/406
WEBS 2-5=-472/557

- NOTES-**
- 1) 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 Corner(3) 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
 - 2) Gable requires continuous bottom chord bearing.
 - 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 100 lb uplift at joint(s) except (jt=lb) 1=341, 4=208, 5=415.
 - 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.



April 20,2021

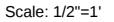
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
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Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job Reference (optional)

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:49 2021 Page 1

ID:ja0L6Z4CEmlyeqhDgBS87bzZkjf-vQrqQ8v_hfOCm01N2mP1zi5QhrwBWheVlv_k17zPBq



Weight: 25 lb FT = 20%

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-2-14 to 3-2-14, Interior(1) 3-2-14 to 3-7-0, Exterior(2E) 3-7-0 to 6-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 1-4-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Bearing at joint(s) 1, 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 2, 6 except (jt=lb) 10=103, 8=101.
- 9) 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.
- 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



April 20, 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	Roeser/1483 Winterset
2720415	PB02	Piggyback	2	1	
					Job Reference (optional)

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:50 2021 Page 1

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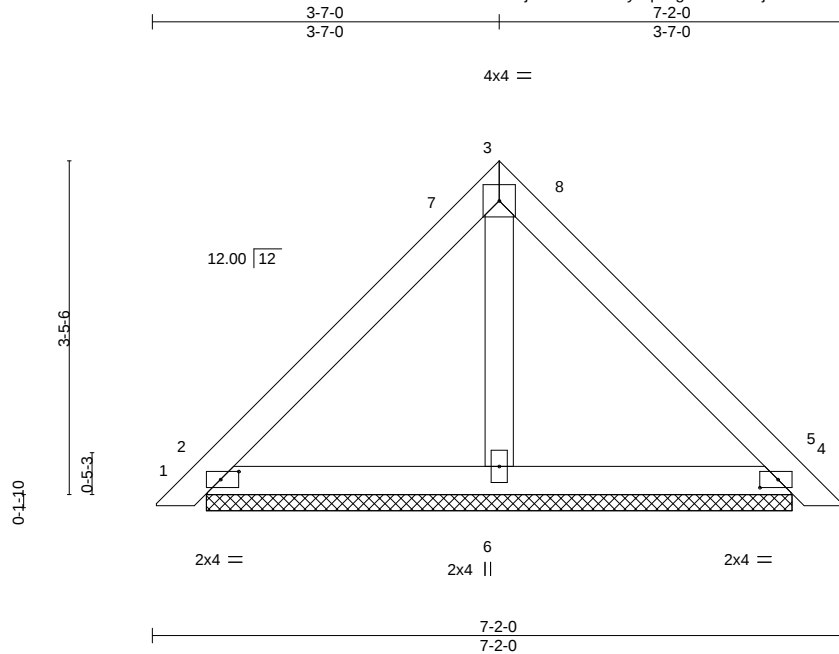
RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

01/21/2022



Scale: 1/2"=1'

Plate Offsets (X,Y)--		[2:0-2-4,0-1-0], [4:0-2-4,0-1-0]							
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d
TCLL	25.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	0.00	5	n/r
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	0.01	5	n/r
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	4	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P					
						PLATES	GRIP		
						MT20	197/144		
						Weight: 21 lb	FT = 20%		

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 2=6-0-10, 4=6-0-10, 6=6-0-10
Max Horz 2=-87(LC 10)
Max Uplift 2=-48(LC 13), 4=-53(LC 13)
Max Grav 2=189(LC 1), 4=189(LC 1), 6=211(LC 1)

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

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) 0-2-14 to 3-2-14, Interior(1) 3-2-14 to 3-7-0, Exterior(2R) 3-7-0 to 6-7-3, Interior(1) 6-7-3 to 6-11-2 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
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



April 20,2021

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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	Roeser/1483 Winterset
2720415	PB03	Piggyback	8	1	Job Reference (optional)

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:52 2021 Page 1

ID:ja0L6Z4CEmlyeqhDgBS87bzZkf-K?Wz3Axs_amidTBykuyk0Lh2xzjEdxjttOy0zPBn

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

01/21/2022

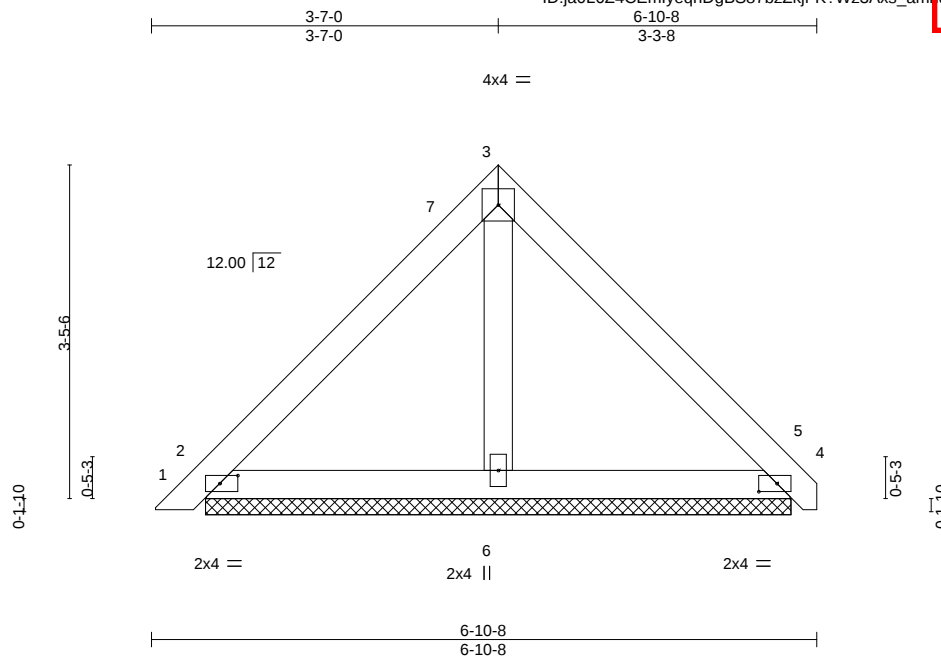


Plate Offsets (X,Y)-- [2:0-2-4,0-1-0], [4:0-2-4,0-1-0]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	0.00	5	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	0.00	5	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 21 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 2=6-0-10, 4=6-0-10, 6=6-0-10
Max Horz 2=86(LC 9)
Max Uplift 2=-48(LC 13), 4=-49(LC 13)
Max Grav 2=190(LC 1), 4=169(LC 1), 6=211(LC 1)

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

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) 0-2-14 to 3-2-14, Interior(1) 3-2-14 to 3-7-0, Exterior(2E) 3-7-0 to 6-9-10 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
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



April 20, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	PB04	Piggyback	1	1	Job Reference (optional)

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:54 2021 Page 1

ID:ja0L6Z4CEmlyeqhDgBS87bzZkif-GNejUsz7VB0VtnLirJ?Cgmo0wccBOWEmfV_gzPBII

RELEASE FOR CONSTRUCTION

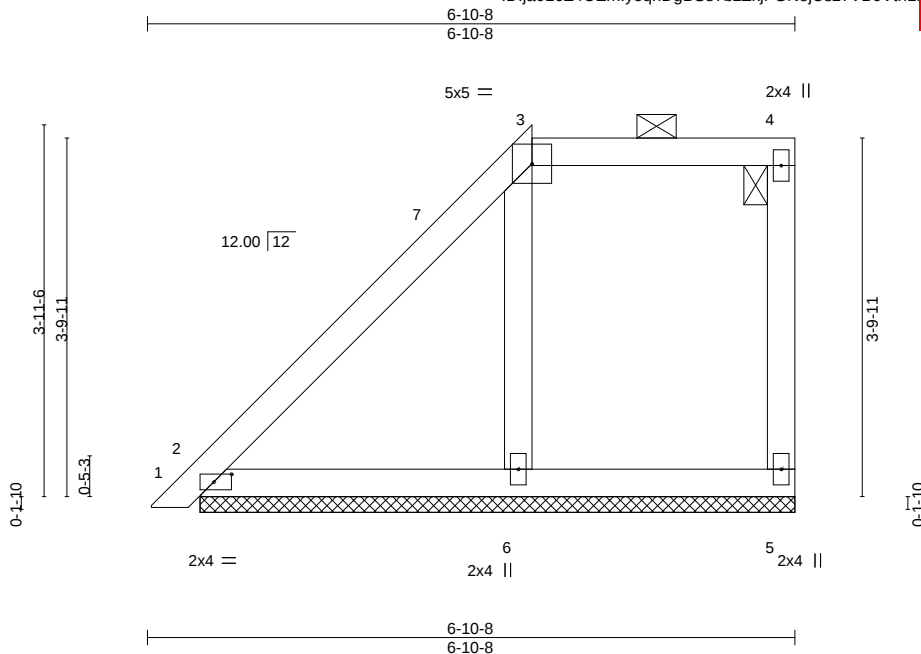
AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

145716450

01/21/2022



Scale = 1:24.5

Plate Offsets (X,Y)-- [2:0-2-4,0-1-0]										
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	0.34	Vert(LL)	0.00 1 n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	0.00 1 n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00 5 n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 24 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 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

(size) 5=6-3-13, 2=6-3-13, 6=6-3-13
Max Horz 2=144(LC 9)
Max Uplift 5=-31(LC 8), 2=-9(LC 8), 6=-101(LC 9)
Max Grav 5=112(LC 1), 2=177(LC 20), 6=301(LC 1)

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

TOP CHORD 2-3=-286/171
WEBS 3-6=-249/371

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) 0-2-14 to 3-2-14, Interior(1) 3-2-14 to 4-1-0, Exterior(2E) 4-1-0 to 6-8-12 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
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2 except (jt=lb) 6=101.
- 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 20,2021

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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	Roeser/1483 Winterset
2720415	PB05	Piggyback	1	1	Job Reference (optional)

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:54 2021 Page 1

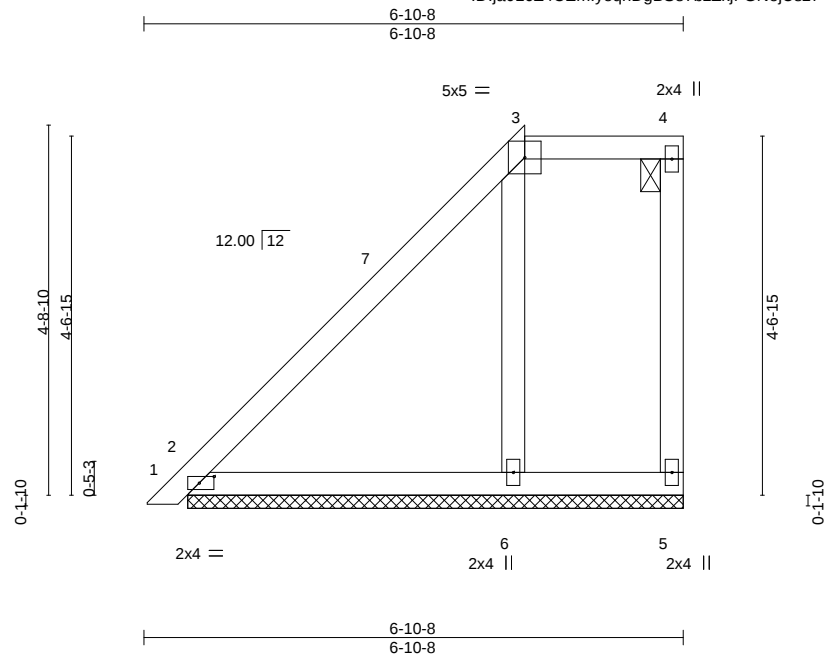
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RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

01/21/2022



Scale = 1:29.4

Plate Offsets (X,Y)-- [2:0-2-4,0-1-0]										
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	0.53	Vert(LL)	0.00 1 n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	0.01 1 n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00 5 n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 26 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 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

(size) 5=6-3-13, 2=6-3-13, 6=6-3-13
Max Horz 2=174(LC 9)
Max Uplift 5=-26(LC 8), 2=-10(LC 8), 6=-106(LC 9)
Max Grav 5=70(LC 1), 2=215(LC 20), 6=314(LC 19)

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

TOP CHORD 2-3=-343/204
WEBS 3-6=-270/416

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) 0-2-14 to 3-2-14, Interior(1) 3-2-14 to 4-10-4, Exterior(2E) 4-10-4 to 6-8-12 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
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2 except (jt=lb) 6=106.
- 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 20,2021

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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

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	PB06	Piggyback	1	1	Job Reference (optional)

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:55 2021 Page 1

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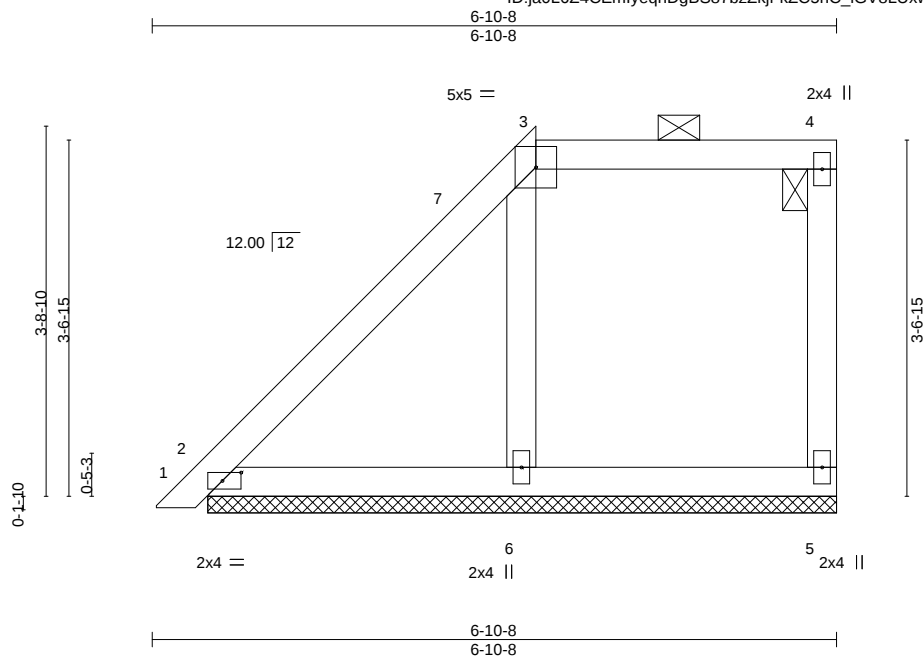
RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

01/21/2022



Scale = 1:23.1

Plate Offsets (X,Y)--		[2:0-2-4,0-1-0]									
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	0.29	Vert(LL)	0.00	1	n/r	120	MT20 197/144
TCDL	10.0	Lumber DOL 1.15		BC	0.08	Vert(CT)	0.00	1	n/r	120	
BCLL	0.0	Rep Stress Incr YES		WB	0.06	Horz(CT)	0.00	5	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 24 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 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

(size) 5=6-3-13, 2=6-3-13, 6=6-3-13
Max Horz 2=135(LC 9)
Max Uplift 5=-33(LC 8), 2=-9(LC 8), 6=-98(LC 9)
Max Grav 5=123(LC 1), 2=165(LC 20), 6=301(LC 1)

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

TOP CHORD 2-3=-269/161
WEBS 3-6=-243/358

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) 0-2-14 to 3-2-14, Interior(1) 3-2-14 to 3-10-4, Exterior(2E) 3-10-4 to 6-8-12 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
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2, 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 20,2021

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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	Roeser/1483 Winterset	RELEASE FOR CONSTRUCTION
2720415	PB07	Piggyback	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						DEVELOPMENT SERVICES
8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:56 2021 Page 1						LEE'S SUMMIT, MISSOURI

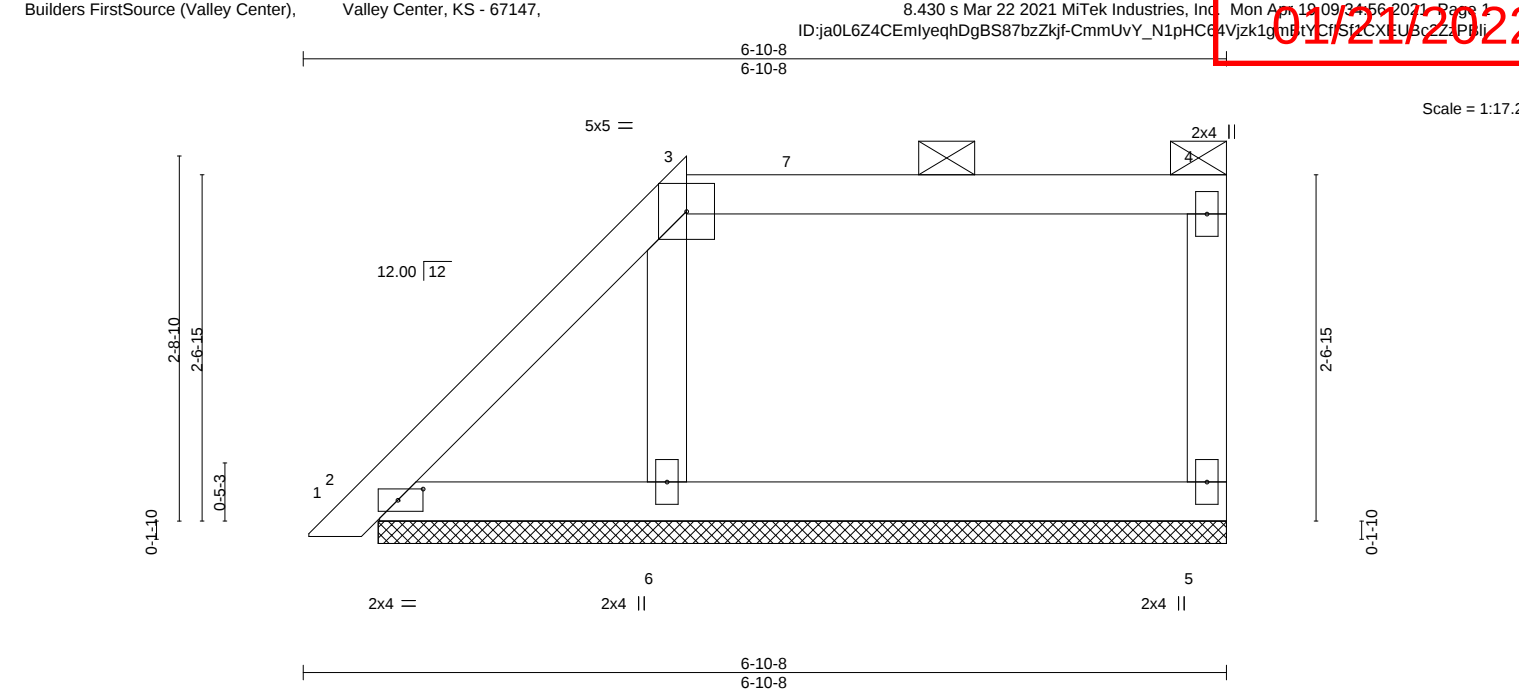


Plate Offsets (X,Y)--	[2:0-2-4,0-1-0]						
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.29	Vert(LL)	0.00	1	n/r
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	0.00	1	n/r
BCLL 0.0	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	5	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P				
				PLATES	GRIP		
				MT20	197/144		
				Weight: 21 lb	FT = 20%		

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-10-8 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SPF No.2	

REACTIONS. (size) 5=6-3-13, 2=6-3-13, 6=6-3-13
Max Horz 2=95(LC 9)
Max Uplift 5=42(LC 8), 2=9(LC 8), 6=86(LC 9)
Max Grav 5=168(LC 1), 2=107(LC 20), 6=312(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-6=-229/296

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) 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) Gable requires continuous bottom chord bearing.
- 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) 5, 2, 6.
- 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.
- 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 20, 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	Roeser/1483 Winterset
2720415	PB08	Piggyback	1	1	
Job Reference (optional)					

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:57 2021 Page 1

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RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

01/21/2022

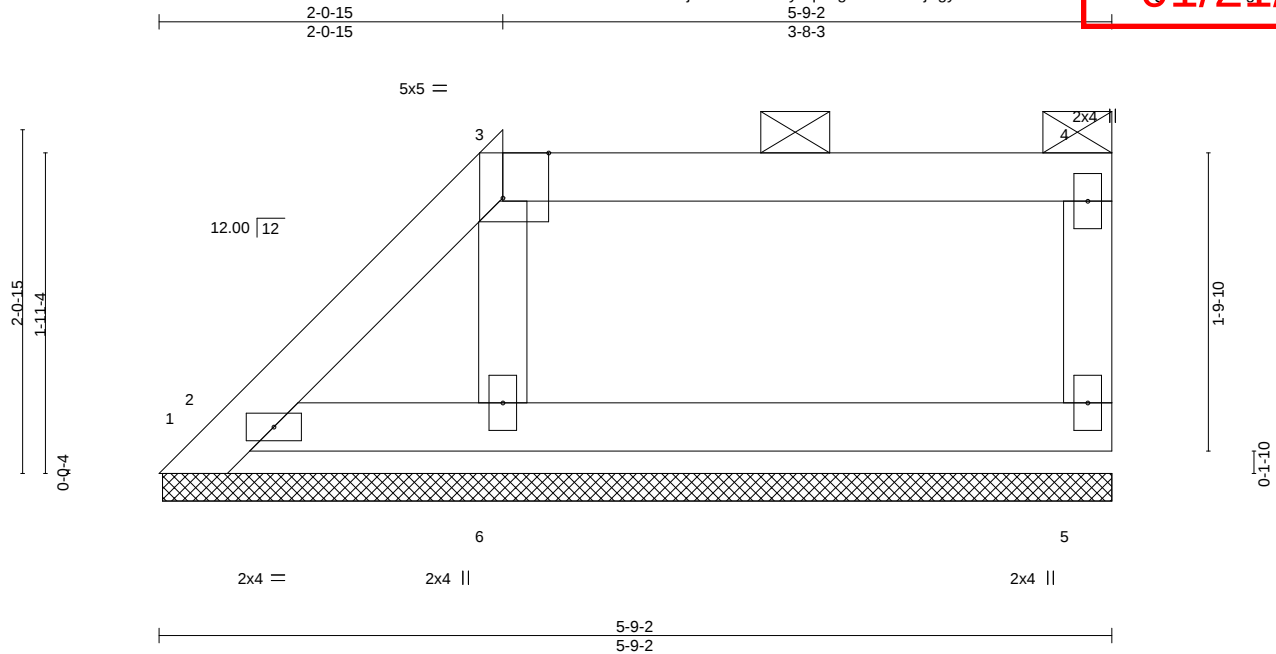


Plate Offsets (X,Y)--		[3:0-3-5,Edge]		5-9-2		5-9-2	
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.24	Vert(LL)	n/a	-	n/a
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	n/a	-	n/a
BCLL 0.0	Rep Stress Incr	YES	WB 0.02	Horz(CT)	-0.00	5	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P				
				PLATES	GRIP		
				MT20	197/144		
				Weight: 16 lb	FT = 20%		

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-9-2 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

All bearings 5-8-14.
(lb) - Max Horz 1=66(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 6 except 2=-102(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 2, 6

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

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) 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.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 6 except (jt=lb) 2=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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 20,2021

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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

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	PB09	Piggyback	1	1	Job Reference (optional)

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:57 2021 Page 1

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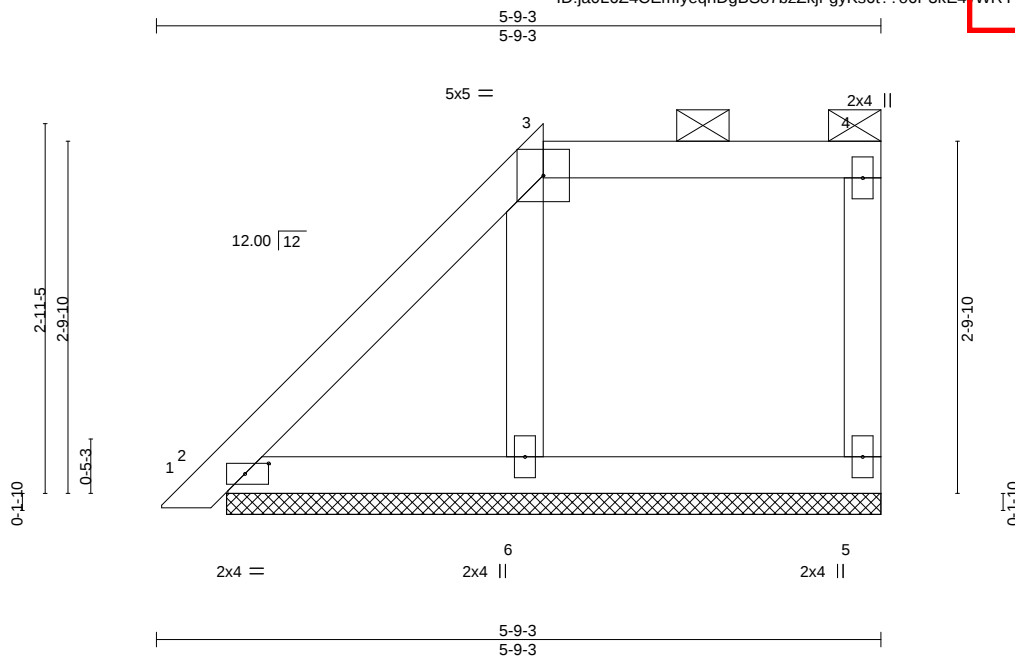
RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

01/21/2022



Scale = 1:18.3

Plate Offsets (X,Y)-- [2:0-2-4,0-1-0]										
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	0.17	Vert(LL)	0.00 1 n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	0.00 1 n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00 5 n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 19 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 5-9-3 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

(size) 5=5-2-8, 2=5-2-8, 6=5-2-8
Max Horz 2=104(LC 9)
Max Uplift 5=-28(LC 8), 2=-8(LC 8), 6=-80(LC 9)
Max Grav 5=110(LC 1), 2=127(LC 20), 6=249(LC 1)

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

WEBS 3-6=-202/305

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) 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) Gable requires continuous bottom chord bearing.
- 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) 5, 2, 6.
- 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.
- 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 20,2021

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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	Roeser/1483 Winterset
2720415	PB10	GABLE	1	1	Job Reference (optional)

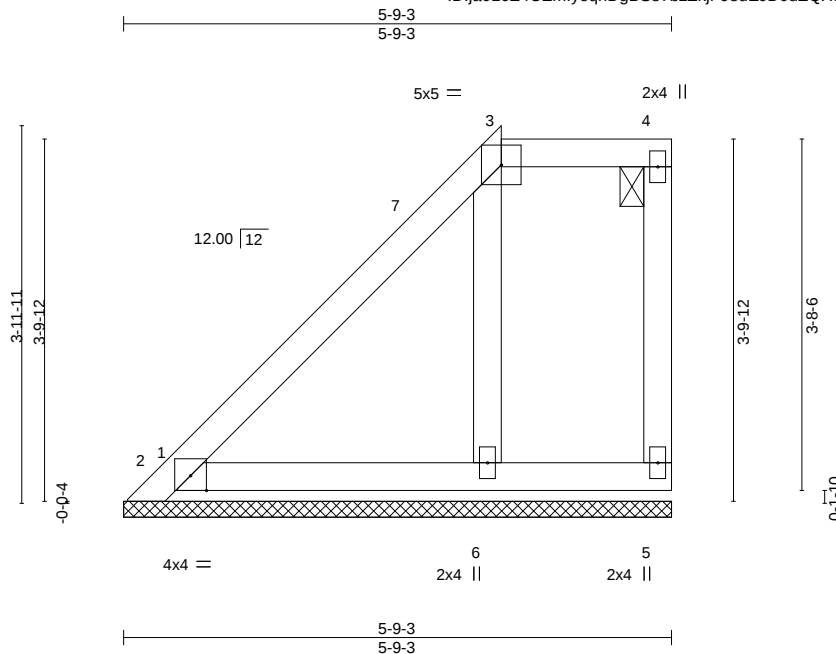
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:58 2021 Page 1

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RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
145716456

01/21/2022



Scale = 1:24.2

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 0.26	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.05	Horz(CT)	-0.00	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						
								Weight: 21 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 5-9-3 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

All bearings 5-9-3.
(lb) - Max Horz 1=141(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 5, 6 except 1=356(LC 19), 2=371(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 5, 6 except 1=339(LC 12), 2=522(LC 19)

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

TOP CHORD 1-2=-837/433
WEBS 3-6=-197/298

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) 0-2-14 to 3-2-14, Interior(1) 3-2-14 to 3-11-11, Exterior(2E) 3-11-11 to 5-7-7 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
- 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.
- Provide adequate drainage to prevent water ponding.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearing at joint(s) 1, 2 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) 5, 6 except (jt=lb) 1=356, 2=371.
- 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 20,2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	PB11	GABLE	1	1	
Job Reference (optional)					

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:34:59 2021 Page 1

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RELEASE FOR CONSTRUCTION

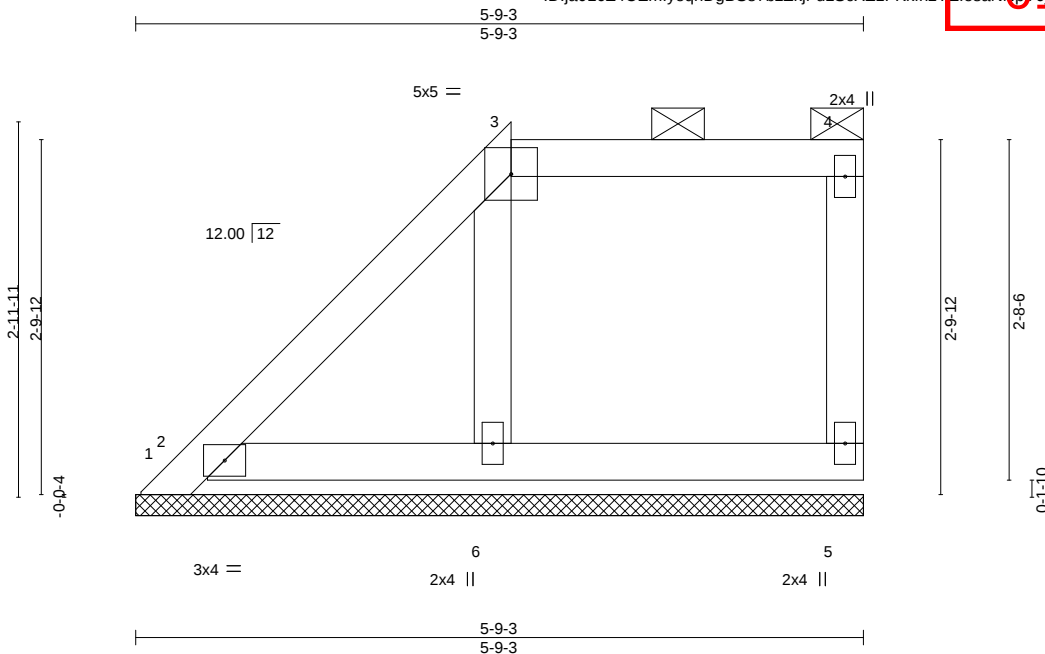
AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

45716457

01/21/2022



Scale = 1:18.3

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 0.13	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.05	Horz(CT)	-0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 19 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 5-9-3 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

All bearings 5-9-3.
(lb) - Max Horz 1=101(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 5, 6 except 1=-177(LC 19), 2=-202(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6 except 2=295(LC 19)

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

TOP CHORD 1-2=-516/270
WEBS 3-6=-179/258

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) 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
- 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.
- Provide adequate drainage to prevent water ponding.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearing at joint(s) 1, 2 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) 5, 6 except (jt=lb) 1=177, 2=202.
- 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 20, 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	Roeser/1483 Winterset
2720415	PB12	GABLE	1	1	

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES

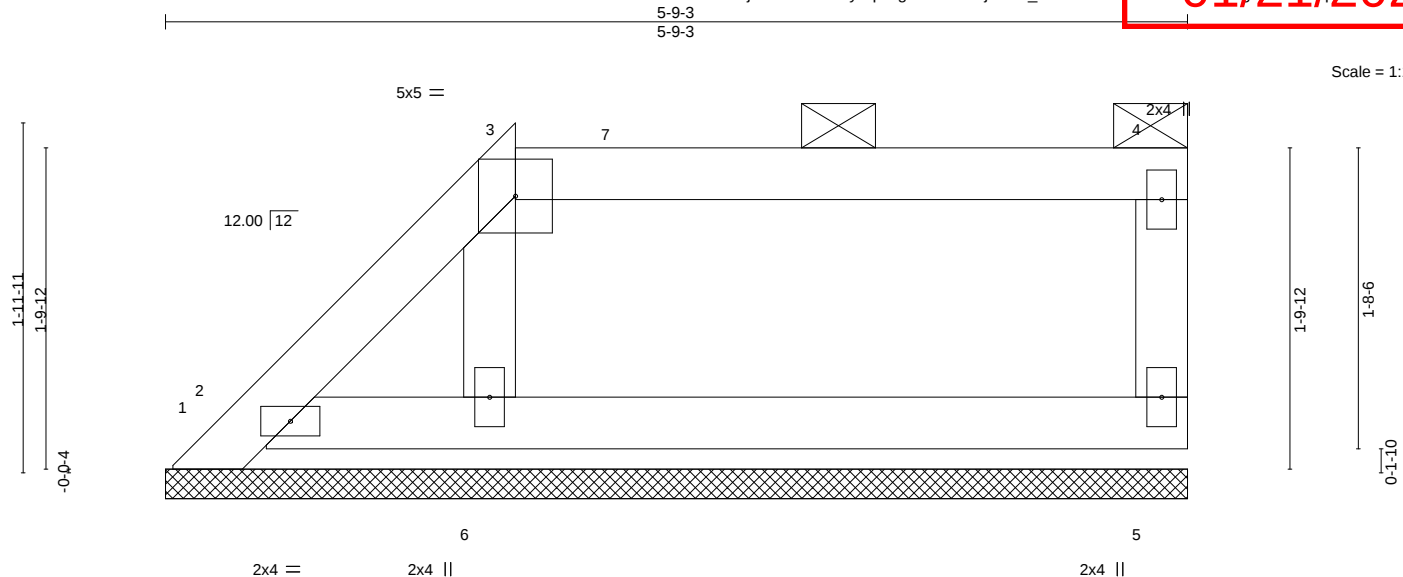
LEE'S SUMMIT, MISSOURI

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:35:00 2021 Page 1

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01/21/2022



Scale = 1:13.0

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 0.25	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.04	Horz(CT)	-0.00	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 16 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 5-9-3 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

All bearings 5-9-3.
(lb) - Max Horz 1=61(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 2, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 2 except 6=264(LC 1)

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

TOP CHORD 1-2=-264/140

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) 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
- 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.
- Provide adequate drainage to prevent water ponding.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- 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 100 lb uplift at joint(s) 1, 5, 2, 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 20,2021

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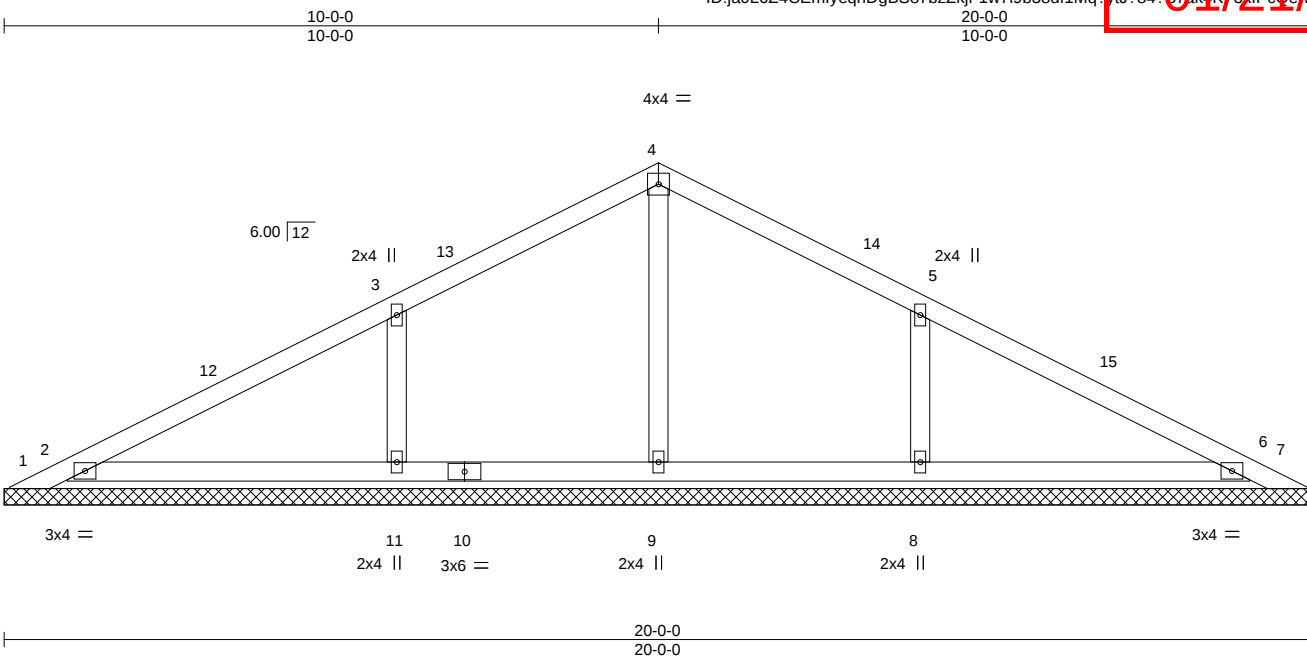
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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	Roeser/1483 Winterset	RELEASE FOR CONSTRUCTION
2720415	PB13	GABLE	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						DEVELOPMENT SERVICES
8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:35:02 2021 Page 1						LEE'S SUMMIT, MISSOURI



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 0.29	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.08	Horz(CT)	0.00	6	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 56 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-

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

REACTIONS.

- All bearings 20'-0".
(lb) - Max Horz 1=85(LC 16)
Max Uplift All uplift 100 lb or less at joint(s) except 1=-233(LC 1), 7=-233(LC 1), 2=-180(LC 12), 11=-152(LC 12), 6=-160(LC 13), 8=-151(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 2=516(LC 1), 9=277(LC 1), 11=450(LC 25), 6=516(LC 1), 8=450(LC 26)

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

WEBS 3-11=-346/204, 5-8=-346/204

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) 0-4-11 to 3-4-11, Interior(1) 3-4-11 to 10-0-0, Exterior(2R) 10-0-0 to 13-0-0, Interior(1) 13-0-0 to 19-7-5 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
- 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4'-0" oc.
- 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 233 lb uplift at joint 1, 233 lb uplift at joint 7, 180 lb uplift at joint 2, 152 lb uplift at joint 11, 160 lb uplift at joint 6 and 151 lb uplift at joint 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



April 20, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset	RELEASE FOR CONSTRUCTION
2720415	V01	Valley	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						DEVELOPMENT SERVICES
8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:35:03 2021 Page 1						LEE'S SUMMIT, MISSOURI
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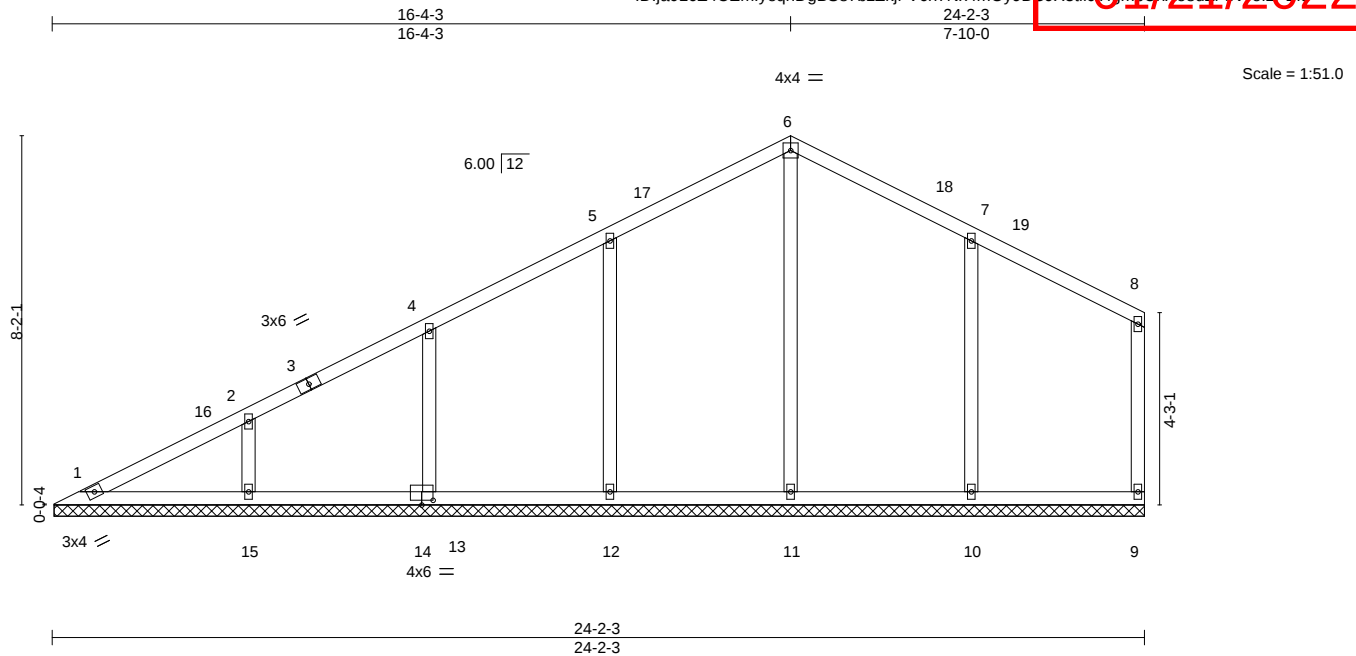


Plate Offsets (X,Y)--		[14:0-3-0,0-1-4]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.21
TCDL 10.0	Lumber DOL	1.15	BC 0.10
BCLL 0.0	Rep Stress Incr	YES	WB 0.26
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-S
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) n/a - n/a 999
			Vert(CT) n/a - n/a 999
			Horz(CT) -0.00 9 n/a n/a
			PLATES
			MT20
			GRIP
			197/144
			Weight: 89 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-

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

REACTIONS.

All bearings 24-1-11.
(lb) - Max Horz 1=217(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 9, 1 except 12=135(LC 12), 13=117(LC 12), 15=134(LC 12), 10=140(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 9, 1 except 11=322(LC 1), 12=386(LC 25), 13=348(LC 1), 15=392(LC 25), 10=399(LC 26)

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

WEBS 5-12=-305/168, 4-13=-272/152, 2-15=-298/164, 7-10=-316/178

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) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 16-4-2, Exterior(2R) 16-4-2 to 19-4-2, Interior(1) 19-4-2 to 24-0-6 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) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 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) 9, 1 except (jt=lb) 12=135, 13=117, 15=134, 10=140.
- 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.



April 20,2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	V02	Valley	1	1	

RELEASE FOR CONSTRUCTION

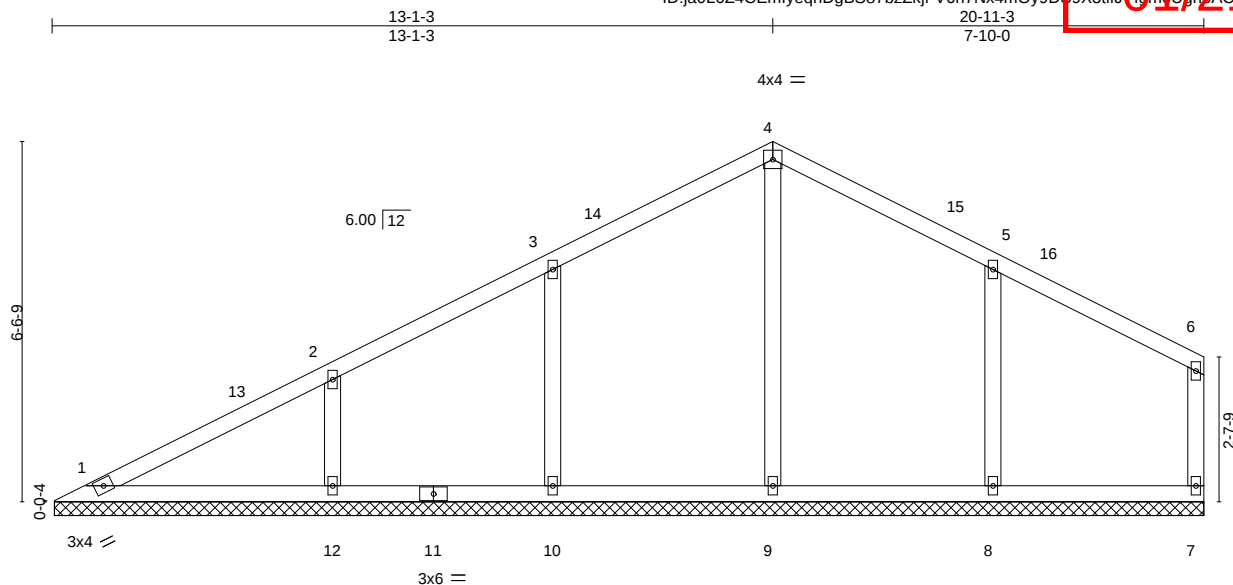
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:35:03 2021 Page 1

ID:ja0L6Z4CEmlyeqhDgBS87bzZkf-V6h7Nx4mOy9D\$9X3tifJ (from UghoAC1r4NTofzPB6



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	n/a	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a				
BCLL	0.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	-0.00				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							
								Weight: 71 lb		FT = 20%	

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-

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

REACTIONS.

All bearings 20-10-11.

(lb) - Max Horz 1=149(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 10=127(LC 12), 12=147(LC 12), 8=140(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 9=321(LC 1), 10=361(LC 25), 12=435(LC 1), 8=396(LC 26)

FORCES.

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

WEBS 3-10=-289/161, 2-12=-328/179, 5-8=-315/176

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) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 13-1-3, Exterior(2R) 13-1-3 to 16-1-2, Interior(1) 16-1-2 to 20-9-6 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
- All plates are 2x4 MT20 unless otherwise indicated.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7 except (jt=lb) 10=127, 12=147, 8=140.
- 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.



April 20, 2021

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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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	Roeser/1483 Winterset
2720415	V03	Valley	1	1	

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

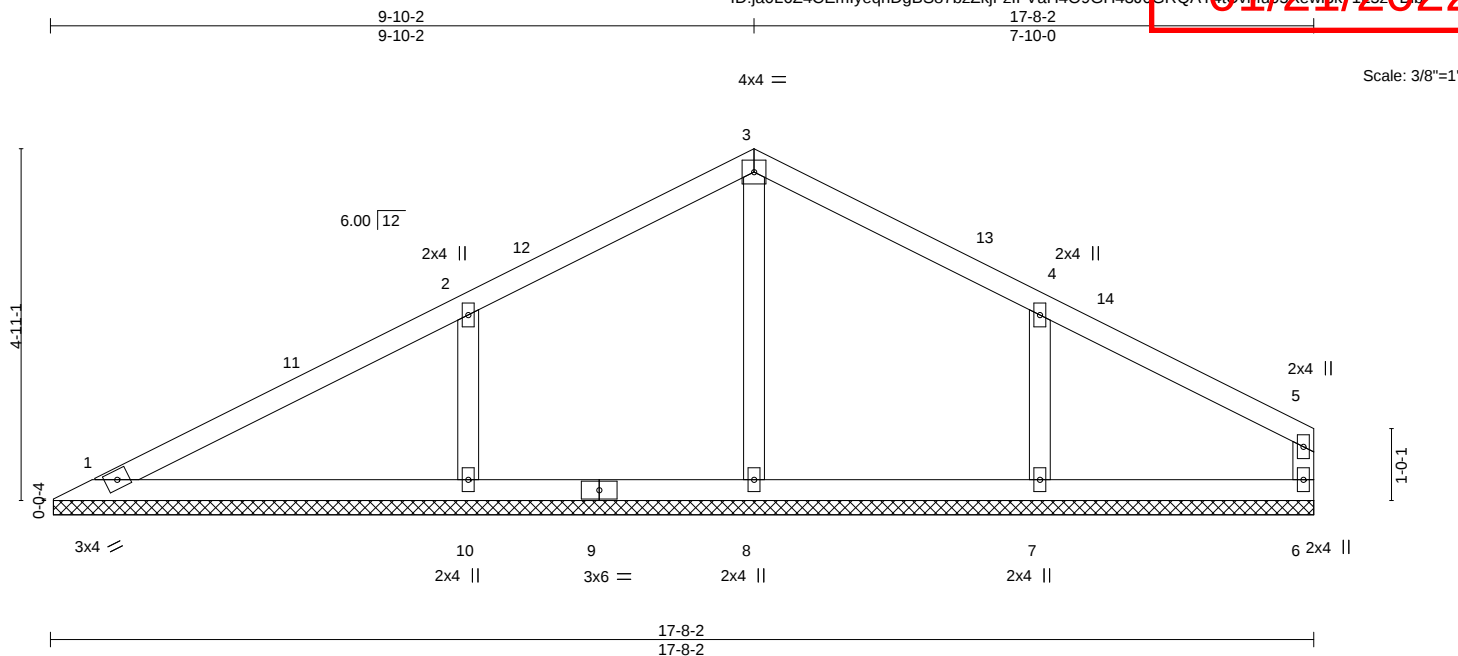
LEE'S SUMMIT, MISSOURI

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:35:04 2021 Page 1

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01/21/2022



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 0.34	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.19	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	6	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 53 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-

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

REACTIONS.

All bearings 17-7-10.
(lb) - Max Horz 1=84(LC 16)
Max Uplift All uplift 100 lb or less at joint(s) 1, 6 except 10=177(LC 12), 7=145(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 6, 8 except 10=512(LC 25), 7=402(LC 26)

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

WEBS 2-10=-390/227, 4-7=-315/194

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) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 9-10-2, Exterior(2R) 9-10-2 to 12-10-2, Interior(1) 12-10-2 to 17-6-6 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
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 6 except (jt=lb) 10=177, 7=145.
- 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.



April 20, 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

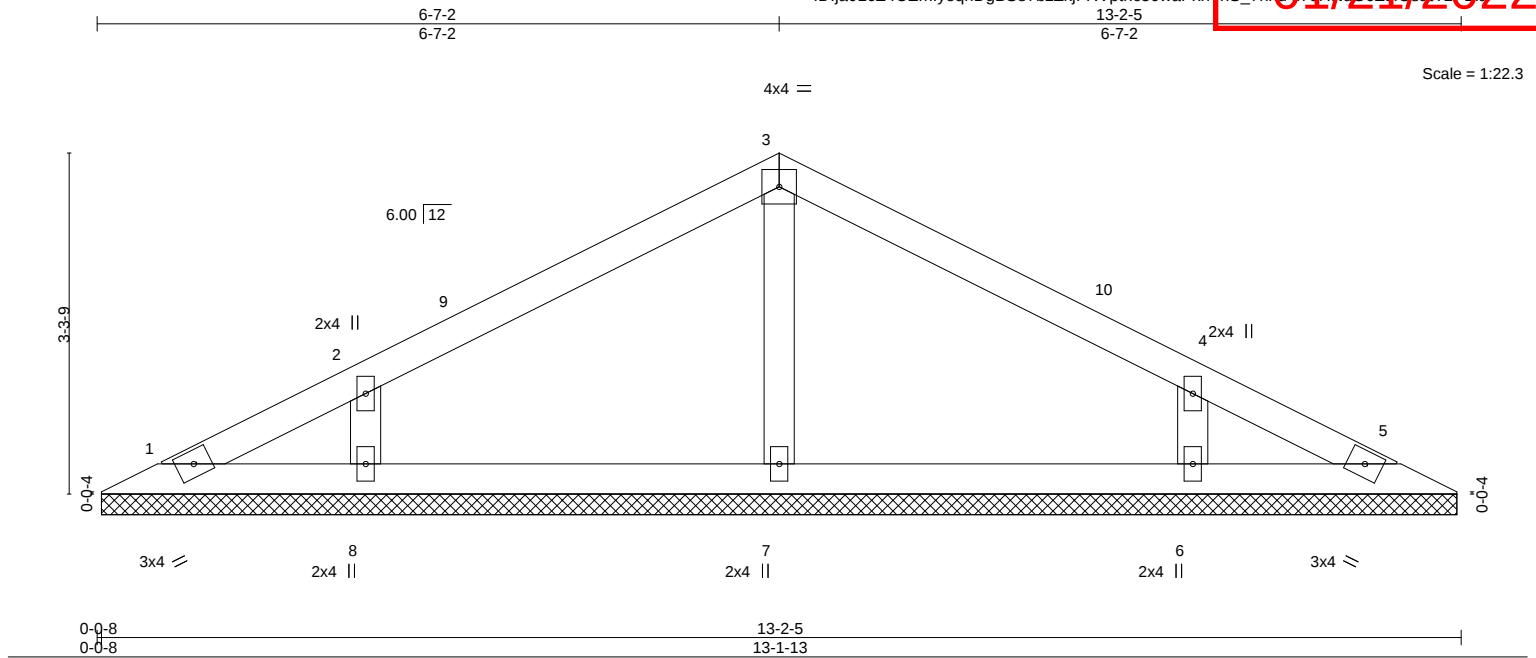
Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	V04	Valley	1	1	
Job Reference (optional)					

AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:35:05 2021 Page 1
ID:ja0L6Z4CEmlyeqhDgBS87bzKjF-RVptnc50waPxhThS_7hrd47cHnd66Z3lQsah7zPBa

01/21/2022



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 0.17	Vert(LL)	n/a	-	n/a	999	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	n/a	-	n/a	999	197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	5	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						
									Weight: 35 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

All bearings 13-1-5.
(lb) - Max Horz 1=53(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 8=121(LC 12), 6=121(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=322(LC 1), 8=338(LC 25), 6=338(LC 26)

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

WEBS 2-8=-273/202, 4-6=-273/203

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) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 6-7-2, Exterior(2R) 6-7-2 to 9-7-2, Interior(1) 9-7-2 to 12-6-12 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
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7 except (jt=lb) 8=121, 6=121.
- 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.



April 20, 2021

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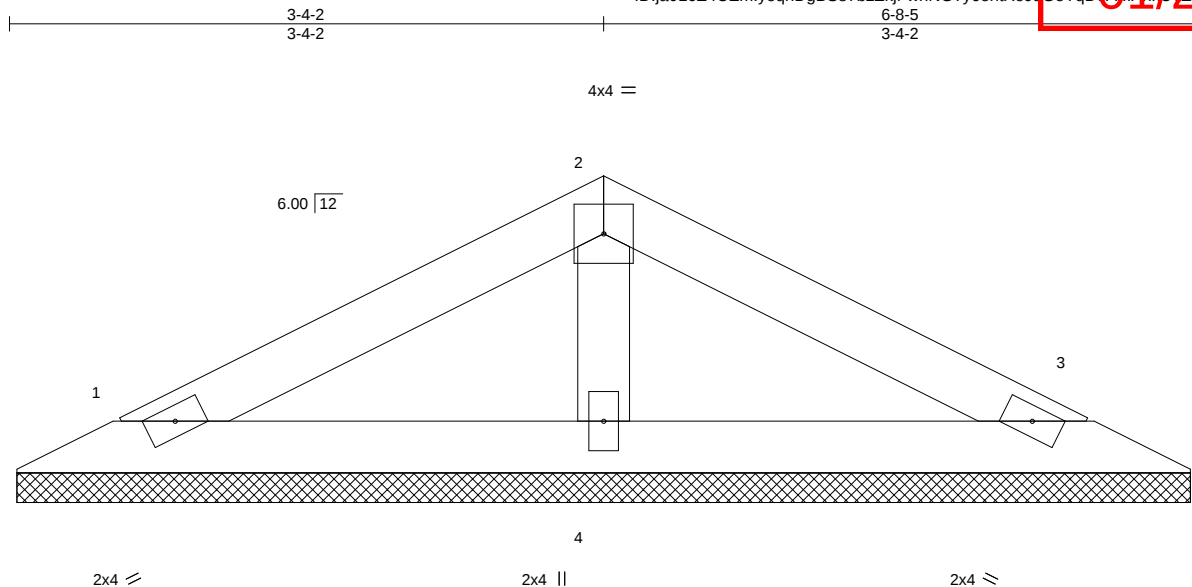
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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	Roeser/1483 Winterset	RELEASE FOR CONSTRUCTION
2720415	V05	Valley	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						DEVELOPMENT SERVICES
8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:35:06 2021 Page 1						LEE'S SUMMIT, MISSOURI
ID:ja0L6Z4CEmlyeqhDgBS87bzZkif-whNG?y6ehtXoJcGeYqDUAJlAnkU277?X268PZPBZ						145716464



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a				
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							
								Weight: 16 lb		FT = 20%	

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=6-7-5, 3=6-7-5, 4=6-7-5
Max Horz 1=24(LC 12)
Max Uplift 1=32(LC 12), 3=37(LC 13), 4=17(LC 12)
Max Grav 1=125(LC 1), 3=125(LC 1), 4=240(LC 1)

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

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) 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
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
- 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.



April 20, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

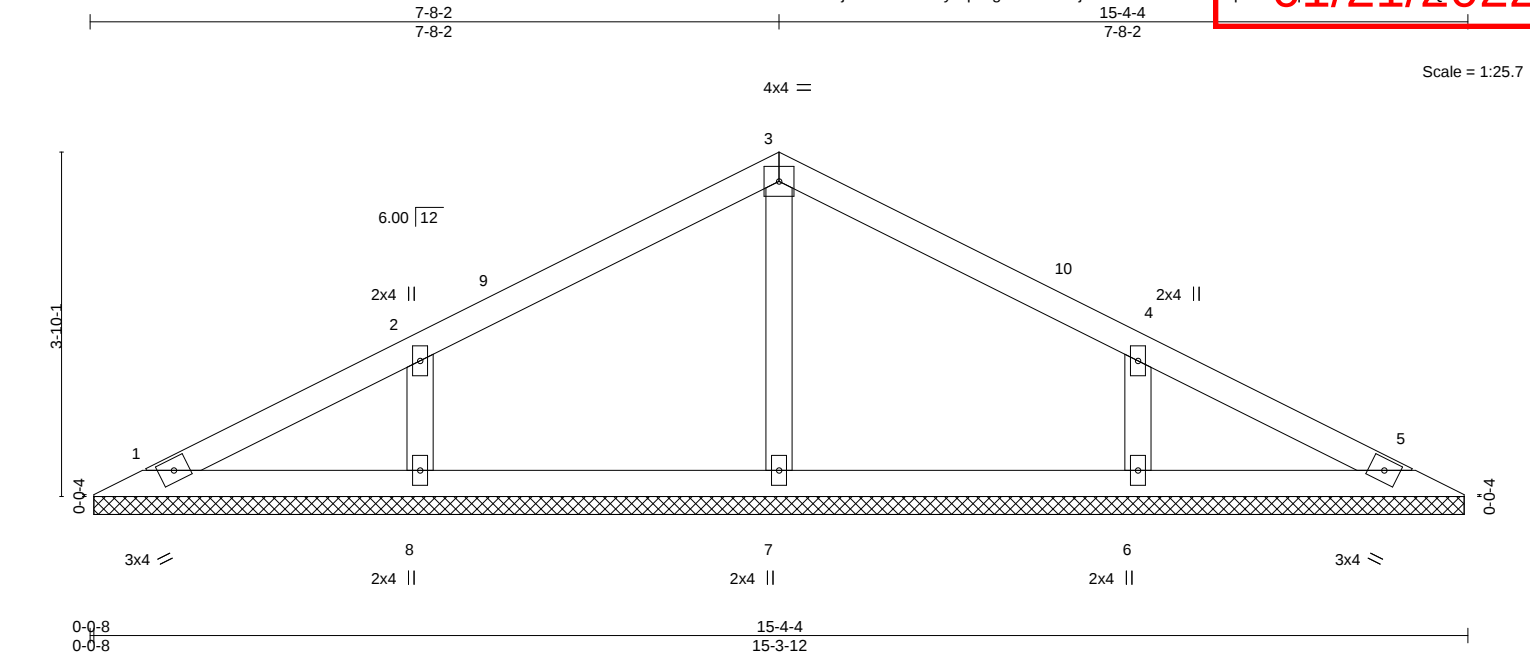
Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset	RELEASE FOR CONSTRUCTION AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI
2720415	V06	Valley	1	1	Job Reference (optional)	145716465

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:35:07 2021 Page 1

ID:ja0L6Z4CEmlyeqhDgBS87bzZkf-OtweC17HSBffwqrq6YkFVAT35ZDKov8mihnyOzPEY

01/21/2022



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 0.18	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 42 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-

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

REACTIONS.

All bearings 15-3-4.
(lb) - Max Horz 1=62(LC 16)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-133(LC 12), 6=-133(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=311(LC 1), 8=377(LC 25), 6=377(LC 26)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-296/195, 4-6=-296/195

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) 0-7-9 to 3-8-2, Interior(1) 3-8-2 to 7-8-2, Exterior(2R) 7-8-2 to 10-8-2, Interior(1) 10-8-2 to 14-8-11 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
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=133, 6=133.
- 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.



April 20,2021

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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	Roeser/1483 Winterset	RELEASE FOR CONSTRUCTION
2720415	V07	Valley	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						DEVELOPMENT SERVICES
8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:35:08 2021 Page 1						LEE'S SUMMIT, MISSOURI
ID:ja0L6Z4CEmlyeqhDgBS87bzZkif-s4U0Qe8vCVnVYwQ1gFFUFJnd0VOTTSKLM5EUzPBX						145716466

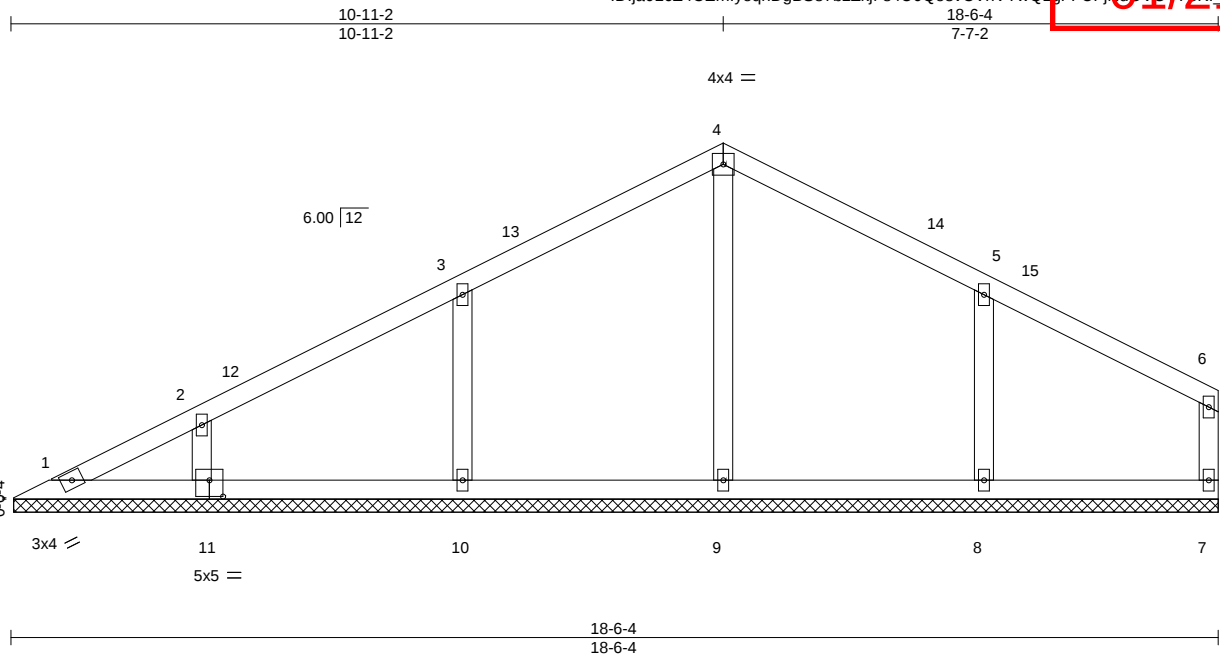


Plate Offsets (X,Y)-- [11:0-2-8,0-3-0]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a - n/a	999	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a - n/a	999	
BCLL	0.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00 7 n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 59 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x4 SPF No.2
 OTHERS 2x4 SPF No.2

BRACING-

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

REACTIONS.

All bearings 18-5-12.
 (lb) - Max Horz 1=107(LC 9)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 11 except 10=139(LC 12), 8=138(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 9=309(LC 1), 10=392(LC 25), 11=300(LC 1), 8=385(LC 26)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 3-10=-312/183, 5-8=-305/180

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) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 10-11-2, Exterior(2R) 10-11-2 to 13-11-2, Interior(1) 13-11-2 to 18-4-8 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
- All plates are 2x4 MT20 unless otherwise indicated.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 11 except (jt=lb) 10=139, 8=138.
- 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.



April 20,2021

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset
2720415	V08	Valley	1	1	

RELEASE FOR CONSTRUCTION

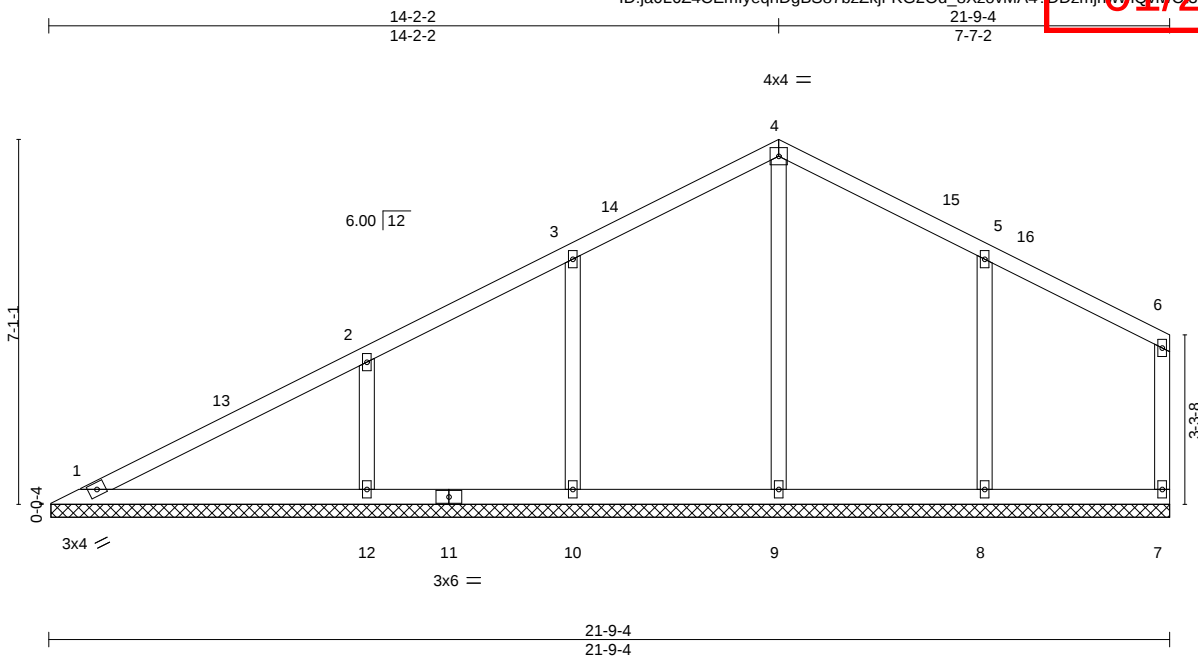
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:35:09 2021 Page 1

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01/21/2022



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 0.38	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.21	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.20	Horz(CT)	-0.00	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 76 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-

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

REACTIONS.

All bearings 21-8-12.

(lb) - Max Horz 1=175(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 10=116(LC 12), 12=174(LC 12), 8=136(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 9=337(LC 1), 10=330(LC 25), 12=516(LC 1), 8=385(LC 26)

FORCES.

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

WEBS 4-9=-252/29, 3-10=-267/149, 2-12=-386/210, 5-8=-306/172

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) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 14-2-2, Exterior(2R) 14-2-2 to 17-2-2, Interior(1) 17-2-2 to 21-7-8 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
- All plates are 2x4 MT20 unless otherwise indicated.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7 except (jt=lb) 10=116, 12=174, 8=136.
- 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.



April 20,2021

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

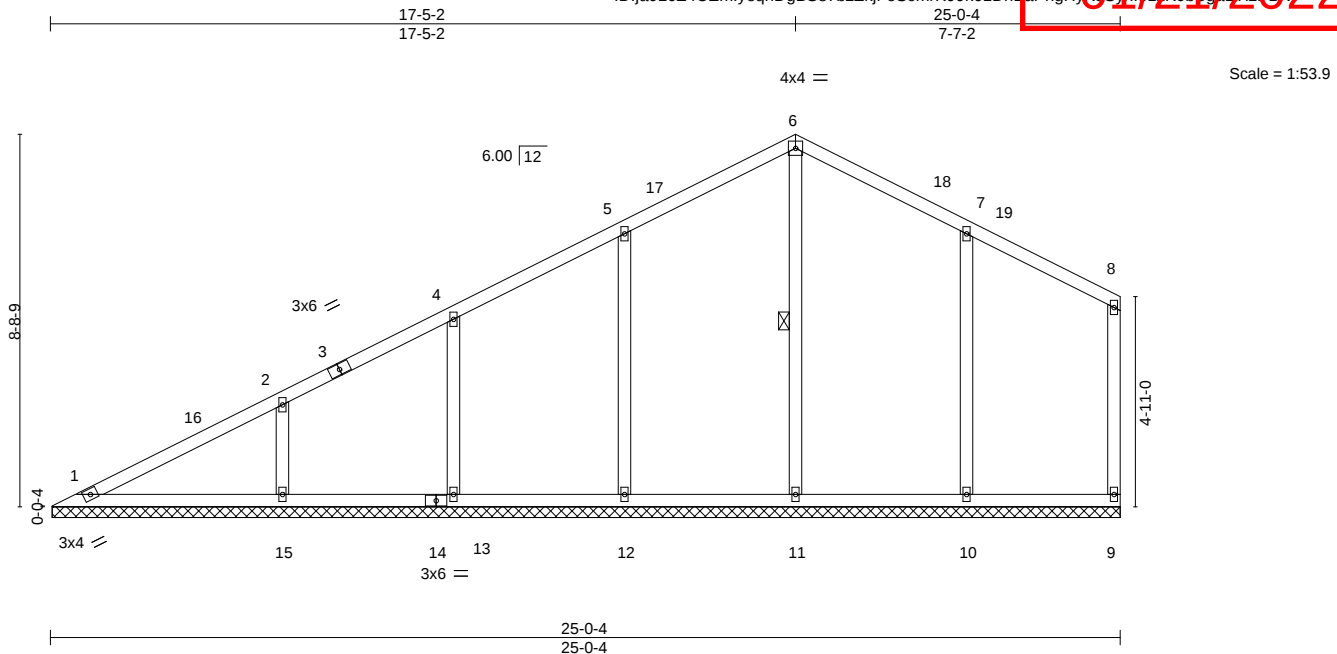
Job	Truss	Truss Type	Qty	Ply	Roeser/1483 Winterset	RELEASE FOR CONSTRUCTION
2720415	V09	Valley	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI

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

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01/21/2022



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 0.29	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.22	Horz(CT)	-0.00	9	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 95 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-

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

REACTIONS.

All bearings 24-11-12.
(lb) - Max Horz 1=243(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 9, 1, 11 except 12=-137(LC 12), 13=-109(LC 12), 15=-158(LC 12), 10=-136(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 9, 1 except 11=326(LC 1), 12=392(LC 25), 13=324(LC 1), 15=464(LC 25), 10=388(LC 26)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 5-12=-309/170, 4-13=-254/143, 2-15=-351/192, 7-10=-308/175

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) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 17-5-2, Exterior(2R) 17-5-2 to 20-5-2, Interior(1) 20-5-2 to 24-10-8 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
- All plates are 2x4 MT20 unless otherwise indicated.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 1, 11 except (jt=lb) 12=137, 13=109, 15=158, 10=136.
- 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.



April 20,2021

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



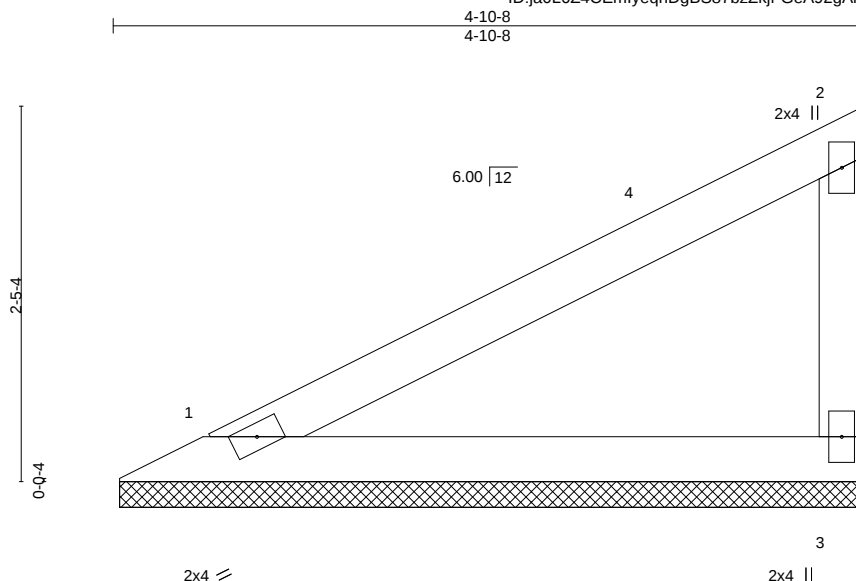
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Builders FirstSource (Valley Center).	Valley Center, KS - 67147.
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8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Apr 19 09:35:11 2021 Page 1

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01/21/2022



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 0.31	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.17	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P						Weight: 13 lb	FT = 20%

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2

TOP CHORD	Structural wood sheathing directly applied or 4-10-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-10-0, 3=4-10-0
 Max Horz 1=86(LC 9)
 Max Uplift 1=-31(LC 12), 3=-53(LC 12)
 Max Grav 1=184(LC 1), 3=184(LC 1)

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

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCFL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 4-8-12 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
- 2) Gable requires continuous bottom chord bearing.
- 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 100 lb uplift at joint(s) 1, 3.
- 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.



April 20, 2021



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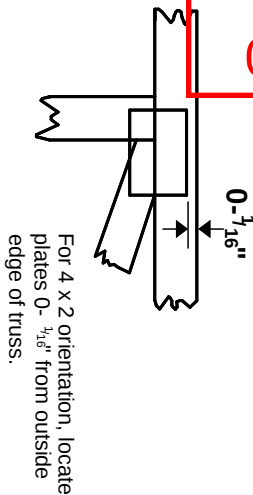
16023 Swingley Ridge Rd
Chesterfield, MO 63017

01/21/2022

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.



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

*** Plate location details available in MiTek 20120 software or upon request.**

PLATE SIZE

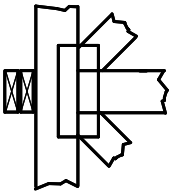
4 X 4
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



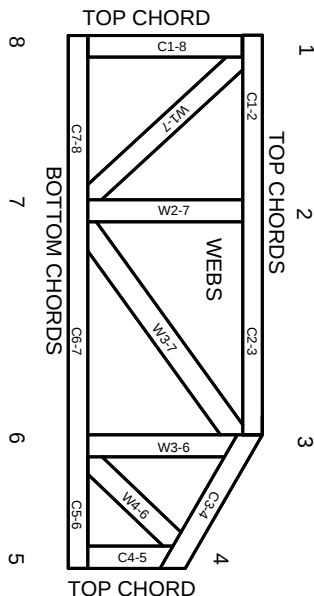
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP1.1: 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

6-4-8 | dimensions shown in ft-in-sixteenths
(Drawings not to scale)



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/TP1 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/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 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/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.