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

10/22/2020 Dylan Eppert Digitally signed by Dylan Eppert Reason: APPROVED TRUSS PACKAGE Date: 2020.10.22 15:00:26-05'00'

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

Re: 2472503
Roeser 1470 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: I43262496 thru I43262612

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

Missouri COA: Engineering 001193

October 20,2020

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 1470 Winterset
2472503	A1	Half Hip Girder	1	2	I43262496

RELEASE FOR CONSTRUCTION
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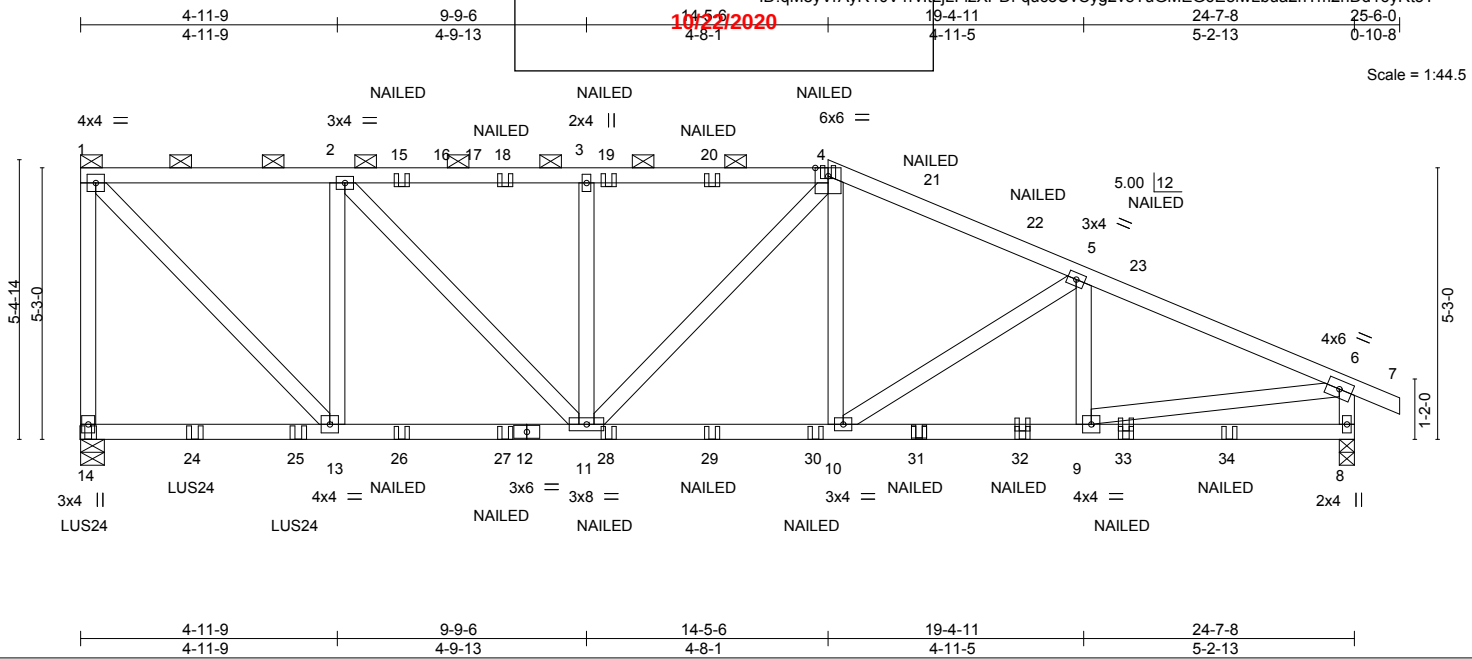
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:00:32 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-quc3UvCyg2v8TuGMEG6E8lwLbua2riTm2hDd16yRt3T



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	-0.07	9-10	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.12	9-10	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.30	Horz(CT)	0.03	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 235 lb	FT = 20%
BCDL	10.0											

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 (6-0-0 max.): 1-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 14=0-5-8, 8=0-3-8
Max Horz 14=-178(LC 10)
Max Uplift 14=-602(LC 8), 8=-422(LC 12)
Max Grav 14=2408(LC 2), 8=1871(LC 32)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-14=-1900/486, 1-2=-1720/498, 2-3=-2388/700, 3-4=-2393/702, 4-5=-2608/720, 5-6=-2876/704, 6-8=-1813/443
BOT CHORD 11-13=-367/1720, 10-11=-529/2343, 9-10=-574/2587
WEBS 1-13=-639/2423, 2-13=-1158/372, 2-11=-291/959, 3-11=-635/270, 4-10=-85/540, 5-10=-420/50, 6-9=-563/2409

NOTES-
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 0-9-0 oc.
Bottom chords connected as follows: 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=15ft; B=45ft; L=25ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
6) Unbalanced snow loads have been considered for this design.
7) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
8) Provide adequate drainage to prevent water ponding.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=602, 8=422.
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 LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-12 oc max. starting at 0-1-12 from the left end to 4-2-8 to connect truss(es) to front face of bottom chord.
14) Fill all nail holes where hanger is in contact with lumber.

Continued on page 2

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

15) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-60, 4-6=-60, 6-7=-60, 8-14=-20
   Concentrated Loads (lb)
   Vert: 14=-266(F) 4=-81(F) 15=-81(F) 18=-81(F) 19=-81(F) 20=-81(F) 23=-33(F) 24=-257(F) 25=-257(F) 26=-39(F) 27=-39(F) 28=-39(F) 29=-39(F) 30=-39(F) 31=-144(F) 32=-111(F) 33=-78(F) 34=-6(F)

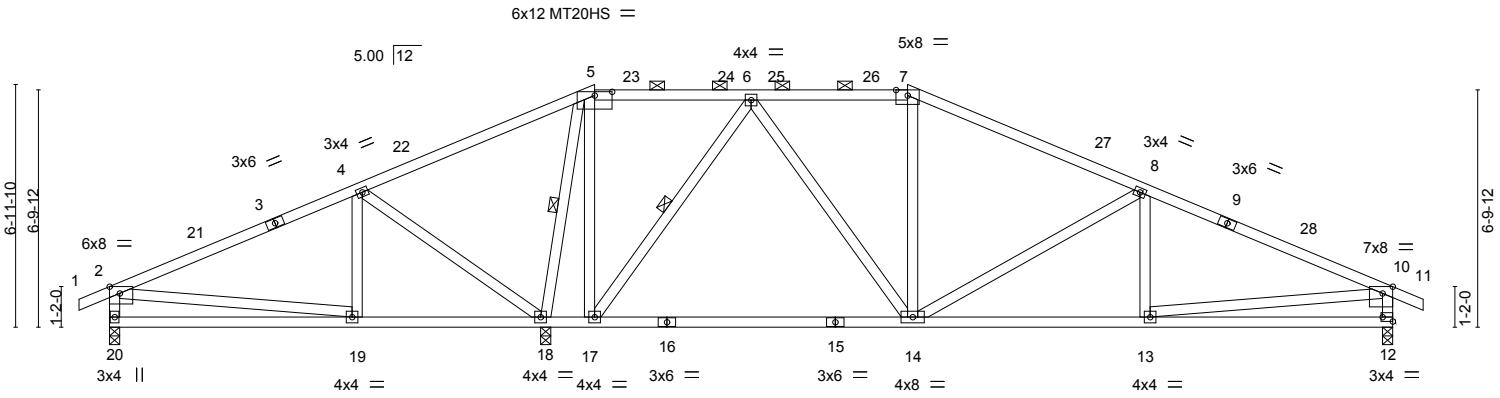
Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	A2	Hip	1	1	I43262497

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:00:41 2020 Page 1
ID:qMeyVrAyR40V1rvItLjLFlzXPDf-3cfSN_JbYp2s2HS5GfmL0folNWd1SeD57aubs4yRt3K

-0-10-8	7-1-5	13-11-2	18-5-0	22-10-14	29-8-11	36-10-0	37-8-8
0-10-8	7-1-5	6-9-13	4-5-14	4-5-14	6-9-13	7-1-5	0-10-8

Scale = 1:66.1



7-1-5	12-6-4	13-11-2	22-10-14	29-8-11	36-10-0
7-1-5	5-4-15	1-4-14	8-11-13	6-9-13	7-1-5

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.15	14-17	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.32	14-17	>905	180	MT20HS	148/108
TCDL	10.0	Rep Stress Incr	YES	WB	0.84	Horz(CT)	0.03	12	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 169 lb	FT = 20%
BCDL	10.0											

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-7.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 5-18, 6-17

REACTIONS. (size) 20=0-3-8, 18=0-3-8, 12=0-3-8
Max Horz 20=-145(LC 14)
Max Uplift 20=-55(LC 16), 18=-166(LC 16), 12=-108(LC 16)
Max Grav 20=494(LC 39), 18=2150(LC 39), 12=1191(LC 39)

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

TOP CHORD	2-4=-342/196, 4-5=-28/779, 5-6=0/308, 6-7=-795/193, 7-8=-953/176, 8-10=-1672/199, 2-20=-424/112, 10-12=-1115/186
BOT CHORD	19-20=-64/415, 17-18=-287/142, 14-17=0/479, 13-14=-94/1428, 12-13=-44/421
WEBS	4-19=0/284, 4-18=-971/143, 5-18=-1594/148, 5-17=-39/969, 6-17=-1022/161, 6-14=-56/843, 8-14=-820/129, 2-19=-268/81, 10-13=-70/1016

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=15ft; B=45ft; L=37ft; eave=5ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-9-11, Interior(1) 2-9-11 to 13-11-2, Exterior(2R) 13-11-2 to 19-1-10, Interior(1) 19-1-10 to 22-10-14, Exterior(2R) 22-10-14 to 28-1-7, Interior(1) 28-1-7 to 37-8-8 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
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) 20 except (jt=lb) 18=166, 12=108.
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.
11) 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.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 20,2020

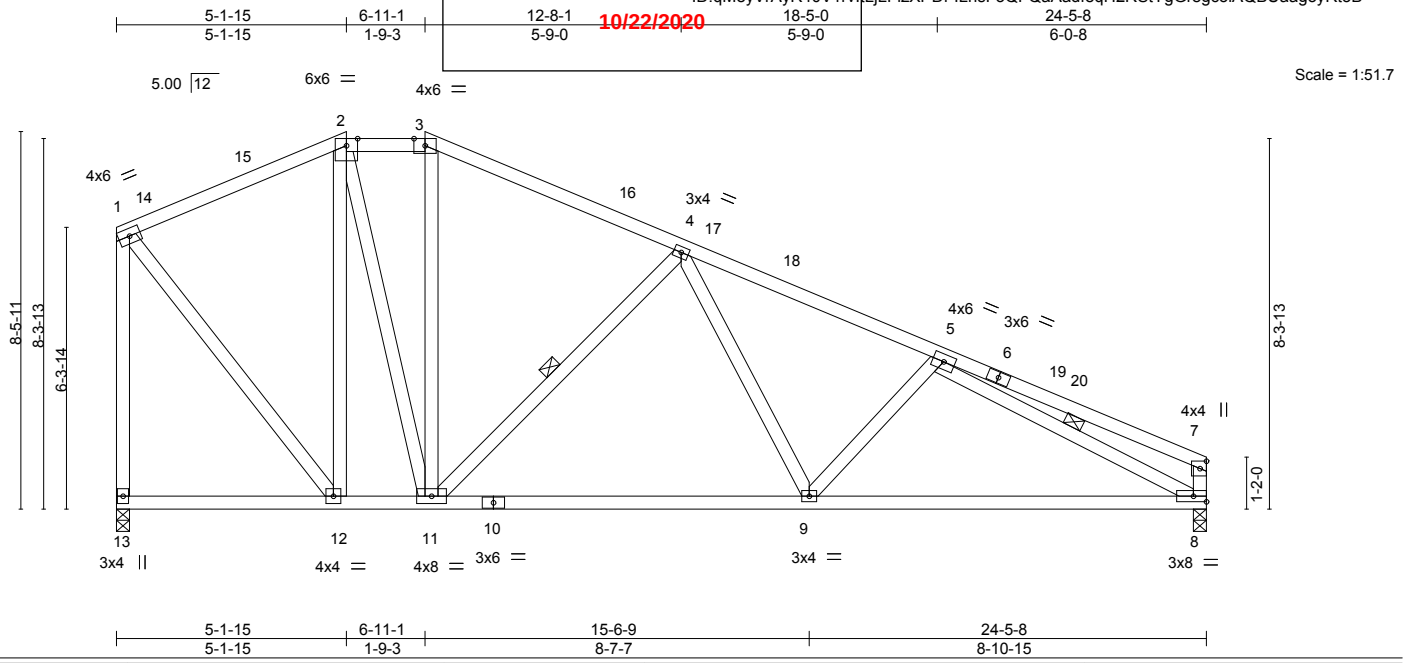
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type		Qty	Ply	Roeser 1470 Winterset
2472503	A3	Hip		1	1	I43262498

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:00:50 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-ILhsF3QFQaAadfeqH2RStYgGr8gc3iAQBUaag3yRt3B

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.92	Vert(LL)	-0.12	8-9	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.24	8-9	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.05	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 129 lb	FT = 20%
BCDL	10.0											

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 (5-11-14 max.): 2-3.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-11, 5-8

REACTIONS. (size) 13=0-3-8, 8=0-3-8
Max Horz 13=-243(LC 14)
Max Uplift 13=-92(LC 16), 8=-85(LC 16)
Max Grav 13=1326(LC 38), 8=1272(LC 38)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-783/184, 2-3=-826/199, 3-4=-1009/194, 4-5=-1887/220, 5-7=-379/69, 1-13=-1274/187, 7-8=-314/78
BOT CHORD 11-12=0/658, 9-11=-93/1455, 8-9=-168/1828
WEBS 2-12=-739/145, 2-11=-98/730, 4-11=-901/148, 4-9=-7/429, 5-9=-274/113, 1-12=-145/998, 5-8=-1781/166

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 5-1-15, Exterior(2E) 5-1-15 to 6-11-1, Exterior(2R) 6-11-1 to 11-2-0, Interior(1) 11-2-0 to 24-3-12 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 8.
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) 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.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	A4	Common	3	1	I43262499

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:00:52 2020 Page 1
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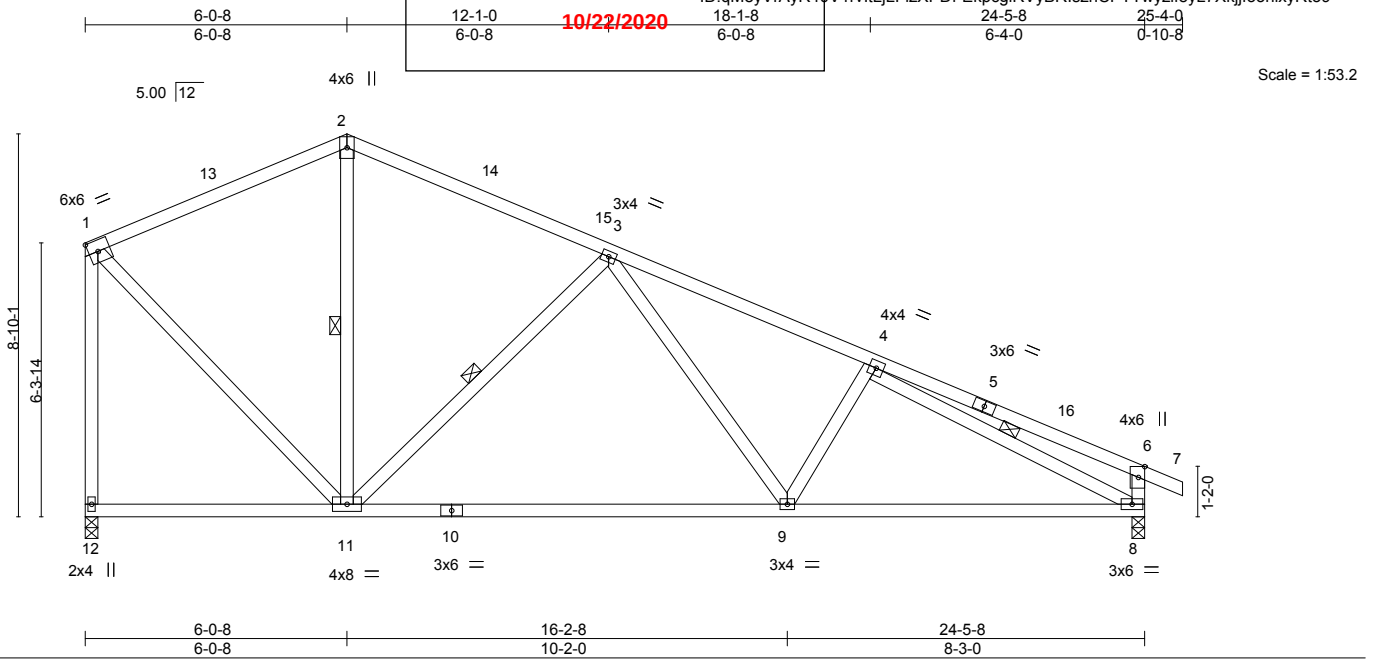

Plate Offsets (X,Y)-- [6:0-3-0,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.21	9-11	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.44	9-11	>659	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.04	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 115 lb	FT = 20%
BCDL	10.0											

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 2-11, 3-11, 4-8

REACTIONS. (size) 12=0-3-8, 8=0-3-8
Max Horz 12=-257(LC 14)
Max Uplift 12=-92(LC 16), 8=-116(LC 16)
Max Grav 12=1086(LC 2), 8=1160(LC 2)

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

TOP CHORD	1-2=-727/207, 2-3=-738/214, 3-4=-1566/277, 4-6=-404/120, 1-12=-1046/212, 6-8=-413/147
BOT CHORD	11-12=-154/258, 9-11=-94/1109, 8-9=-174/1482
WEBS	3-11=-735/191, 3-9=-43/473, 1-11=-161/840, 4-8=-1365/161

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 6-0-8, Exterior(2R) 6-0-8 to 9-0-8, Interior(1) 9-0-8 to 25-4-0 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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) 12 except (jt=lb) 8=116.
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) 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.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	A5	COMMON GIRDER	1	2	I43262500

Builders FirstSource (Valley Center), Valley Center, KS - 67147, Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:00:56 2020 Page 1
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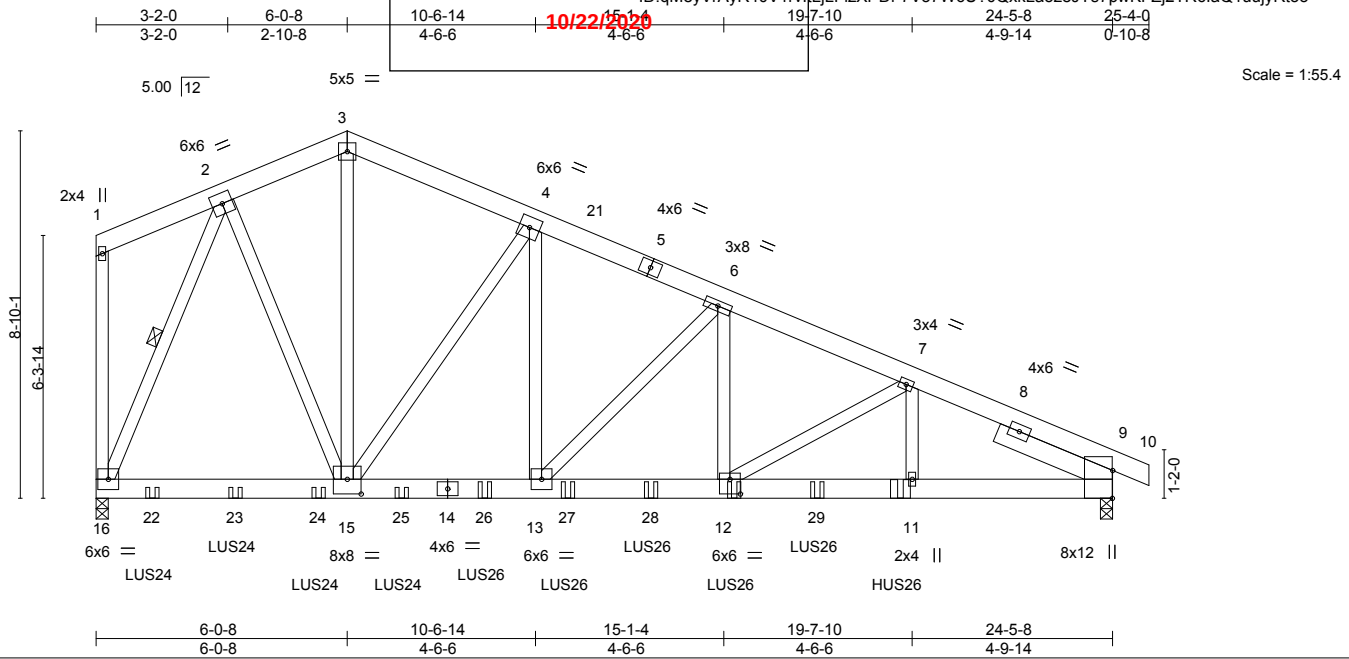

Plate Offsets (X,Y)-- [9:0-8-1,Edge], [12:0-3-0,0-4-4], [15:0-4-0,0-4-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.13	11-12	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.24	11-12	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.83	Horz(CT)	0.06	9	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 341 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SPF No.2
BOT CHORD	2x6 SP 2400F 2.0E *Except* 9-14: 2x6 SPF 2100F 1.8E
WEBS	2x4 SPF No.2
SLIDER	Right 2x6 SPF No.2 3-0-0

BRACING-

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

REACTIONS. (size) 16=0-3-8, 9=0-3-8
Max Horz 16=-245(LC 10)
Max Uplift 16=-761(LC 12), 9=-635(LC 12)
Max Grav 16=5640(LC 2), 9=4772(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3494/566, 3-4=-3533/565, 4-6=-5826/843, 6-7=-7910/1074, 7-9=-8422/1127
BOT CHORD 15-16=-169/1909, 13-15=-617/5305, 12-13=-896/7329, 11-12=-946/7464, 9-11=-946/7464
WEBS 2-15=-422/3440, 3-15=-355/2315, 4-15=-3633/534, 4-13=-480/3594, 6-13=-2883/396, 6-12=-269/2299, 7-12=-351/59, 7-11=-118/1094, 2-16=-4917/624

NOTES-

1) 2-ply truss to be connected together as follows:
Top chords connected with 10d (0.131"x3") nails as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected with 10d (0.131"x3") nails as follows: 2x6 - 2 rows staggered at 0-6-0 oc.
Web connected with 10d (0.148"x3") nails 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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
6) Unbalanced snow loads have been considered for this design.
7) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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) except (jt=lb) 16=761, 9=635.
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.
11) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-4-4 from the left end to 7-4-4 to connect truss(es) to back face of bottom chord.

October 20,2020

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	A5	COMMON GIRDER	1	2	I43262500

Job Reference (optional)

NOTES-

12) Use Simpson Strong-Tie LUS26 (4-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 9-4-4 from the left end to 17-4-4 to connect truss(es) to back face of bottom chord.
13) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent at 19-4-4 from the left end to connect truss(es) to back face of bottom chord.
14) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-60, 3-10=-60, 16-17=-20
   Concentrated Loads (lb)
   Vert: 12=-680(B) 11=-1402(B) 22=-680(B) 23=-680(B) 24=-680(B) 25=-680(B) 26=-680(B) 27=-680(B) 28=-680(B) 29=-680(B)

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	A6	Monopitch Girder	1	2	I43262501

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:00:59 2020 Page 1
ID:qMeyVrAyR40V1rvltLLFlzXPDf-X4kG88WuJLJJC2qYJR5ZkSYpPmlrgrQIGOGYU1yRt32

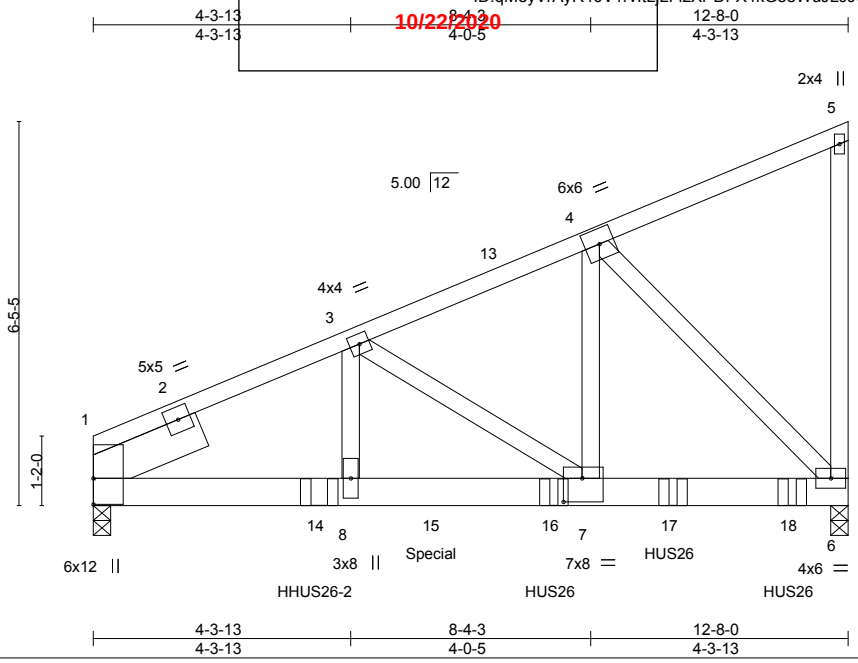

Plate Offsets (X,Y)-- [1:Edge,0-0-0], [7:0-3-12,0-4-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.07	7-8	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.13	7-8	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.60	Horz(CT)	0.02	6	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 139 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x6 SPF 2100F 1.8E
WEBS	2x4 SPF No.2
SLIDER	Left 2x8 SP 2400F 2.0E 2-0-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-7-13 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 6=0-3-8
Max Horz 1=202(LC 11)
Max Uplift 1=-405(LC 12), 6=-443(LC 12)
Max Grav 1=3213(LC 2), 6=4285(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-4996/644, 3-4=-3318/384
BOT CHORD 1-8=-625/4474, 7-8=-625/4474, 6-7=-360/3060
WEBS 3-8=-277/1652, 3-7=-1679/318, 4-7=-412/3940, 4-6=-4342/505

NOTES-

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.
   Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-5-0 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) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
4) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
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) 1=405, 6=443.
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) Use Simpson Strong-Tie HHUS26-2 (14-10d Girder, 4-10d Truss) or equivalent at 3-9-8 from the left end to connect truss(es) to back face of bottom chord.
10) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 7-8-12 from the left end to 11-8-12 to connect truss(es) to back face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1135 lb down and 114 lb up at 5-8-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

October 20,2020

Continued on page 2

LOAD CASE(S) Standard

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	A6	Monopitch Girder	1	2	I43262501

Builders FirstSource (Valley Center), Valley Center, KS - 67147, Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:00:59 2020 Page 2
ID:qMeyVrAyR40V1rvltLLFlzXPDf-X4kG88WuJLJJC2qYJR5ZkSYpPmlrgrQIGOGYU1yRt32

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-5=-60, 6-9=-20
   Concentrated Loads (lb)
   Vert: 14=-1819(B) 15=-1007(B) 16=-1007(B) 17=-1007(B) 18=-1009(B)

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	B1	ROOF SPECIAL GIRDER	1	2	I43262502

Job Reference (optional)

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

10/22/2020

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:01:03 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLFlzXPDf-Qr_n_VaONapkhf7JYHAVvlib3N49ceQKB0EmdpyRt3_

-0-10-8	2-3-8	2-10-11	6-3-5	9-8-0	14-3-8	16-10-11	20-0-0	22-10-4	26-0-0
0-10-8	2-3-8	0-7-3	3-4-11	3-4-11	4-7-8	2-7-3	3-1-5	2-10-4	3-1-12

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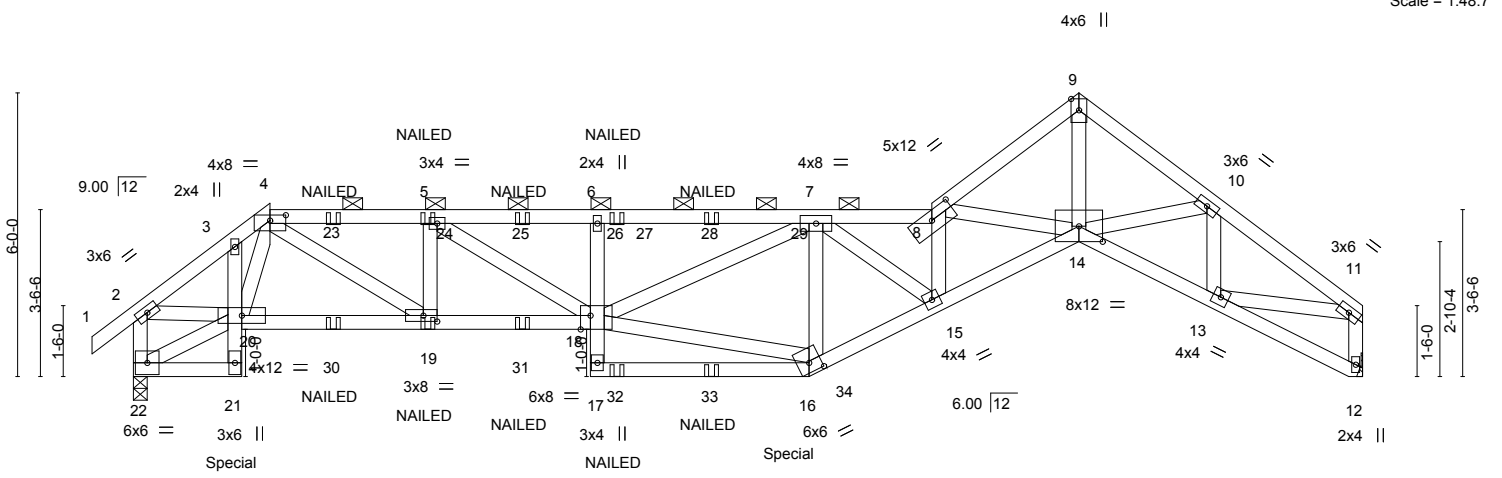


2-3-8	6-3-5	9-8-0	14-3-8	16-10-11	20-0-0	22-10-4	26-0-0
2-3-8	3-11-13	3-4-11	4-7-8	2-7-3	3-1-5	2-10-4	3-1-12

Plate Offsets (X,Y)-- [4:0-4-0,0-1-6], [8:0-6-0,0-2-3], [14:0-6-0,0-3-15], [16:0-3-0,0-2-7], [18:0-2-8,Edge], [19:0-3-8,0-1-8]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	-0.25	16-17	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.44	16-17	>696	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.60	Horz(CT)	0.25	12	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 252 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
14-16: 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 12=Mechanical, 22=0-3-8
Max Horz 22=153(LC 34)
Max Uplift 12=-337(LC 10), 22=-1847(LC 10)
Max Grav 12=1847(LC 2), 22=3112(LC 43)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4146/2480, 3-4=-3922/2345, 4-5=-5355/1818, 5-6=-6835/1797, 6-7=-6706/1764, 7-8=-6849/1418, 8-9=-4274/806, 9-10=-4236/805, 10-11=-3132/579, 2-22=-3099/1832, 11-12=-1827/342
BOT CHORD 20-21=-1659/1751, 3-20=-318/417, 19-20=-1646/3192, 18-19=-1733/5353, 17-18=-18/266, 6-18=-507/109, 16-17=-113/551, 15-16=-1162/5658, 14-15=-1467/7499, 13-14=-446/2754
WEBS 4-19=-180/3149, 5-19=-1467/104, 5-18=0/1754, 16-18=-919/4516, 7-18=-755/1942, 7-16=-2604/644, 7-15=-361/2200, 8-15=-2139/386, 8-14=-3343/795, 9-14=-909/4884, 10-14=-191/943, 10-13=-1032/210, 11-13=-397/2404, 4-20=-1231/1122, 2-20=-1873/3208

NOTES-

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 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 2 rows staggered at 0-3-0 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=15ft; B=45ft; L=26ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=337, 22=1847.

Continued on page 2

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	B1	ROOF SPECIAL GIRDER	1	2	I43262502

Builders FirstSource (Valley Center), Valley Center, KS - 67147, Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:01:04 2020 Page 2
ID:qMeyVrAyR40V1rvltLjLFIzXPDf-u2Y9Cra17txbIpiW6_hkRVFmpnQOL5gUPfzJ9FyRt2z

NOTES-

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) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1754 lb down and 1685 lb up at 2-1-12, and 787 lb down and 105 lb up at 13-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-60, 2-4=-60, 4-8=-60, 8-9=-60, 9-11=-60, 21-22=-20, 18-20=-20, 16-17=-20, 14-16=-20, 12-14=-20
   Concentrated Loads (lb)
   Vert: 21=-260(F) 19=-77(F) 5=-157(F) 23=-157(F) 25=-157(F) 26=-126(F) 28=-126(F) 30=-77(F) 31=-77(F) 32=-109(F) 33=-109(F) 34=-787(F)

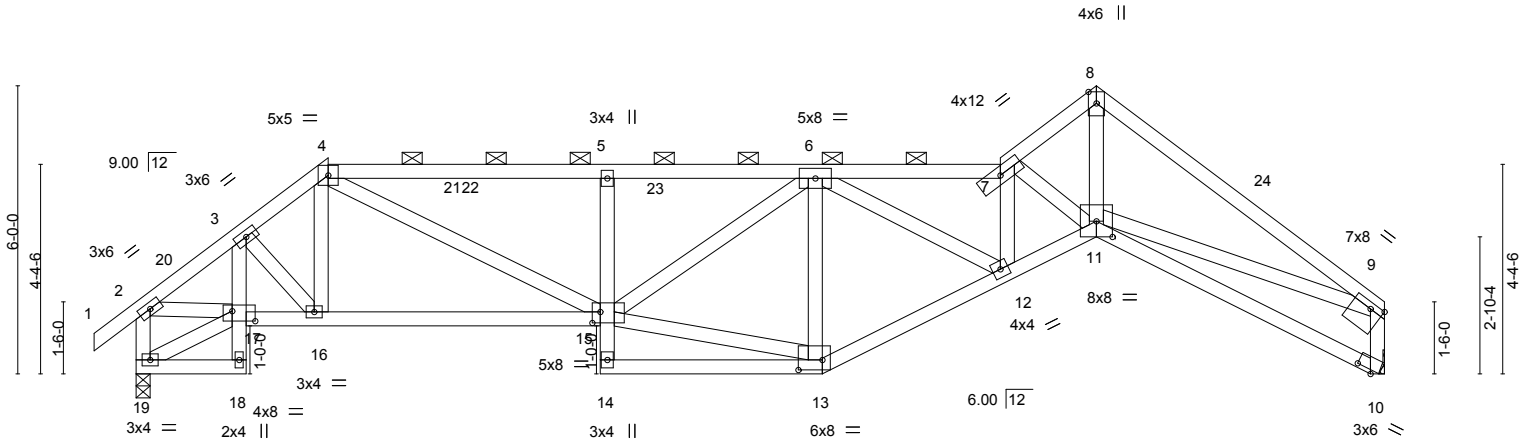
Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	B2	Roof Special	1	1	I43262503

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:01:22 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-MVdyz?oJuPC2Ta4z9m0yAI?qY2bfZEa7YTKGnCyRt2h

-0-10-8 2-3-8 4-0-0 9-8-0 14-3-8 18-0-0 20-0-0 26-0-0
0-10-8 2-3-8 1-8-8 5-8-0 4-7-8 3-8-8 2-0-0 6-0-0

Scale: 1/4"=1'



2-3-8 4-0-0 9-8-0 14-3-8 18-0-0 20-0-0 26-0-0
2-3-8 1-8-8 5-8-0 4-7-8 3-8-8 2-0-0 6-0-0

Plate Offsets (X,Y)-- [9:Edge,0-1-8], [10:0-4-1,0-0-15], [11:0-4-0,0-3-15], [13:0-6-0,0-2-8], [15:0-2-0,0-2-12], [17:0-5-12,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	-0.18	12-13	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.32	12-13	>959	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.63	Horz(CT)	0.22	10	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 127 lb	FT = 20%
BCDL	10.0											

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 (3-2-11 max.): 4-7.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 19=0-3-8, 10=Mechanical
Max Horz 19=153(LC 13)
Max Uplift 19=-124(LC 14), 10=-94(LC 14)
Max Grav 19=1230(LC 2), 10=1155(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1535/234, 3-4=-1550/220, 4-5=-2323/298, 5-6=-2267/292, 6-7=-2872/345, 7-8=-2413/291, 8-9=-2503/273, 2-19=-1183/183, 9-10=-1171/171
BOT CHORD 16-17=-203/1180, 15-16=-155/1271, 5-15=-379/96, 12-13=-218/2038, 11-12=-322/3143
WEBS 4-15=-131/1191, 13-15=-175/1741, 6-15=-61/522, 6-13=-1203/169, 6-12=-123/1199, 7-12=-1017/124, 7-11=-1067/159, 8-11=-237/2584, 9-11=-114/1783, 2-17=-120/1162

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=15ft; B=45ft; L=26ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-12, Interior(1) 2-1-12 to 4-0-0, Exterior(2R) 4-0-0 to 7-0-0, Interior(1) 7-0-0 to 20-0-0, Exterior(2R) 20-0-0 to 23-0-0, Interior(1) 23-0-0 to 25-10-4 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10 except (jt=lb) 19=124.
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) 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.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	B3	Roof Special	1	1	I43262504

Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:01:25 2020 Page 1
ID:qMeyVrAyR40V1rvItLjLFlzXPDf-m4J5c1rCBKbcK1pYrvZfoxdNAFhcmcfaERZxOXyRt2e

-0-10-8	2-3-8	5-1-5	9-8-0	14-4-11	19-1-5	20-0-0	26-0-0
0-10-8	2-3-8	2-9-13	4-6-11	4-8-11	4-8-11	0-10-11	6-0-0

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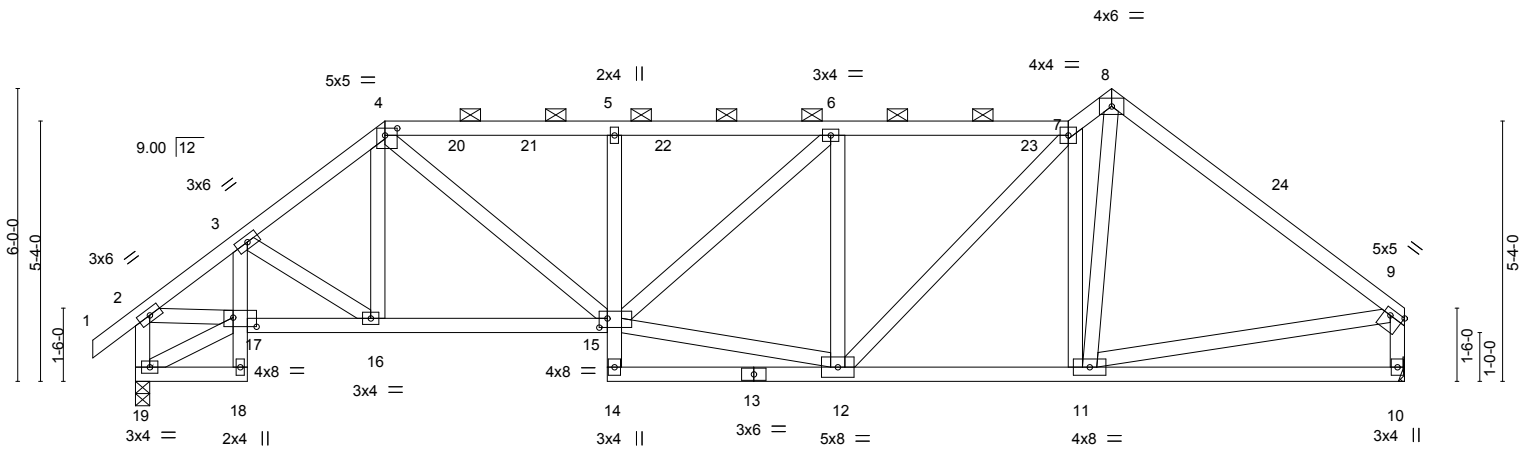


2-3-8	5-1-5	9-8-0	14-4-11	19-1-5	26-0-0
2-3-8	2-9-13	4-6-11	4-8-11	4-8-11	6-10-11

Plate Offsets (X,Y)-- [4:0-3-0,0-1-12], [9:Edge,0-1-8], [15:0-2-0,0-2-4], [17:0-5-12,0-2-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	-0.08	5	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.14	15-16	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.06	10	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 137 lb	FT = 20%
BCDL	10.0											

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 (4-2-10 max.): 4-7.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 10=Mechanical, 19=0-3-8
Max Horz 19=152(LC 13)
Max Uplift 10=-94(LC 14), 19=-124(LC 14)
Max Grav 10=1155(LC 2), 19=1230(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1546/228, 3-4=-1524/218, 4-5=-1750/250, 5-6=-1730/249, 6-7=-1483/233, 7-8=-1246/202, 8-9=-1333/180, 2-19=-1182/173, 9-10=-1089/148
BOT CHORD 16-17=-206/1221, 15-16=-121/1169, 5-15=-326/84, 11-12=-96/1151
WEBS 4-15=-84/767, 12-15=-130/1411, 6-15=-38/337, 6-12=-585/110, 7-12=-59/533, 7-11=-1196/147, 8-11=-89/1168, 9-11=-32/829, 2-17=-124/1183

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=15ft; B=45ft; L=26ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-12, Interior(1) 2-1-12 to 5-1-5, Exterior(2R) 5-1-5 to 8-1-5, Interior(1) 8-1-5 to 20-0-0, Exterior(2R) 20-0-0 to 23-0-0, Interior(1) 23-0-0 to 25-10-4 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10 except (jt=lb) 19=124.
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) 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.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER
October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type		Qty	Ply	Roeser 1470 Winterset
2472503	B4	Hip		1	1	I43262505

Job Reference (optional)

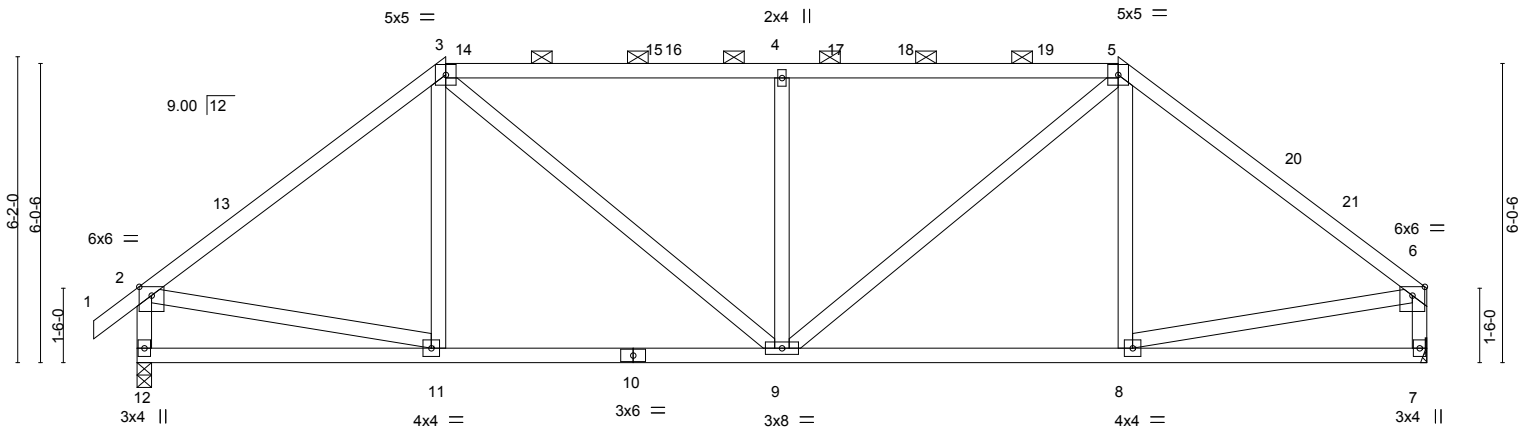
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:01:28 2020 Page 1
ID:qMeyVrAyR40V1rvItLjLFlzXPDf-Bf_DE2t4UFzBBVY7W16MQZFq7Sidz140xOnb?syRt2b

-0-10-8 | 6-2-11 | 13-0-0 | 19-9-5 | 26-0-0
0-10-8 | 6-2-11 | 6-9-5 | 6-9-5 | 6-2-11

Scale = 1:46.4



6-2-11 | 13-0-0 | 19-9-5 | 26-0-0
6-2-11 | 6-9-5 | 6-9-5 | 6-2-11

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	-0.05	9	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.11	9-11	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.03	7	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 118 lb	FT = 20%
BCDL	10.0											

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 (4-5-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 12=0-3-8, 7=Mechanical
Max Horz 12=154(LC 13)
Max Uplift 12=-124(LC 14), 7=-94(LC 14)
Max Grav 12=1230(LC 2), 7=1155(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1328/147, 3-4=-1360/190, 4-5=-1360/190, 5-6=-1327/143, 2-12=-1173/146, 6-7=-1099/116
BOT CHORD 11-12=-146/277, 9-11=-67/965, 8-9=-57/970
WEBS 3-9=-38/585, 4-9=-538/108, 5-9=-43/582, 2-11=-4/813, 6-8=-19/835

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=15ft; B=45ft; L=26ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-2-11, Exterior(2R) 6-2-11 to 10-5-9, Interior(1) 10-5-9 to 19-9-5, Exterior(2R) 19-9-5 to 24-0-4, Interior(1) 24-0-4 to 25-10-4 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 12=124.
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) 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.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER
PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

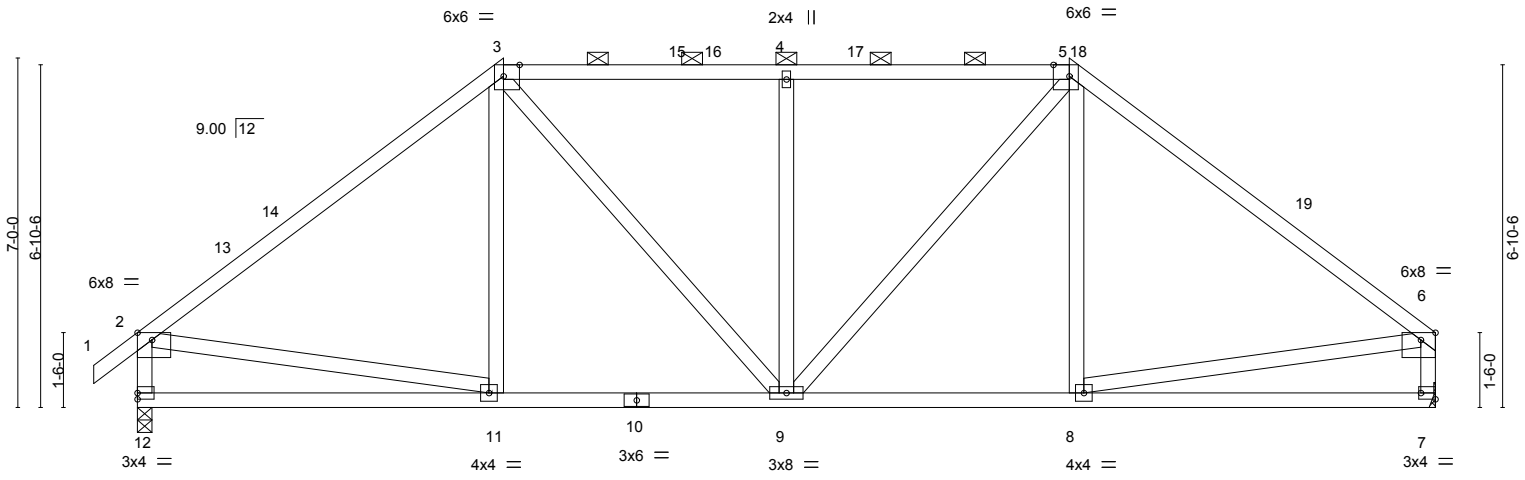
Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	B5	Hip	1	1	I43262506

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:01:33 2020 Page 1
ID:qMeyVrAyR40V1rvItLjLFlzXPDf-Xdo6HmxDIobUHGQ4JaiX7dyhsTQ_eH3l4gVMg3yRt2W

-0-10-8 7-4-0 13-0-0 18-8-0 26-0-0
0-10-8 7-4-0 5-8-0 5-8-0 7-4-0

Scale = 1:46.2



7-4-0 13-0-0 18-8-0 26-0-0
7-4-0 5-8-0 5-8-0 7-4-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	-0.06	7-8	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.38	Vert(CT)	-0.12	7-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.02	7	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 124 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 (5-1-12 max.): 3-5.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS. (size) 12=0-3-8, 7=Mechanical
Max Horz 12=173(LC 13)
Max Uplift 12=-124(LC 14), 7=-94(LC 14)
Max Grav 12=1230(LC 2), 7=1155(LC 2)

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

TOP CHORD	2-3=-1329/152, 3-4=-1163/185, 4-5=-1163/185, 5-6=-1327/148, 2-12=-1158/153, 6-7=-1084/123
BOT CHORD	11-12=-168/389, 9-11=-63/940, 8-9=-49/945
WEBS	3-9=-40/430, 4-9=-432/77, 5-9=-45/427, 2-11=0/696, 6-8=-10/729

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=15ft; B=45ft; L=26ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 7-4-0, Exterior(2R) 7-4-0 to 11-6-15, Interior(1) 11-6-15 to 18-8-0, Exterior(2R) 18-8-0 to 22-10-15, Interior(1) 22-10-15 to 25-10-4 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 12=124.
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) 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.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type		Qty	Ply	Roeser 1470 Winterset
2472503	B6	Hip		1	1	I43262507

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:01:36 2020 Page 1
ID:qMeyVrAyR40V1nvItLjLFlzXPDf-yCTFvoz5bjz38k9f_iGEkFaELhQfrX4Bmej0HOyRt2T

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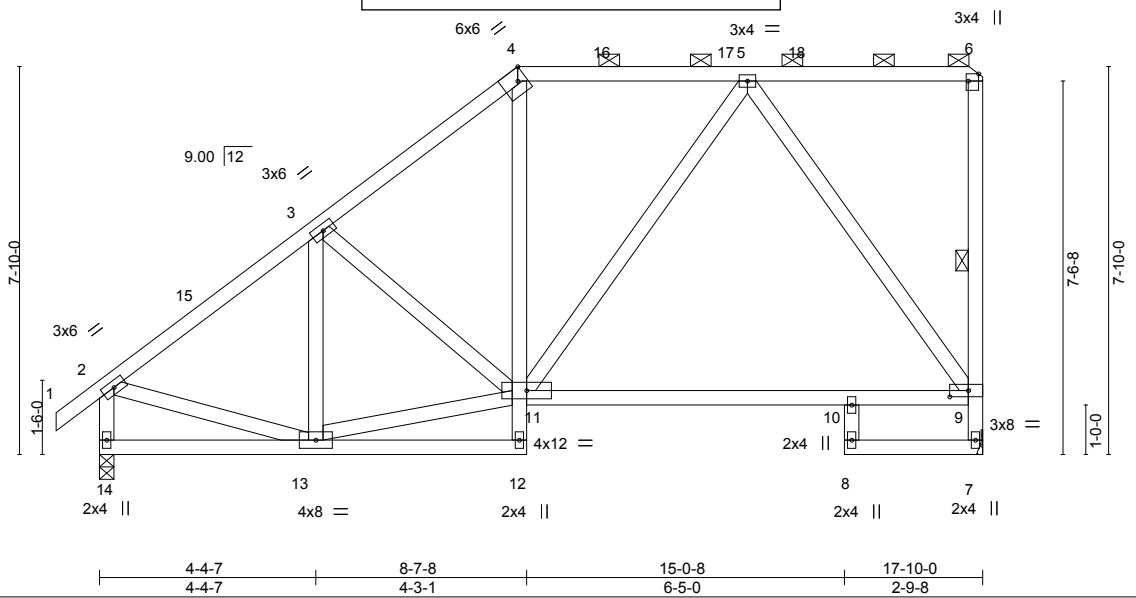

Plate Offsets (X,Y)-- [4:0-2-2,Edge], [6:0-1-12,Edge], [9:0-4-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	-0.17	10-11	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.35	10-11	>603	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.76	Horz(CT)	0.10	7	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 103 lb	FT = 20%
BCDL	10.0											

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.): 4-6.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 6-7

REACTIONS. (size) 14=0-3-8, 7=Mechanical
Max Horz 14=271(LC 11)
Max Uplift 14=-86(LC 14), 7=-120(LC 11)
Max Grav 14=863(LC 2), 7=787(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-817/118, 3-4=-776/150, 4-5=-556/148, 2-14=-823/134, 7-9=-746/169
BOT CHORD 13-14=-377/315, 10-11=-195/415, 9-10=-224/437
WEBS 11-13=-257/696, 2-13=-8/546, 5-11=-91/271, 5-9=-677/202

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-5-5, Exterior(2R) 8-5-5 to 12-8-4, Interior(1) 12-8-4 to 17-8-4 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14 except (jt=lb) 7=120.
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) 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.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type		Qty	Ply	Roeser 1470 Winterset
2472503	B7	Hip		1	1	I43262508

Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:01:40 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-qzjml90cfxUUdLSRDYKAv5luqIrQnKbnhGhDQ9yRt2P

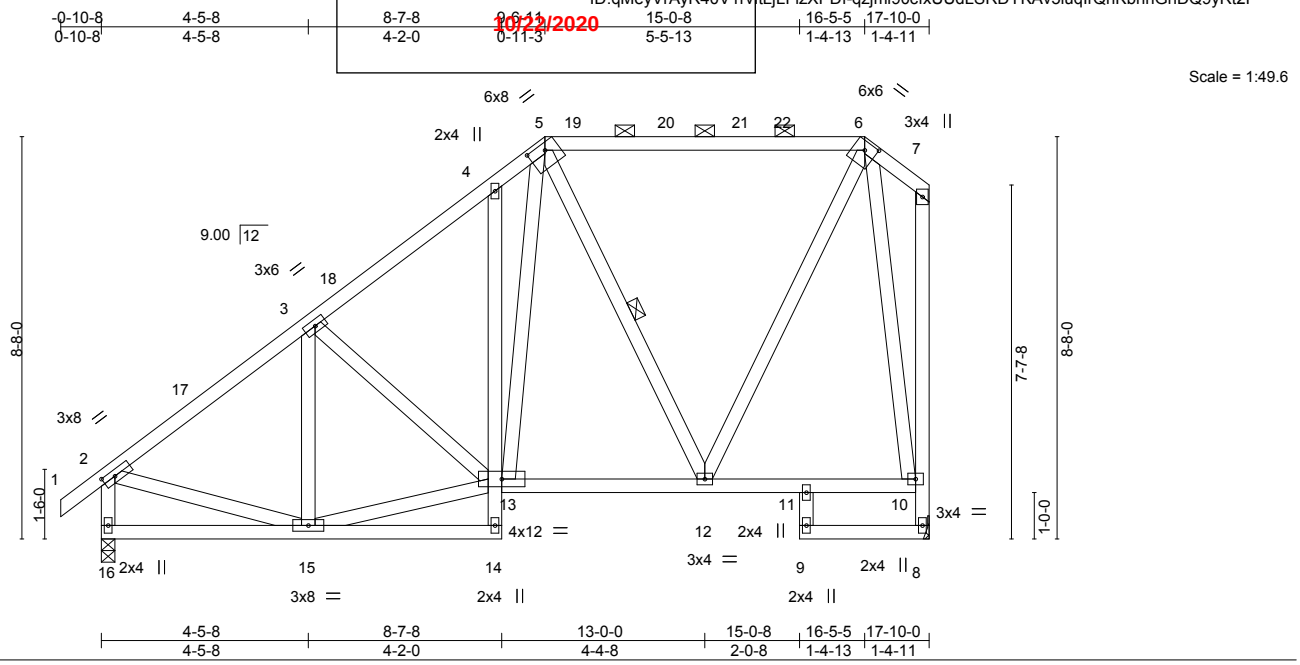

Plate Offsets (X,Y)-- [2:0-3-4,0-1-8], [5:0-4-8,0-1-12], [6:0-3-0,0-2-2]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.56	Vert(LL)	-0.02	12-13	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.04	12-13	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.02	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 121 lb	FT = 20%
BCDL	10.0											

LUMBER-

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

BRACING-

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

REACTIONS. (size) 16=0-3-8, 8=Mechanical
Max Horz 16=288(LC 13)
Max Uplift 16=-87(LC 14), 8=-94(LC 11)
Max Grav 16=863(LC 2), 8=787(LC 2)

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

TOP CHORD	2-3=-829/119, 3-4=-760/151, 4-5=-589/174, 5-6=-342/140, 2-16=-818/134, 8-10=-758/188
BOT CHORD	15-16=-372/316, 12-13=-242/507
WEBS	13-15=-304/630, 5-13=-145/341, 2-15=-9/544, 6-10=-856/286, 5-12=-353/164, 6-12=-99/467

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 9-6-11, Exterior(2R) 9-6-11 to 13-9-9, Interior(1) 13-9-9 to 16-5-5, Exterior(2E) 16-5-5 to 17-8-4 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) The Fabrication Tolerance at joint 5 = 16%, joint 6 = 0%
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 8.
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.
11) 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.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	B8	Hip	1	1	I43262509

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:01:43 2020 Page 1
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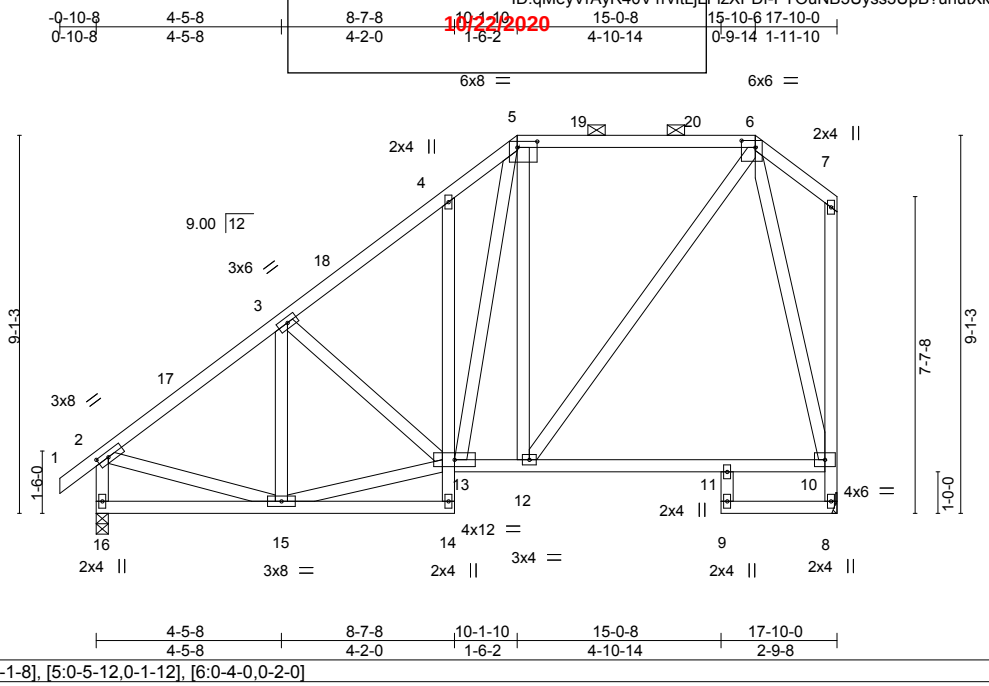

Plate Offsets (X,Y)-- [2:0-3-4,0-1-8], [5:0-5-12,0-1-12], [6:0-4-0,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	-0.07	11-12	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.14	11-12	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.81	Horz(CT)	0.05	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 123 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 16=0-3-8, 8=Mechanical
Max Horz 16=298(LC 13)
Max Uplift 16=-87(LC 14), 8=-84(LC 11)
Max Grav 16=863(LC 2), 8=787(LC 2)

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

TOP CHORD	2-3=-829/118, 3-4=-750/151, 4-5=-644/199, 5-6=-456/159, 2-16=-818/134, 8-10=-752/193
BOT CHORD	15-16=-373/316, 12-13=-222/483
WEBS	13-15=-305/575, 2-15=-8/543, 5-13=-208/331, 6-10=-727/271, 6-12=-134/496

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-1-10, Exterior(2R) 10-1-10 to 14-4-8, Interior(1) 14-4-8 to 15-10-6, Exterior(2E) 15-10-6 to 17-8-4 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 8.
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) 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.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	B9	Half Hip	1	1	I43262510

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:01:46 2020 Page 1
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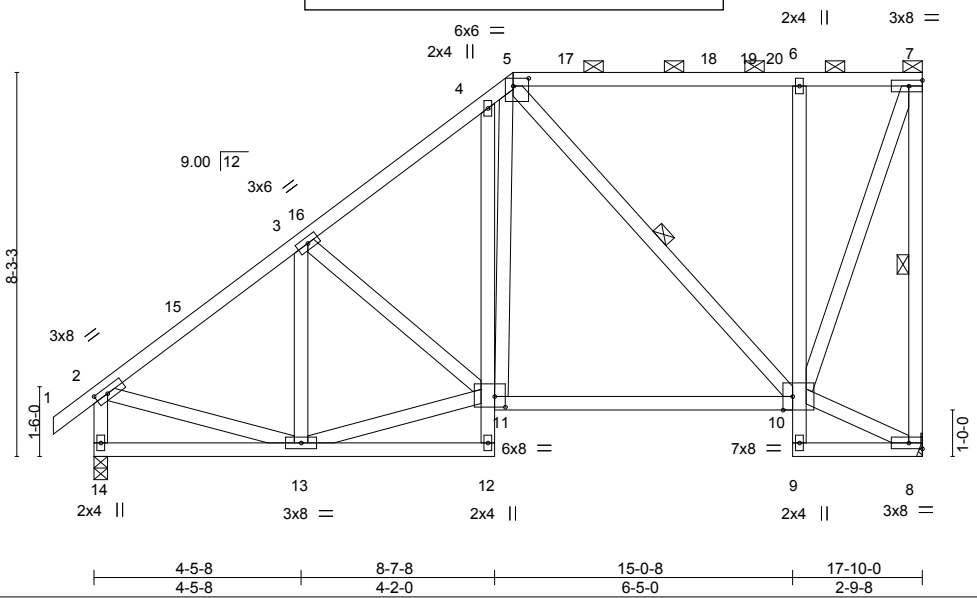

Plate Offsets (X,Y)-- [2:0-3-4,0-1-8], [5:0-4-0,0-2-0], [10:0-2-8,Edge], [11:0-2-12,0-2-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	-0.06	10-11	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.12	10-11	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.02	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 120 lb	FT = 20%
BCDL	10.0											

LUMBER-

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

BRACING-

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

REACTIONS. (size) 8=Mechanical, 14=0-3-8
Max Horz 14=286(LC 11)
Max Uplift 8=-125(LC 11), 14=-85(LC 14)
Max Grav 8=787(LC 2), 14=863(LC 2)

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

TOP CHORD	2-3=-829/121, 3-4=-767/151, 4-5=-576/161, 5-6=-282/135, 6-7=-269/131, 7-8=-764/173, 2-14=-818/136
BOT CHORD	13-14=-398/336, 10-11=-257/533, 6-10=-373/125
WEBS	11-13=-301/660, 5-11=-138/332, 5-10=-377/167, 7-10=-210/781, 2-13=-9/542

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 9-0-4, Exterior(2R) 9-0-4 to 13-3-3, Interior(1) 13-3-3 to 17-8-4 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14 except (jt=lb) 8=125.
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) 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.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 20,2020

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	B10	Half Hip	1	1	I43262511

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:01:06 2020 Page 1
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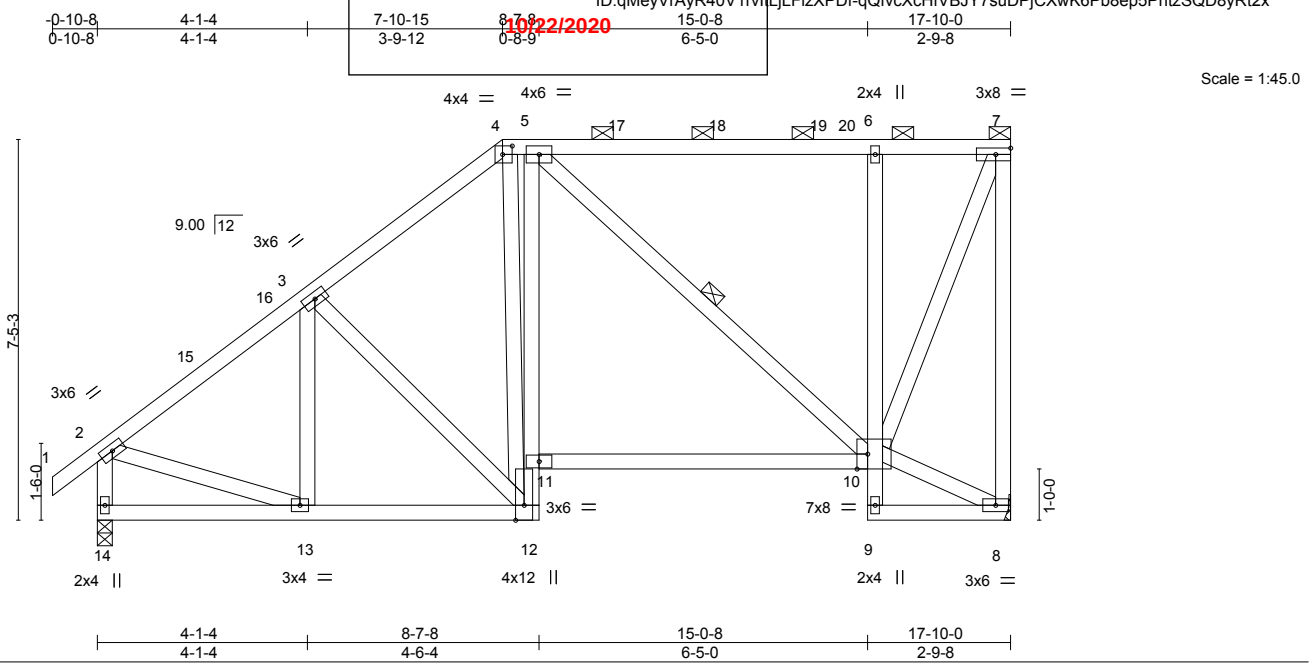

Plate Offsets (X,Y)-- [4:0-2-4,0-2-0], [10:0-2-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	-0.08	10-11	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.19	10-11	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.12	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 112 lb	FT = 20%
BCDL	10.0											

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.): 4-7.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-10

REACTIONS. (size) 8=Mechanical, 14=0-3-8
Max Horz 14=257(LC 11)
Max Uplift 8=-116(LC 11), 14=-87(LC 14)
Max Grav 8=787(LC 2), 14=863(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-804/120, 3-4=-713/157, 4-5=-523/163, 5-6=-328/124, 6-7=-308/120, 7-8=-776/161, 2-14=-806/137
BOT CHORD 13-14=-362/308, 12-13=-295/605, 10-11=-245/584, 6-10=-388/123
WEBS 4-12=-130/294, 5-10=-350/138, 7-10=-196/813, 2-13=-18/532

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 7-10-15, Exterior(2R) 7-10-15 to 12-1-14, Interior(1) 12-1-14 to 17-8-4 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14 except (jt=lb) 8=116.
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) 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.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	B11	Half Hip	1	1	I43262512

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:01:07 2020 Page 1
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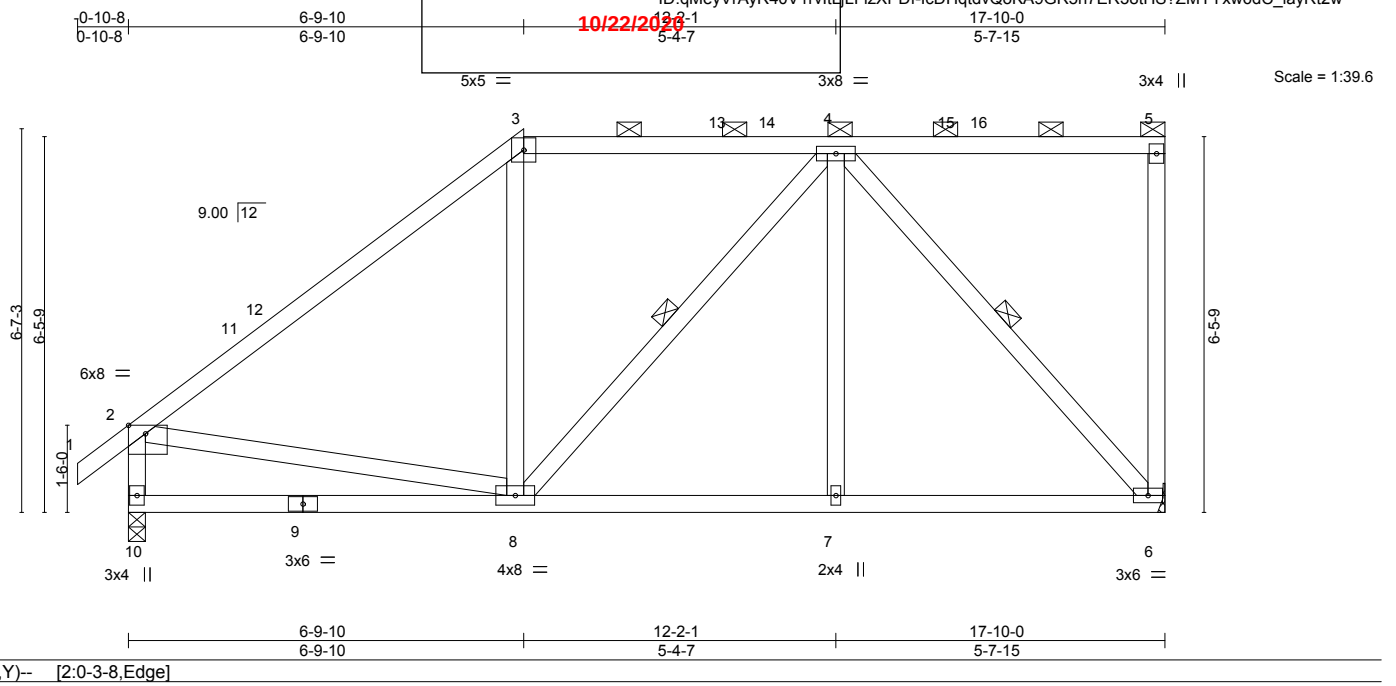

Plate Offsets (X,Y)-- [2:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	-0.04	8-10	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.09	8-10	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 91 lb	FT = 20%
BCDL	10.0											

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

REACTIONS. (size) 6=Mechanical, 10=0-3-8
Max Horz 10=224(LC 13)
Max Uplift 6=-105(LC 11), 10=-89(LC 14)
Max Grav 6=787(LC 2), 10=863(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-840/132, 3-4=-557/151, 2-10=-796/146
BOT CHORD 8-10=-386/374, 7-8=-156/522, 6-7=-156/522
WEBS 4-6=-758/144, 2-8=0/358

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-9-10, Exterior(2R) 6-9-10 to 11-0-8, Interior(1) 11-0-8 to 17-8-4 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10 except (jt=lb) 6=105.
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) 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.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	B12	Half Hip	1	1	I43262513

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:01:10 2020 Page 1
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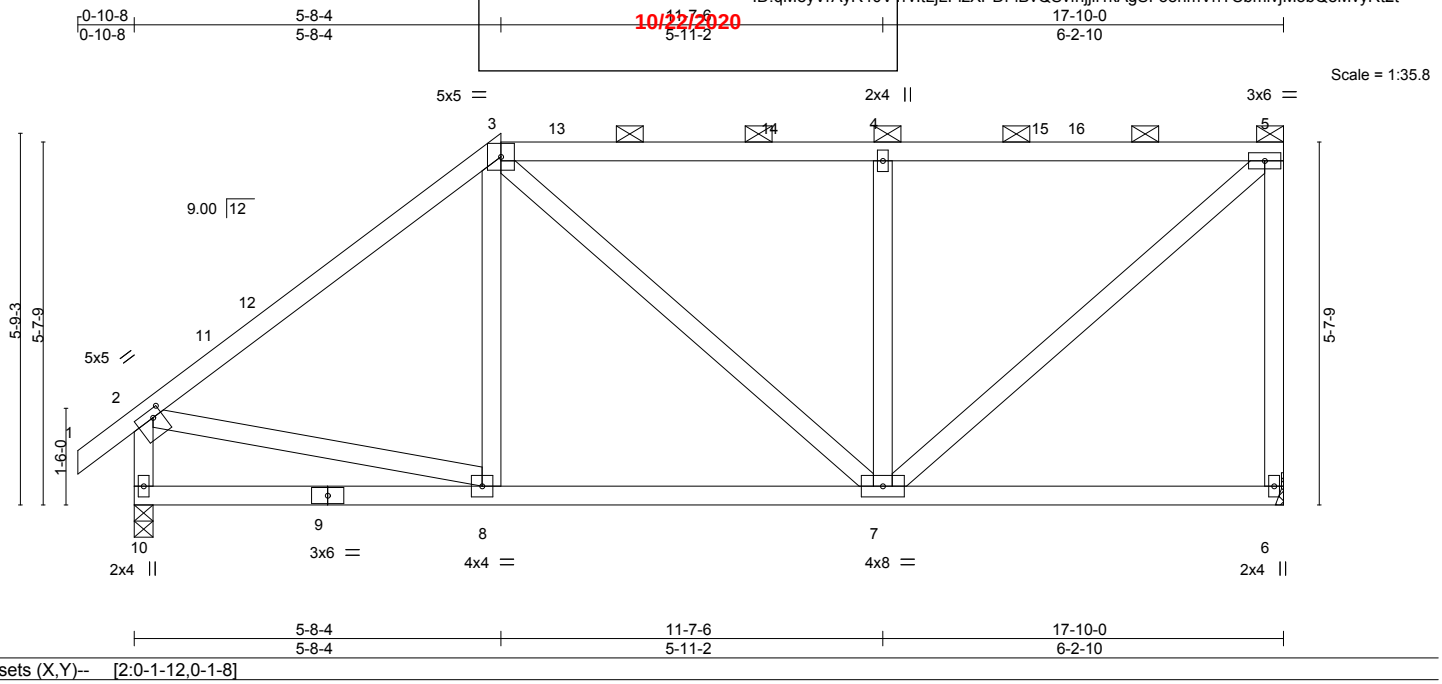

Plate Offsets (X,Y)-- [2:0-1-12,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	-0.03	6-7	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.07	6-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 86 lb	FT = 20%
BCDL	10.0											

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.): 3-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 6=Mechanical, 10=0-3-8
Max Horz 10=195(LC 13)
Max Uplift 6=-99(LC 11), 10=-90(LC 14)
Max Grav 6=787(LC 2), 10=863(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-847/127, 3-4=-644/148, 4-5=-643/147, 5-6=-729/131, 2-10=-811/141
BOT CHORD 8-10=-325/288, 7-8=-210/586
WEBS 4-7=-482/120, 5-7=-137/823, 2-8=-3/462

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-8-4, Exterior(2R) 5-8-4 to 9-11-3, Interior(1) 9-11-3 to 17-8-4 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 10.
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) 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.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	B13	Half Hip	1	1	I43262514

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:01:13 2020 Page 1
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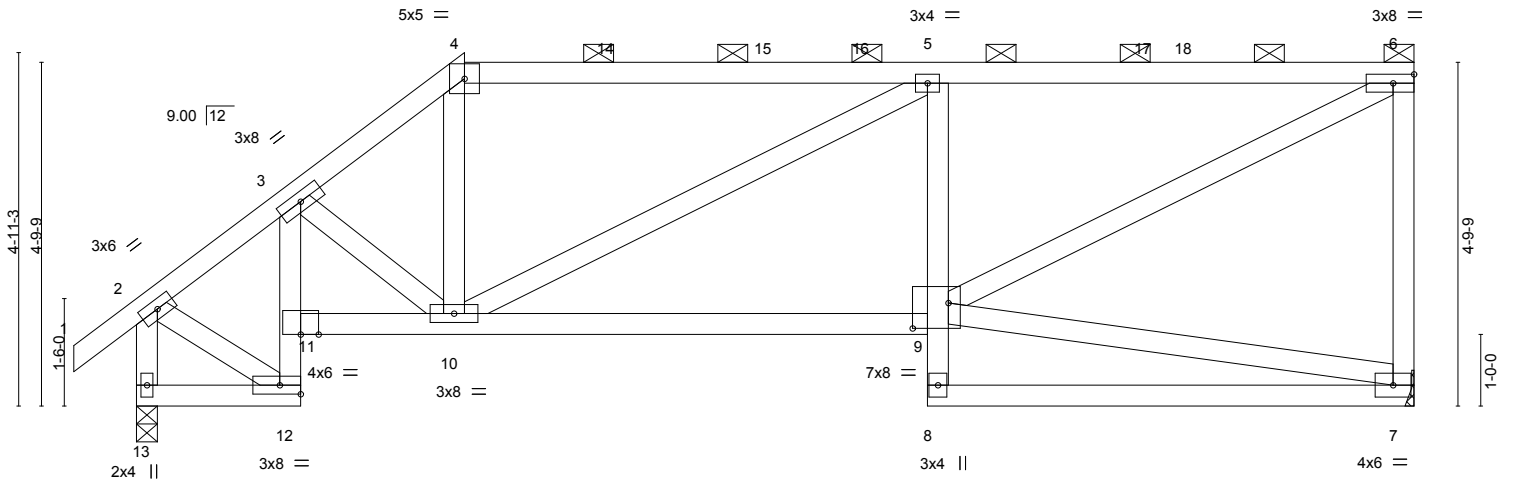
Scale: 3/8"=1'



2-3-8	4-6-15	11-0-8	17-10-0
2-3-8	2-3-7	6-5-9	6-9-8

Plate Offsets (X,Y)-- [9:0-6-0,0-4-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	-0.06	9-10	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.14	9-10	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.08	7	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 89 lb	FT = 20%
BCDL	10.0											

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 (5-1-1 max.): 4-6.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 7=Mechanical, 13=0-3-8
Max Horz 13=166(LC 13)
Max Uplift 7=-92(LC 11), 13=-92(LC 14)
Max Grav 7=787(LC 2), 13=863(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-726/110, 3-4=-983/170, 4-5=-787/165, 5-6=-1048/152, 6-7=-719/132, 2-13=-923/129
BOT CHORD 3-11=-289/22, 10-11=-328/689, 9-10=-215/1066, 5-9=-373/136
WEBS 4-10=-16/292, 5-10=-372/50, 6-9=-196/1136, 2-12=-34/582

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-12, Interior(1) 2-1-12 to 4-6-15, Exterior(2R) 4-6-15 to 8-9-14, Interior(1) 8-9-14 to 17-8-4 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 13.
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) 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.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

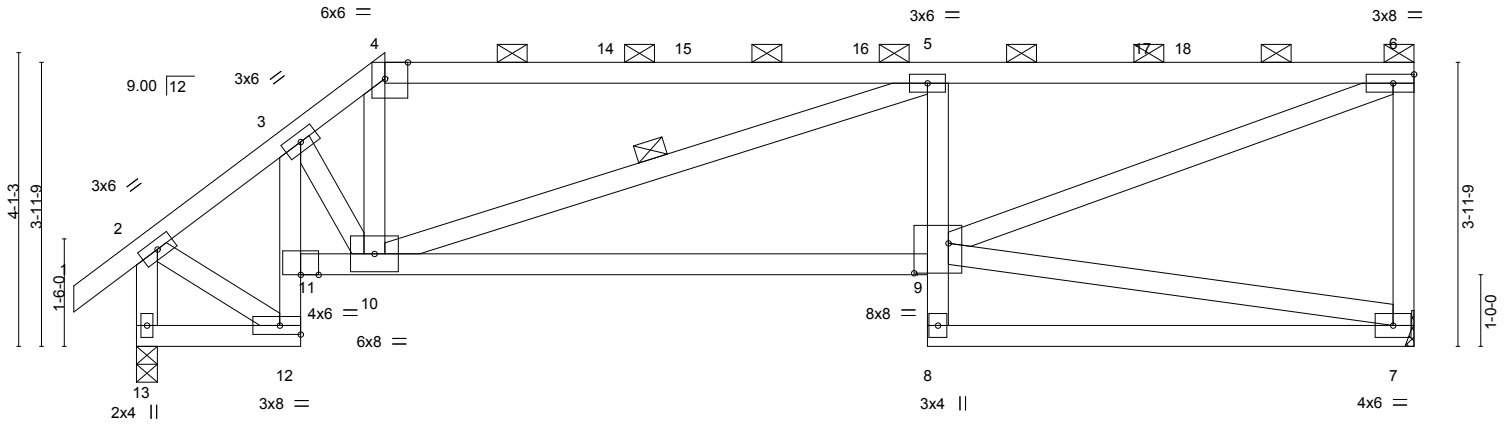
Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	B14	Half Hip	1	1	I43262515

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:01:16 2020 Page 1
ID:qMeyVrAyR40V1nvItLjLFlzXPDf-XLGhjykYJZSulfdppWvYw1llLdYb9bWFAXtyaYyRt2n

-0-10-8 2-3-8 3-5-10 11-0-8 17-10-0
0-10-8 2-3-8 1-2-2 7-6-14 6-9-8

Scale: 3/8"=1'



2-3-8 3-5-10 11-0-8 17-10-0
2-3-8 1-2-2 7-6-14 6-9-8

Plate Offsets (X,Y)-- [4:0-3-13,Edge], [9:0-5-12,0-5-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	-0.10	9-10	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.21	9-10	>980	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.09	7	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 86 lb	FT = 20%
BCDL	10.0											

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 (4-5-1 max.): 4-6.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 5-10

REACTIONS. (size) 7=Mechanical, 13=0-3-8
Max Horz 13=137(LC 13)
Max Uplift 7=-87(LC 11), 13=-93(LC 14)
Max Grav 7=787(LC 2), 13=863(LC 2)

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

TOP CHORD	2-3=-722/109, 3-4=-992/166, 4-5=-886/168, 5-6=-1385/167, 6-7=-715/118, 2-13=-917/131
BOT CHORD	3-11=-469/1, 10-11=-249/620, 9-10=-234/1453, 5-9=-359/127
WEBS	3-10=-18/515, 4-10=0/284, 5-10=-640/66, 6-9=-209/1433, 2-12=-30/570

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-12, Interior(1) 2-1-12 to 3-5-10, Exterior(2R) 3-5-10 to 7-8-8, Interior(1) 7-8-8 to 17-8-4 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 13.
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) 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.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	B15	Half Hip Girder	1	1	I43262516

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:01:19 2020 Page 1
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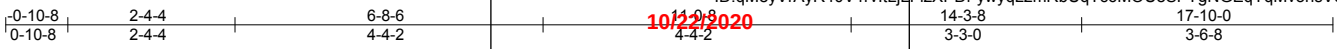

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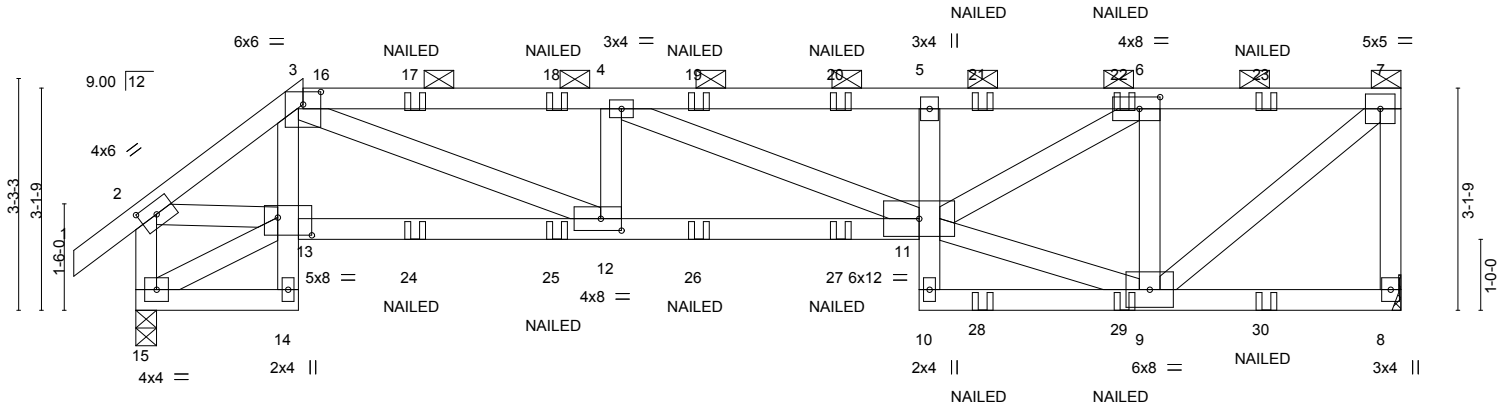


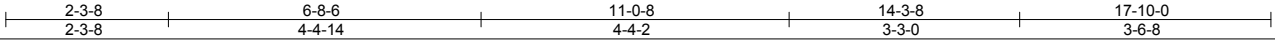


Plate Offsets (X,Y)-- [2:0-2-14,0-2-0], [3:0-3-0,0-2-2], [6:0-3-8,0-2-0], [12:0-3-8,0-2-0], [13:0-5-12,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.17	11-12	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.28	11-12	>744	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.51	Horz(CT)	0.12	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 84 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
11-13: 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-1-5 oc purlins, except end verticals, and 2-0-0 oc purlins (2-7-4 max.): 3-7.
BOT CHORD Rigid ceiling directly applied or 9-8-11 oc bracing.

REACTIONS. (size) 8=Mechanical, 15=0-3-8
Max Horz 15=108(LC 34)
Max Uplift 8=-187(LC 7), 15=-231(LC 10)
Max Grav 8=1422(LC 1), 15=1516(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2038/346, 3-4=-3482/513, 4-5=-3393/471, 5-6=-3267/453, 6-7=-1484/217, 7-8=-1366/199, 2-15=-1472/245
BOT CHORD 12-13=-343/1710, 11-12=-554/3478, 5-11=-437/107
WEBS 3-12=-258/1935, 4-12=-546/119, 9-11=-201/1364, 6-11=-322/2072, 6-9=-1514/285, 7-9=-252/1899, 2-13=-237/1616

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=187, 15=231.
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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 255 lb down and 95 lb up at 2-4-4 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).

October 20,2020

LOAD CASE(S) Standard

Continued on page 2

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-60, 2-3=-60, 3-7=-60, 14-15=-20, 11-13=-20, 8-10=-20
   Concentrated Loads (lb)
   Vert: 3=-232 17=-113(B) 18=-113(B) 19=-113(B) 20=-113(B) 21=-137(B) 22=-137(B) 23=-137(B) 24=-64(B) 25=-64(B) 26=-64(B) 27=-64(B) 28=-40(B) 29=-40(B) 30=-40(B)

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	C1	Common Supported Gable	1	1	I43262517

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:01:49 2020 Page 1
ID:qMeyVrAyR40V1rvItLjLFIzXPDf-3imAeE7FXicDCke9Fx?Hm?cY7wzoOYW6mANCE8yRt2G

-0-10-8 9-3-8 18-7-0 19-5-8
0-10-8 9-3-8 9-3-8 0-10-8

Scale = 1:49.5

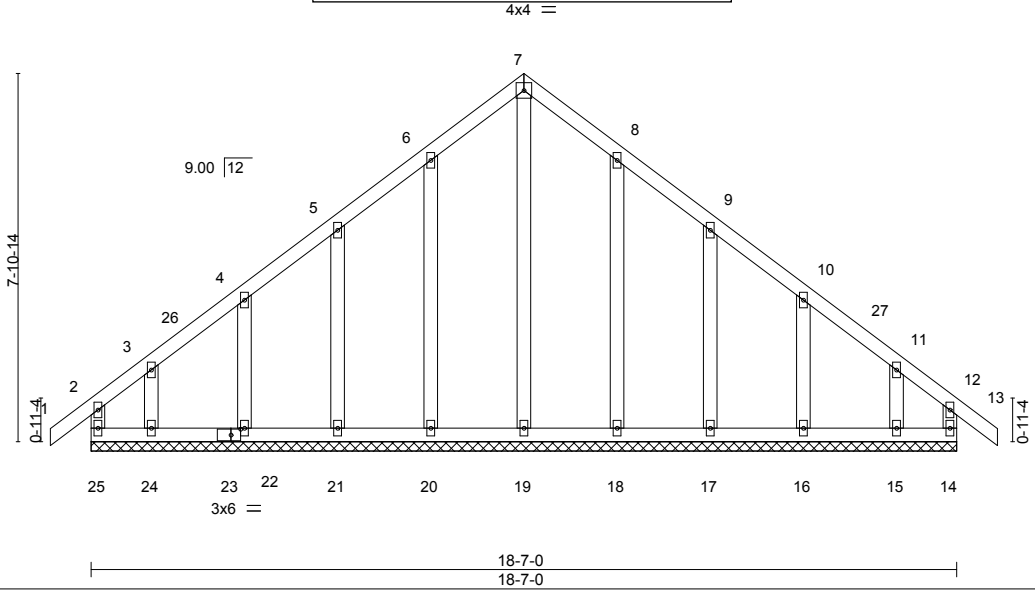


Plate Offsets (X,Y)-- [23:0-2-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	13	n/r	120	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00	13	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.23	Horz(CT)	-0.00	14	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 93 lb	FT = 20%
BCDL	10.0											

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.

REACTIONS. All bearings 18-7-0.
(lb) - Max Horz 25=193(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 25, 14, 20, 21, 22, 24, 18, 17, 16, 15
Max Grav All reactions 250 lb or less at joint(s) 25, 14, 19, 20, 21, 22, 24, 18, 17, 16, 15

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 6-7=-134/254, 7-8=-134/254

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=15ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 9-3-8, Corner(3R) 9-3-8 to 12-3-8, Exterior(2N) 12-3-8 to 19-5-8 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) 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 25, 14, 20, 21, 22, 24, 18, 17, 16, 15.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

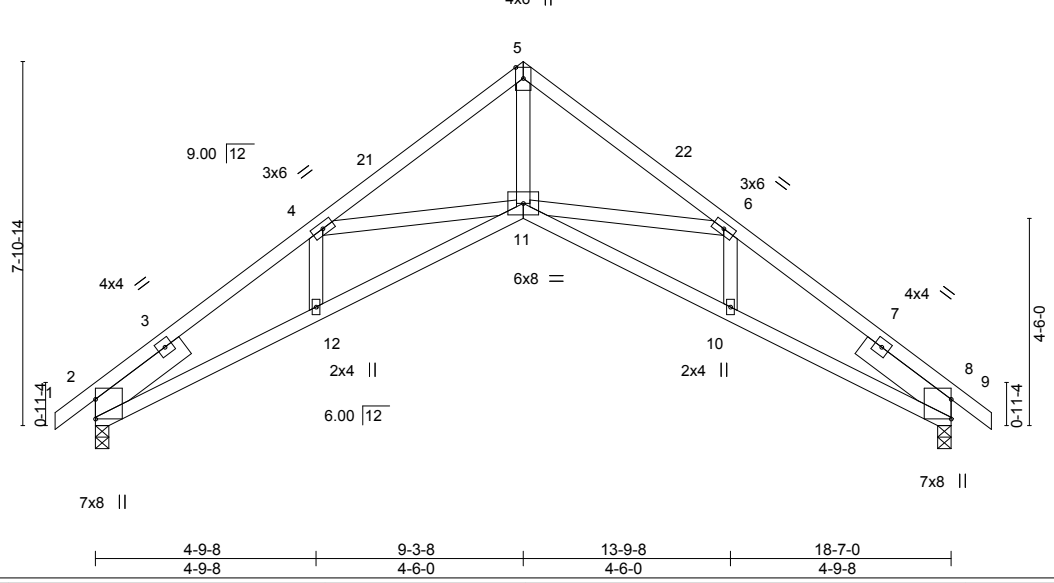
Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	C2	Scissor	6	1	I43262518

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:01:51 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-04tw3w9V3KswR1oYMM1lrPilakRNsPcPDTsJJ1yRt2E

-0-10-8 4-9-8 9-3-8 13-9-8 18-7-0 19-5-8
0-10-8 4-9-8 4-6-0 4-6-0 4-9-8 0-10-8

Scale = 1:50.0



4-9-8 9-3-8 13-9-8 18-7-0
4-9-8 4-6-0 4-6-0 4-9-8

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.16	11-12	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.30	11-12	>738	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.34	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 79 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x6 SPF No.2 2-6-0, Right 2x6 SPF No.2 2-6-0

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

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=-170(LC 12)
Max Uplift 2=-94(LC 14), 8=-94(LC 14)
Max Grav 2=897(LC 2), 8=897(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1927/167, 4-5=-1706/75, 5-6=-1706/71, 6-8=-1927/170
BOT CHORD 2-12=-63/1641, 11-12=-63/1693, 10-11=-68/1640, 8-10=-68/1583
WEBS 5-11=0/1580

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 9-3-8, Exterior(2R) 9-3-8 to 12-3-8, Interior(1) 12-3-8 to 19-5-8 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Bearing at joint(s) 2, 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.
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) 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.

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	C3	GABLE	1	1	I43262519

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:01:54 2020 Page 1
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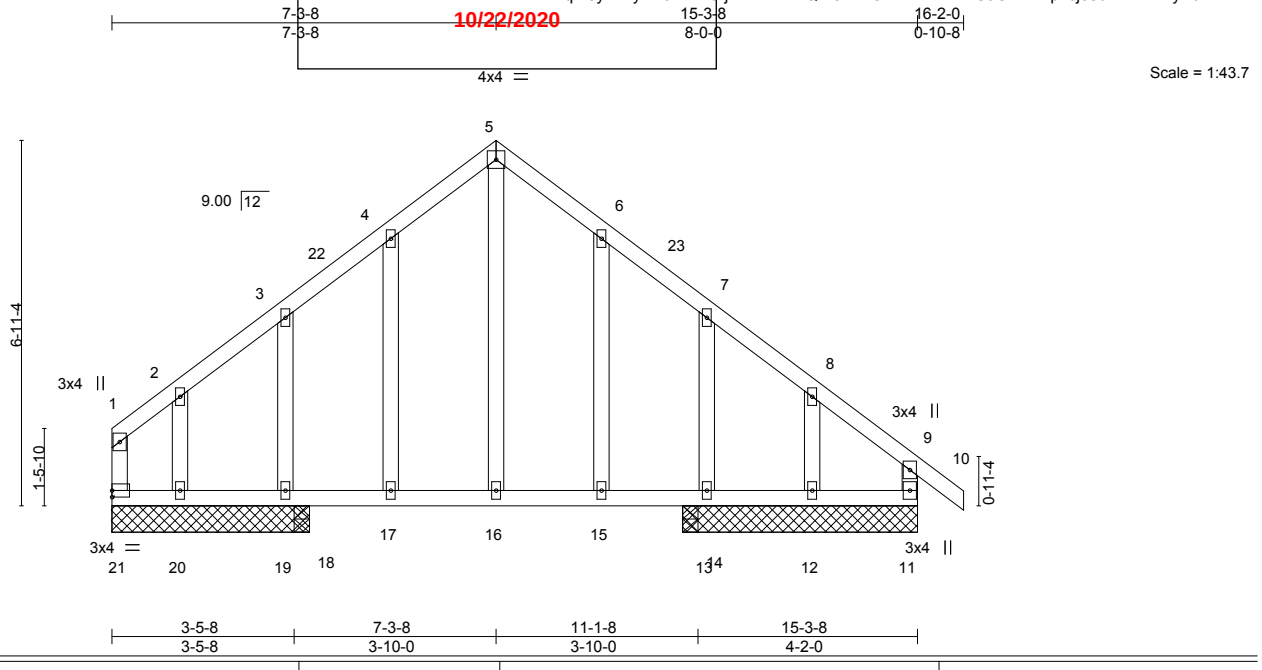

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	-0.02	16	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.03	16	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	11	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 73 lb	FT = 20%
BCDL	10.0											

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.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS. All bearings 3-9-0 except (jt=length) 11=4-5-8, 13=4-5-8, 12=4-5-8, 18=0-3-8, 14=0-3-8.
(lb) - Max Horz 21=-173(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 12 except 19=-113(LC 24), 20=-182(LC 25), 13=-151(LC 25)
Max Grav All reactions 250 lb or less at joint(s) 20, 12 except 21=416(LC 25), 11=375(LC 2), 18=483(LC 2), 14=512(LC 25)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-317/0, 3-4=-277/56, 6-7=-277/60, 8-9=-308/0, 1-21=-279/0, 9-11=-318/2

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-3-8, Interior(1) 3-3-8 to 7-3-8, Exterior(2R) 7-3-8 to 10-3-8, Interior(1) 10-3-8 to 16-2-0 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
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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable studs spaced at 2-0-0 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) 12 except (jt=lb) 19=113, 20=182, 13=151.
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.
11) 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.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	C4	Common	1	1	I43262520

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:01:57 2020 Page 1
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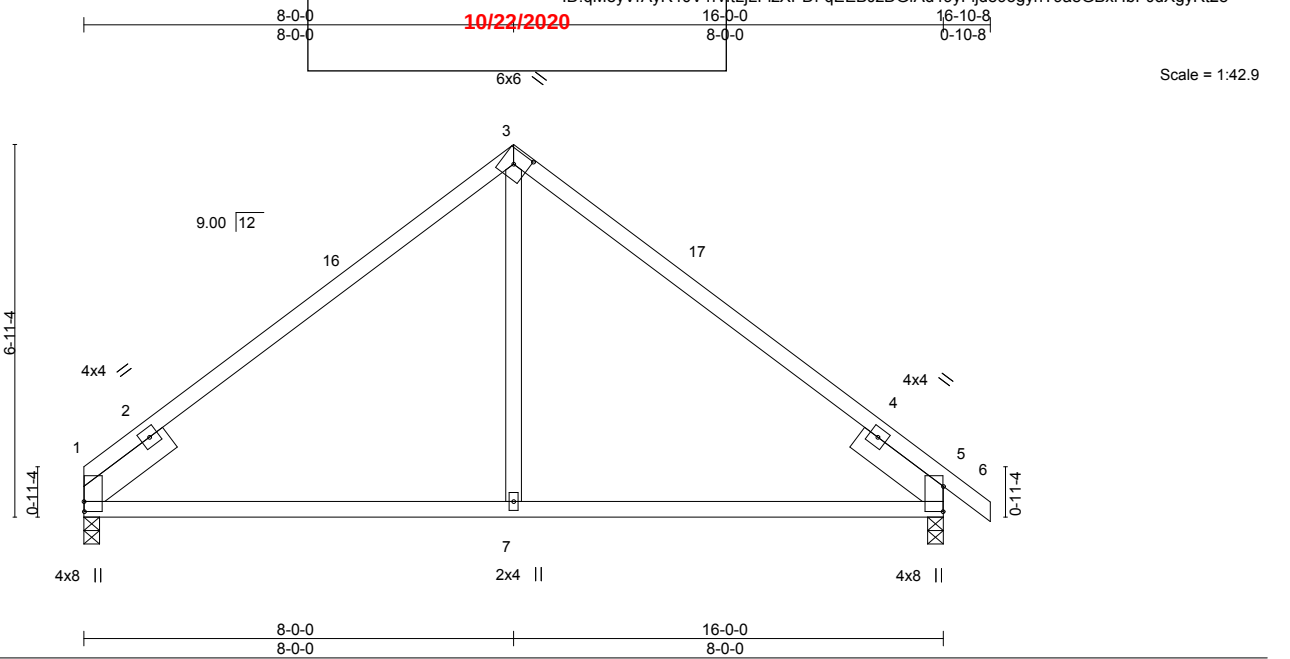

Plate Offsets (X,Y)-- [1:0-2-4,0-0-1], [3:0-3-4,0-3-0], [5:0-5-10,0-0-1]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.63	Vert(LL)	-0.12	7-10	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.19	7-10	>996	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.06	1	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 57 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
SLIDER	Left 2x6 SPF No.2 2-0-0, Right 2x6 SPF No.2 2-0-0

BRACING-

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

REACTIONS. (size) 1=0-3-8, 5=0-3-8
Max Horz 1=-143(LC 12)
Max Uplift 1=-58(LC 14), 5=-85(LC 14)
Max Grav 1=718(LC 2), 5=783(LC 2)

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

TOP CHORD	1-3=-629/153, 3-5=-629/153
BOT CHORD	1-7=0/503, 5-7=0/503
WEBS	3-7=0/343

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 8-0-0, Exterior(2R) 8-0-0 to 11-0-0, Interior(1) 11-0-0 to 16-10-8 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 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.
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.

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER
PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	C5	Roof Special	3	1	I43262521

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:01:59 2020 Page 1
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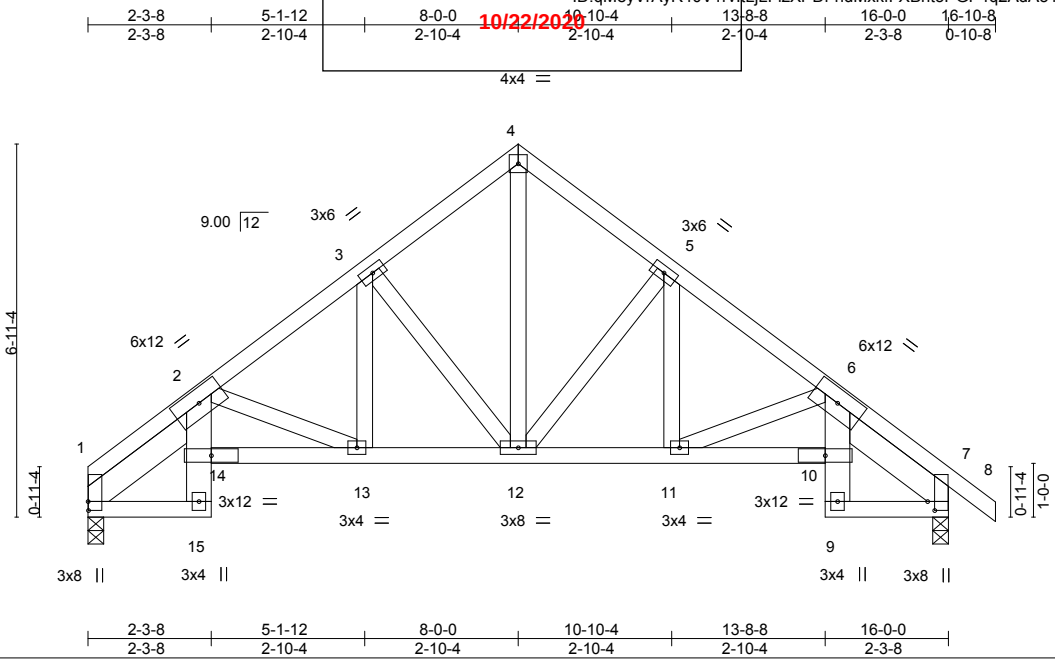

Plate Offsets (X,Y)-- [1:0-2-0,0-0-1], [7:0-2-0,0-1-9]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	-0.03	13	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.06	13-14	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.07	7	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 88 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except* 2-15,6-9: 2x6 SPF No.2
WEBS	2x4 SPF No.2
SLIDER	Left 2x6 SPF No.2 2-5-8, Right 2x6 SPF No.2 2-5-8

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=-143(LC 12)
Max Uplift 1=-58(LC 14), 7=-85(LC 14)
Max Grav 1=718(LC 2), 7=783(LC 2)

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

TOP CHORD	1-2=-292/65, 2-3=-988/153, 3-4=-711/167, 4-5=-711/166, 5-6=-984/151, 6-7=-257/63
BOT CHORD	1-15=-41/627, 13-14=-77/1139, 12-13=-5/755, 11-12=-10/739, 10-11=-84/1075, 7-9=-44/585
WEBS	4-12=-126/584, 5-12=-348/103, 6-11=-362/79, 3-12=-372/103, 2-13=-414/78

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 8-0-0, Exterior(2R) 8-0-0 to 10-10-4, Interior(1) 10-10-4 to 16-10-8 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 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.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	C6	Roof Special	1	1	I43262522

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:01 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-j?Ui9LGniO7WeaZTyTC5FW6atmziCz4tW1HqgRyRt24

1-10-6	4-7-12	7-6-14	10-6-0	13-3-6	15-6-14	16-5-6
1-10-6	2-9-6	2-11-2	2-11-2	2-9-6	2-3-8	0-10-8

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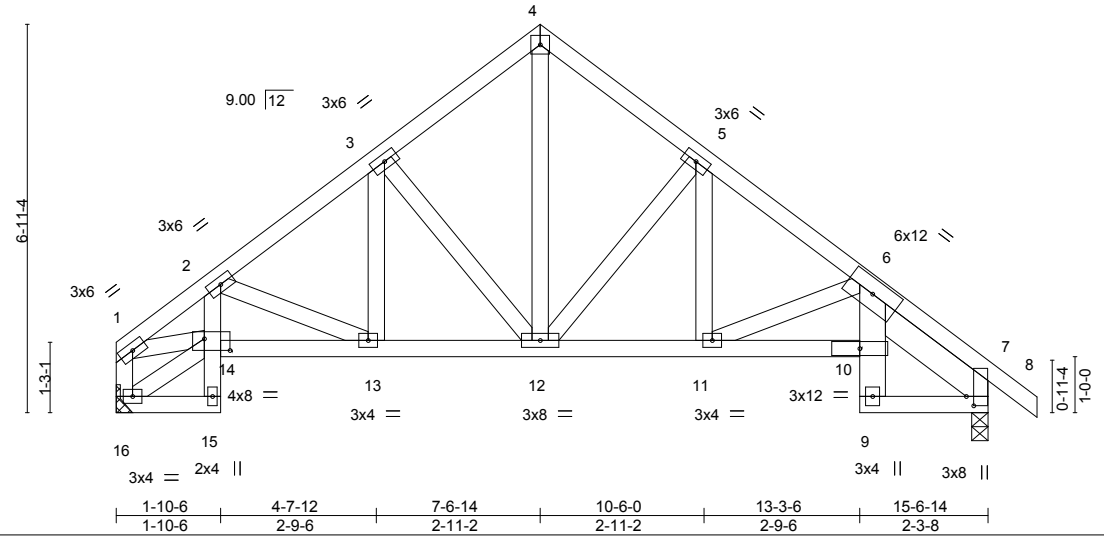

Plate Offsets (X,Y)-- [7:0-2-0,0-1-9], [14:0-5-8,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	-0.03	11	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.05	10-11	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.20	Horz(CT)	-0.06	16	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 85 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except* 6-9: 2x6 SPF No.2
WEBS	2x4 SPF No.2
SLIDER	Right 2x6 SPF No.2 2-5-8

BRACING-

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

REACTIONS. (size) 7=0-3-8, 16=Mechanical
Max Horz 7=-164(LC 12)
Max Uplift 7=-83(LC 14), 16=-56(LC 14)
Max Grav 7=757(LC 2), 16=692(LC 2)

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

TOP CHORD	1-2=-1068/169, 2-3=-886/163, 3-4=-668/178, 4-5=-667/171, 5-6=-942/169, 1-16=-654/105
BOT CHORD	13-14=-146/880, 12-13=-72/665, 11-12=-90/719, 10-11=-190/1076, 7-9=-106/592
WEBS	4-12=-134/525, 3-12=-287/99, 5-12=-365/118, 6-11=-385/108, 1-14=-122/799

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 7-6-14, Exterior(2R) 7-6-14 to 10-6-0, Interior(1) 10-6-0 to 16-5-6 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 16.
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) 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.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	CJ1	Diagonal Hip Girder	1	1	I43262523

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:02 2020 Page 1
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4-0-9

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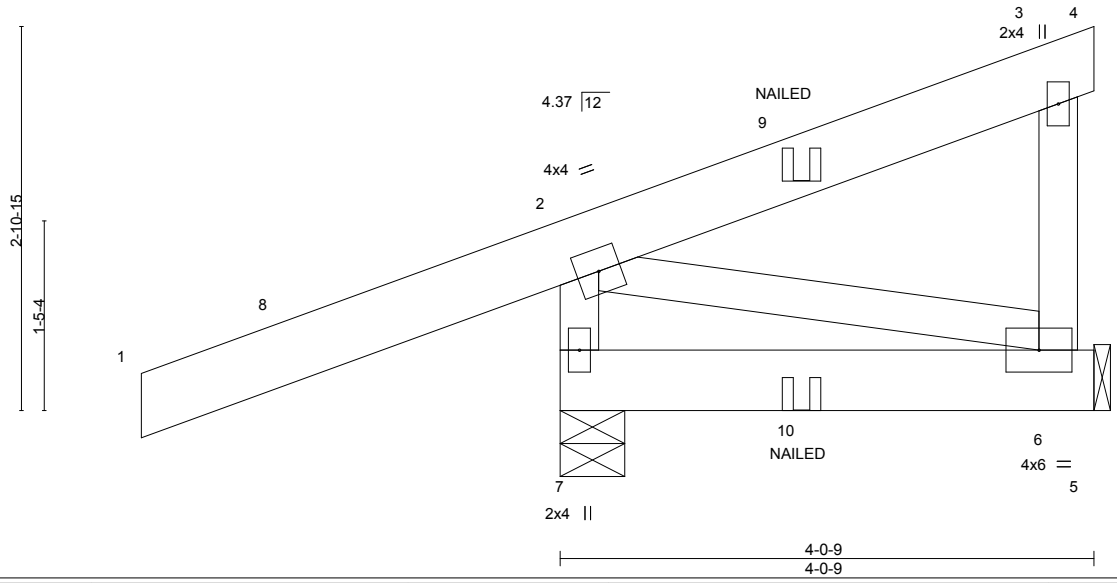

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.00	6-7	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	6-7	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.01	Horz(CT)	-0.00	6	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 28 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-0-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=0-5-14, 6=Mechanical
Max Horz 7=99(LC 9)
Max Uplift 7=-183(LC 12), 6=-51(LC 9)
Max Grav 7=520(LC 17), 6=81(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-497/192

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 7=183.
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) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-60, 2-3=-60, 3-4=-60, 5-7=-20
Concentrated Loads (lb)
Vert: 9=56(F) 10=26(F)

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	CJ2	Diagonal Hip Girder	1	1	I43262524

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:08 2020 Page 1
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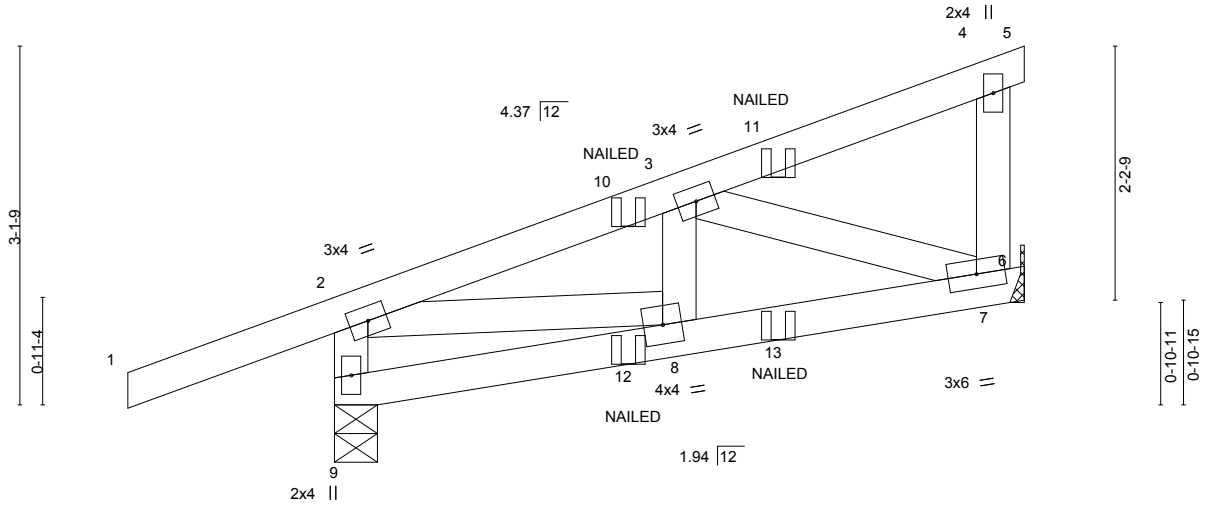

3-0-2 / 3-0-2 | 6-0-3 / 3-0-2

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	-0.01	8	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.01	8	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.09	Horz(CT)	0.00	7	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 26 lb	FT = 20%
BCDL	10.0											

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 6-0-0 oc bracing.

REACTIONS. (size) 9=0-4-8, 7=Mechanical
Max Horz 9=93(LC 9)
Max Uplift 9=-88(LC 12), 7=-40(LC 9)
Max Grav 9=453(LC 17), 7=325(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-9=-424/107, 2-3=-422/31
BOT CHORD 7-8=-64/355
WEBS 2-8=-8/349, 3-7=-364/51

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) 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.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 7.
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) "NAILED" indicates 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
11) 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-60, 2-4=-60, 4-5=-60, 6-9=-20
Concentrated Loads (lb)
Vert: 12=-20(F) 13=-4(B)

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	CJ3	Jack-Open	1	1	I43262525

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:11 2020 Page 1
ID:qMeyVrAyR40V1rvItLiLFlzXPDf-Qw5UFlO2MTO5r6KOXZORfdXIYoT8YYcLpbiM?syRt1w

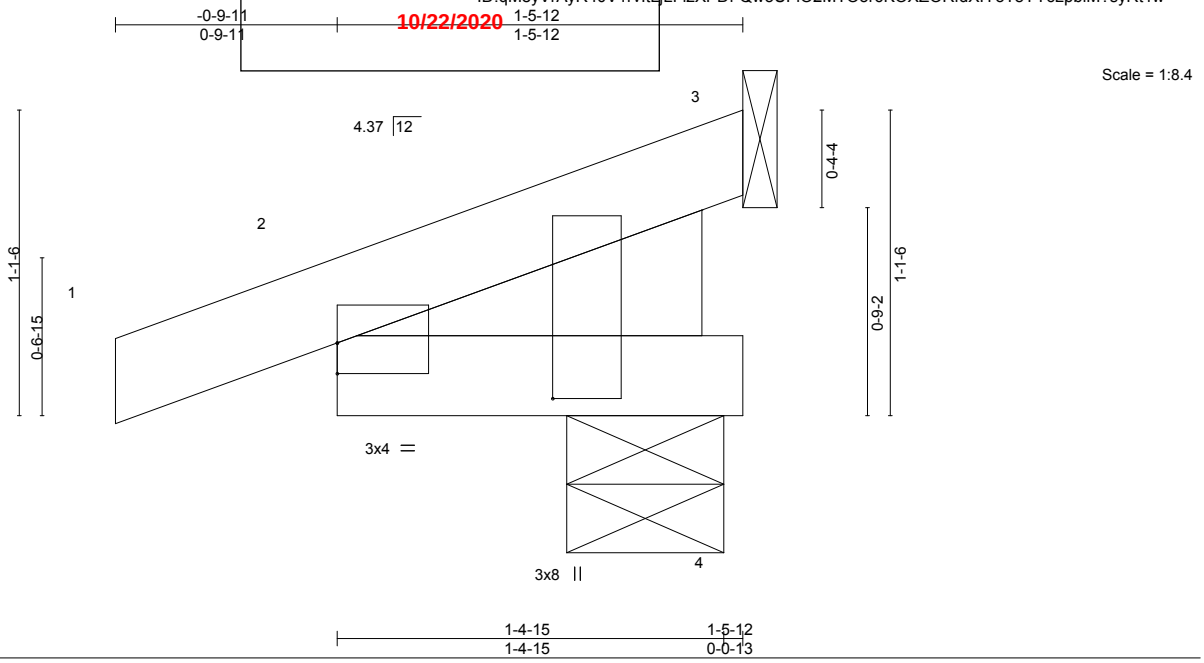

Plate Offsets (X,Y)-- [2:0-0-0,0-1-5], [2:0-2-7,0-9-7]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 7 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-5-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-6-14
Max Horz 2=27(LC 16)
Max Uplift 3=-150(LC 21), 2=-70(LC 16)
Max Grav 3=35(LC 16), 2=360(LC 21)

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 3=150.
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.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	CJ4	Jack-Open	2	1	I43262526

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:11 2020 Page 1
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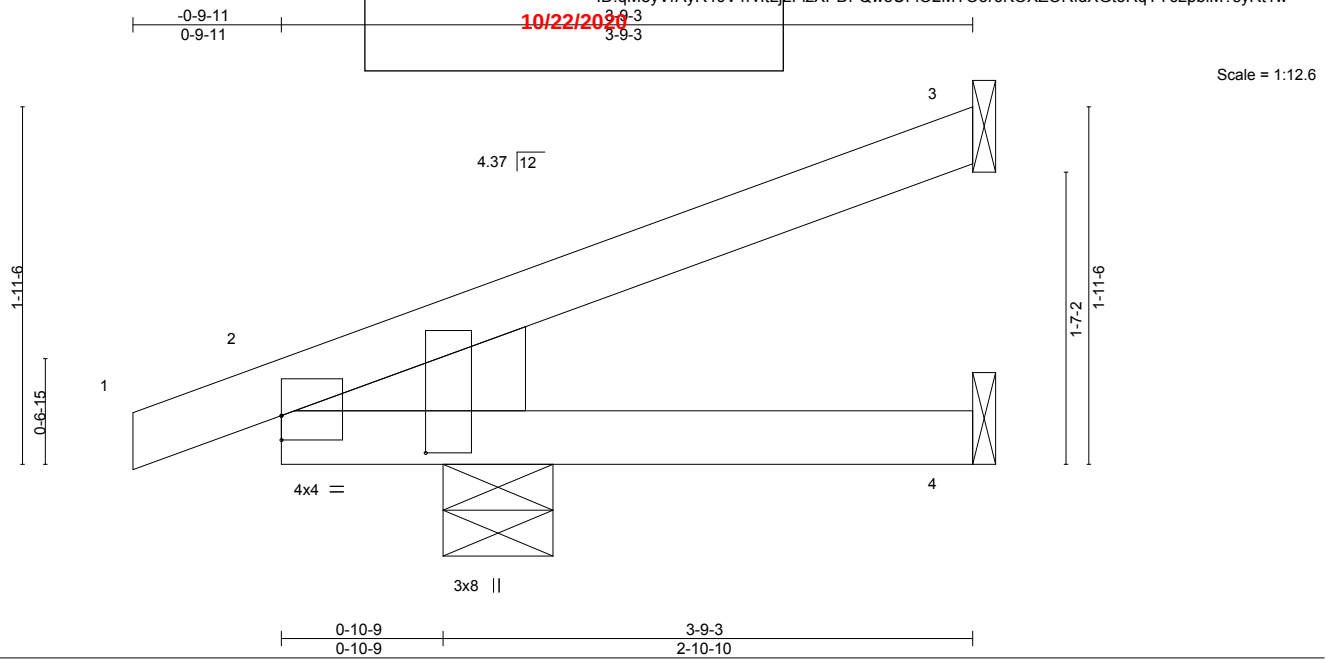

Plate Offsets (X,Y)-- [2:0-0-0,0-1-9], [2:0-2-7,0-9-7]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	-0.02	5	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	-0.02	5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 12 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-9-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-7-3, 4=Mechanical
Max Horz 2=50(LC 16)
Max Uplift 3=-19(LC 16), 2=-45(LC 16), 4=-12(LC 21)
Max Grav 3=73(LC 21), 2=406(LC 21), 4=33(LC 7)

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.
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.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	CJ5	Jack-Open	1	1	I43262527

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:12 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-u7esT5Pg7nWyTGva5GvgCr3QaCokH?sU2FRwXJyRt1v

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1-9-10 1-8-7

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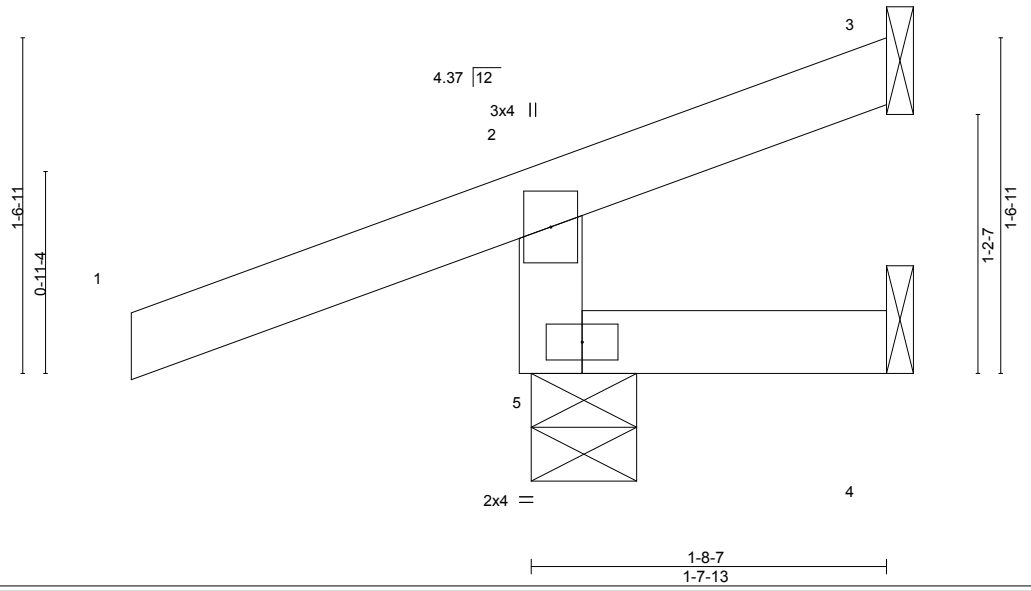

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	0.00	4-5	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	0.00	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCLL	0.0	Code IRC2018/TPI2014		Matrix-MR							Weight: 7 lb	FT = 20%
BCDL	10.0											

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 1-8-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 5=0-5-14
Max Horz 5=61(LC 16)
Max Uplift 3=-35(LC 20), 4=-13(LC 21), 5=-82(LC 16)
Max Grav 3=9(LC 12), 4=22(LC 7), 5=347(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-303/247

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Bearing at joint(s) 5 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) 3, 4, 5.
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.

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	CJ6	MONO TRUSS	1	1	I43262528

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:14 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-qVmcunRxeOmgiZ3zChx8HG9l3?T2luFnWYw0cByRt1t

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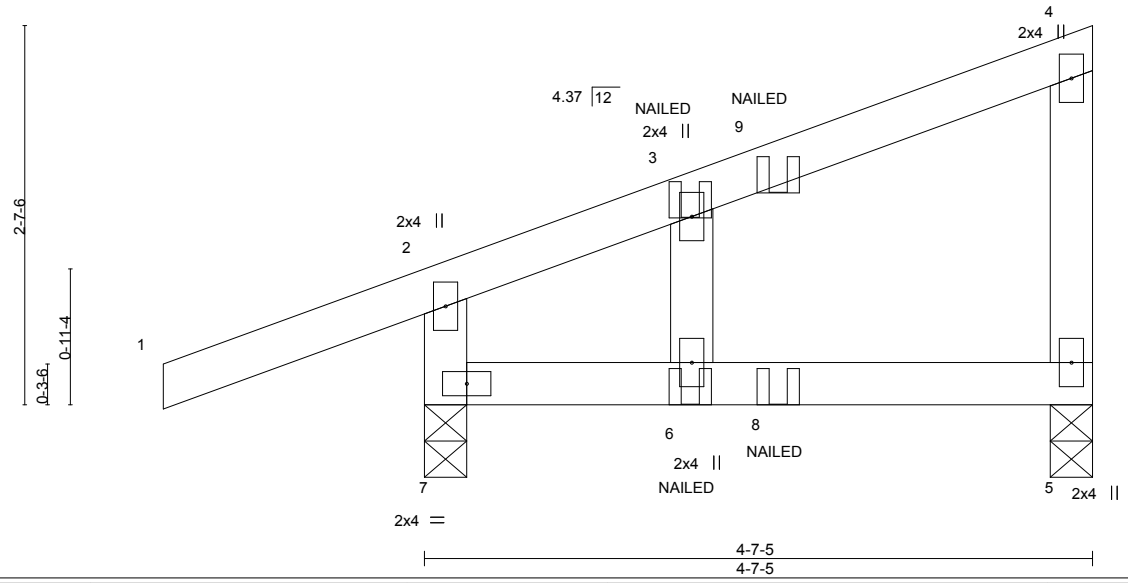

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.01	6	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.02	5-6	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.01	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 17 lb	FT = 20%
BCDL	10.0											

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 4-7-5 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 7=0-3-8
Max Horz 7=88(LC 11)
Max Uplift 5=-26(LC 9), 7=-89(LC 12)
Max Grav 5=200(LC 17), 7=452(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-370/92

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) 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.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 7.
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) "NAILED" indicates 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 5-7=-20, 1-2=-60, 2-4=-60
Concentrated Loads (lb)
Vert: 6=-12(F) 8=1(B)

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	CJ7	Jack-Open Girder	1	1	I43262529

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:16 2020 Page 1
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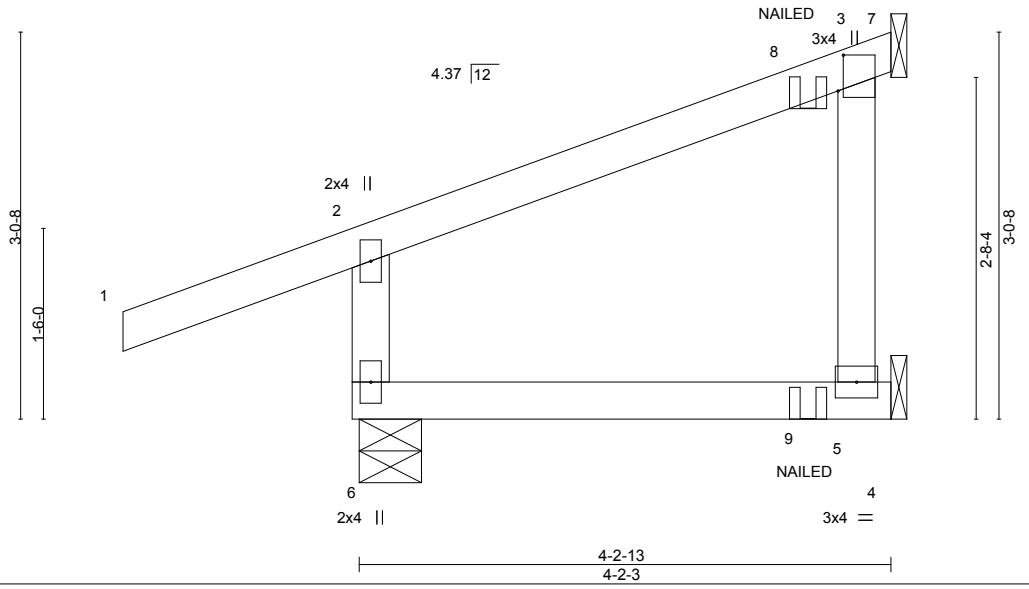

Plate Offsets (X,Y)-- [3:0-3-6,0-0-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.01	5-6	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.03	5-6	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.22	Horz(CT)	-0.13	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										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 4-2-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 6=0-5-14, 5=Mechanical, 3=Mechanical
Max Horz 6=100(LC 12)
Max Uplift 6=-121(LC 12), 5=-372(LC 10), 3=-1588(LC 12)
Max Grav 6=428(LC 17), 5=1617(LC 34), 3=438(LC 32)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-6=-390/133
WEBS 3-5=-1580/388

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=121, 5=372, 3=1588.
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) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
10) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
11) 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-60, 2-3=-60, 4-6=-20
Concentrated Loads (lb)
Vert: 9=1(B)

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	CJ8	Diagonal Hip Girder	1	1	I43262530

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:17 2020 Page 1
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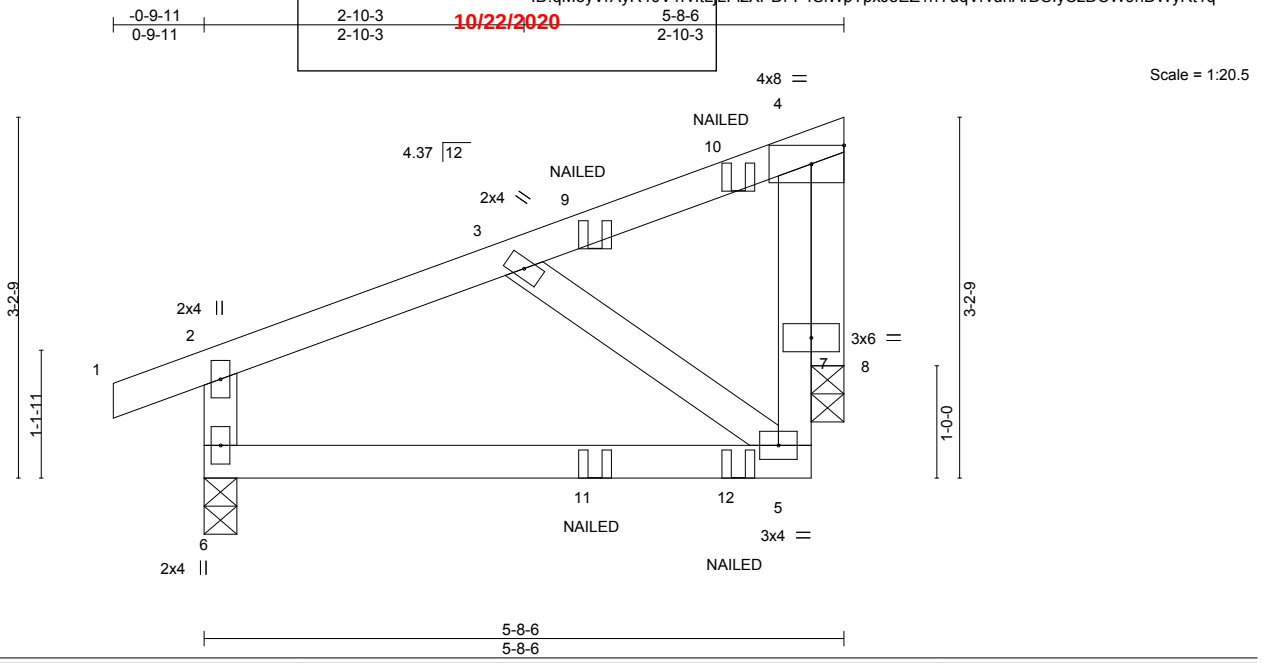

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.04	5-6	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.09	5-6	>725	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.20	Horz(CT)	0.05	6	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 23 lb	FT = 20%
BCDL	10.0											

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 5-8-6 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 6=0-3-8, 8=0-3-8
Max Horz 8=71(LC 9)
Max Uplift 6=-61(LC 12), 8=-65(LC 12)
Max Grav 6=392(LC 17), 8=301(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-6=-339/69
WEBS 4-8=-312/66

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 8.
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) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-60, 2-4=-60, 5-6=-20
Concentrated Loads (lb)
Vert: 10=-72(B) 11=3(F) 12=-20(B)

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	CJ9	Jack-Open	1	1	I43262531

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:17 2020 Page 1
ID:qMeyVrAyR40V1rvItLjLFIzXPDf-F4SlWpTpxJ8EZ1nYuqVrvunHLDWDyFqDCW9hDWyRt1q

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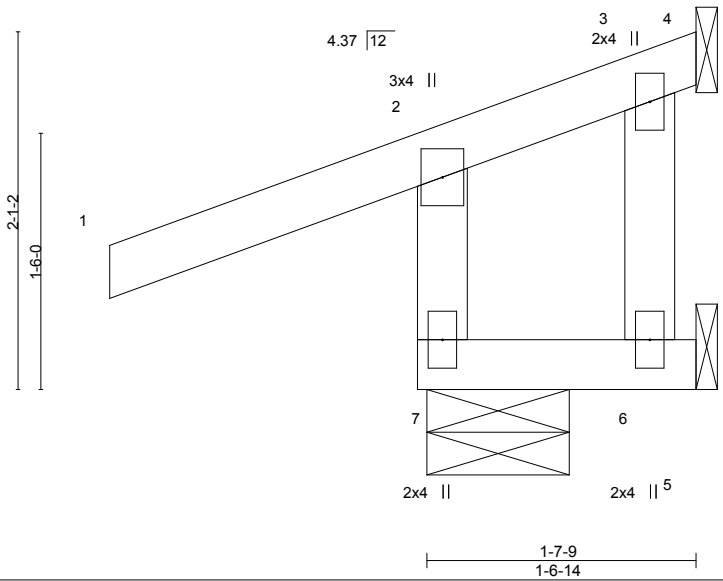

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	0.00	6	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00	6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	-0.01	4	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 9 lb	FT = 20%
BCDL	10.0											

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 1-7-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 5=Mechanical, 7=0-10-0
Max Horz 7=73(LC 16)
Max Uplift 4=-28(LC 16), 5=-60(LC 20), 7=-58(LC 16)
Max Grav 4=30(LC 28), 5=19(LC 12), 7=347(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-324/257

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5, 7.
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.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	CJ10	Diagonal Hip Girder	1	1	I43262532

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:05 2020 Page 1
ID:qMeyVrAyR40V1rvlt_jLFlzXPDf-bnjD?iKHmddx7BtEBIH1QMHDLNPx8qrSRfF2pDyRt20

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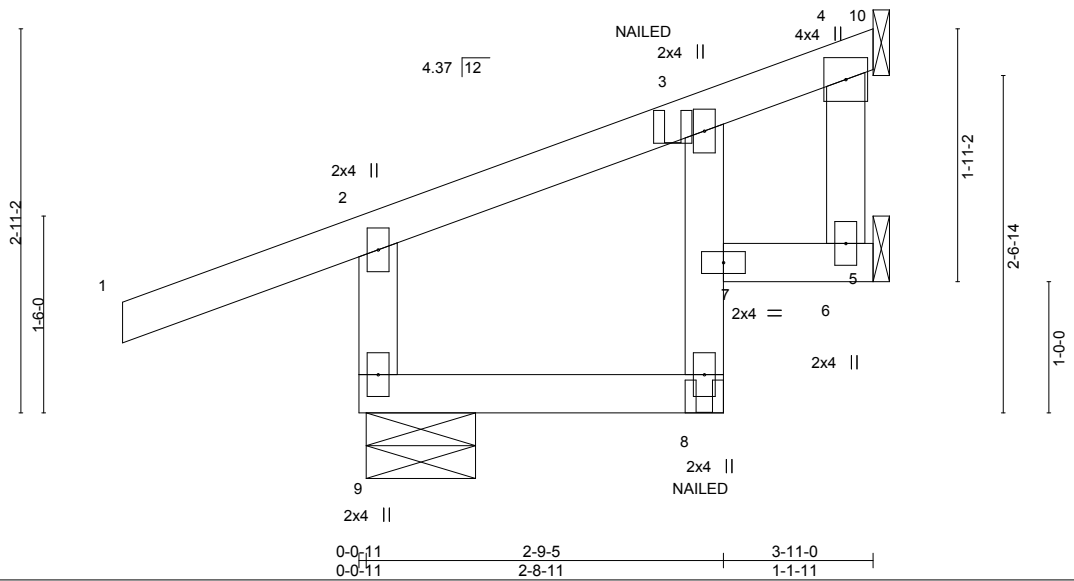

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.01	7	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.01	7	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.02	Horz(CT)	-0.01	4	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 16 lb	FT = 20%
BCDL	10.0											

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 3-11-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 9=0-10-0, 6=Mechanical, 4=Mechanical
Max Horz 9=96(LC 12)
Max Uplift 9=-61(LC 12), 6=-10(LC 28), 4=-98(LC 34)
Max Grav 9=413(LC 17), 6=201(LC 17), 4=31(LC 10)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-9=-372/84

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 6, 4.
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) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
10) "NAILED" indicates 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
11) 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-60, 2-4=-60, 8-9=-20, 5-7=-20
Concentrated Loads (lb)
Vert: 8=-3(B)

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	D1	Half Hip	1	1	I43262533

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:18 2020 Page 1
ID:qMeyVrAyR40V1rvltLLFlzXPDf-jH07j9URidG5BBMkRX04R6JN4cmRhdHNQAuElyyRt1p

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0-10-8 4-6-0 4-2-8 6-10-6

Scale = 1:44.2

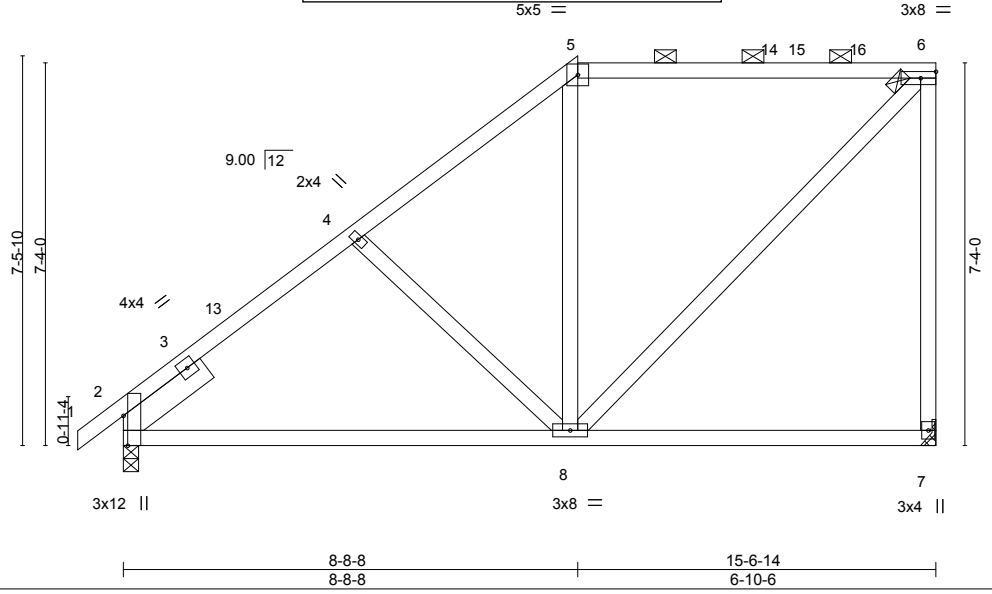

Plate Offsets (X,Y)-- [2:0-6-14,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.63	Vert(LL)	-0.07	8-11	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.15	8-11	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.32	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 75 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
SLIDER	Left 2x6 SPF No.2 2-0-0

BRACING-

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

REACTIONS. (size) 7=Mechanical, 2=0-3-8
Max Horz 2=250(LC 13)
Max Uplift 7=-107(LC 11), 2=-75(LC 14)
Max Grav 7=692(LC 2), 2=757(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-753/147, 4-5=-588/158, 5-6=-419/163, 6-7=-631/188
BOT CHORD 2-8=-309/584
WEBS 6-8=-194/563

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-8-8, Exterior(2R) 8-8-8 to 12-11-7, Interior(1) 12-11-7 to 15-5-2 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
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 7=107.
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) 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.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER
PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	D2	Half Hip	1	1	I43262534

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:25 2020 Page 1
ID:qMeyVrAyR40V1rvItLjLFlzXPDf-0dxnCYZq3m86WGO4MVekDa6c9R7yqonP1m56V2yRt1i

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0-10-8 5-0-6 4-8-14 5-9-11

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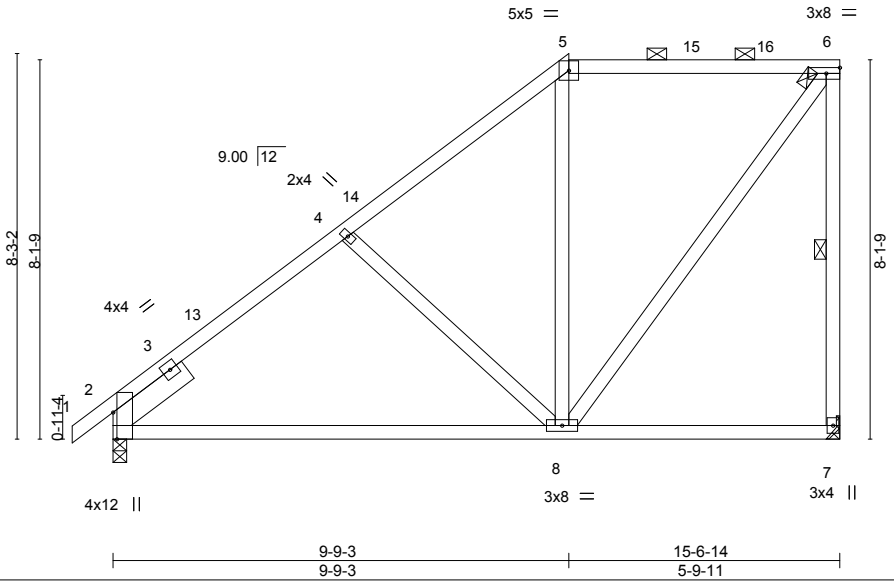

Plate Offsets (X,Y)-- [2:0-6-14,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	-0.14	8-11	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.28	8-11	>665	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.02	2	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 78 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
SLIDER	Left 2x6 SPF No.2 2-0-0

BRACING-

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

REACTIONS. (size) 7=Mechanical, 2=0-3-8
Max Horz 2=278(LC 13)
Max Uplift 7=-114(LC 11), 2=-74(LC 14)
Max Grav 7=692(LC 2), 2=757(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-703/152, 4-5=-536/162, 5-6=-356/166, 6-7=-649/199
BOT CHORD 2-8=-318/583
WEBS 4-8=-286/163, 6-8=-207/574

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 9-9-3, Exterior(2R) 9-9-3 to 14-0-2, Interior(1) 14-0-2 to 15-5-2 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
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 7=114.
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) 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.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	D3	Half Hip	1	1	I43262535

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:26 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-UpV9PuaSq4Hz8PzGvD9zmoep4rREZFSYGQqf1VyRt1h

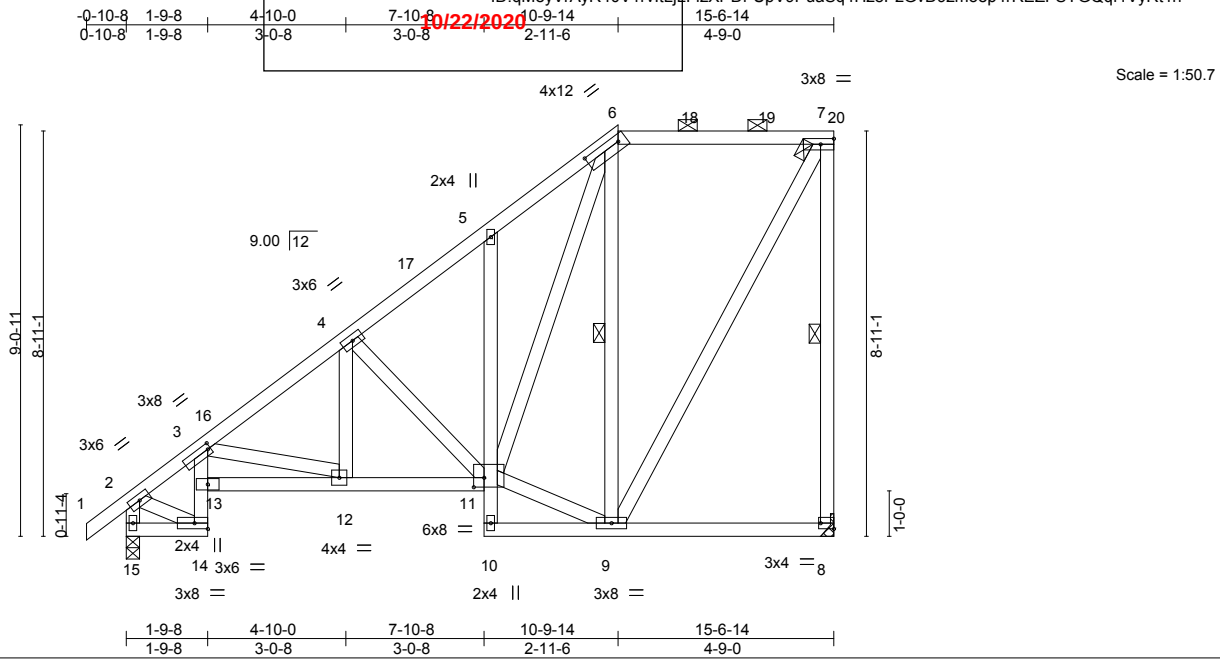

Plate Offsets (X,Y)-- [3:0-0-12,0-1-8], [6:0-9-12,0-1-12], [8:Edge,0-1-8], [11:0-2-12,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.04	12-13	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.07	12-13	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.07	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 104 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.): 6-7.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 7-8, 6-9

REACTIONS. (size) 8=Mechanical, 15=0-3-8
Max Horz 15=311(LC 13)
Max Uplift 8=-123(LC 11), 15=-75(LC 14)
Max Grav 8=685(LC 2), 15=762(LC 2)

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

TOP CHORD	2-3=-708/93, 3-4=-936/123, 4-5=-658/147, 5-6=-614/226, 6-7=-280/173, 7-8=-640/215, 2-15=-830/129
BOT CHORD	14-15=-434/350, 12-13=-733/1135, 11-12=-416/776
WEBS	9-11=-157/282, 6-11=-295/603, 6-9=-507/326, 7-9=-224/562, 4-11=-380/176, 3-12=-389/327, 2-14=-50/472

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-9-14, Exterior(2R) 10-9-14 to 15-0-13, Interior(1) 15-0-13 to 15-5-2 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
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15 except (jt=lb) 8=123.
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) 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.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	D4	Roof Special	1	1	I43262536

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:28 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-QCcvqZbjLhXgNj7f1dBRrDk8Ee7i18OrkkJm6NyRt1f

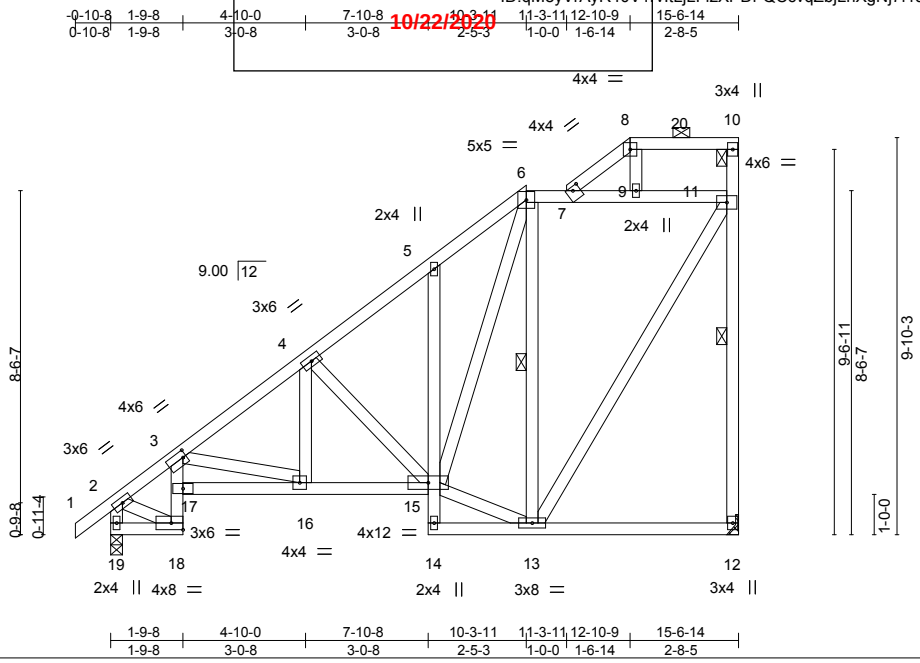

Plate Offsets (X,Y)-- [3:0-1-0,0-2-0], [7:0-2-0,0-1-2]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	-0.04	16-17	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.07	16-17	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.41	Horz(CT)	0.07	12	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 110 lb	FT = 20%
BCDL	10.0											

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.): 6-11, 8-10.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 10-12, 6-13

REACTIONS. (size) 12=Mechanical, 19=0-3-8
Max Horz 19=343(LC 13)
Max Uplift 12=-133(LC 11), 19=-72(LC 14)
Max Grav 12=685(LC 2), 19=762(LC 2)

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

TOP CHORD	2-3=-708/99, 3-4=-936/132, 4-5=-659/151, 5-6=-596/219, 6-7=-319/172, 7-9=-361/260, 9-11=-372/270, 11-12=-640/251, 2-19=-830/137
BOT CHORD	18-19=-478/438, 16-17=-784/1245, 15-16=-435/793
WEBS	3-16=-467/362, 4-15=-386/193, 13-15=-182/350, 6-15=-284/583, 6-13=-523/355, 11-13=-257/576, 2-18=-52/472

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 12-10-9, Exterior(2E) 10-3-11 to 11-3-11, Interior(1) 12-10-9 to 15-5-2 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19 except (jt=lb) 12=133.
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) 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.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	D5	Roof Special	1	1	I43262537

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:29 2020 Page 1
ID:qMeyVrAyR40V1rvItLjLFlzXPDf-uOAH1vcL6?fX?tirbLigOQGKn2SxmYj_yO3JeqyRt1e

-0-10-8 1-9-8 | 4-10-0 | 7-10-8 | 9-2-6 10-2-6 | 13-11-5 | 15-6-14
0-10-8 1-9-8 | 3-0-8 | 3-0-8 | 1-3-14 1-0-0 | 3-8-15 | 1-7-9

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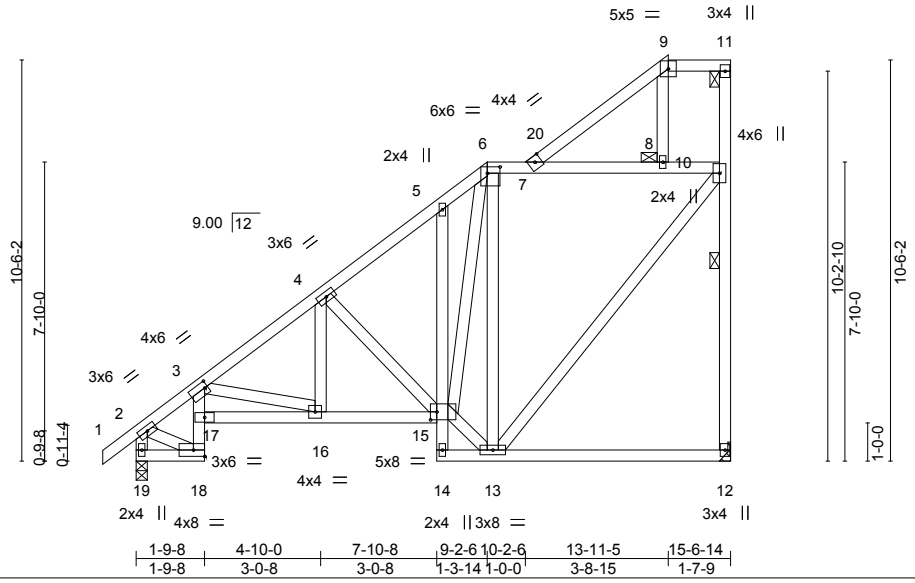

1-9-8 | 4-10-0 | 7-10-8 | 9-2-6 10-2-6 | 13-11-5 | 15-6-14
1-9-8 | 3-0-8 | 3-0-8 | 1-3-14 1-0-0 | 3-8-15 | 1-7-9

Plate Offsets (X,Y)-- [3:0-1-0,0-2-0], [6:0-4-0,0-2-0], [15:0-2-0,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.04	12-13	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.08	12-13	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.07	12	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 111 lb	FT = 20%
BCDL	10.0											

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.): 6-10, 9-11.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 11-12
JOINTS	1 Brace at Jt(s): 11, 8

REACTIONS. (size) 12=Mechanical, 19=0-3-8
Max Horz 19=366(LC 13)
Max Uplift 12=-138(LC 11), 19=-70(LC 14)
Max Grav 12=695(LC 24), 19=762(LC 2)

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

TOP CHORD	2-3=-708/99, 3-4=-937/133, 4-5=-657/152, 5-6=-522/196, 6-7=-366/167, 7-8=-389/236, 8-10=-384/232, 10-12=-639/292, 2-19=-830/137
BOT CHORD	18-19=-514/465, 16-17=-819/1268, 15-16=-453/806
WEBS	13-15=-228/471, 6-15=-318/550, 6-13=-600/438, 2-18=-52/471, 4-15=-397/206, 4-16=-109/250, 3-16=-478/379, 10-13=-276/586

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 13-11-5, Exterior(2E) 9-2-6 to 10-2-15, Interior(1) 13-11-5 to 15-5-2 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
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19 except (jt=lb) 12=138.
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) 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.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	D6	Roof Special	1	1	I43262538

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:30 2020 Page 1
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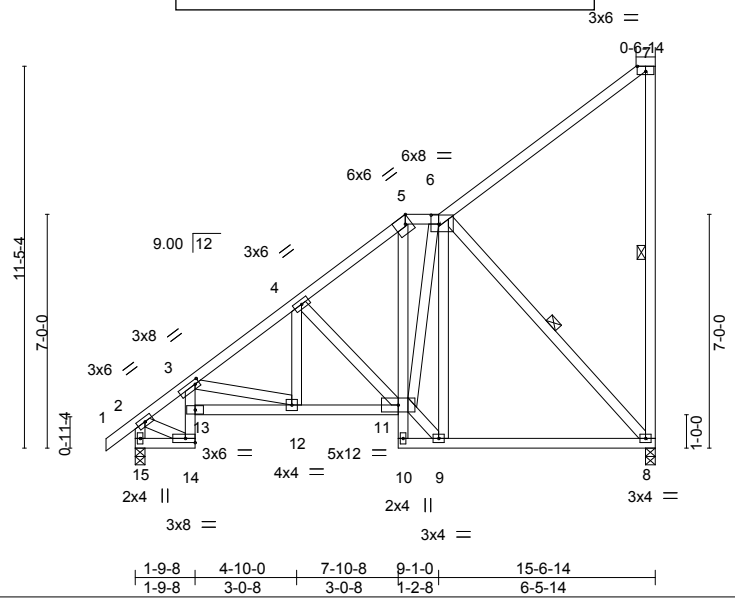

Plate Offsets (X,Y)-- [3:0-1-8,0-1-8], [5:0-2-2,Edge], [6:0-2-12,0-3-4], [7:0-3-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	-0.04	8-9	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.09	8-9	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.07	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 102 lb	FT = 20%
BCDL	10.0											

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

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

REACTIONS. (size) 8=0-3-8, 15=0-3-8
Max Horz 15=345(LC 14)
Max Uplift 8=-174(LC 14)
Max Grav 8=698(LC 24), 15=762(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-708/8, 3-4=-936/49, 4-5=-660/6, 5-6=-452/29, 2-15=-830/61
BOT CHORD 14-15=-362/269, 12-13=-591/1092, 11-12=-315/747, 5-11=-63/392, 8-9=-143/425
WEBS 9-11=-142/527, 6-8=-603/204, 2-14=0/471, 4-11=-383/186, 3-12=-366/285

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-1-0, Exterior(2E) 8-1-0 to 9-1-0 , Interior(1) 9-1-0 to 15-5-2 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
4) Provide adequate drainage to prevent water ponding.
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) 8=174.
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.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	D7	Roof Special	1	1	I43262539

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:31 2020 Page 1
ID:qMeyVrAyR40V1nvItLjLFlzXPDf-rnI2SbebecvFEBsEiml8TrMbdsC0EWTHQiYQiiyRt1c

-0-10-8 6-11-11 7-11-11 15-6-14
0-10-8 6-11-11 1-0-0 7-7-3

Scale = 1:70.6

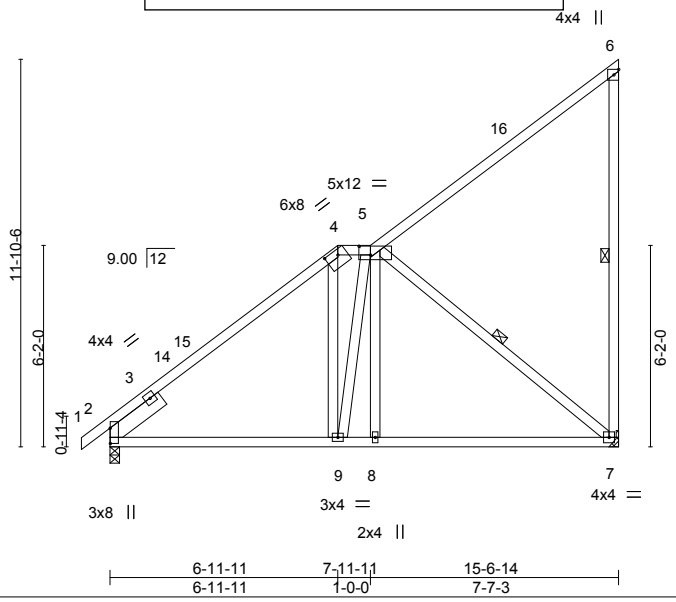

Plate Offsets (X,Y)-- [2:0-5-10,0-0-1], [4:0-4-11,0-1-14], [5:0-4-4,0-3-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.08	7-8	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.15	7-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.26	Horz(CT)	-0.03	2	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 87 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
SLIDER	Left 2x6 SPF No.2 2-0-0

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 6-7, 5-7

REACTIONS. (size) 7=Mechanical, 2=0-3-8
Max Horz 2=328(LC 14)
Max Uplift 7=-173(LC 14)
Max Grav 7=705(LC 24), 2=757(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-692/0, 4-5=-499/31
BOT CHORD 2-9=-200/511, 8-9=-163/517, 7-8=-160/518
WEBS 5-7=-641/199

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-11-11, Exterior(2E) 6-11-11 to 7-11-11, Interior(1) 7-11-11 to 15-5-2 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=173.
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) 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.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	D8	Roof Special	1	1	I43262540

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:33 2020 Page 1
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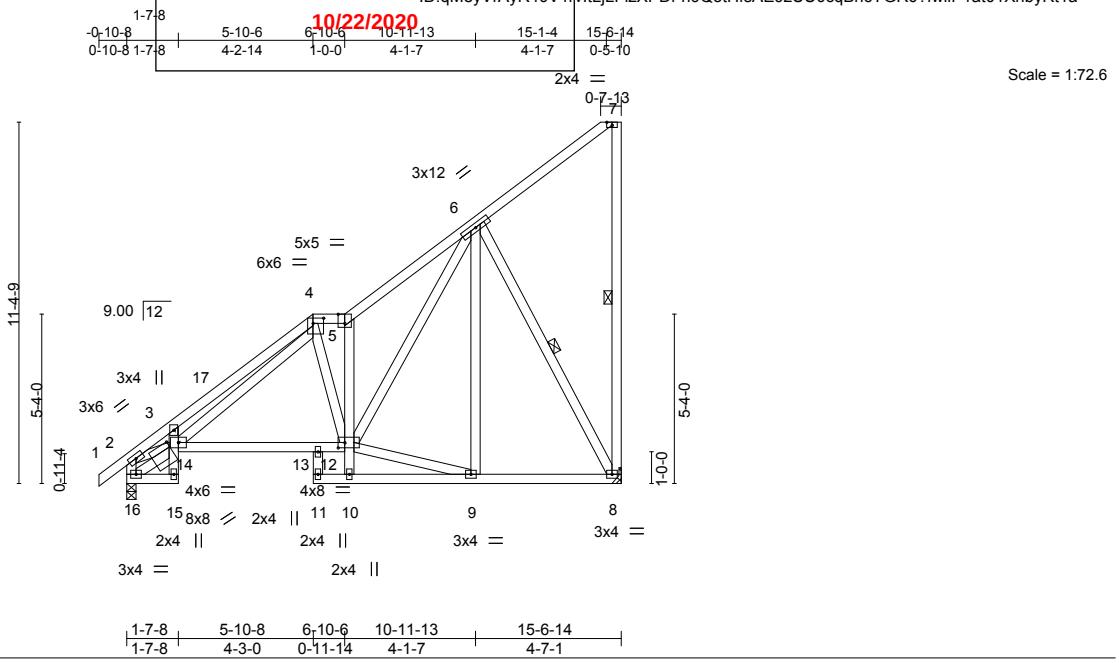

Plate Offsets (X,Y)-- [4:0-4-0,0-2-0], [5:0-2-8,Edge], [7:0-2-0,Edge], [12:0-2-8,0-2-0], [14:0-3-10,0-2-11]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	-0.04	13-14	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.09	13-14	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.32	Horz(CT)	0.06	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 109 lb	FT = 20%
BCDL	10.0											

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.): 4-5.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 7-8, 6-8

REACTIONS. (size) 8=Mechanical, 16=0-3-8
Max Horz 16=345(LC 14)
Max Uplift 8=-174(LC 14)
Max Grav 8=699(LC 24), 16=762(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1234/397, 3-4=-1436/530, 4-5=-659/22, 5-6=-861/92, 2-16=-694/204
BOT CHORD 13-14=-267/657, 12-13=-262/718, 8-9=-97/294
WEBS 5-12=-533/44, 4-14=-555/714, 6-8=-604/198, 9-12=-91/323, 6-12=-249/737, 14-16=-344/200, 2-14=-301/909

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-10-6, Exterior(2E) 5-10-6 to 6-10-6, Interior(1) 6-10-6 to 15-5-2 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=174.
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) 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.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	D9	Roof Special	1	1	I43262541

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:34 2020 Page 1
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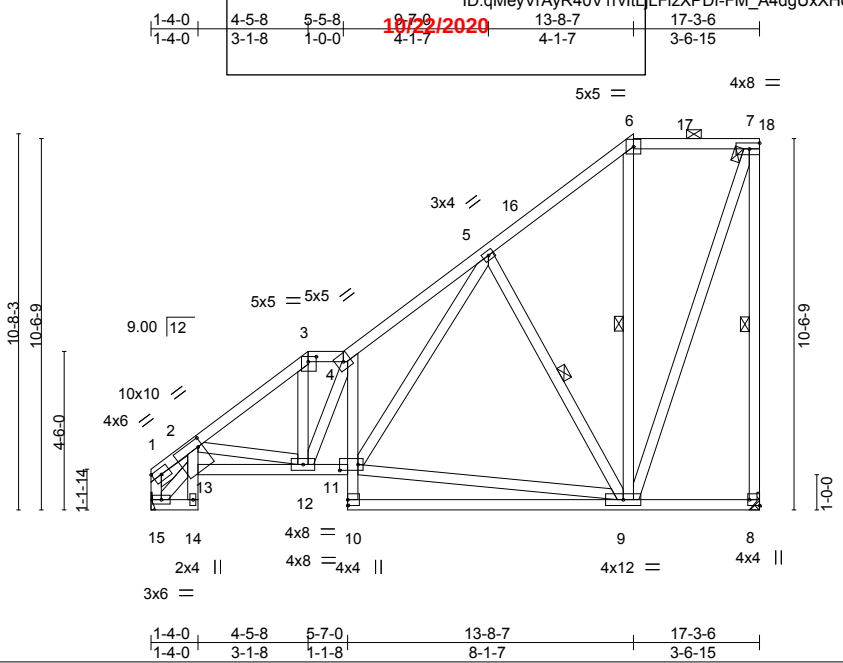

Plate Offsets (X,Y)-- [2:0-1-8,0-2-12], [3:0-2-12,0-1-12], [8:Edge,0-3-8], [11:0-6-4,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.09	9-10	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.19	9-10	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.06	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 124 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, 6-7.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 7-8, 5-9, 6-9

REACTIONS. (size) 8=Mechanical, 15=Mechanical
Max Horz 15=356(LC 13)
Max Uplift 8=-139(LC 11), 15=-47(LC 14)
Max Grav 8=765(LC 2), 15=765(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1500/839, 2-3=-1047/116, 3-4=-791/116, 4-5=-1099/222, 5-6=-407/198, 6-7=-296/183, 7-8=-746/212, 1-15=-736/395
BOT CHORD 2-13=-610/672, 12-13=-1208/1701, 11-12=-437/923, 4-11=-527/241
WEBS 2-12=-838/731, 3-12=-28/401, 4-12=-297/53, 9-11=-270/349, 5-11=-255/697, 5-9=-532/224, 7-9=-242/689, 13-15=-553/406, 1-13=-657/1135

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 4-5-8, Exterior(2E) 4-5-8 to 5-5-8, Interior(1) 5-5-8 to 13-8-7, Exterior(2R) 13-8-7 to 16-8-7, Interior(1) 16-8-7 to 17-1-10 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
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15 except (jt=lb) 8=139.
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) 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.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	D10	Roof Special	1	1	I43262542

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:20 2020 Page 1
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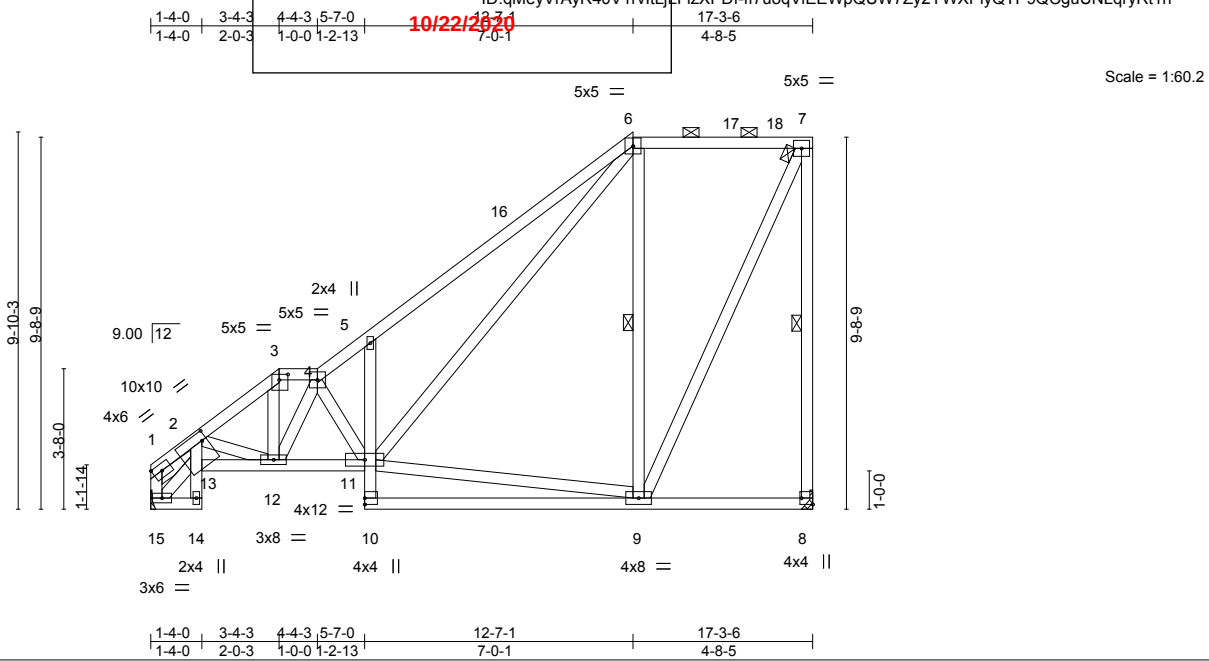

Plate Offsets (X,Y)-- [2:0-1-8,0-2-12], [3:0-2-12,0-1-12], [8:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.48	Vert(LL)	-0.07	9-10	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.15	9-10	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.81	Horz(CT)	0.05	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 115 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, 6-7.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 7-8, 6-9

REACTIONS. (size) 8=Mechanical, 15=Mechanical
Max Horz 15=327(LC 13)
Max Uplift 8=-130(LC 11), 15=-49(LC 14)
Max Grav 8=765(LC 2), 15=765(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1471/803, 2-3=-1112/181, 3-4=-849/182, 4-5=-1017/129, 5-6=-1269/333, 6-7=-320/181, 7-8=-734/202, 1-15=-733/387
BOT CHORD 2-13=-589/641, 12-13=-1117/1590, 11-12=-474/1036, 5-11=-540/249
WEBS 2-12=-658/604, 3-12=-9/408, 4-12=-342/32, 6-11=-384/994, 6-9=-513/313, 7-9=-222/669, 13-15=-512/367, 1-13=-619/1103

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 4-4-3, Interior(1) 4-4-3 to 12-7-1, Exterior(2R) 12-7-1 to 15-7-1, Interior(1) 15-7-1 to 17-1-10 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
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15 except (jt=lb) 8=130.
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) 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.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	D11	Roof Special	1	1	I43262543

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:21 2020 Page 1
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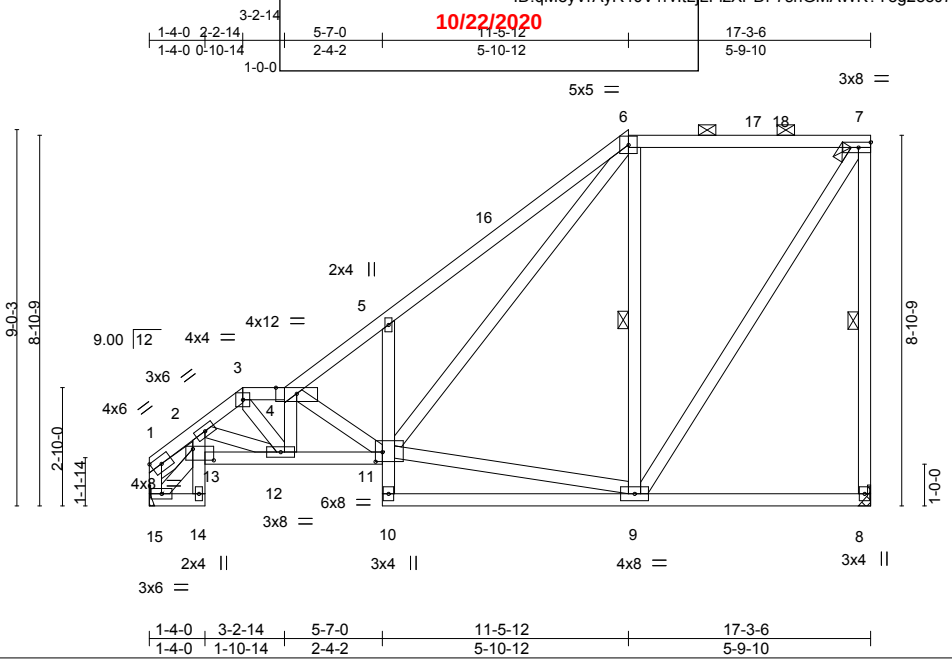

Plate Offsets (X,Y)-- [11:0-2-0,0-2-12], [13:0-6-0,0-3-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	-0.05	5	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.09	9-10	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.05	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 108 lb	FT = 20%
BCDL	10.0											

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 (5-4-10 max.): 3-4, 6-7.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 7-8, 6-9

REACTIONS. (size) 8=Mechanical, 15=Mechanical
Max Horz 15=298(LC 13)
Max Uplift 8=-122(LC 11), 15=-51(LC 14)
Max Grav 8=765(LC 2), 15=765(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1442/743, 2-3=-1142/207, 3-4=-1181/225, 4-5=-1093/142, 5-6=-1201/293, 6-7=-350/174, 7-8=-716/194, 1-15=-737/373
BOT CHORD 2-13=-547/615, 12-13=-970/1449, 11-12=-562/1294, 5-11=-363/177
WEBS 2-12=-450/428, 3-12=-43/526, 4-12=-409/68, 4-11=-440/192, 9-11=-179/291, 6-11=-336/880, 6-9=-459/276, 7-9=-201/632, 13-15=-474/345, 1-13=-558/1064

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-2-14, Interior(1) 3-2-14 to 11-5-12, Exterior(2R) 11-5-12 to 14-5-12, Interior(1) 14-5-12 to 17-1-10 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
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15 except (jt=lb) 8=122.
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) 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.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset	I43262544
2472503	D12	Roof Special	1	1	Job Reference (optional)	

Builders First Source, Valley Center, KS 67147

8.240 s Apr 4 2020 MiTek Industries, Inc. Mon Oct 19 14:21:42 2020 Page 1
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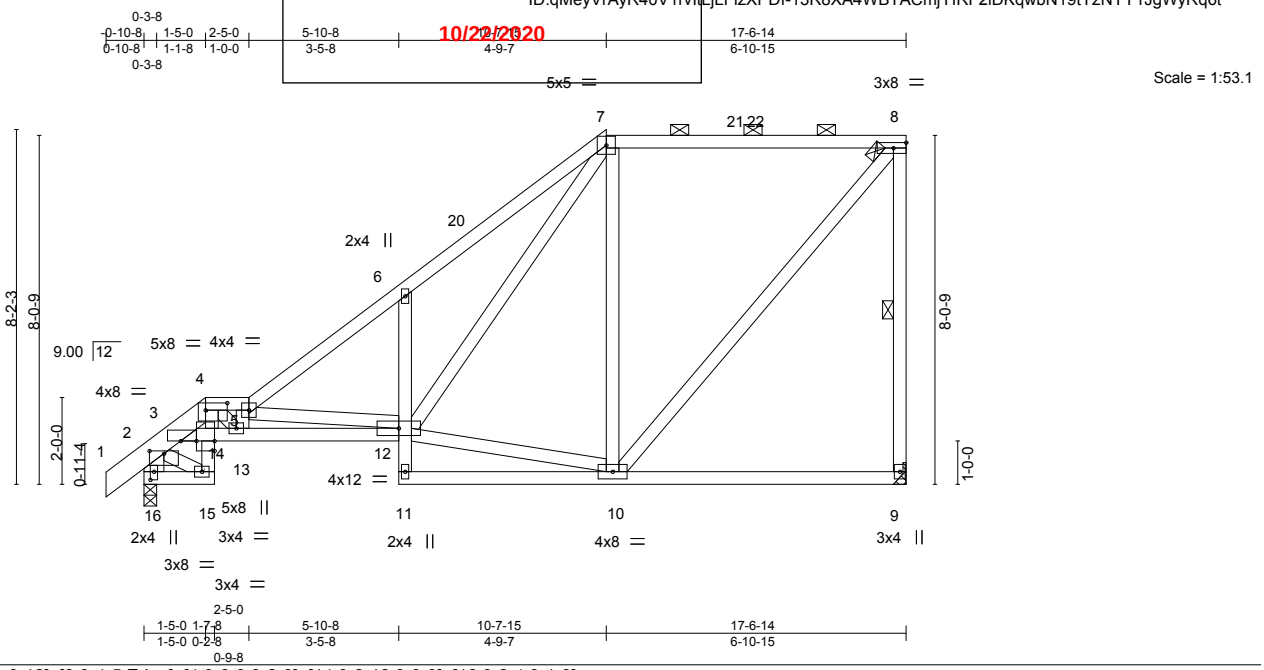

Plate Offsets (X,Y)-- [2:0-4-0,0-0-12], [3:0-4-5,Edge], [4:0-6-0,0-2-0], [14:0-2-12,0-0-0], [16:0-2-4,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.06	12-13	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.11	9-10	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.07	9	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 103 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 1-4: 2x6 SPF 2100F 1.8E
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2 *Except* 2-16: 2x6 SPF No.2

BRACING-

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

REACTIONS. (lb/size) 9=686/Mechanical, 16=756/0-3-8
Max Horz 16=282(LC 13)
Max Uplift 9=-113(LC 11), 16=-88(LC 14)
Max Grav 9=771(LC 2), 16=854(LC 2)

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

TOP CHORD	2-3=-542/80, 3-4=-1313/399, 4-5=-1781/428, 5-6=-1172/141, 6-20=-1175/238, 7-20=-999/259, 7-21=-426/167, 21-22=-427/166, 8-22=-428/166, 8-9=-708/182, 2-16=-854/125
BOT CHORD	15-16=-374/401, 3-14=-684/1212, 13-14=-777/1340, 12-13=-761/1954, 6-12=-295/151
WEBS	10-12=-180/391, 7-12=-297/813, 7-10=-433/250, 8-10=-182/628, 5-12=-1029/392, 4-14=-203/276, 4-13=-81/804, 5-13=-559/105, 2-15=-338/339

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-5-0, Interior(1) 2-5-0 to 10-7-15, Exterior(2R) 10-7-15 to 13-7-15, Interior(1) 13-7-15 to 17-5-2 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
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 113 lb uplift at joint 9 and 88 lb uplift at joint 16.
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) 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.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	D13	Roof Special Girder	1	1	I43262545

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:24 2020 Page 1
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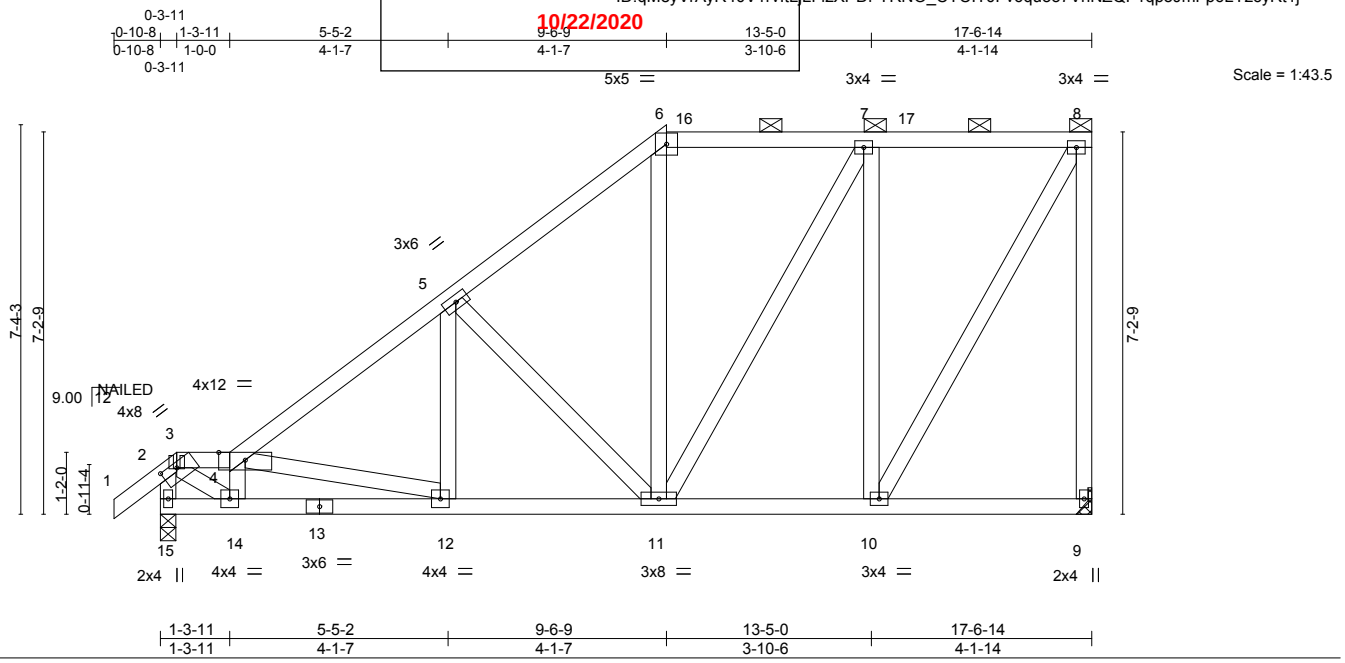

Plate Offsets (X,Y)-- [2:0-2-3,0-0-0], [3:0-3-12,0-1-3]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.02	12	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.05	12-14	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.45	Horz(CT)	0.01	9	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 102 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 5-7-15 oc purlins, except end verticals, and 2-0-0 oc purlins (5-9-6 max.): 3-4, 6-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 9=Mechanical, 15=0-3-8
Max Horz 15=252(LC 44)
Max Uplift 9=-107(LC 7), 15=-105(LC 10)
Max Grav 9=776(LC 2), 15=779(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-589/50, 3-4=-1043/89, 4-5=-999/99, 5-6=-708/126, 6-7=-492/127, 7-8=-365/112, 8-9=-739/111, 2-15=-725/102
BOT CHORD 12-14=-185/947, 11-12=-164/771, 10-11=-103/365
WEBS 3-14=-87/1159, 4-14=-716/85, 5-11=-386/100, 7-11=-52/269, 7-10=-535/139, 8-10=-104/717

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=107, 15=105.
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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
12) 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

October 20,2020

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	D13	Roof Special Girder	1	1	I43262545

Job Reference (optional)

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-2=-60, 2-3=-60, 3-4=-60, 4-6=-60, 6-8=-60, 9-15=-20

Concentrated Loads (lb)

Vert: 2=64(F)

Job	Truss	Truss Type		Qty	Ply	Roeser 1470 Winterset
2472503	E1	Half Hip		1	1	I43262546

Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:35 2020 Page 1
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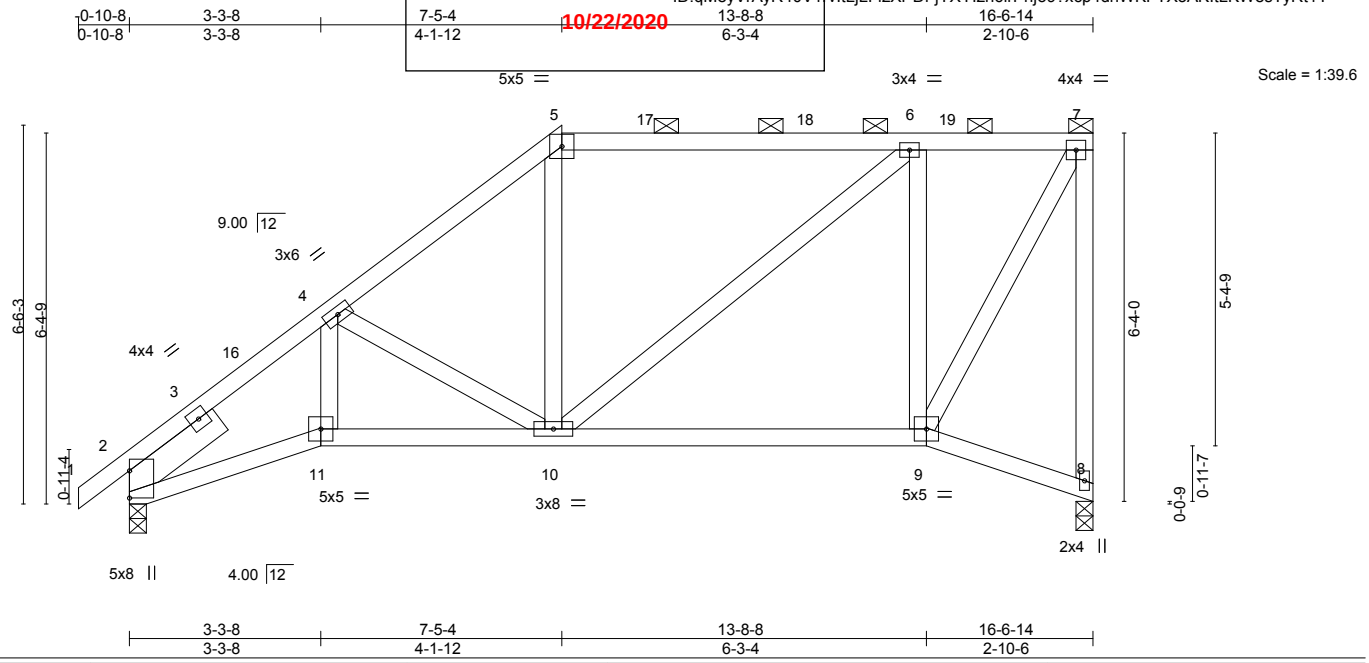

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	-0.05	9-10	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.11	9-10	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.04	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 85 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
SLIDER	Left 2x6 SPF No.2 2-0-0

BRACING-

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

REACTIONS. (size) 8=0-3-8, 2=0-3-8
Max Horz 2=214(LC 13)
Max Uplift 8=-101(LC 11), 2=-81(LC 14)
Max Grav 8=738(LC 2), 2=802(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1208/234, 4-5=-826/142, 5-6=-633/148, 6-7=-368/123, 7-8=-721/147
BOT CHORD 2-11=-448/952, 10-11=-419/900, 9-10=-143/385
WEBS 4-11=-103/267, 4-10=-311/194, 6-10=-139/331, 6-9=-591/192, 7-9=-171/778

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 7-5-4, Exterior(2R) 7-5-4 to 11-8-3, Interior(1) 11-8-3 to 16-5-2 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
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Bearing at joint(s) 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) 2 except (jt=lb) 8=101.
9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 8.
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.
11) 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.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER
PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	E2	Half Hip	1	1	I43262547

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:37 2020 Page 1
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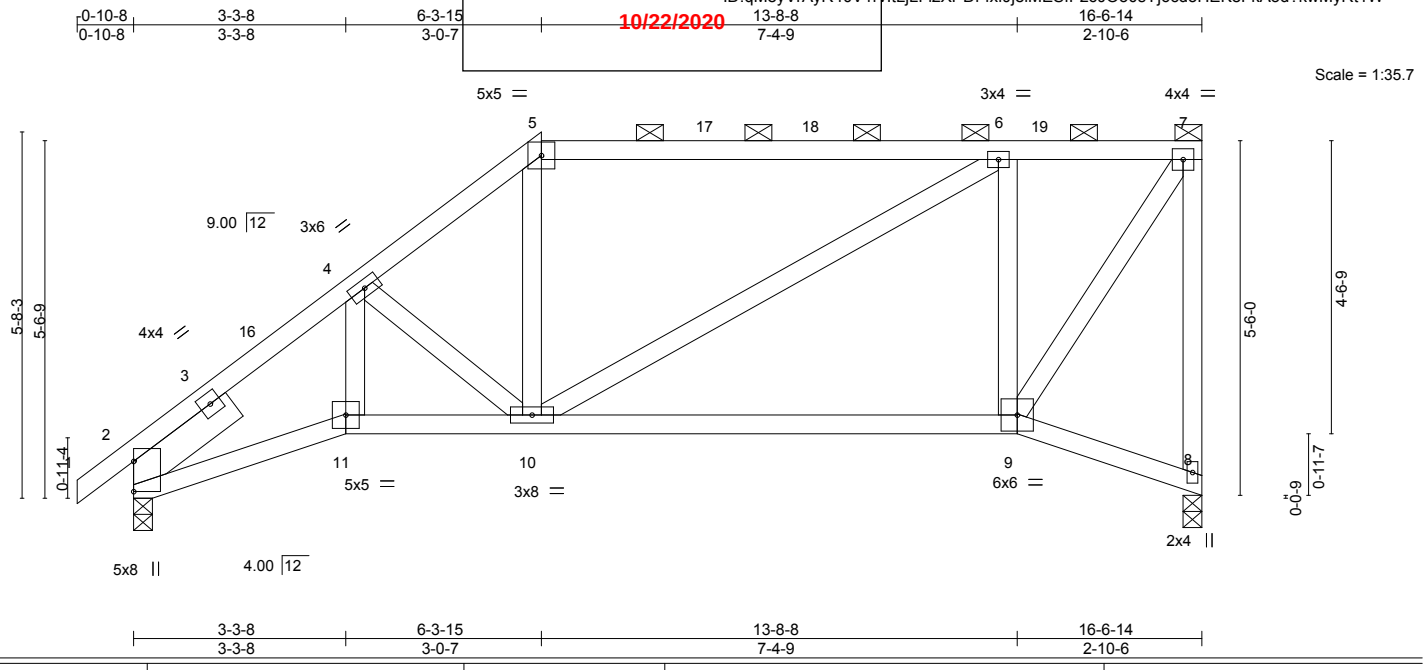

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.08	9-10	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.18	9-10	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.04	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 80 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
SLIDER	Left 2x6 SPF No.2 2-0-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-6-9 max.): 5-7.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS. (size) 8=0-3-8, 2=0-3-8
Max Horz 2=185(LC 13)
Max Uplift 8=-94(LC 11), 2=-83(LC 14)
Max Grav 8=738(LC 2), 2=802(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1184/240, 4-5=-913/148, 5-6=-736/155, 6-7=-463/121, 7-8=-728/129
BOT CHORD 2-11=-407/905, 10-11=-378/856, 9-10=-144/484
WEBS 6-10=-126/301, 6-9=-615/184, 7-9=-164/865

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-3-15, Exterior(2R) 6-3-15 to 10-6-13, Interior(1) 10-6-13 to 16-5-2 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
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Bearing at joint(s) 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) 8, 2.
9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 8.
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.
11) 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.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	E3	Half Hip	1	1	I43262548

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:38 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-87Dhw_j_?mnGaFuackNnFK8t9gZQNixJ1HkISoyRt1V

-0-10-8	3-3-8	5-2-9	9-5-9	13-8-8	16-6-14
0-10-8	3-3-8	1-11-1	4-2-15	4-2-15	2-10-6

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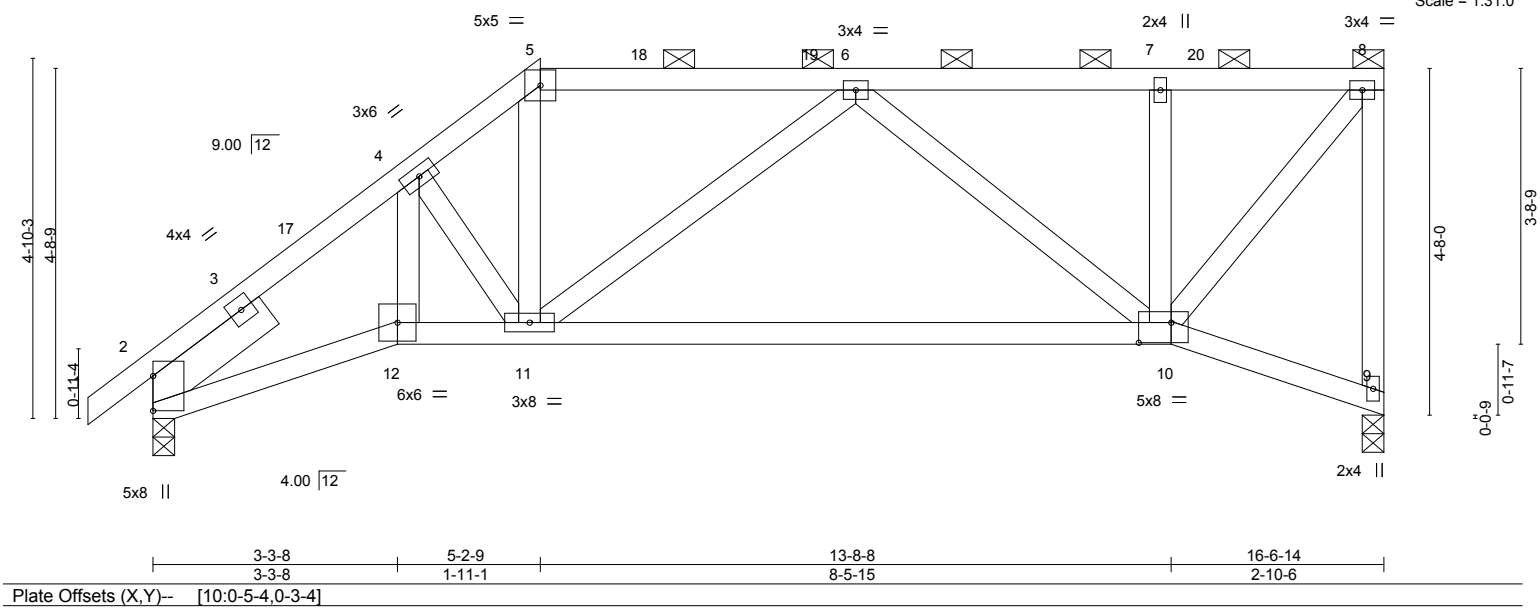


3-3-8	5-2-9	13-8-8	16-6-14
3-3-8	1-11-1	8-5-15	2-10-6

Plate Offsets (X,Y)-- [10:0-5-4,0-3-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	-0.13	10-11	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.27	10-11	>725	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.05	9	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 78 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
SLIDER	Left 2x6 SPF No.2 2-0-0

BRACING-

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

REACTIONS. (size) 9=0-3-8, 2=0-3-8
Max Horz 2=156(LC 13)
Max Uplift 9=-88(LC 11), 2=-84(LC 14)
Max Grav 9=738(LC 2), 2=802(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1172/236, 4-5=-995/170, 5-6=-809/156, 6-7=-536/100, 7-8=-525/98, 8-9=-735/112
BOT CHORD 2-12=-359/881, 11-12=-330/843, 10-11=-226/869
WEBS 5-11=-40/321, 6-10=-428/129, 7-10=-257/75, 8-10=-128/837

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-2-9, Exterior(2R) 5-2-9 to 9-5-9 , Interior(1) 9-5-9 to 16-5-2 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
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Bearing at joint(s) 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) 9, 2.
9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 9.
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.
11) 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.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER
PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

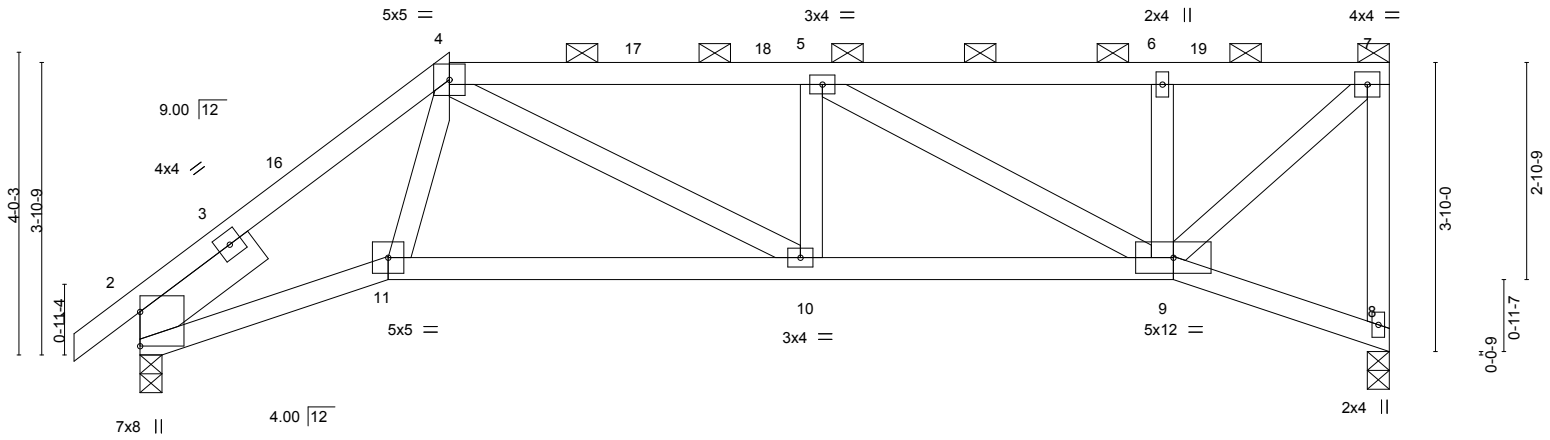
Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	E4	Half Hip	1	1	I43262549

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:40 2020 Page 1
ID:qMeyVrAyR40V1rvItLjLFlzXPDf-4WLRLglFXN1zqZ2zk9PFKlEBBUEerb3cUbDPXhyRt1T

-0-10-8	4-1-4	8-10-14	13-8-8	16-6-14
0-10-8	4-1-4	4-9-10	4-9-10	2-10-6

Scale = 1:30.6



3-3-8	8-10-14	13-8-8	16-6-14
3-3-8	5-7-6	4-9-10	2-10-6

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	-0.06	10-11	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.13	10-11	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.06	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 72 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
SLIDER	Left 2x6 SPF No.2 2-0-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-10-12 max.): 4-7.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS. (size) 8=0-3-8, 2=0-3-8
Max Horz 2=127(LC 13)
Max Uplift 8=-82(LC 11), 2=-85(LC 14)
Max Grav 8=738(LC 2), 2=802(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1248/218, 4-5=-1244/176, 5-6=-692/111, 6-7=-676/108, 7-8=-712/109
BOT CHORD 2-11=-294/965, 10-11=-256/845, 9-10=-227/1243
WEBS 4-11=-64/321, 4-10=-42/514, 5-9=-626/100, 6-9=-274/79, 7-9=-139/923

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-1-4, Exterior(2R) 4-1-4 to 8-4-3 , Interior(1) 8-4-3 to 16-5-2 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
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Bearing at joint(s) 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) 8, 2.
9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 8.
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.
11) 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.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER
PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

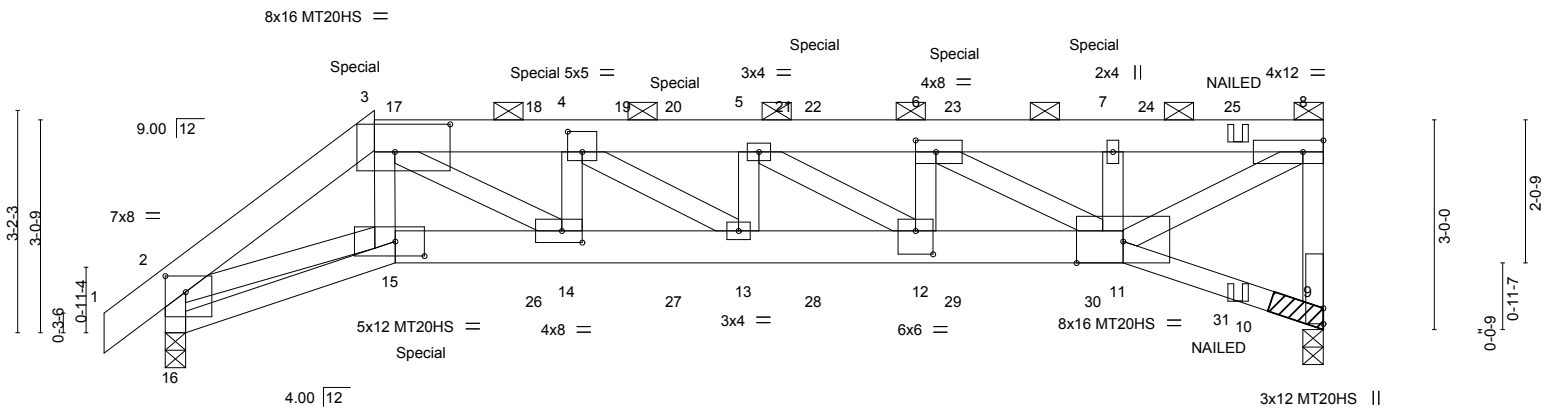
Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	E5	Half Hip Girder	1	1	I43262550

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:42 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-0uTCmMmV2?Ih3tCLraRjQAJS7IvyJL3vyviVbZyRt1R

-0-10-8	2-11-15	5-9-14	8-4-3	10-10-10	13-8-8	16-6-14
0-10-8	2-11-15	2-9-15	2-6-6	2-6-6	2-9-14	2-10-6

Scale = 1:33.0



3-3-8	5-9-14	8-4-3	10-10-10	13-8-8	16-6-14
3-3-8	2-6-6	2-6-6	2-6-6	2-9-14	2-10-6

Plate Offsets (X,Y)-- [2:0-3-8,0-2-12], [3:0-9-8,0-4-12], [4:0-2-8,0-3-8], [6:0-3-8,0-2-0], [12:0-3-0,0-4-0], [14:0-3-8,0-2-0], [15:0-5-0,0-2-8], [16:0-0-0,0-1-14]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	0.32	13	>607	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.36	13	>544	180	MT20HS	148/108
TCDL	10.0	Rep Stress Incr	NO	WB	0.91	Horz(CT)	0.20	9	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 89 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x6 SPF No.2 *Except* 3-8: 2x6 SPF 2100F 1.8E
BOT CHORD	2x4 SPF No.2 *Except* 11-15: 2x6 SPF 2100F 1.8E
WEBS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-11-13 oc purlins, except end verticals, and 2-0-0 oc purlins (3-2-9 max.): 3-8.
BOT CHORD	Rigid ceiling directly applied or 3-8-0 oc bracing.

REACTIONS. (size) 9=(0-3-8 + bearing block) (req. 0-4-8), 16=0-3-8
Max Horz 16=102(LC 7)
Max Uplift 9=-2218(LC 7), 16=-2189(LC 10)
Max Grav 9=2860(LC 33), 16=2859(LC 33)

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

TOP CHORD	2-3=-5675/4442, 3-4=-7750/6168, 4-5=-8585/6828, 5-6=-7628/6042, 6-7=-4446/3567, 7-8=-4424/3507, 8-9=-2800/2209, 2-16=-2948/2282
BOT CHORD	15-16=-403/496, 14-15=-3732/4844, 13-14=-6204/7768, 12-13=-6866/8603, 11-12=-6082/7666
WEBS	3-15=-619/1482, 7-11=-406/695, 8-11=-4103/5161, 4-13=-792/1014, 2-15=-3259/4136, 5-13=-41/349, 5-12=-1130/928, 6-12=-677/1690, 6-11=-3693/2878, 4-14=-835/1297, 3-14=-2861/3411

NOTES-

1) 2x4 SPF No.2 bearing block 12" long at jt. 9 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
4) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) 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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=2218, 16=2189.
11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 9.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

October 20,2020

Continued on page 2

NOTES-

13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 188 lb down and 633 lb up at 3-4-4, 191 lb down and 629 lb up at 5-4-4, 188 lb down and 629 lb up at 7-4-4, 190 lb down and 629 lb up at 9-4-4, and 191 lb down and 629 lb up at 11-4-4, and 191 lb down and 629 lb up at 13-4-4 on top chord, and 302 lb down and 62 lb up at 3-3-8, 653 lb down and 111 lb up at 3-3-8, 653 lb down and 111 lb up at 5-4-4, 653 lb down and 111 lb up at 7-4-4, 653 lb down and 111 lb up at 9-4-4, and 653 lb down and 111 lb up at 11-4-4, and 653 lb down and 111 lb up at 13-4-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
16) 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-60, 2-3=-60, 3-8=-60, 15-16=-20, 11-15=-20, 9-11=-20
   Concentrated Loads (lb)
   Vert: 15=-387(F=-302) 7=-169(F) 17=-169(F) 18=-169(F) 20=-169(F) 22=-169(F) 23=-169(F) 25=-109(F) 26=-86 27=-86 28=-86 29=-86 30=-86 31=-136(F)

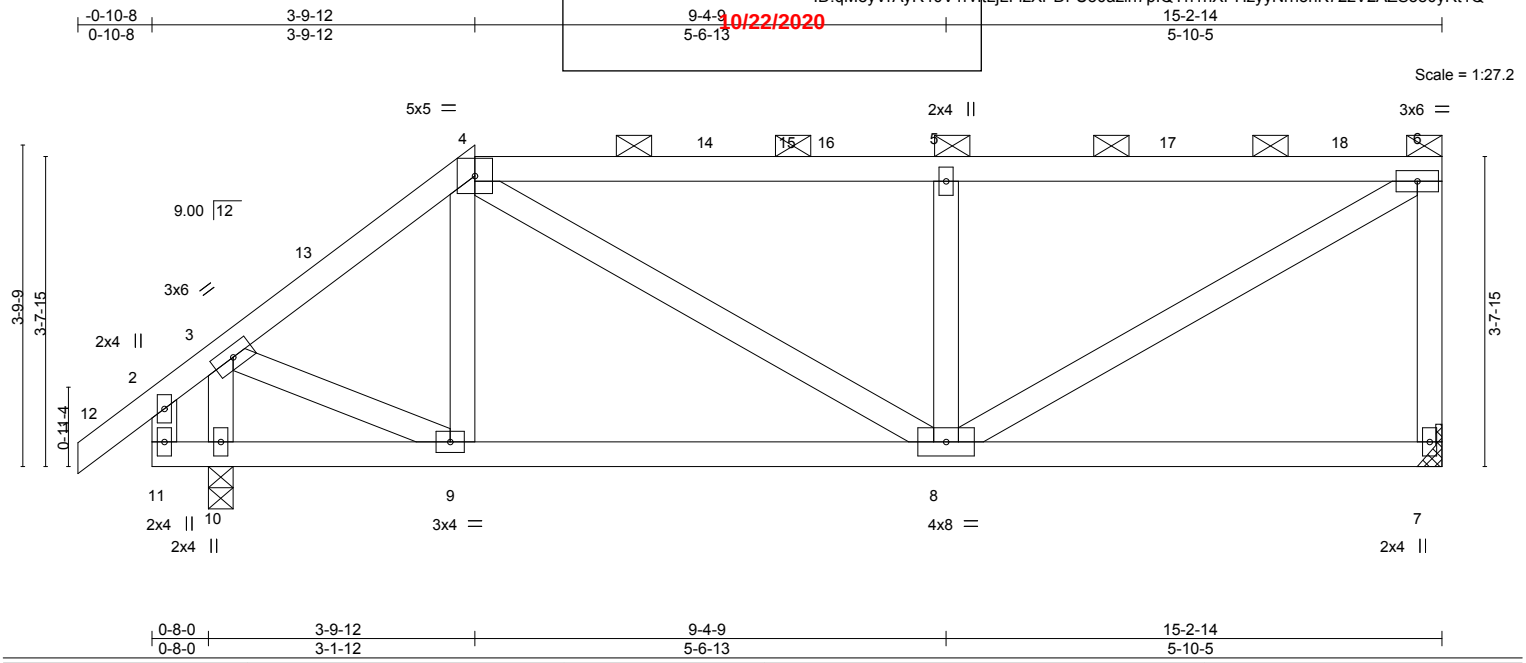
Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	F1	Half Hip	1	1	I43262551

Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:43 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-U50azin7pIQYh1nXPHzyyNrh5hK72zV2AZS380yRt1Q



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	-0.03	7-8	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.05	7-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.00	7	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 67 lb	FT = 20%
BCDL	10.0											

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.): 4-6.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS. (size) 7=Mechanical, 10=0-3-8
Max Horz 10=128(LC 13)
Max Uplift 7=-76(LC 11), 10=-102(LC 14)
Max Grav 7=635(LC 2), 10=781(LC 2)

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

TOP CHORD	3-4=-611/101, 4-5=-723/146, 5-6=-722/145, 6-7=-580/112
BOT CHORD	8-9=-162/459
WEBS	4-8=-41/333, 5-8=-448/123, 6-8=-130/792, 3-10=-700/128, 3-9=-52/541

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-9-12, Exterior(2R) 3-9-12 to 8-0-11, Interior(1) 8-0-11 to 15-1-2 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
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 10=102.
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) 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.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	F2	Half Hip Girder	1	1	I43262552

Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:45 2020 Page 1
ID:qMeyVrAyR40V1rvItLjLFlzXPDf-QT8KONpNLwgGwKwwXi?Q1ox_wVysWpdLetx9CuyRt1O

-0-10-8	2-8-7	6-8-13	10-11-0	15-2-14
0-10-8	2-8-7	4-0-6	4-2-2	4-3-14

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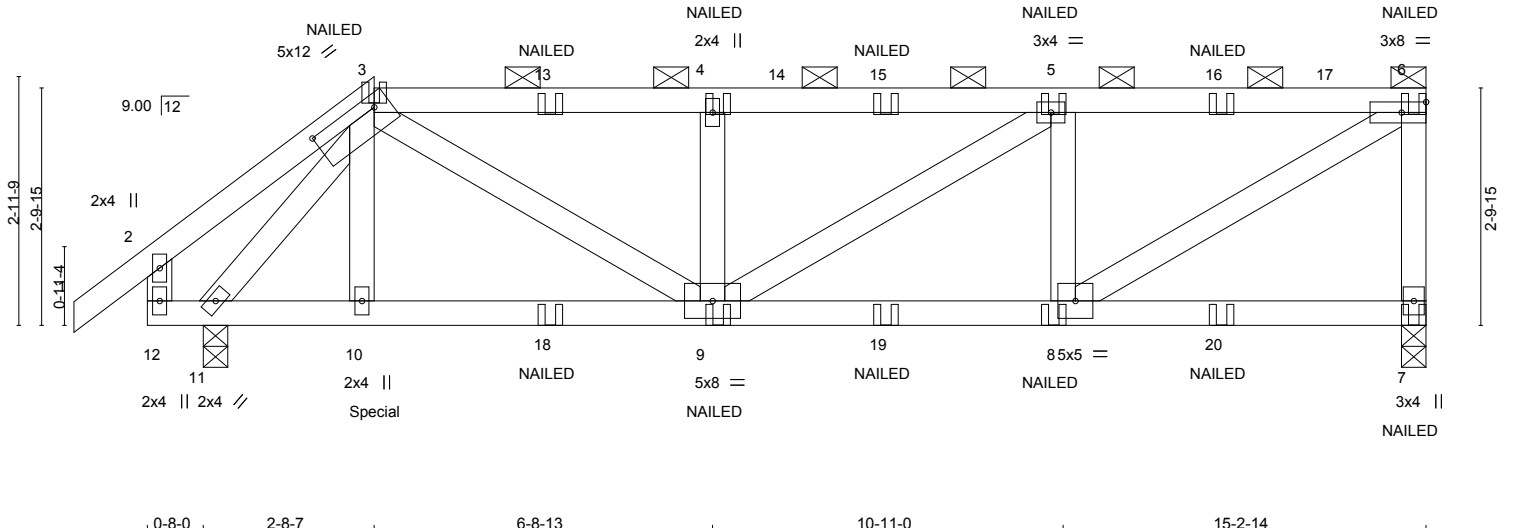

0-8-0	2-8-7	6-8-13	10-11-0	15-2-14
0-8-0	2-0-7	4-0-6	4-2-2	4-3-14

Plate Offsets (X,Y)-- [3:0-9-12,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.59	Vert(LL)	-0.06	8-9	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.10	8-9	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.47	Horz(CT)	0.02	7	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 66 lb	FT = 20%
BCDL	10.0											

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 (3-6-2 max.): 3-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 11-12.

REACTIONS. (size) 7=0-3-8, 11=0-3-8
Max Horz 11=99(LC 9)
Max Uplift 7=-129(LC 7), 11=-193(LC 10)
Max Grav 7=1500(LC 24), 11=1429(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-1997/198, 4-5=-1995/197, 5-6=-1697/164, 6-7=-1359/167
BOT CHORD 10-11=-159/979, 9-10=-159/967, 8-9=-173/1697
WEBS 3-9=-86/1218, 4-9=-614/134, 5-9=-50/348, 5-8=-786/167, 6-8=-177/1933, 3-11=-1566/148

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=129, 11=193.
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) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 130 lb down and 81 lb up at 2-8-7 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
12) 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

October 20,2020

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	F2	Half Hip Girder	1	1	I43262552

Job Reference (optional)

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-2=-60, 2-3=-60, 3-6=-60, 7-12=-20

Concentrated Loads (lb)

Vert: 3=-161(B) 7=-72(B) 10=-130(B) 9=-65(B) 4=-161(B) 5=-161(B) 8=-65(B) 6=-182(B) 13=-161(B) 15=-161(B) 16=-161(B) 18=-65(B) 19=-65(B) 20=-65(B)

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	G1	Monopitch	2	1	I43262553

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:45 2020 Page 1
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-0-10-8 0-10-8 | 4-6-1 4-6-1 | 9-3-8 4-9-7

Scale = 1:27.5

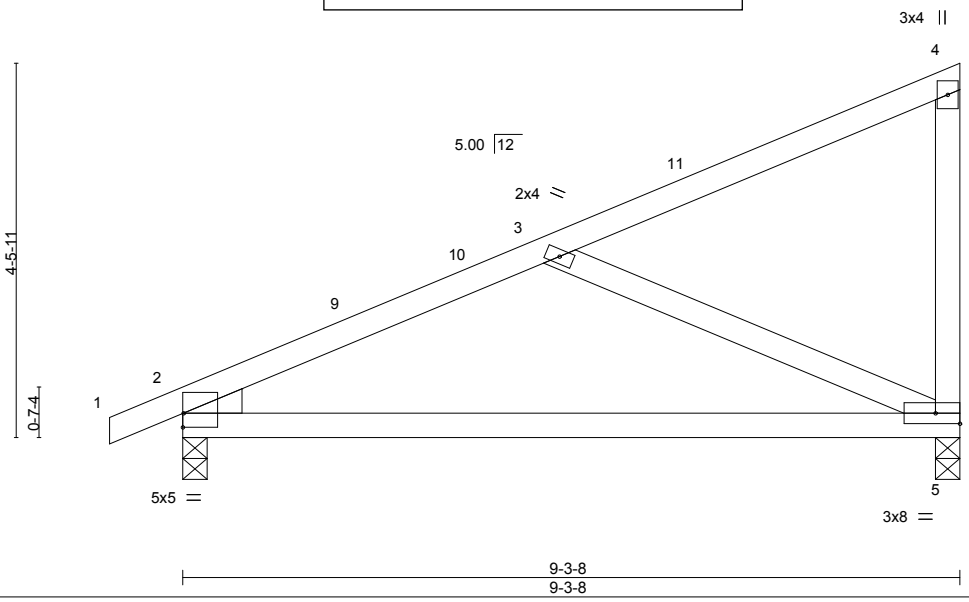

Plate Offsets (X,Y)-- [2:0-0-1,0-0-0], [2:0-5-11,0-0-1], [2:Edge,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.14	5-8	>795	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.28	5-8	>398	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 34 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-3-8, 5=0-3-8
Max Horz 2=146(LC 15)
Max Uplift 2=-57(LC 16), 5=-37(LC 16)
Max Grav 2=476(LC 2), 5=482(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-597/188
BOT CHORD 2-5=-293/541
WEBS 3-5=-548/268

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 9-1-12 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 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.
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.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	G2	Monopitch	6	1	I43262554

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:46 2020 Page 1
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-0-10-8 / 0-10-8 | 2-11-8 / 2-11-8

Scale: 1"=1'

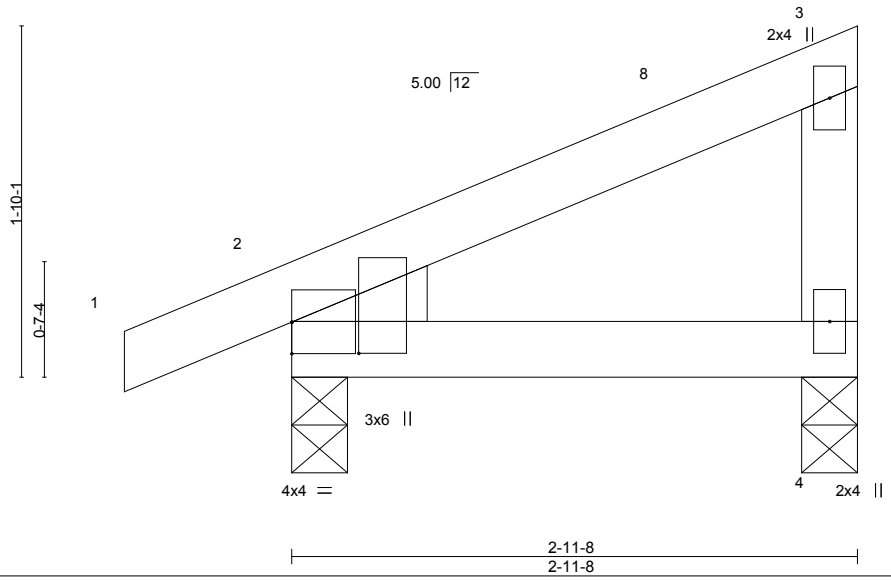

Plate Offsets (X,Y)-- [2:0-1-15,0-4-3]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	-0.00	4-7	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.01	4-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 10 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-11-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=0-3-8, 2=0-3-8
Max Horz 2=54(LC 15)
Max Uplift 4=-13(LC 13), 2=-39(LC 16)
Max Grav 4=138(LC 21), 2=237(LC 21)

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 2-9-12 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 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.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	G4	Half Hip	1	1	I43262555

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:47 2020 Page 1
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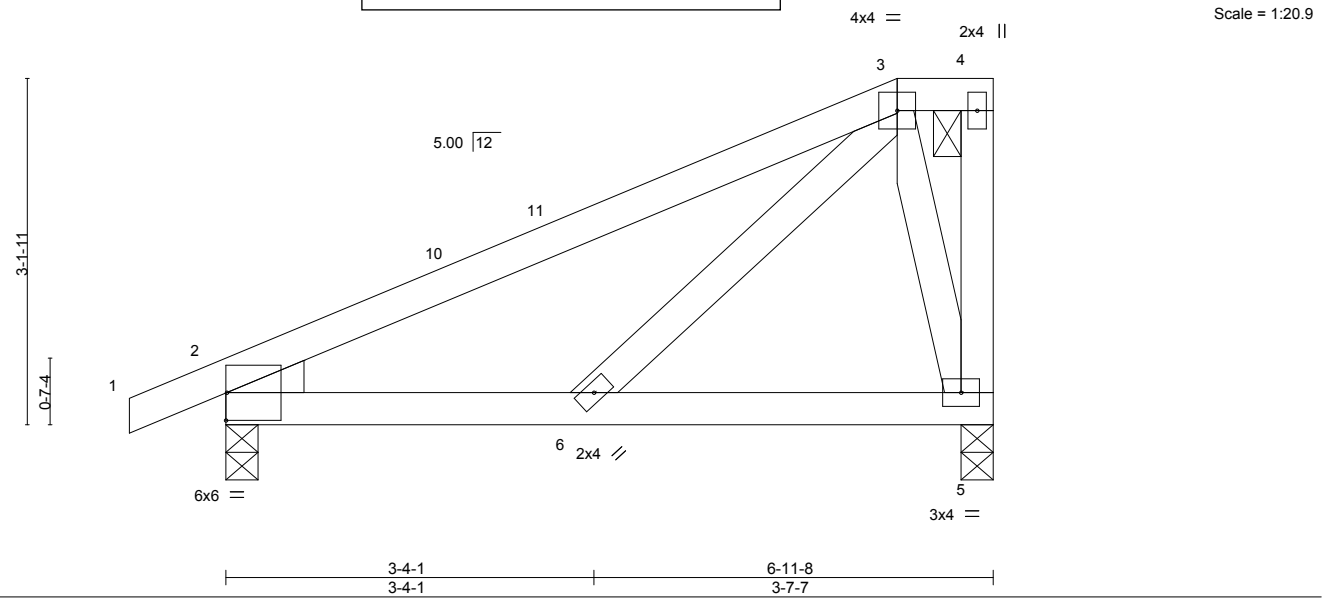

Plate Offsets (X,Y)-- [2:0-0-1,0-0-0], [2:0-5-11,0-0-1]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	-0.03	6-9	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.03	6-9	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 29 lb	FT = 20%
BCDL	10.0											

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

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

REACTIONS. (size) 2=0-3-8, 5=0-3-8
Max Horz 2=102(LC 15)
Max Uplift 2=-50(LC 16), 5=-27(LC 13)
Max Grav 2=490(LC 36), 5=350(LC 36)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-469/103
BOT CHORD 2-6=-155/324
WEBS 3-6=-106/335, 3-5=-341/189

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-1-1, Exterior(2E) 6-1-1 to 6-9-12 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 5.
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) 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.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	G5	Roof Special Girder	1	1	I43262556

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:49 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-JEOrElsuP8AiPyEhmY3MCe5np6Q5Sj6xZVvNLfyRt1K

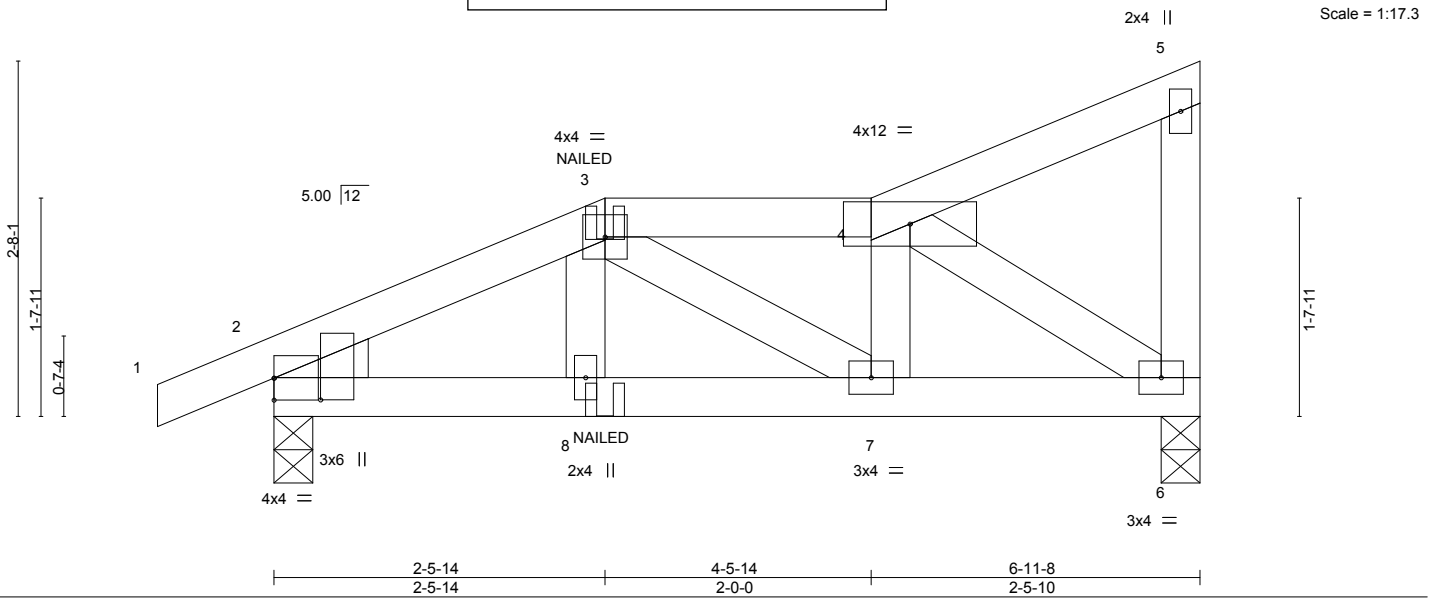

Plate Offsets (X,Y)-- [2:0-1-15,0-4-3]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	-0.00	8	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	-0.01	7-8	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.06	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 28 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
WEDGE
Left: 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.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=83(LC 11)
Max Uplift 2=-68(LC 12), 6=-35(LC 12)
Max Grav 2=399(LC 35), 6=312(LC 35)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-354/64, 3-4=-316/50
BOT CHORD 2-8=-85/302, 7-8=-87/297, 6-7=-50/319
WEBS 4-6=-369/57

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
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) "NAILED" indicates 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
11) 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-4=-60, 4-5=-60, 6-9=-20

October 20,2020

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	G5	Roof Special Girder	1	1	I43262556

Job Reference (optional)

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 8=3(B) 3=43(B)

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	G6	Monopitch	4	1	I43262557

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:50 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-nRxDR5sWASIZ05puJFbbksev5WjKBAG4n9ewt6yRt1J

-0-10-8 / 0-10-8 — 4-11-8 / 4-11-8

Scale: 3/4"=1'

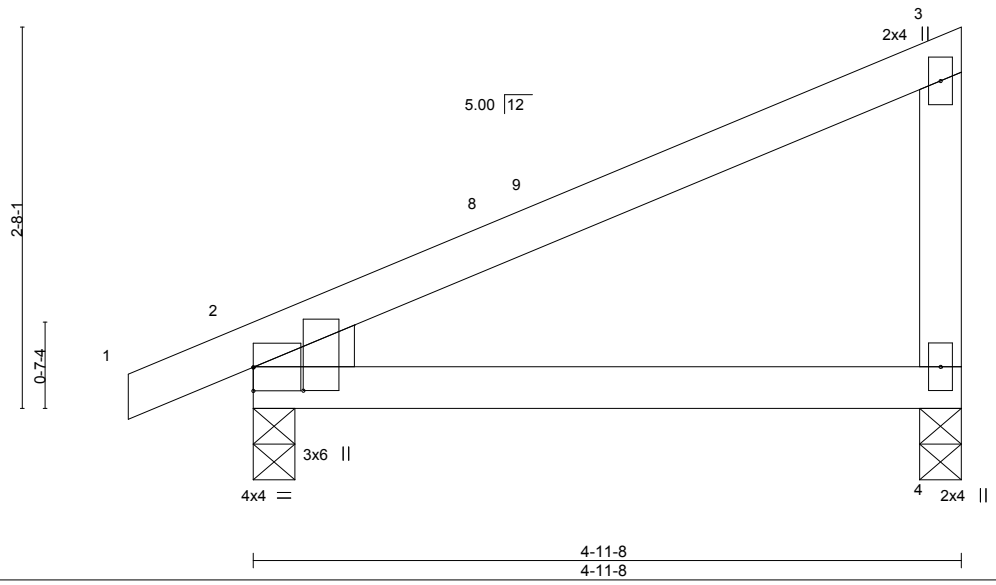

Plate Offsets (X,Y)-- [2:0-1-15,0-4-3]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.04	4-7	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.07	4-7	>828	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 16 lb	FT = 20%

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

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

REACTIONS. (size) 4=0-3-8, 2=0-3-8
Max Horz 2=83(LC 15)
Max Uplift 4=-19(LC 13), 2=-44(LC 16)
Max Grav 4=259(LC 21), 2=352(LC 21)

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-9-12 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 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.
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.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	G7	Jack-Open	1	1	I43262558

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:51 2020 Page 1
ID:qMeyVrAyR40V1rvItLjLFlzXPDf-FdVcfRt8xlQQeFO4tz6qH3B9ew7KwdWE0pOUQYyRt1I

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0-10-8 2-4-5

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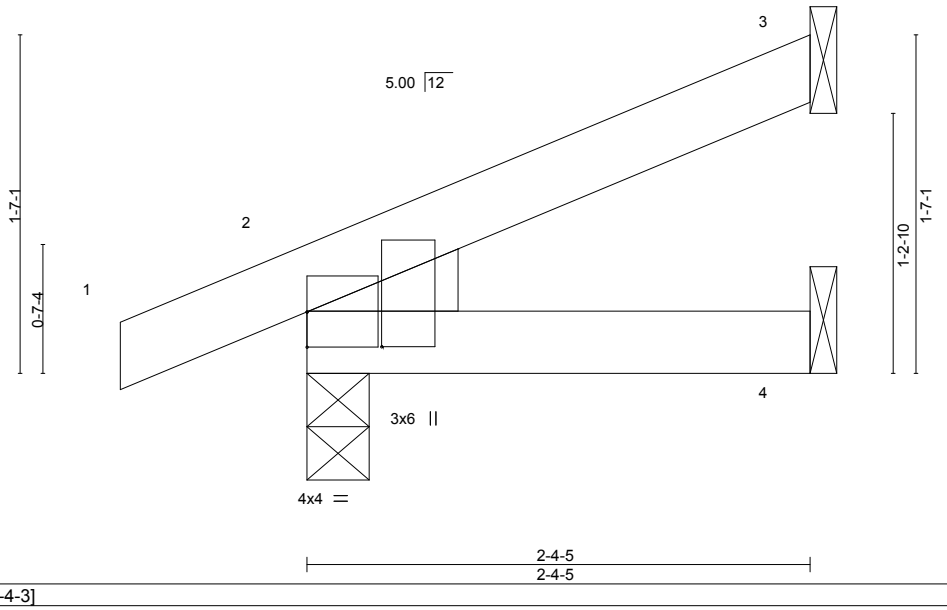


Plate Offsets (X,Y)-- [2:0-1-15,0-4-3]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	-0.00	7	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00	7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 8 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-4-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=42(LC 16)
Max Uplift 3=-15(LC 16), 2=-30(LC 16)
Max Grav 3=72(LC 21), 2=208(LC 21), 4=40(LC 7)

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
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.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	GR1	Common Girder	1	2	I43262559

Job Reference (optional)

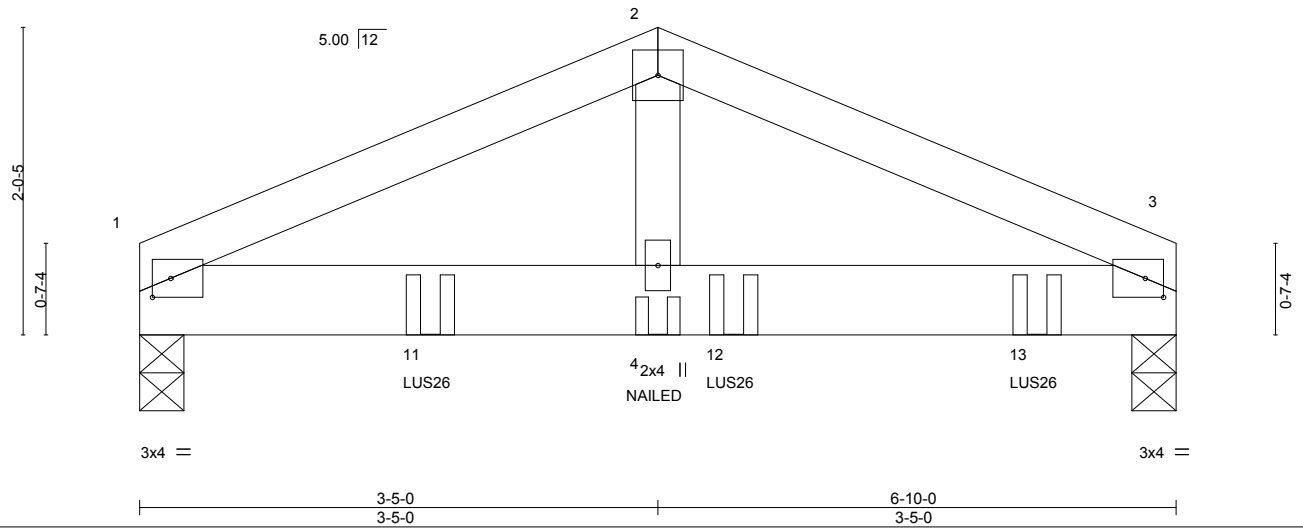
Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:52 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-jp3_snumi3YGGPzGRgd3pHjJZKOtf2DNFT71y_yRt1H

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

3-5-0
3-5-0
6-10-0
3-5-0

4x4 =

Scale = 1:15.2



3-5-0
3-5-0
6-10-0
3-5-0

Plate Offsets (X,Y)-- [1:0-1-7,0-1-8], [3:0-1-7,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	-0.01	4-10	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.02	4-10	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 45 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 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 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 3=0-3-8
Max Horz 1=-23(LC 10)
Max Uplift 1=-140(LC 12), 3=-163(LC 12)
Max Grav 1=1285(LC 2), 3=1613(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2034/247, 2-3=-2022/246
BOT CHORD 1-4=-198/1835, 3-4=-198/1835
WEBS 2-4=-147/1336

NOTES-
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 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-8-0 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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
6) Unbalanced snow loads have been considered for this design.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=140, 3=163.
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) 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 1-11-0 from the left end to 5-11-0 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 3-12d (0.148"x3.25") toe-nails per NDS guidlines.

LOAD CASE(S) Standard

October 20,2020

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	GR1	Common Girder	1	2	I43262559

Builders FirstSource (Valley Center), Valley Center, KS - 67147, Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:52 2020 Page 2
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-jp3_snumi3YGGPzGRgd3pHjJZKOtf2DNFT71y_yRt1H

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-60, 2-3=-60, 5-8=-20
   Concentrated Loads (lb)
   Vert: 4=-81(B) 11=-660(F) 12=-660(F) 13=-660(F)

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	H1	GABLE	1	1	I43262560

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:53 2020 Page 1
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0-10-8 6-0-0 6-0-0 0-10-8

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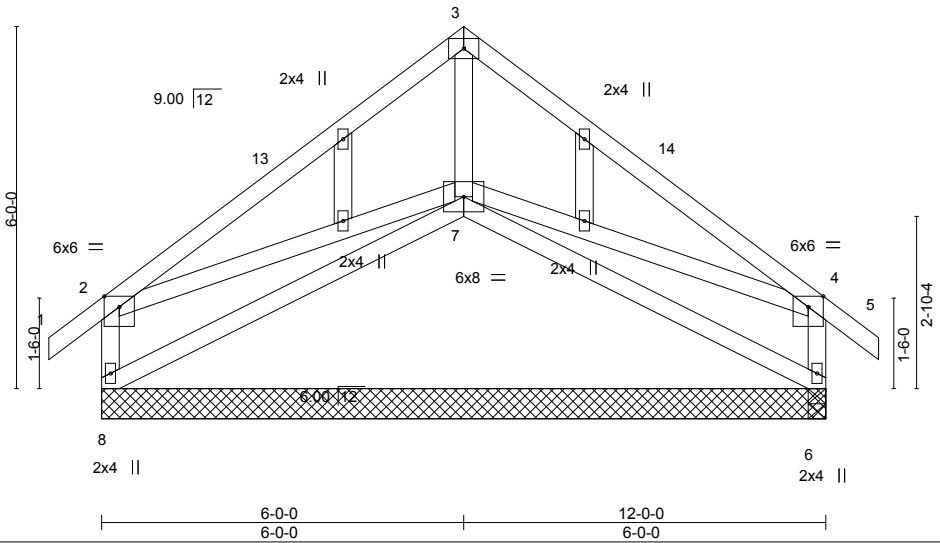


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	-0.04	6-7	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.08	6-7	>894	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 58 lb	FT = 20%
BCDL	10.0											

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 12-0-0.
(lb) - Max Horz 8=158(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) except 8=-111(LC 14), 6=-111(LC 14)
Max Grav All reactions 250 lb or less at joint(s) except 8=347(LC 2), 6=347(LC 2), 6=306(LC 1), 7=502(LC 2)

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

TOP CHORD	2-8=-363/209, 4-6=-363/209
BOT CHORD	7-8=-163/316
WEBS	3-7=-282/47

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-0-0, Exterior(2R) 6-0-0 to 9-0-0 , Interior(1) 9-0-0 to 12-10-8 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 111 lb uplift at joint 8 and 111 lb uplift at joint 6.
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.

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	H2	Scissor	4	1	I43262561

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:55 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-8Ol6Uowf__wr7thr6oAmRvLmtXRnsQYpxRMhZJyRt1E

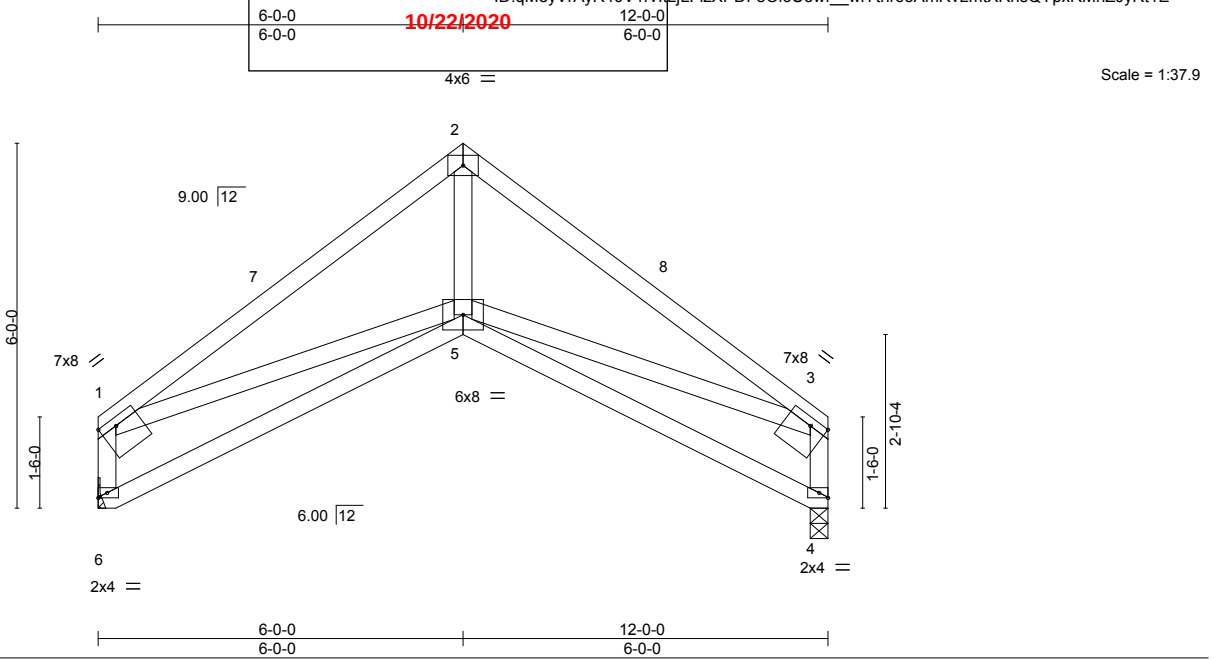


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [3:Edge,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.04	4-5	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	-0.08	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.04	4	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 52 lb	FT = 20%
BCDL	10.0											

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, 4=0-3-8
Max Horz 6=141(LC 13)
Max Uplift 6=-43(LC 14), 4=-43(LC 14)
Max Grav 6=527(LC 2), 4=527(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-894/187, 2-3=-894/194, 1-6=-535/184, 3-4=-535/171
BOT CHORD 5-6=-140/294
WEBS 2-5=-35/531, 1-5=0/496, 3-5=-19/544

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 6-0-0, Exterior(2R) 6-0-0 to 9-0-0, Interior(1) 9-0-0 to 11-10-4 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
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) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 43 lb uplift at joint 6 and 43 lb uplift at joint 4.
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) 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.

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER
PE-2001018807
PROFESSIONAL ENGINEER

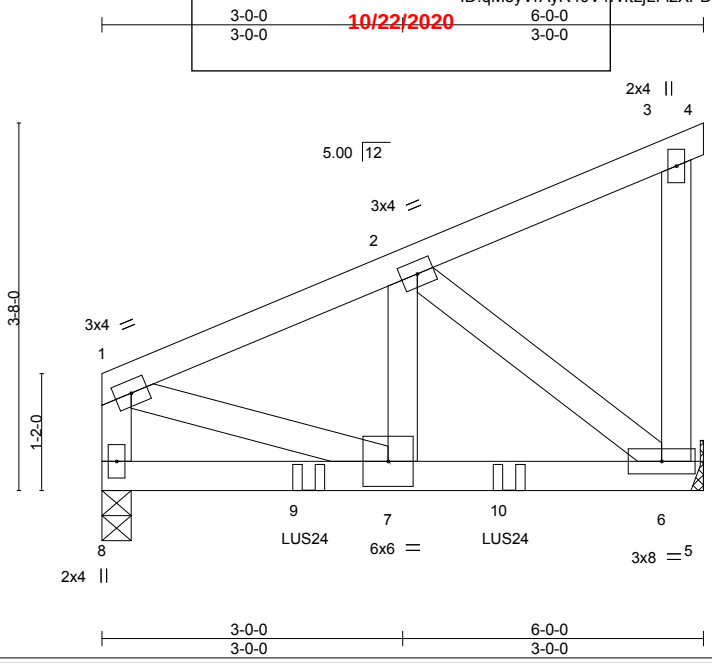
October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	J1	Jack-Closed Girder	1	1	I43262562

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:56 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-cbJVi8xHII2ik0G1gWh?_7u__xgKbrWzA55F5lyRt1D



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	-0.02	6-7	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.03	7-8	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.21	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 27 lb	FT = 20%
BCDL	10.0											

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) 8=0-3-8, 6=Mechanical
Max Horz 8=113(LC 9)
Max Uplift 8=-63(LC 12), 6=-85(LC 9)
Max Grav 8=736(LC 16), 6=807(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-8=-641/64, 1-2=-828/88
BOT CHORD 6-7=-104/743
WEBS 1-7=-53/781, 2-7=-55/652, 2-6=-939/115

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
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 63 lb uplift at joint 8 and 85 lb uplift at joint 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) 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 2-0-12 from the left end to 4-0-12 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-4=-60, 5-8=-20
Concentrated Loads (lb)
Vert: 9=-448(F) 10=-448(F)

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	J2	Jack-Open	2	1	I43262563

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:01 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-yY6Ols?Qaqh?ro9?T3HAhAbmHyP7G9hiJMp0mzyRt18

-0-10-8 / 0-10-8 | 3-6-7 / 3-6-7 | 6-0-0 / 2-5-9

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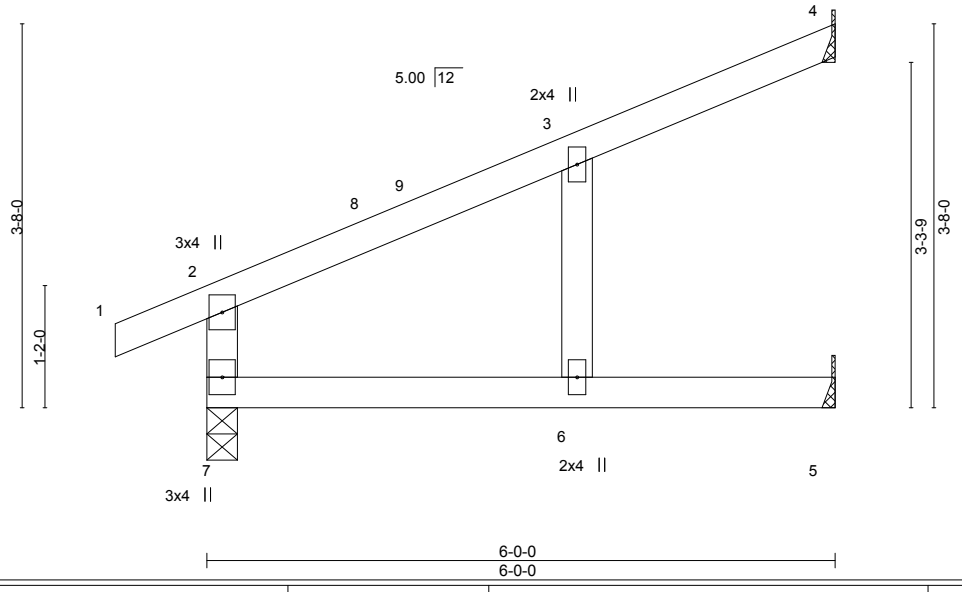

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	-0.11	6-7	>614	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.18	6-7	>389	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.09	4	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 19 lb	FT = 20%
BCDL	10.0											

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) 7=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 7=106(LC 16)
Max Uplift 7=-26(LC 16), 4=-36(LC 16), 5=-11(LC 16)
Max Grav 7=387(LC 21), 4=186(LC 21), 5=129(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-282/123

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-11-4 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint 7, 36 lb uplift at joint 4 and 11 lb uplift at joint 5.
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) 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.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	J3	Jack-Open	3	1	I43262564

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:02 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-RkgmzC02L8psSykB0moPDO8wwMm6?cErY0YZJPyRt17

-0-10-8 2-3-8 6-0-0
0-10-8 2-3-8 3-8-8

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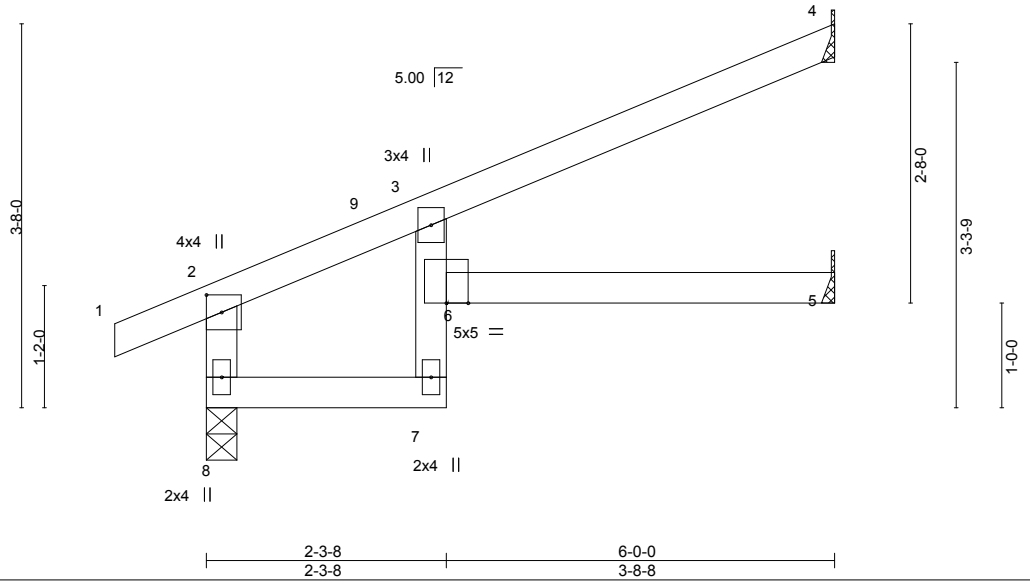

2-3-8 6-0-0
2-3-8 3-8-8

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 (roof)	25.0	Plate Grip DOL	1.15	TC	0.51	Vert(LL)	-0.10	5-6	>689	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.16	5-6	>434	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.07	5	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 18 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) 8=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 8=106(LC 16)
Max Uplift 8=-26(LC 16), 4=-46(LC 16), 5=-1(LC 16)
Max Grav 8=387(LC 21), 4=217(LC 21), 5=99(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-341/148, 2-3=-258/53

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-1, Interior(1) 2-1-1 to 5-11-4 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint 8, 46 lb uplift at joint 4 and 1 lb uplift at joint 5.
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) 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.

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	J4	Half Hip Girder	1	1	I43262565

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:03 2020 Page 1
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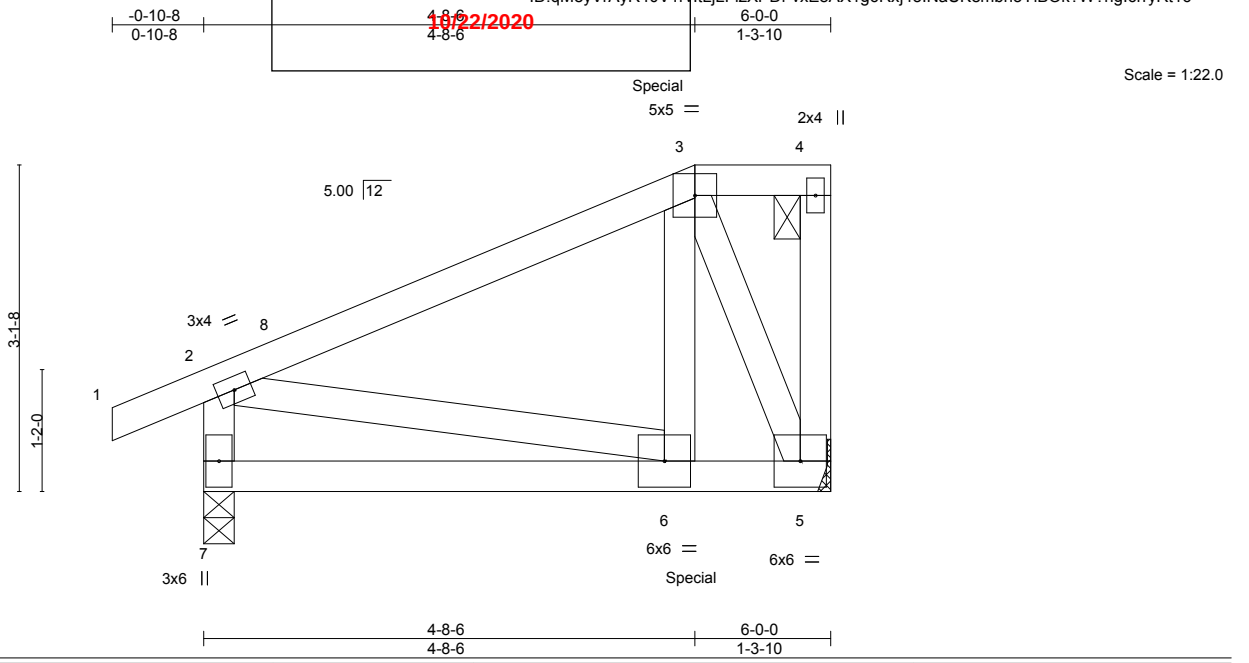


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.02	6-7	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.04	6-7	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.32	Horz(CT)	-0.00	5	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 30 lb	FT = 20%
BCDL	10.0											

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 7-1-3 oc bracing.

REACTIONS. (size) 7=0-3-8, 5=Mechanical
Max Horz 7=103(LC 11)
Max Uplift 7=-477(LC 12), 5=-1665(LC 9)
Max Grav 7=717(LC 68), 5=1762(LC 51)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-888/748, 2-7=-673/485
BOT CHORD 5-6=-683/719
WEBS 3-6=-296/1501, 3-5=-1871/1755, 2-6=-676/843

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 477 lb uplift at joint 7 and 1665 lb uplift at joint 5.
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.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 547 lb down and 1613 lb up at 4-8-6 on top chord, and 1623 lb down and 497 lb up at 4-8-6 on bottom 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).

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

October 20,2020

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	J4	Half Hip Girder	1	1	I43262565

Job Reference (optional)

LOAD CASE(S) Standard
Uniform Loads (plf)
Vert: 1-2=-60, 2-3=-60, 3-4=-60, 5-7=-20
Concentrated Loads (lb)
Vert: 6=-11(B) 3=-39(B)

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	J5	Jack-Open	3	1	I43262566

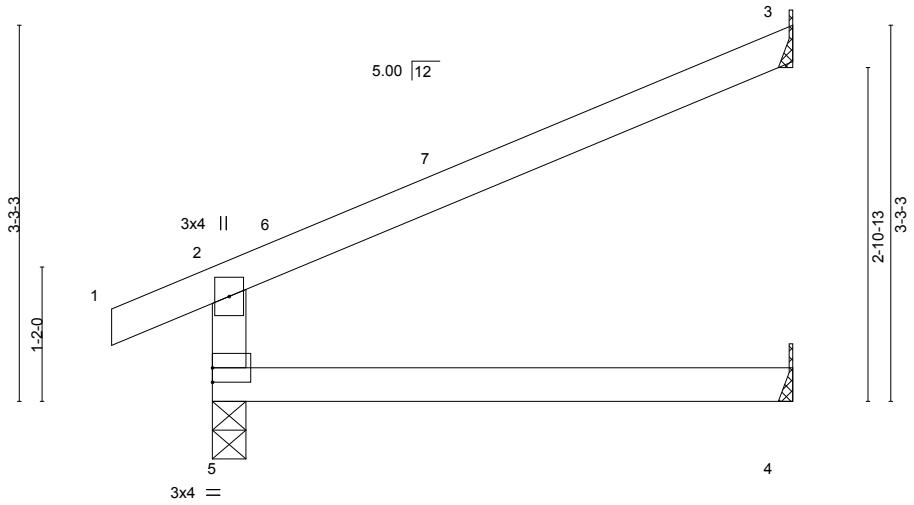
Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:04 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-N7oWNt1ltl3ZiFta8BrtJpDHo9WcTWk8?K1gNIyRt15

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

-0-10-8 0-10-8 5-0-8 5-0-8

Scale = 1:20.0



5-0-8 5-0-8

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	0.03	4-5	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.06	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.04	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 14 lb	FT = 20%
BCDL	10.0											

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=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=95(LC 16)
Max Uplift 5=-25(LC 16), 3=-49(LC 16)
Max Grav 5=369(LC 21), 3=197(LC 21), 4=91(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-332/158

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 5 and 49 lb uplift at joint 3.
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) 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.

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER
PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	J6	Jack-Open	4	1	I43262567

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:05 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-rJLubD2we3BQJPSmivM6r0mU8ZqKCz_IE_nDvkyRt14

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

-0-10-8 / 0-10-8 | 2-3-8 / 2-3-8 | 5-0-8 / 2-9-0

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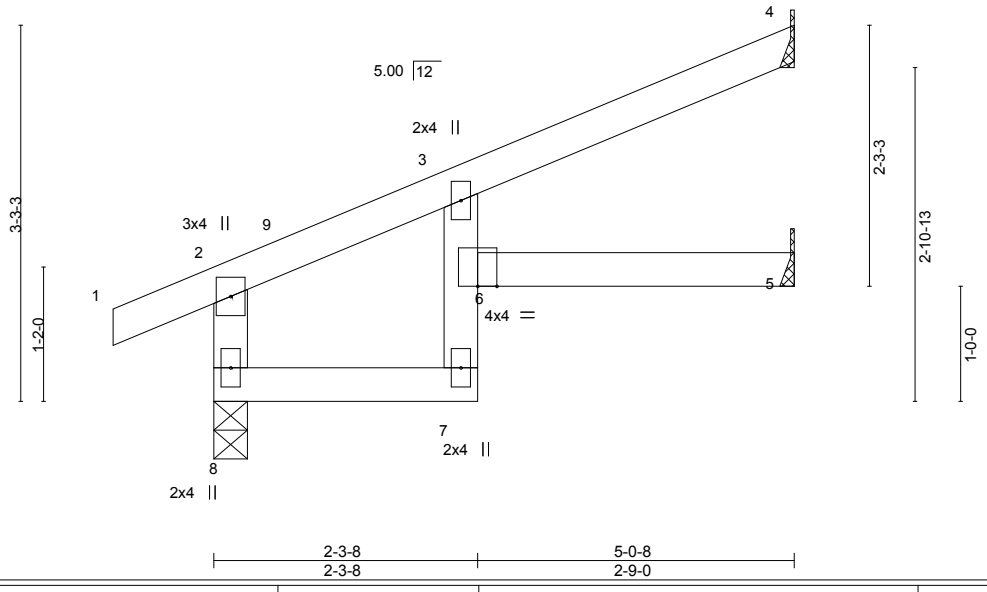

2-3-8 / 2-3-8 | 5-0-8 / 2-9-0

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	-0.05	5-6	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.07	5-6	>786	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.03	5	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 16 lb	FT = 20%
BCDL	10.0											

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) 8=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 8=95(LC 16)
Max Uplift 8=-25(LC 16), 4=-37(LC 16), 5=-4(LC 16)
Max Grav 8=369(LC 21), 4=173(LC 21), 5=84(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-329/142

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-1, Interior(1) 2-1-1 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 8, 37 lb uplift at joint 4 and 4 lb uplift at joint 5.
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) 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.

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	J7	Jack-Open	1	1	I43262568

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:06 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-JWvHoZ3YPMJHxZ1yFctLOEIgtzD6xQERTeWnSAyRt13

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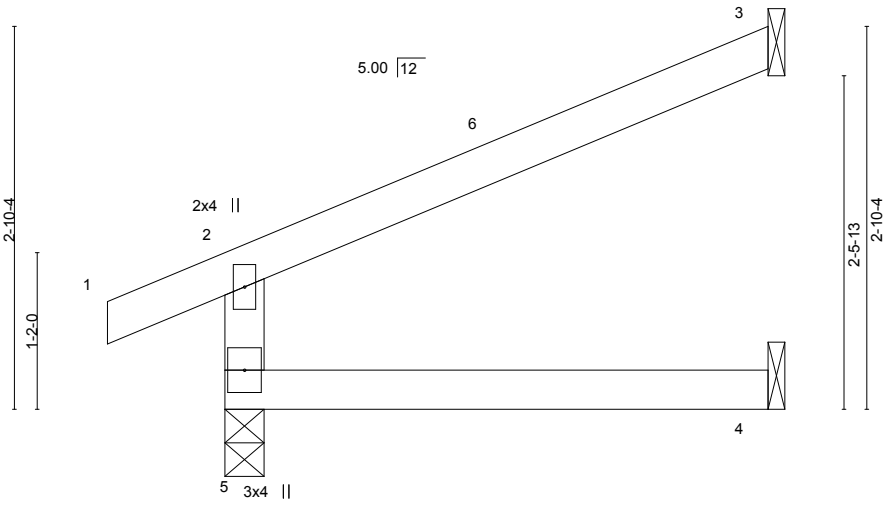

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	0.02	4-5	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.02	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.02	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 12 lb	FT = 20%
BCDL	10.0											

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=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=83(LC 16)
Max Uplift 5=-23(LC 16), 3=-40(LC 16)
Max Grav 5=316(LC 21), 3=153(LC 21), 4=72(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-285/141

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-11-13 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 5 and 40 lb uplift at joint 3.
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) 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.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	J8	Jack-Open	2	1	I43262569

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:07 2020 Page 1
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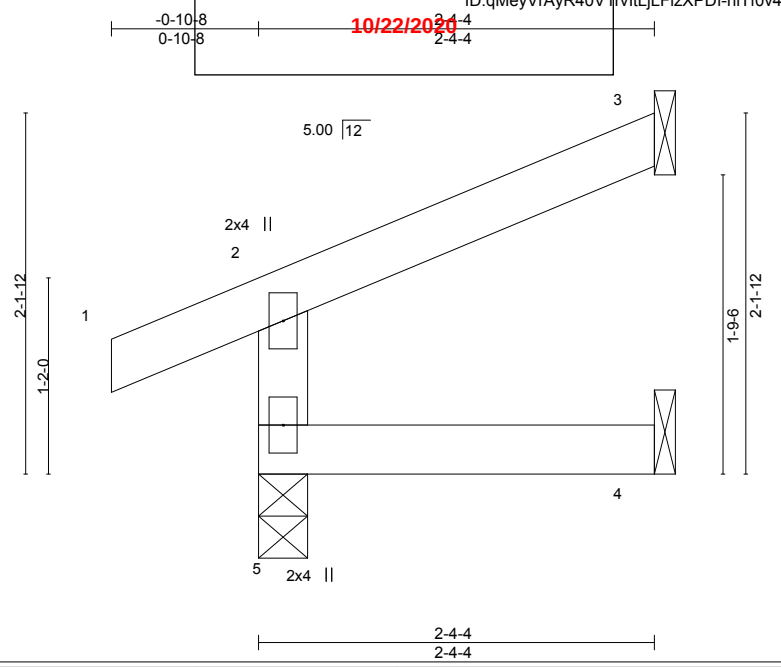

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.00	4-5	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.00	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCLL	0.0	Code IRC2018/TPI2014		Matrix-MR							Weight: 8 lb	FT = 20%
BCDL	10.0											

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 2-4-4 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=64(LC 16)
Max Uplift 5=-20(LC 16), 3=-24(LC 16), 4=-3(LC 16)
Max Grav 5=219(LC 21), 3=71(LC 21), 4=40(LC 7)

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 20 lb uplift at joint 5, 24 lb uplift at joint 3 and 3 lb uplift at joint 4.
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.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	J9	Jack-Open	2	1	I43262570

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:07 2020 Page 1
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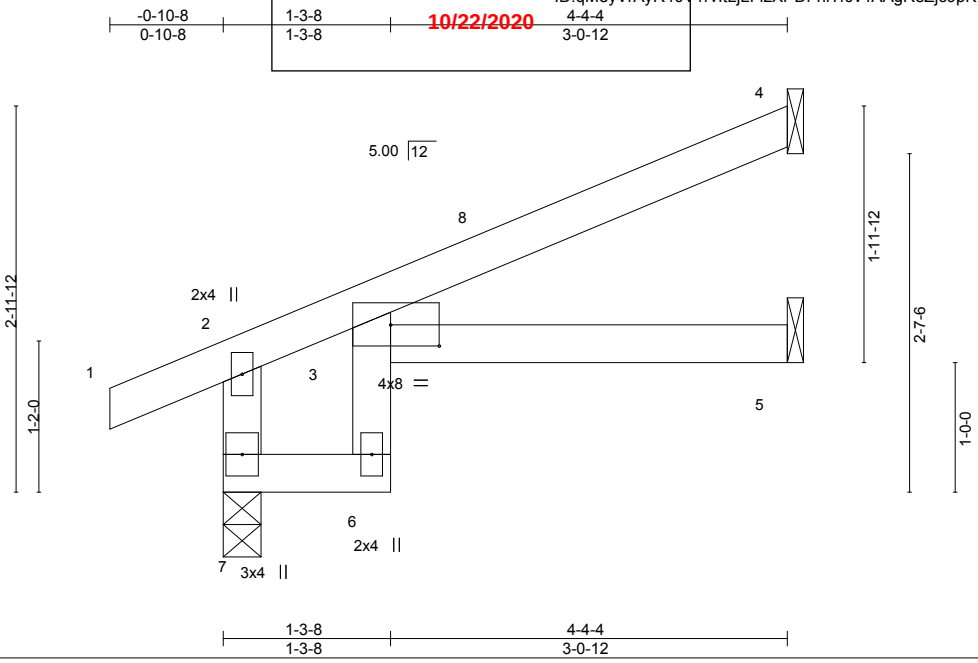

Plate Offsets (X,Y)-- [3:0-4-8,0-1-15]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	0.03	3-5	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.04	3-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.05	5	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 14 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) 7=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 7=87(LC 16)
Max Uplift 7=-23(LC 16), 4=-36(LC 16), 5=-1(LC 16)
Max Grav 7=334(LC 21), 4=152(LC 21), 5=73(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-329/192

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-3-8 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
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 7, 36 lb uplift at joint 4 and 1 lb uplift at joint 5.
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) 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.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	J9A	Jack-Open Supported Gable	1	1	I43262571

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:08 2020 Page 1
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0-10-8 4-4-4

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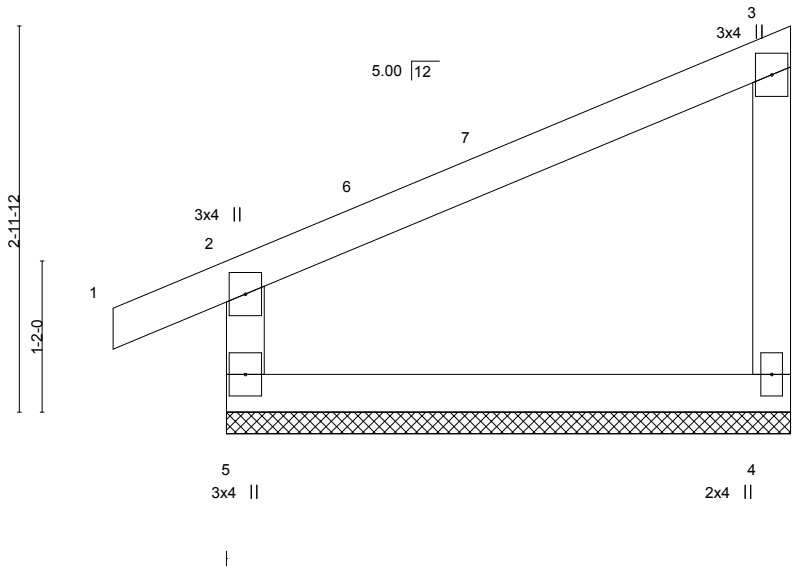


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	0.00	1	n/r	120	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	0.01	1	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 15 lb	FT = 20%
BCDL	10.0											

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 4-4-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=4-4-4, 4=4-4-4
Max Horz 5=95(LC 13)
Max Uplift 5=-43(LC 16), 4=-30(LC 13)
Max Grav 5=328(LC 21), 4=213(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-298/269

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 4-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Gable requires continuous bottom chord bearing.
7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 43 lb uplift at joint 5 and 30 lb uplift at joint 4.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	J10	Jack-Open	1	1	I43262572

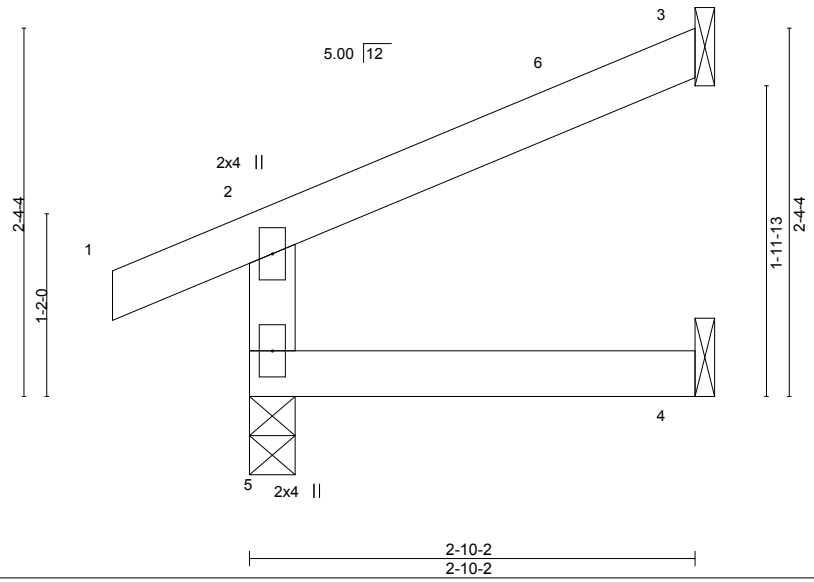
Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:56 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-cbJVi8xHll2ik0G1gWh?_7u?kxpqbulzA55F5lyRt1D

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

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

Scale = 1:14.7



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	-0.00	4-5	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	-0.00	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 9 lb	FT = 20%
BCDL	10.0											

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 2-10-2 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=69(LC 16)
Max Uplift 5=-21(LC 16), 3=-29(LC 16)
Max Grav 5=245(LC 21), 3=95(LC 21), 4=49(LC 7)

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 2-9-6 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
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 21 lb uplift at joint 5 and 29 lb uplift at joint 3.
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.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	J11	Jack-Open	7	1	I43262573

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:57 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-4nttvUyvWbAZMArEEDDEWKR3wL4BKL?6OlrodCyRt1C

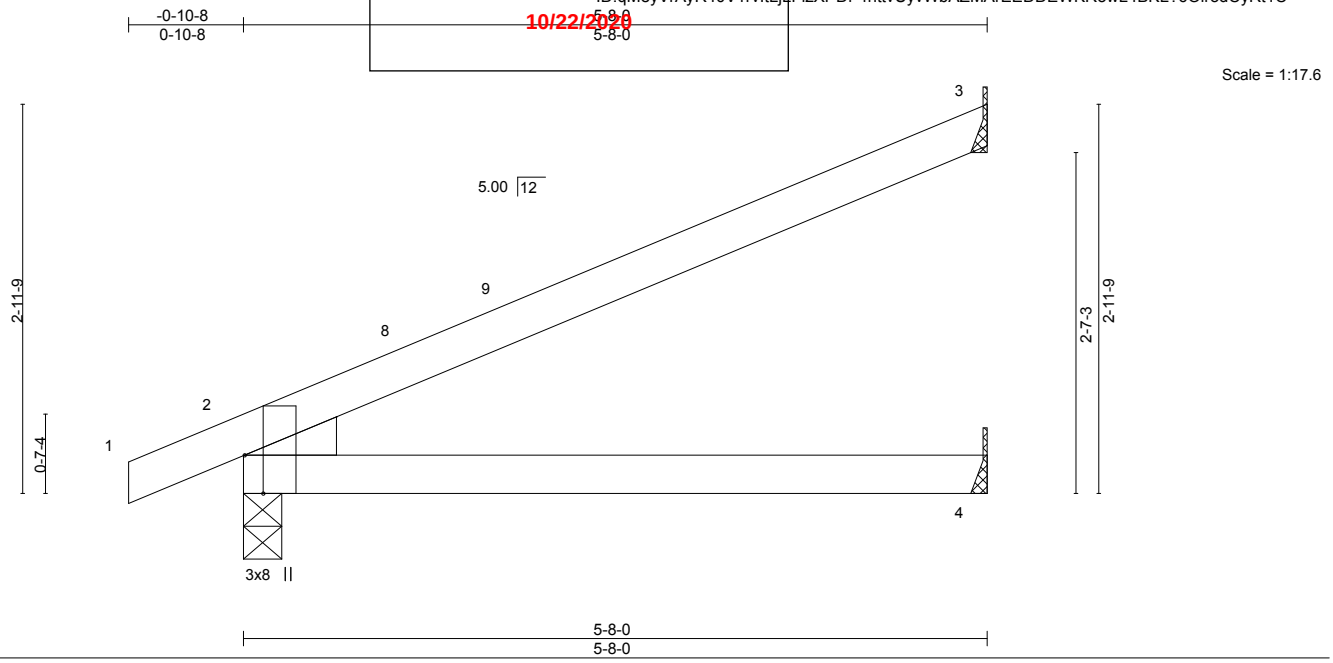


Plate Offsets (X,Y)-- [2:0-0-0,0-0-1], [2:0-0-1,0-5-11], [2:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.07	4-7	>903	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.13	4-7	>522	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.02	2	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 15 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=80(LC 16)
Max Uplift 3=-45(LC 16), 2=-32(LC 16)
Max Grav 3=221(LC 21), 2=366(LC 21), 4=101(LC 7)

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-7-4 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 45 lb uplift at joint 3 and 32 lb uplift at joint 2.
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) 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.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	J12	Monopitch Supported Gable	1	1	I43262574

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:58 2020 Page 1
ID:qMeyVrAyR40V1rvItLjLFlzXPDf-YzQF7qzXHvJQ_KQQnxkT3YzLukWJ3oFGdPaLAeyRt1B

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0-10-8 2-0-1

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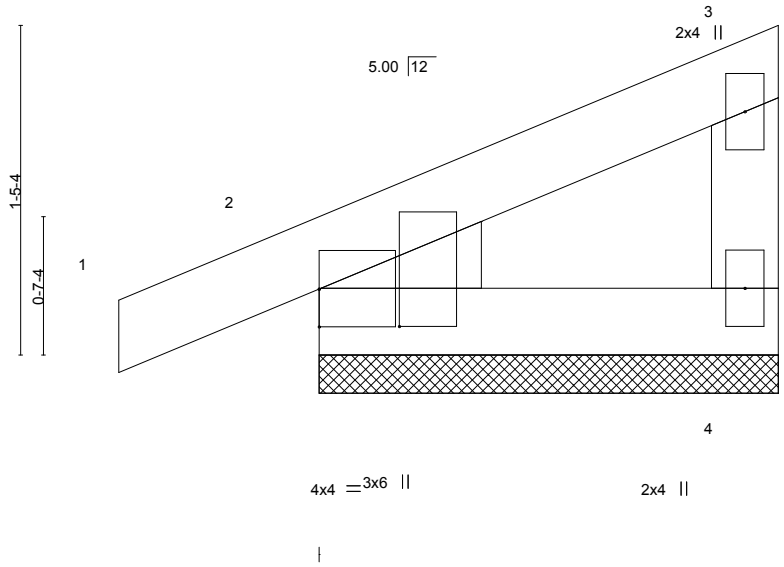

Plate Offsets (X,Y)-- [2:0-1-15,0-4-3]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	0.00	1	n/r	120	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	1	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P								
BCDL	10.0										Weight: 8 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-0-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=2-0-1, 2=2-0-1
Max Horz 2=38(LC 15)
Max Uplift 4=-10(LC 13), 2=-38(LC 16)
Max Grav 4=78(LC 21), 2=185(LC 21)

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=15ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3E) 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 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 10 lb uplift at joint 4 and 38 lb uplift at joint 2.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	J13	Jack-Open	1	1	I43262575

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:02:59 2020 Page 1
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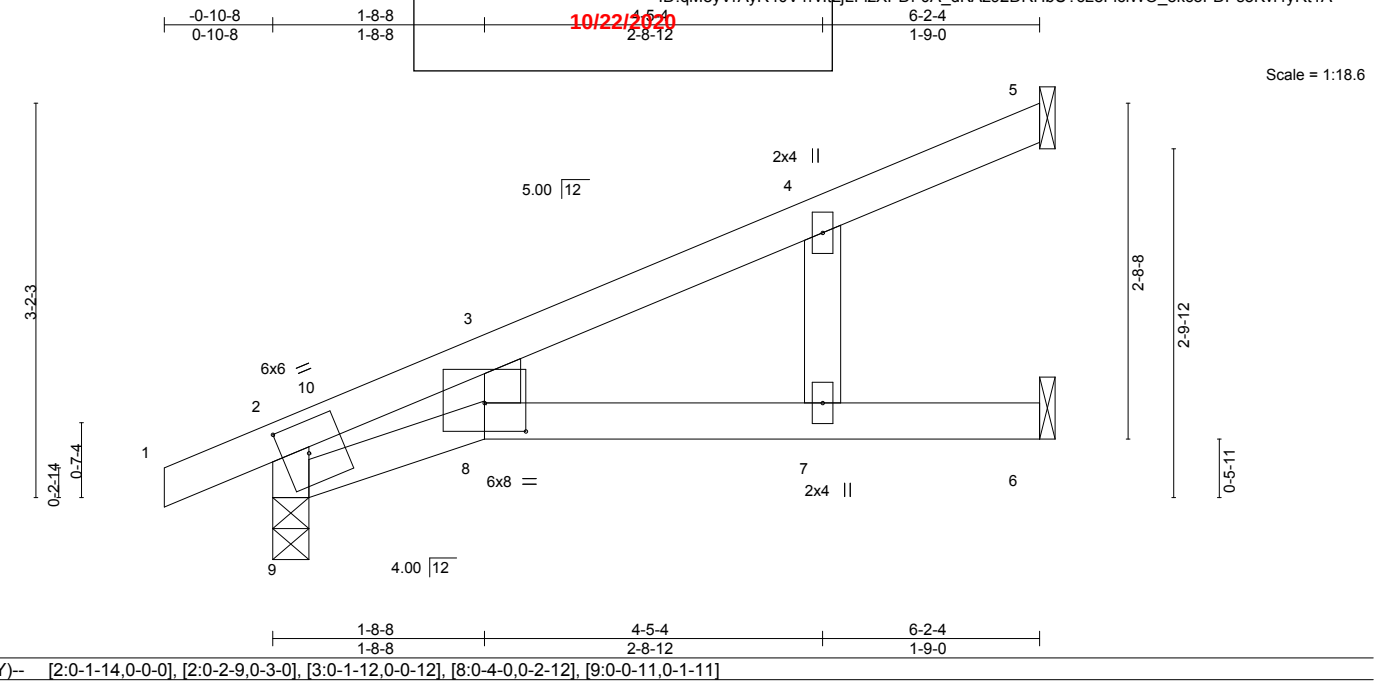

Plate Offsets (X,Y)-- [2:0-1-14,0-0-0], [2:0-2-9,0-3-0], [3:0-1-12,0-0-12], [8:0-4-0,0-2-12], [9:0-0-11,0-1-11]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	-0.13	7-8	>544	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.21	7-8	>346	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.05	6	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 18 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, 9=0-3-8
Max Horz 9=96(LC 16)
Max Uplift 5=-25(LC 16), 6=-14(LC 16), 9=-36(LC 16)
Max Grav 5=169(LC 21), 6=156(LC 21), 9=386(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-9=-277/110

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 1-10-4, Interior(1) 1-10-4 to 6-1-8 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
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) 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.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 5, 14 lb uplift at joint 6 and 36 lb uplift at joint 9.
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) 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.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	J14	Jack-Open	6	1	I43262576

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:00 2020 Page 1
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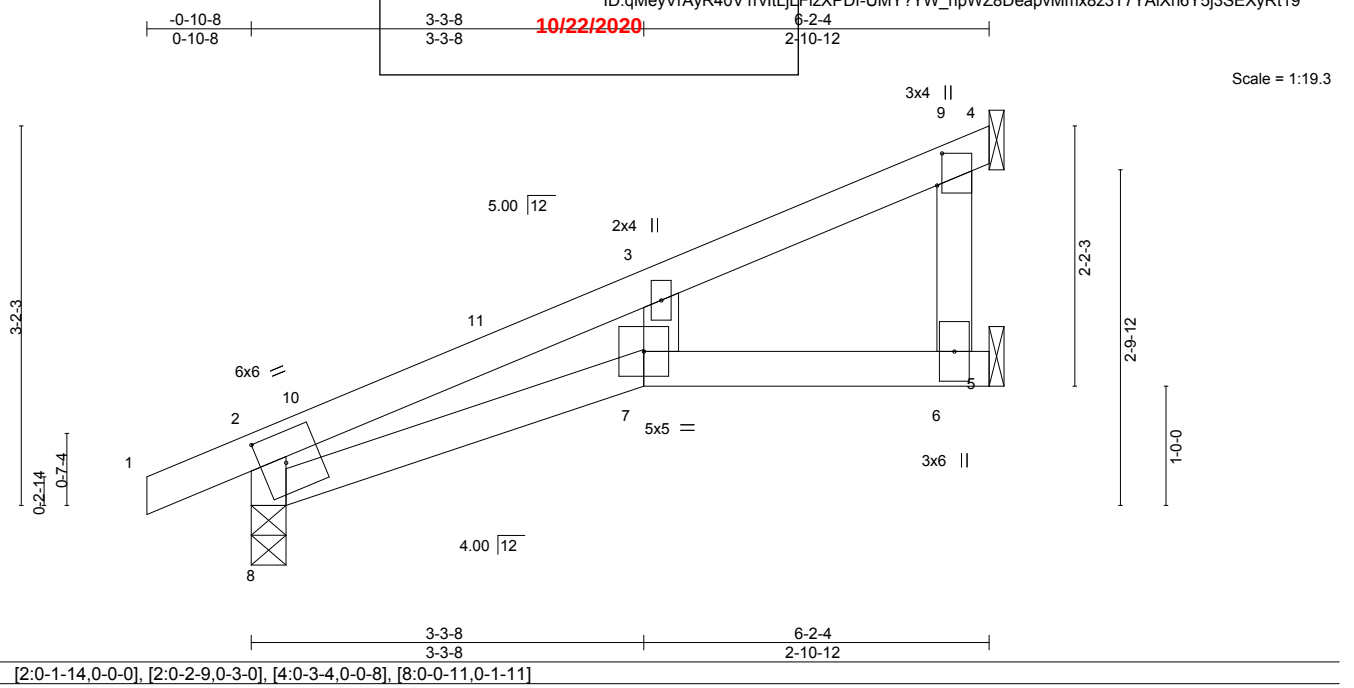

Plate Offsets (X,Y)-- [2:0-1-14,0-0-0], [2:0-2-9,0-3-0], [4:0-3-4,0-0-8], [8:0-0-11,0-1-11]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.91	Vert(LL)	-0.25	7	>280	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	-0.37	7	>189	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.12	6	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS								
BCDL	10.0										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, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 6=Mechanical, 4=Mechanical, 8=0-3-8
Max Horz 8=97(LC 16)
Max Uplift 6=-30(LC 14), 4=-610(LC 16), 8=-65(LC 16)
Max Grav 6=600(LC 16), 4=244(LC 28), 8=382(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-351/244
WEBS 4-6=-1035/394

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-2-4 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
6) N/A
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Refer to girder(s) for truss to truss connections.
9) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 6, 610 lb uplift at joint 4 and 65 lb uplift at joint 8.
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) 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.
13) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	J15	Jack-Open	1	1	I43262577

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:00 2020 Page 1
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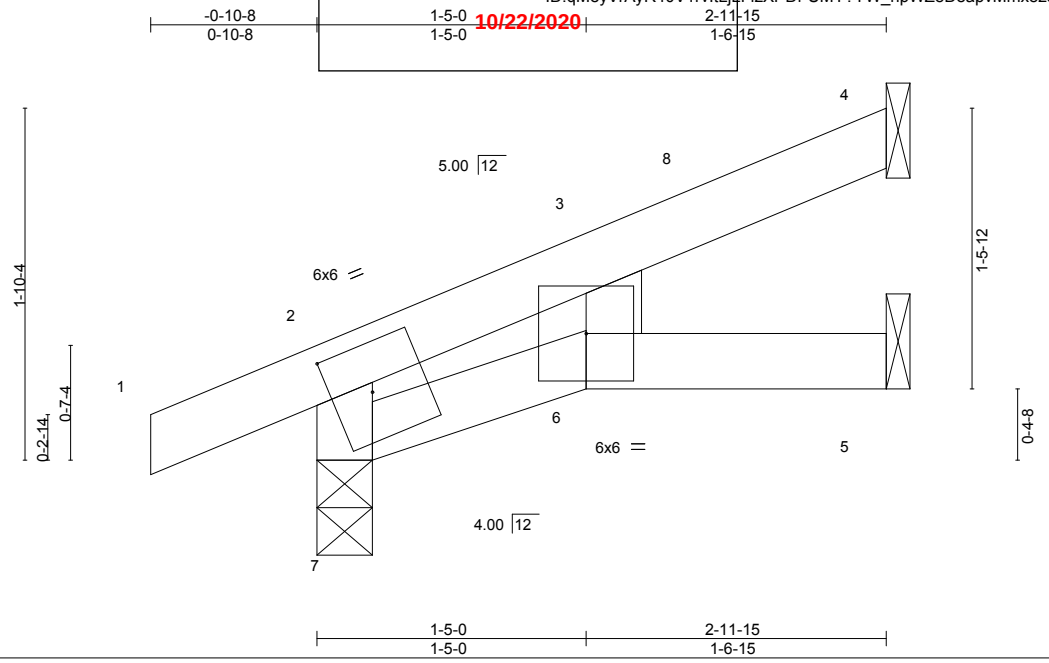

Plate Offsets (X,Y)-- [2:0-1-14,0-0-0], [2:0-2-9,0-3-0], [3:0-1-12,0-0-12], [7:0-0-11,0-1-11]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	0.01	6	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.01	6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.01	Horz(CT)	-0.00	4	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 9 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 2-11-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 5=Mechanical, 7=0-3-8
Max Horz 7=59(LC 16)
Max Uplift 4=-18(LC 16), 7=-34(LC 16)
Max Grav 4=88(LC 21), 5=45(LC 21), 7=254(LC 21)

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 2-11-3 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) 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.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 18 lb uplift at joint 4 and 34 lb uplift at joint 7.
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.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	K1	Half Hip Girder	1	1	I43262578

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:10 2020 Page 1
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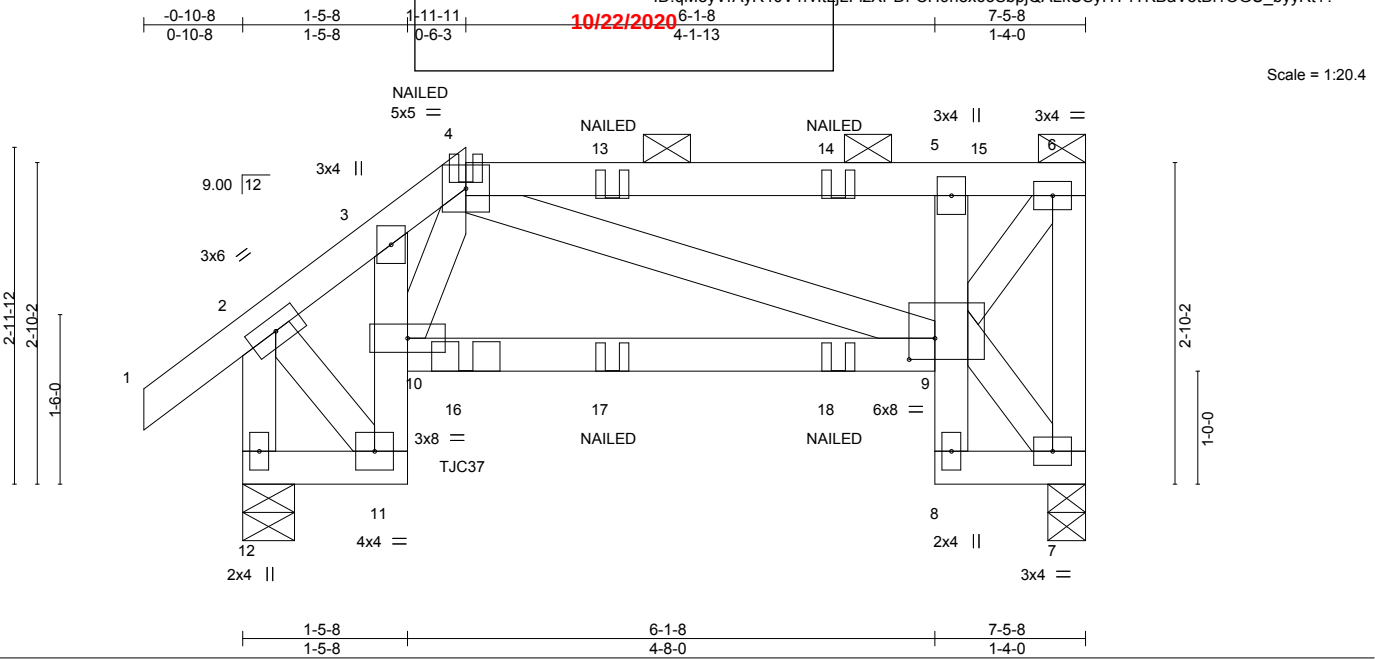


Plate Offsets (X,Y)-- [9:0-2-12,0-2-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	-0.04	9-10	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.08	9-10	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.04	7	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MS								
BCDL	10.0										Weight: 39 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 (6-0-0 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 7=0-4-0, 12=0-5-8
Max Horz 12=98(LC 9)
Max Uplift 7=-107(LC 7), 12=-154(LC 10)
Max Grav 7=480(LC 1), 12=581(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-374/128, 3-4=-490/177, 4-5=-458/96, 5-6=-360/81, 6-7=-466/114, 2-12=-617/169
BOT CHORD 9-10=-227/496, 5-9=-386/109
WEBS 6-9=-166/645, 2-11=-71/273

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 107 lb uplift at joint 7 and 154 lb uplift at joint 12.
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 TJC37 (4 nail 90-150) or equivalent at 1-11-11 from the left end to connect truss(es) to back face of bottom chord, skewed 29.1 deg.to the right, sloping 0.0 deg. down.
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 guidlines.
13) 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

October 20,2020

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	K1	Half Hip Girder	1	1	I43262578

Job Reference (optional)

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-2=-60, 2-4=-60, 4-6=-60, 11-12=-20, 9-10=-20, 7-8=-20

Concentrated Loads (lb)

Vert: 4=28(B) 13=-92(B) 14=-92(B) 16=-178(B) 17=-46(B) 18=-46(B)

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	K2	Half Hip	1	1	I43262579

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:19 2020 Page 1
ID:qMeyVrAyR40V1rvItLjLFlzXPDf-R0CBX0DiLMyR?ZXSWrcOQzLwtCeXTHFLSAAzOwyRt0s

-0-10-8 1-5-8 3-1-0 6-1-8 7-5-8
0-10-8 1-5-8 1-7-8 3-0-8 1-4-0

Scale: 1/2"=1'

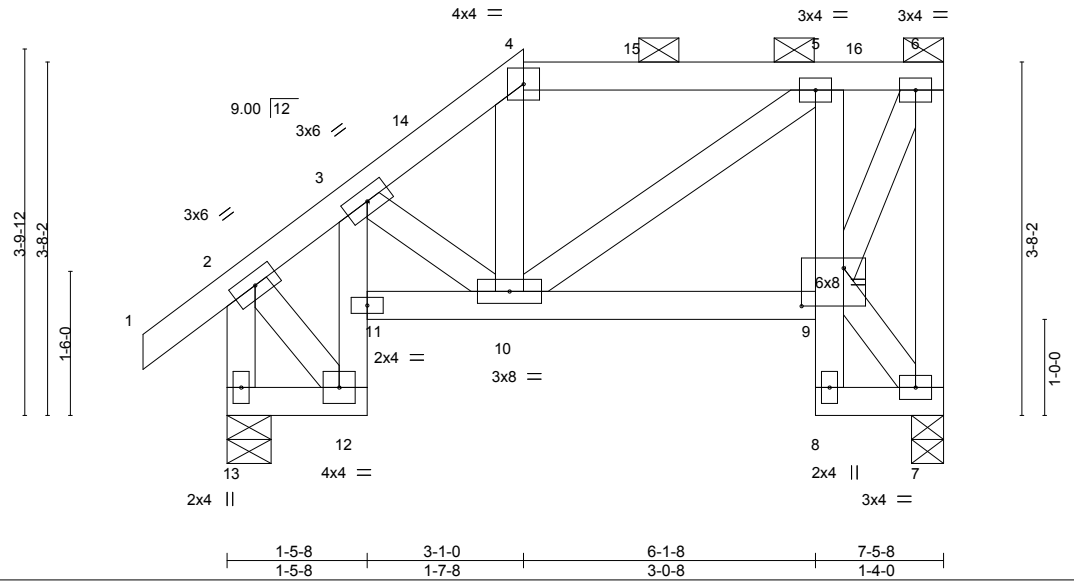


Plate Offsets (X,Y)-- [9:0-5-4,0-4-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	-0.01	11	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.01	9-10	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.02	7	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 44 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.): 4-6.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 7=0-4-0, 13=0-5-8
Max Horz 13=127(LC 13)
Max Uplift 7=-58(LC 11), 13=-52(LC 14)
Max Grav 7=317(LC 2), 13=399(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-318/162, 6-7=-292/177, 2-13=-418/151
BOT CHORD 10-11=-345/353
WEBS 6-9=-208/315

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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 7-3-12 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 58 lb uplift at joint 7 and 52 lb uplift at joint 13.
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) 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.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	K3	Half Hip	1	1	I43262580

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:20 2020 Page 1
ID:qMeyVrAyR40V1rvItLjLFlzXPDf-vClZkLEK6g4Idj6f4Y7dyBu50cz8CkfVhqwWwMyRt0r

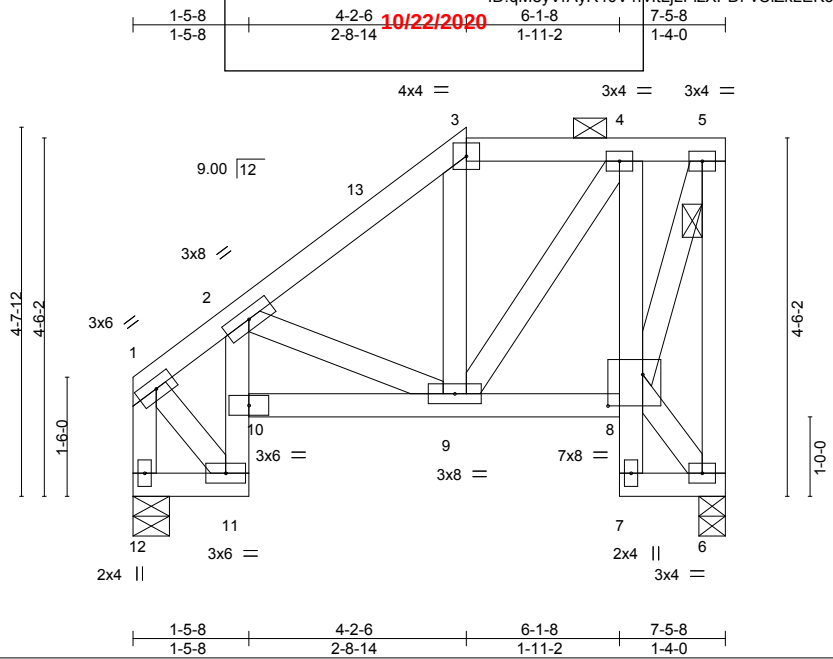


Plate Offsets (X,Y)-- [8:0-5-4,0-4-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.01	9-10	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.01	9-10	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.02	6	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 48 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.): 3-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 6=0-4-0, 12=0-5-8
Max Horz 12=144(LC 13)
Max Uplift 6=-67(LC 11), 12=-21(LC 14)
Max Grav 6=323(LC 2), 12=323(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-299/102, 5-6=-295/218, 1-12=-349/107
BOT CHORD 11-12=-266/196, 9-10=-453/448
WEBS 2-9=-194/251, 5-8=-230/310

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 4-2-6, Exterior(2E) 4-2-6 to 7-3-12 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Provide adequate drainage to prevent water ponding.
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 67 lb uplift at joint 6 and 21 lb uplift at joint 12.
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.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

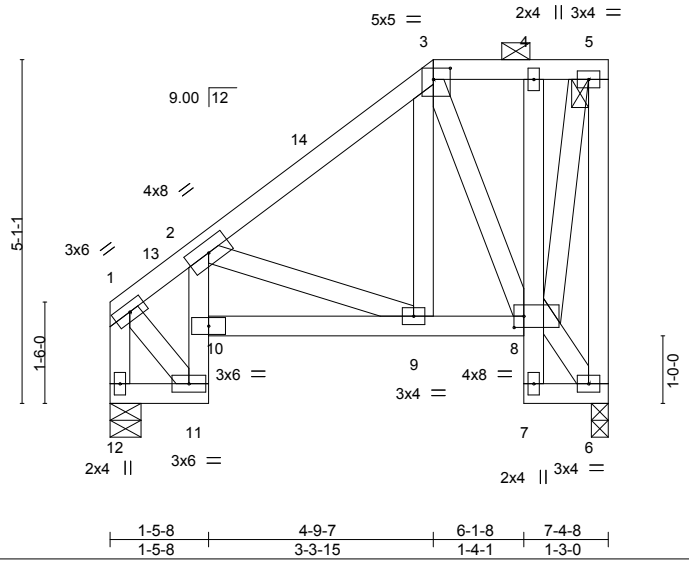
Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	K4	Half Hip	1	1	I43262581

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:21 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-NOJxyhEytzC9EsgreGesVOQGO0lwxBoewUf3TpyRt0q

1-5-8 4-9-7 6-1-8 7-4-8
1-5-8 3-3-15 1-4-1 1-3-0

Scale = 1:34.1



1-5-8 4-9-7 6-1-8 7-4-8
1-5-8 3-3-15 1-4-1 1-3-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	0.02	9-10	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.02	9-10	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	-0.03	6	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 51 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.): 3-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 6=0-3-0, 12=0-5-8
Max Horz 12=164(LC 11)
Max Uplift 6=-76(LC 11), 12=-18(LC 14)
Max Grav 6=319(LC 2), 12=319(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-271/86, 5-6=-285/226, 1-12=-346/90
BOT CHORD 11-12=-303/221, 9-10=-519/499
WEBS 2-9=-272/331, 3-8=-256/233, 5-8=-236/298

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 4-9-7, Exterior(2E) 4-9-7 to 7-2-12 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Provide adequate drainage to prevent water ponding.
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 76 lb uplift at joint 6 and 18 lb uplift at joint 12.
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.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	K5	Roof Special	1	1	I43262582

Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:22 2020 Page 1
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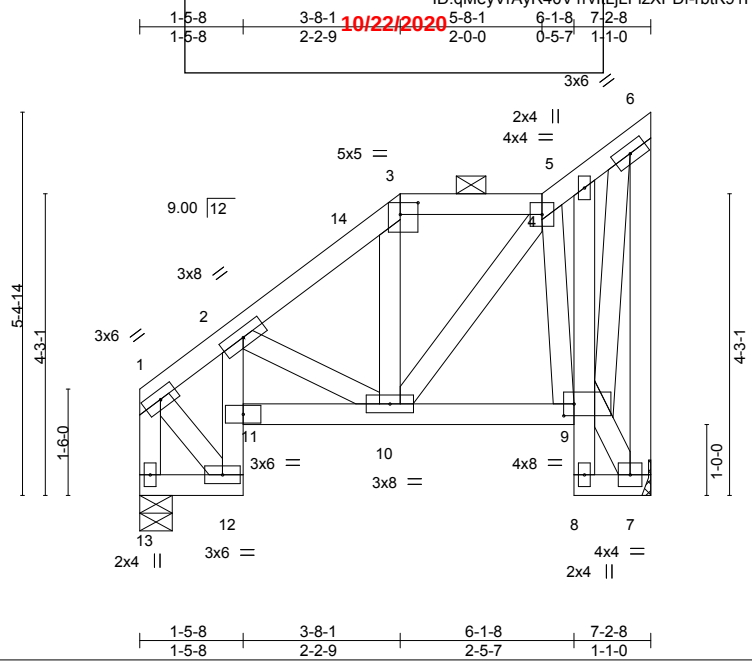


Plate Offsets (X,Y)-- [3:0-3-0,0-2-0], [9:0-1-12,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	-0.01	11	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.01	10-11	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.03	7	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 52 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.

REACTIONS. (size) 7=Mechanical, 13=0-5-8
Max Horz 13=170(LC 11)
Max Uplift 7=-74(LC 11), 13=-17(LC 14)
Max Grav 7=317(LC 23), 13=311(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-300/94, 6-7=-281/209, 1-13=-334/90
BOT CHORD 12-13=-319/232, 10-11=-485/460
WEBS 6-9=-206/290

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 3-8-1, Exterior(2E) 3-8-1 to 5-8-1, Interior(1) 5-8-1 to 7-0-12 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
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 74 lb uplift at joint 7 and 17 lb uplift at joint 13.
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.

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	K6	Roof Special	1	1	I43262583

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:23 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-JnRiNNGDObStUAqDlhgKapWaKp2mP5IxNo8AXhyRt0o

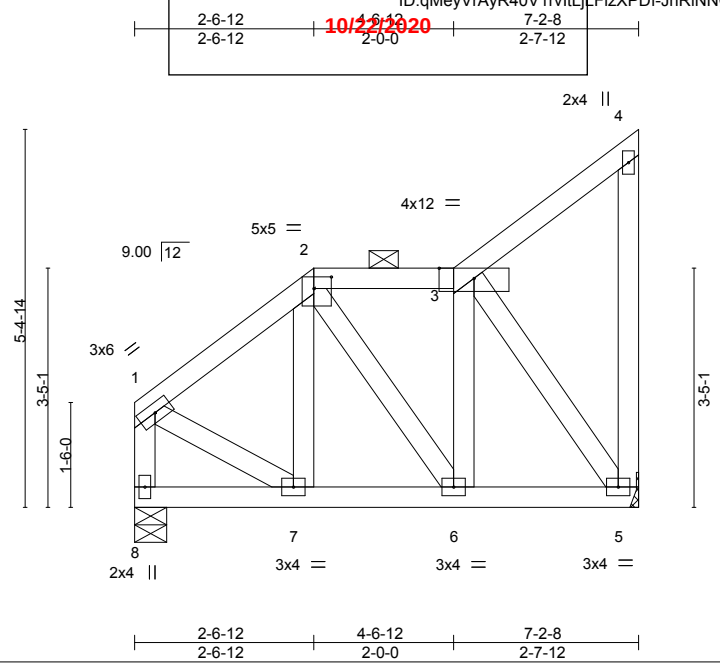


Plate Offsets (X,Y)-- [2:0-3-0,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	-0.00	7	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.00	7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	-0.00	5	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 42 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.): 2-3.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 5=Mechanical, 8=0-5-8
Max Horz 8=170(LC 11)
Max Uplift 5=-71(LC 11), 8=-17(LC 14)
Max Grav 5=320(LC 23), 8=311(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-8=-292/94
BOT CHORD 7-8=-321/230
WEBS 3-5=-260/136

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 4-6-12, Interior(1) 4-6-12 to 7-0-12 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
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 71 lb uplift at joint 5 and 17 lb uplift at joint 8.
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.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	K7	Roof Special	1	1	I43262584

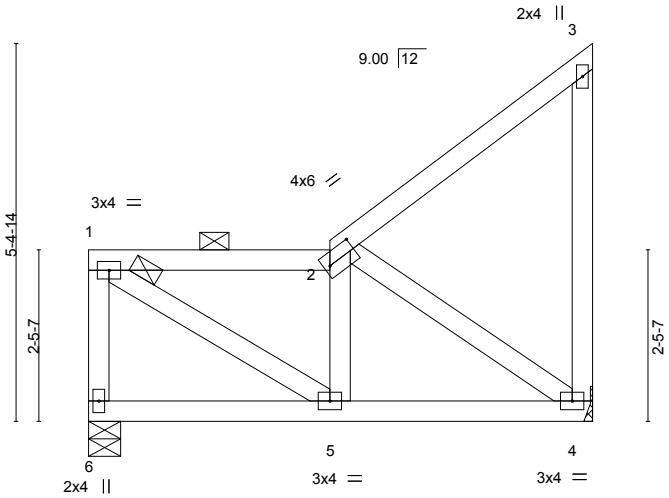
Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:24 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-nz?4ajHr9uak5KPQJOCZ612lqDNu8YE5cRuk38yRt0n

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

3-5-7 7-2-8
3-5-7 3-9-1

Scale = 1:33.0



3-5-7 7-2-8
3-5-7 3-9-1

Plate Offsets (X,Y)-- [2:0-5-0,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	-0.00	4-5	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.01	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 36 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.): 1-2.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 6=0-5-8, 4=Mechanical
Max Horz 6=168(LC 11)
Max Uplift 6=-37(LC 10), 4=-69(LC 11)
Max Grav 6=311(LC 2), 4=323(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-6=-283/115, 1-2=-286/56
BOT CHORD 5-6=-296/245, 4-5=-180/297
WEBS 1-5=-94/343, 2-4=-302/145

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 7-0-12 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
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 37 lb uplift at joint 6 and 69 lb uplift at joint 4.
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.

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	K8	Jack-Open	5	1	I43262585

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:25 2020 Page 1
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5-2-8

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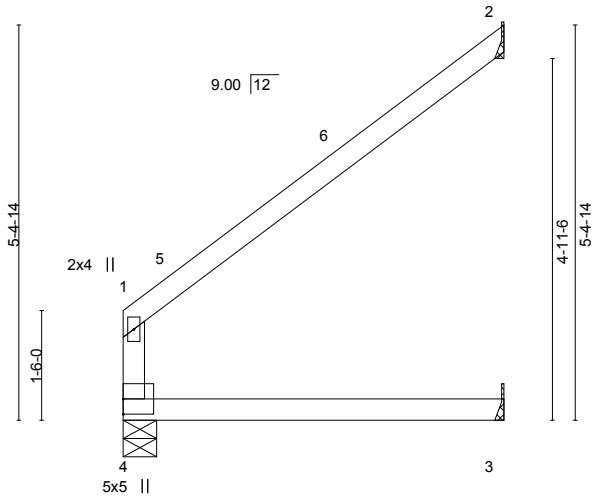

5-2-8
5-2-8

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	0.06	3-4	>926	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.07	3-4	>891	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.11	2	n/a	n/a		
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 15 lb	FT = 20%
BCDL	10.0											

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=0-5-8, 2=Mechanical, 3=Mechanical
Max Horz 4=133(LC 14)
Max Uplift 2=-84(LC 14), 3=-3(LC 14)
Max Grav 4=225(LC 2), 2=175(LC 23), 3=96(LC 5)

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 5-1-12 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
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 84 lb uplift at joint 2 and 3 lb uplift at joint 3.
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.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	K9	Half Hip	1	1	I43262586

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:26 2020 Page 1
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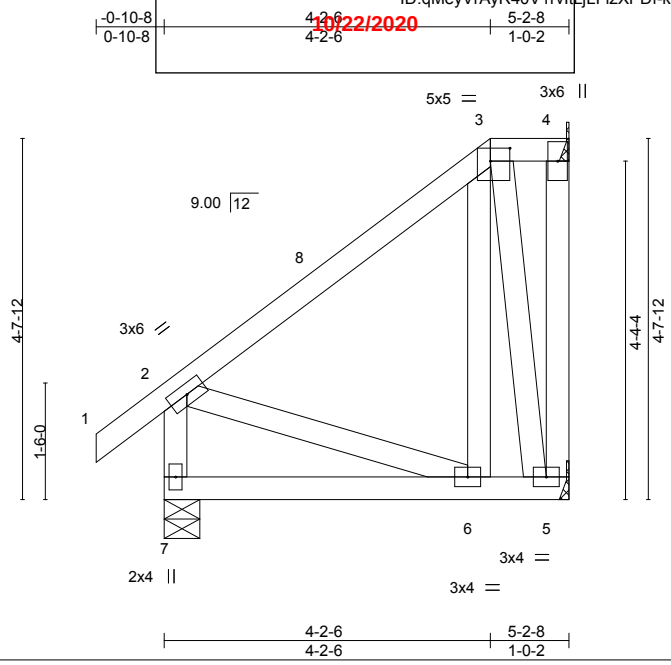


Plate Offsets (X,Y)-- [3:0-3-0,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	-0.01	6-7	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	-0.02	6-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	-0.00	4	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 34 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: 3-4.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 4=Mechanical, 5=Mechanical, 7=0-5-8
Max Horz 7=160(LC 11)
Max Uplift 4=-8(LC 11), 5=-68(LC 11), 7=-37(LC 14)
Max Grav 4=30(LC 2), 5=206(LC 24), 7=300(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-267/136
BOT CHORD 6-7=-335/228
WEBS 3-5=-256/218, 2-6=-122/251

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-2-6, Exterior(2E) 4-2-6 to 5-0-12 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 8 lb uplift at joint 4, 68 lb uplift at joint 5 and 37 lb uplift at joint 7.
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) 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.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	K10	Half Hip	1	1	I43262587

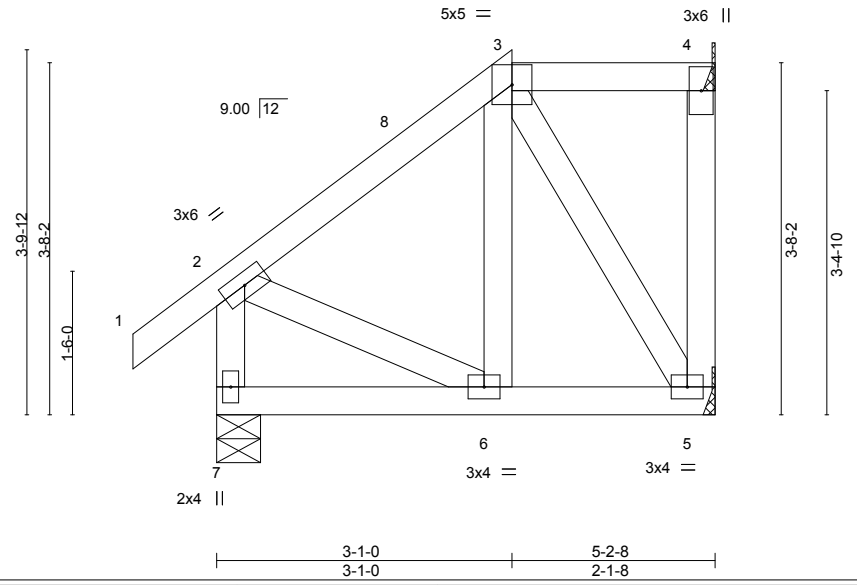
Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:11 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-gTj9rG7hDvxa2Kww29TW5H0Zo_yvcgjAcwEY7OyRt1_

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

-0-10-8 3-1-0 5-2-8
0-10-8 3-1-0 2-1-8

Scale: 1/2"=1'



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	-0.00	6-7	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.00	6-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.00	4	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 30 lb	FT = 20%
BCDL	10.0											

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: 3-4.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 4=Mechanical, 7=0-5-8, 5=Mechanical
Max Horz 7=127(LC 13)
Max Uplift 4=-18(LC 10), 7=-41(LC 14), 5=-40(LC 11)
Max Grav 4=69(LC 2), 7=300(LC 2), 5=156(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-277/141
BOT CHORD 6-7=-266/179

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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 5-0-12 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 18 lb uplift at joint 4, 41 lb uplift at joint 7 and 40 lb uplift at joint 5.
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) 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.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	K11	Half Hip	1	1	I43262588

Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:12 2020 Page 1
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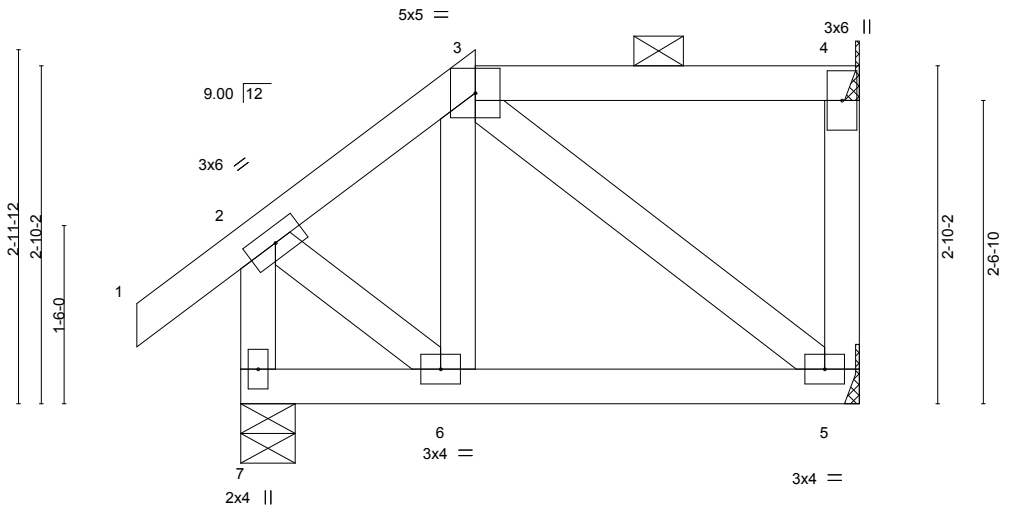

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	-0.00	5-6	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.01	5-6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	-0.00	4	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 27 lb	FT = 20%
BCDL	10.0											

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: 3-4.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 4=Mechanical, 7=0-5-8, 5=Mechanical
Max Horz 7=98(LC 13)
Max Uplift 4=-28(LC 10), 7=-44(LC 14), 5=-17(LC 11)
Max Grav 4=108(LC 2), 7=300(LC 2), 5=115(LC 5)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-293/142

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 28 lb uplift at joint 4, 44 lb uplift at joint 7 and 17 lb uplift at joint 5.
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) 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.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER
PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	K12	Half Hip Girder	1	1	I43262589

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:13 2020 Page 1
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0-10-8 0-10-6 4-4-2

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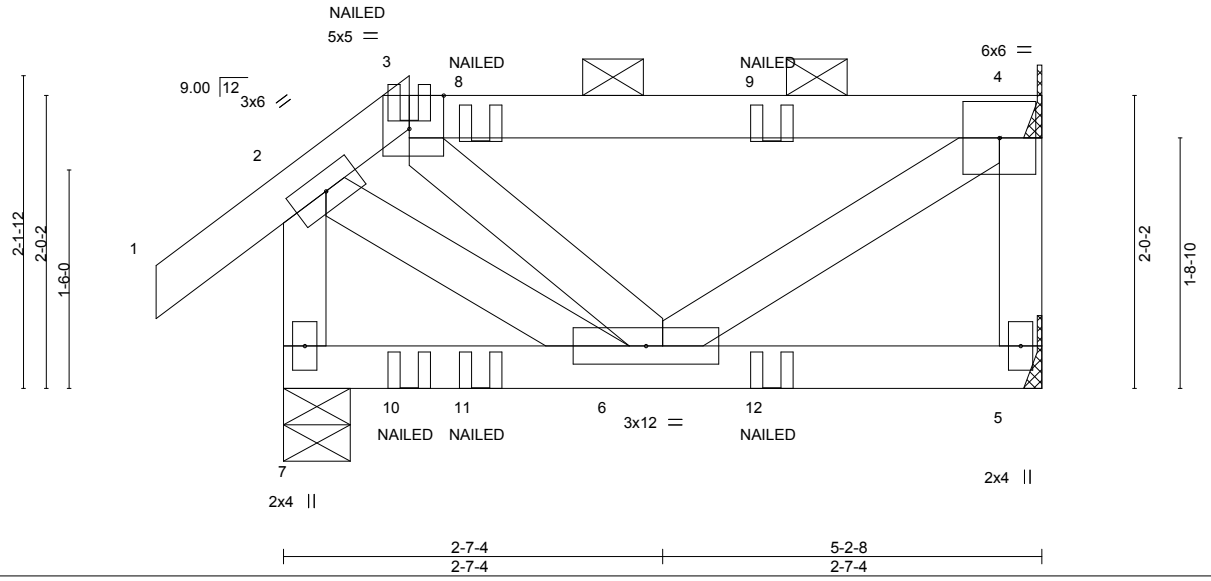


Plate Offsets (X,Y)-- [3:0-2-13,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.00	5-6	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.00	5-6	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.03	Horz(CT)	-0.00	4	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 25 lb	FT = 20%
BCDL	10.0											

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 5-2-8 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. (size) 5=Mechanical, 7=0-5-8, 4=Mechanical
Max Horz 7=69(LC 9)
Max Uplift 7=-86(LC 10), 4=-62(LC 7)
Max Grav 5=45(LC 5), 7=276(LC 2), 4=190(LC 28)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-277/75

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 86 lb uplift at joint 7 and 62 lb uplift at joint 4.
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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
12) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
13) 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-60, 2-3=-60, 3-4=-60, 5-7=-20
Concentrated Loads (lb)
Vert: 8=-13(F) 9=-13(F) 10=28(F) 11=-0(F) 12=-0(F)

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	K13	Jack-Open	1	1	I43262590

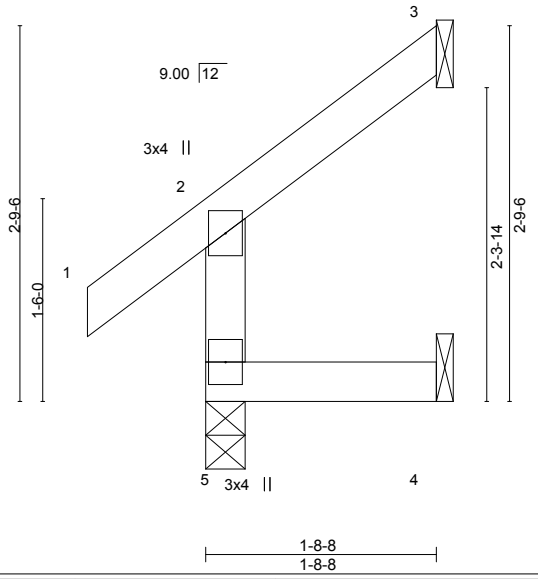
Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:14 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-42OIUI9ZWqK9voeVjI0Djwe2IBxVp1CcJuSCjjyRt0x

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

-0-10-8 0-10-8 1-8-8 1-8-8

Scale = 1:17.0



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	-0.00	5	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.00	5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCLL	0.0	Code IRC2018/TPI2014		Matrix-MR							Weight: 7 lb	FT = 20%
BCDL	10.0											

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 1-8-8 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=94(LC 14)
Max Uplift 3=-39(LC 14), 4=-26(LC 14)
Max Grav 5=165(LC 2), 3=47(LC 24), 4=31(LC 12)

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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 39 lb uplift at joint 3 and 26 lb uplift at joint 4.
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.

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER
PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	K14	Jack-Open	1	1	I43262591

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:15 2020 Page 1
ID:qMeyVrAyR40V1rvItLjLFlzXPDf-YFygheACH7S0WxDhH?XSF7AEnbIZYUSmXYCIF9yRt0w

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

-0-10-8 1-2-1
0-10-8 1-2-1

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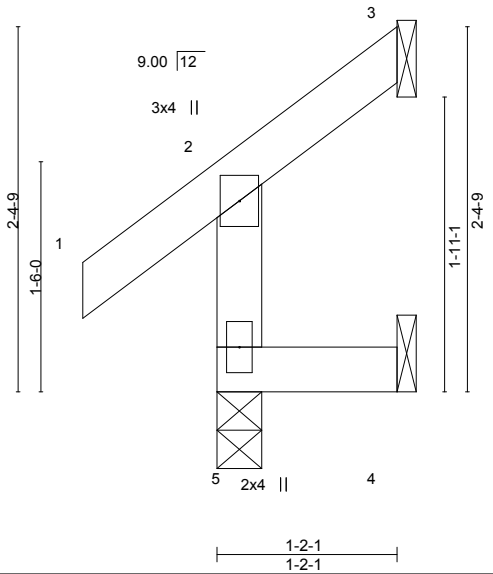

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	-0.00	5	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.00	5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCLL	0.0	Code IRC2018/TPI2014		Matrix-MR							Weight: 6 lb	FT = 20%
BCDL	10.0											

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 1-2-1 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=83(LC 14)
Max Uplift 3=-32(LC 14), 4=-38(LC 14)
Max Grav 5=153(LC 2), 3=24(LC 12), 4=30(LC 12)

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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 32 lb uplift at joint 3 and 38 lb uplift at joint 4.
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.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	K15	Jack-Open	1	1	I43262592

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:15 2020 Page 1
ID:qMeyVrAyR40V1rvItLjLFIzXPDf-YFygheACH7S0WxDhH?XSF7AFdbJEYU6mXYClF9yRt0w

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

-0-10-8 0-10-8 | 1-6-4 1-6-4

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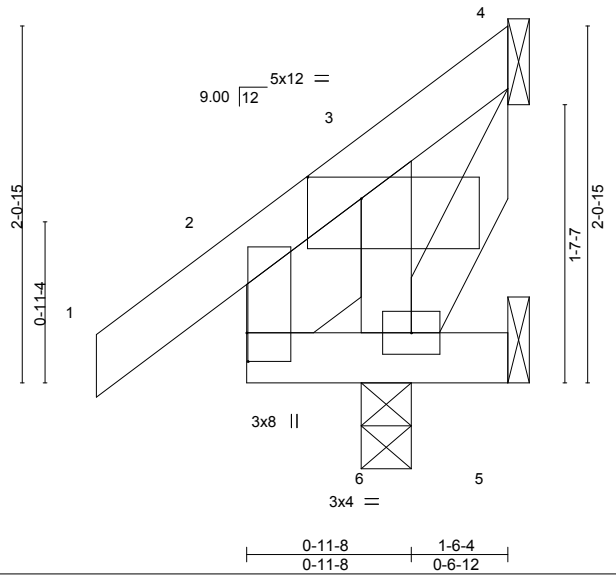

Plate Offsets (X,Y)-- [2:0-2-0,0-0-1], [4:0-3-12,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	0.00	6	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	-0.00	4	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 10 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x6 SPF No.2 1-0-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-6-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 5=Mechanical, 6=0-3-8
Max Horz 6=59(LC 14)
Max Uplift 4=-100(LC 2), 5=-19(LC 2), 6=-47(LC 14)
Max Grav 5=7(LC 14), 6=317(LC 2)

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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 4, 19 lb uplift at joint 5 and 47 lb uplift at joint 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) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	K16	Jack-Open	1	1	I43262593

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:16 2020 Page 1
ID:qMeyVrAyR40V1nvItLjLFlzXPDf-0RW2v_Bq2Ras85otrj2hoLjQM?fKHxivmCxInbyRt0v

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

-0-10-8 0-10-8 1-10-2 1-10-2

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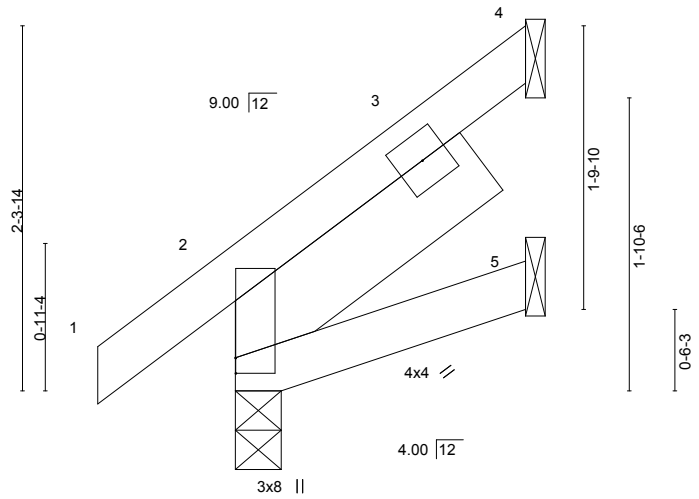


Plate Offsets (X,Y)-- [2:Edge,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	-0.00	8	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 10 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
SLIDER Left 2x6 SPF No.2 2-0-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-10-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=66(LC 14)
Max Uplift 4=-31(LC 14), 2=-5(LC 14), 5=-4(LC 14)
Max Grav 4=54(LC 24), 2=158(LC 2), 5=29(LC 5)

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 4, 5 lb uplift at joint 2 and 4 lb uplift at joint 5.
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.

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER
PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	K17	Half Hip Girder	1	1	I43262594

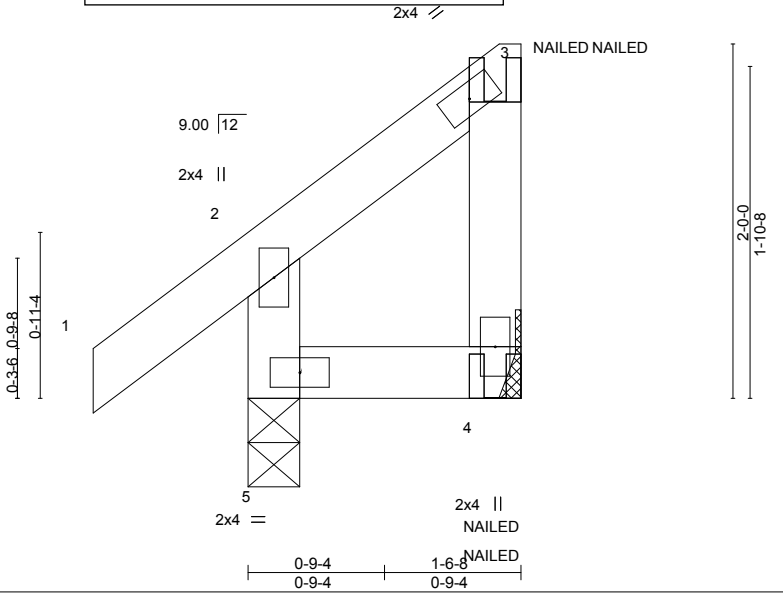
Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:17 2020 Page 1
ID:qMeyVrAyR40V1rvlt_jLFlzXPDf-Ud4R6KBSplijmFN4PQawKYGaIP?v?Oy3?shsK2yRt0u

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

-0-10-8 0-10-8 | 1-5-0 1-5-0 | 1-6-8 0-1-8

Scale = 1:13.0



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.00	5	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	5	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 8 lb	FT = 20%
BCDL	10.0											

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 1-6-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 5=0-3-8
Max Horz 5=67(LC 9)
Max Uplift 4=-70(LC 9), 5=-35(LC 10)
Max Grav 4=101(LC 1), 5=157(LC 27)

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 70 lb uplift at joint 4 and 35 lb uplift at joint 5.
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) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-60, 2-3=-60, 4-5=-20
Concentrated Loads (lb)
Vert: 3=-79(F=-40, B=-40) 4=3(F=2, B=2)

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	K18	Jack-Open	1	1	I43262595

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:18 2020 Page 1
ID:qMeyVrAyR40V1rvItLJLFlzXPDf-zpepJgC4a2qaNPyGy759tmomqoL0krCCDWRPsUyRt0t

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

-0-10-8 1-1-13
0-10-8 1-1-13

Scale: 1"=1'

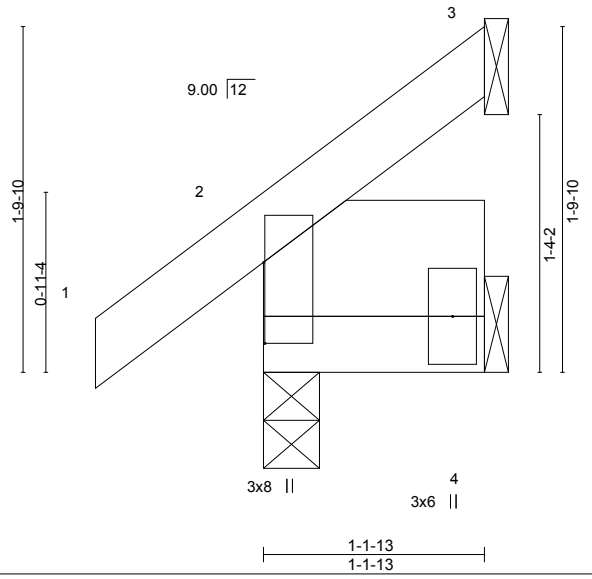


Plate Offsets (X,Y)-- [2:0-5-1,0-0-1]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	0.00	5	>999	240	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 8 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
SLIDER Left 2x8 SP 2400F 2.0E 1-1-13

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-1-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=51(LC 14)
Max Uplift 3=-14(LC 14), 2=-13(LC 14), 4=-8(LC 14)
Max Grav 3=23(LC 24), 2=136(LC 2), 4=20(LC 5)

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
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 14 lb uplift at joint 3, 13 lb uplift at joint 2 and 8 lb uplift at joint 4.
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.

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

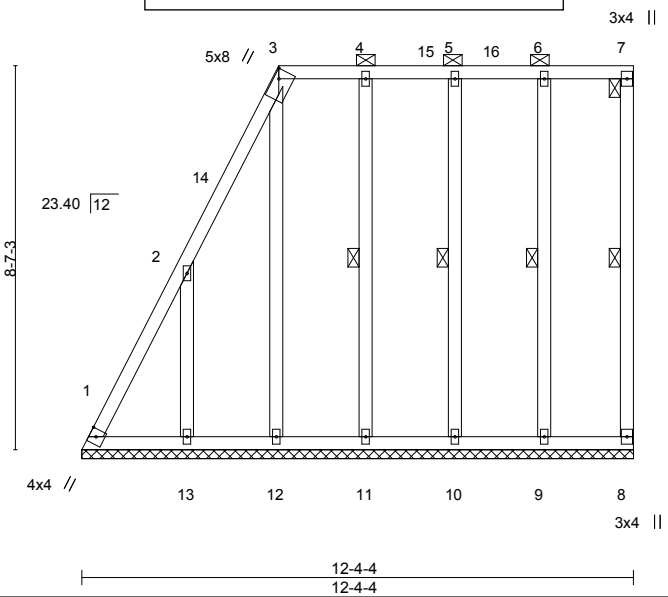
Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	LG1	GABLE	1	1	I43262596

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:27 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-CYhDClJjSpyJyn8?_WlGkfgEiRNoLp8XIP6OgSyRt0k

4-4-15 12-4-4
4-4-15 7-11-5

Scale = 1:51.6



12-4-4
12-4-4

Plate Offsets (X,Y)-- [3:0-2-9,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.40	Horz(CT)	-0.00	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 84 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.): 3-7.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 7-8, 6-9, 5-10, 4-11

REACTIONS. All bearings 12-4-4.
(lb) - Max Horz 1=291(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 8, 9, 10, 11 except 1=-280(LC 12), 12=-199(LC 11), 13=-284(LC 14)
Max Grav All reactions 250 lb or less at joint(s) 8, 9, 10, 11 except 1=388(LC 11), 12=251(LC 23), 13=380(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-733/678, 2-3=-346/353
WEBS 3-12=-372/358, 2-13=-406/410

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3) 0-2-14 to 3-2-14, Exterior(2) 3-2-14 to 9-2-8, Corner(3) 9-2-8 to 12-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Provide adequate drainage to prevent water ponding.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
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) 8, 9, 10, 11 except (jt=lb) 1=280, 12=199, 13=284.
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.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

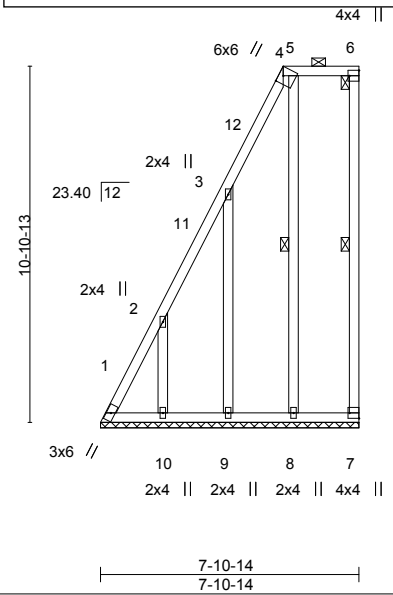
Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	LG2	GABLE	1	1	I43262597

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:30 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-c7MLrmLclkLtpFtaffJzMIIfWeNTYB6z_NL2HnyRt0h

5-7-1 7-10-14 2-3-13

Scale = 1:70.5



7-10-14
7-10-14

Plate Offsets (X,Y)-- [4:0-1-9,0-0-13], [4:0-2-14,Edge], [5:0-0-13,0-1-9], [6:Edge,0-3-8], [7:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.32	Horz(CT)	-0.00	7	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 60 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 5-8-2 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-6.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 6-7, 5-8

REACTIONS. All bearings 7-10-14.
(lb) - Max Horz 1=370(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 7 except 1=-416(LC 12), 8=-215(LC 11), 9=-191(LC 14), 10=-244(LC 14)
Max Grav All reactions 250 lb or less at joint(s) 7 except 1=518(LC 11), 8=276(LC 23), 9=318(LC 23), 10=307(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1083/972, 2-3=-742/711, 3-4=-393/397
WEBS 5-8=-550/574, 3-9=-381/366, 2-10=-360/389

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3) 0-2-14 to 3-2-14, Exterior(2) 3-2-14 to 4-9-2, Corner(3) 4-9-2 to 7-9-2 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
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) 7 except (jt=lb) 1=416, 8=215, 9=191, 10=244.
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.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	LG3	GABLE	1	1	I43262598

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:31 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-4Kwj26MEW2TkRPRmDMqCvVrtU2kAHhN7D14bpEyRt0g

2-4-14 3-1-14 5-7-10
2-4-14 1-0-0 2-2-12

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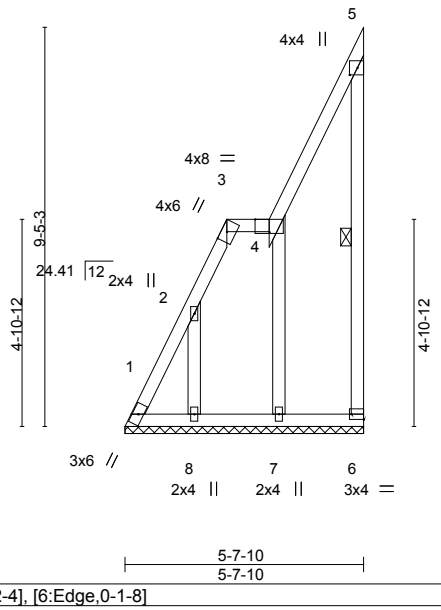


Plate Offsets (X,Y)-- [3:0-2-14,Edge], [4:0-4-0,Edge], [5:0-2-0,0-2-4], [6:Edge,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	-0.00	6	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 38 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 5-6-9 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.
WEBS	1 Row at midpt 5-6

REACTIONS. All bearings 5-7-10.
(lb) - Max Horz 1=303(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) except 1=-377(LC 12), 6=-234(LC 13), 7=-159(LC 14), 8=-340(LC 11)
Max Grav All reactions 250 lb or less at joint(s) 6, 7 except 1=471(LC 11), 8=399(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1051/903, 2-3=-359/330, 4-5=-362/342, 5-6=-332/332
WEBS 2-8=-646/746

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
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 377 lb uplift at joint 1, 234 lb uplift at joint 6, 159 lb uplift at joint 7 and 340 lb uplift at joint 8.
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.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	LG4	GABLE	1	1	I43262599

Job Reference (optional)

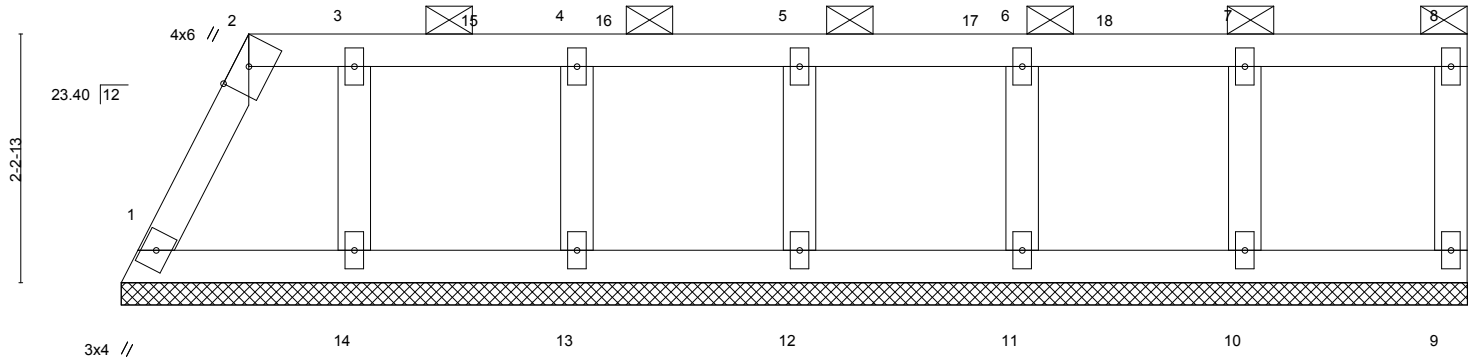
Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:33 2020 Page 1
ID:qMeyVrAyR40V1rvItLjLFlzXPDf-0i2UToOU2fjSgib8Lnsg_wwK3rSRldPPgLZiu6yRt0e

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

1-1-12
1-1-12

12-1-2
10-11-6

Scale = 1:20.7



12-1-2
12-1-2

Plate Offsets (X,Y)-- [2:0-2-14,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	-0.00	9	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 40 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.): 2-8.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 12-1-2.
(lb) - Max Horz 1=68(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 10, 11, 12, 13, 14
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 10, 11, 12, 13, 14

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

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3) 0-2-14 to 3-2-14, Exterior(2) 3-2-14 to 8-11-6, Corner(3) 8-11-6 to 11-11-6 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9, 10, 11, 12, 13, 14.
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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

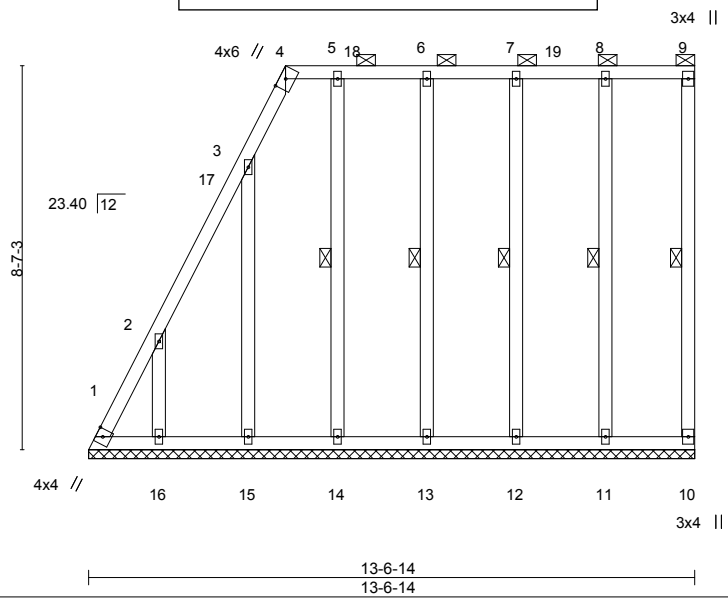
Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	LG5	GABLE	1	1	I43262600

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:34 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-Vucsg8P6pzrJIsALuVNvW8TQ0FmPU0ZZv?JFQYyRt0d

4-4-15 13-6-14
4-4-15 9-1-15

Scale = 1:51.6



13-6-14
13-6-14

Plate Offsets (X,Y)-- [4:0-2-14,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.29	Horz(CT)	-0.00	10	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 92 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.): 4-9.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 9-10, 8-11, 7-12, 6-13, 5-14

REACTIONS. All bearings 13-6-14.
(lb) - Max Horz 1=290(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 10, 11, 12, 13 except 1=-331(LC 12), 14=-101(LC 11), 15=-212(LC 11), 16=-243(LC 14)
Max Grav All reactions 250 lb or less at joint(s) 10, 11, 12, 13, 14 except 1=406(LC 11), 15=317(LC 23), 16=282(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-763/702, 2-3=-495/493
WEBS 3-15=-421/397, 2-16=-349/360

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3) 0-2-14 to 3-2-14, Exterior(2) 3-2-14 to 10-5-2, Corner(3) 10-5-2 to 13-5-2 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
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 11, 12, 13 except (jt=lb) 1=331, 14=101, 15=212, 16=243.
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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	LG6	GABLE	1	1	I43262601

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:36 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-RHjc5qQNLa51YAKj0vPNcZYor3TxyyosMJoMURyRt0b

3-7-3 8-7-14 9-1-8
3-7-3 5-0-11 0-5-11

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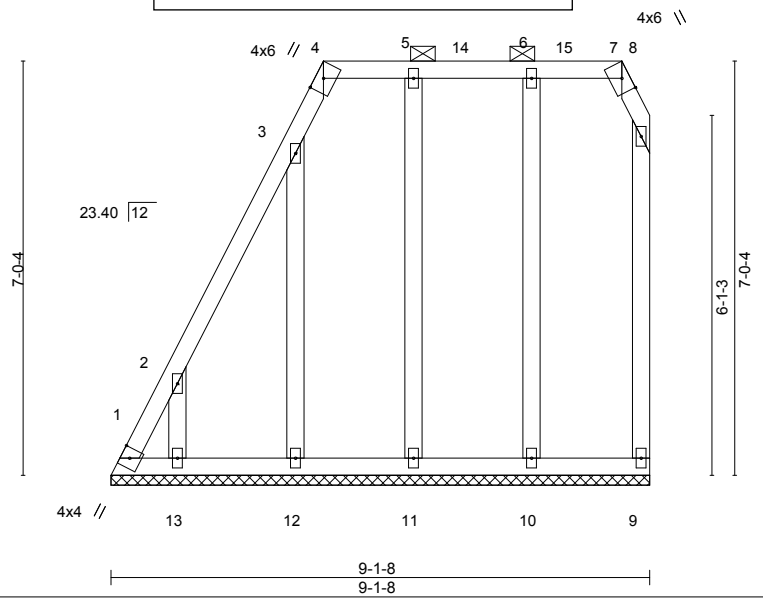

Plate Offsets (X,Y)-- [4:0-2-14,Edge], [7:0-2-14,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	-0.00	9	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 56 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.): 4-7.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 9-1-8.
(lb) - Max Horz 1=231(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 9, 10, 11 except 1=-306(LC 12), 12=-182(LC 11), 13=-231(LC 14)
Max Grav All reactions 250 lb or less at joint(s) 9, 10, 11 except 1=322(LC 11), 12=304(LC 23), 13=264(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-626/554, 2-3=-331/328
WEBS 3-12=-356/346, 2-13=-353/380

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3) 0-2-14 to 3-2-14, Exterior(2) 3-2-14 to 5-11-12, Corner(3) 5-11-12 to 8-11-12 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
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) 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=306, 12=182, 13=231.
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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	LG7	GABLE	1	1	I43262602

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:37 2020 Page 1
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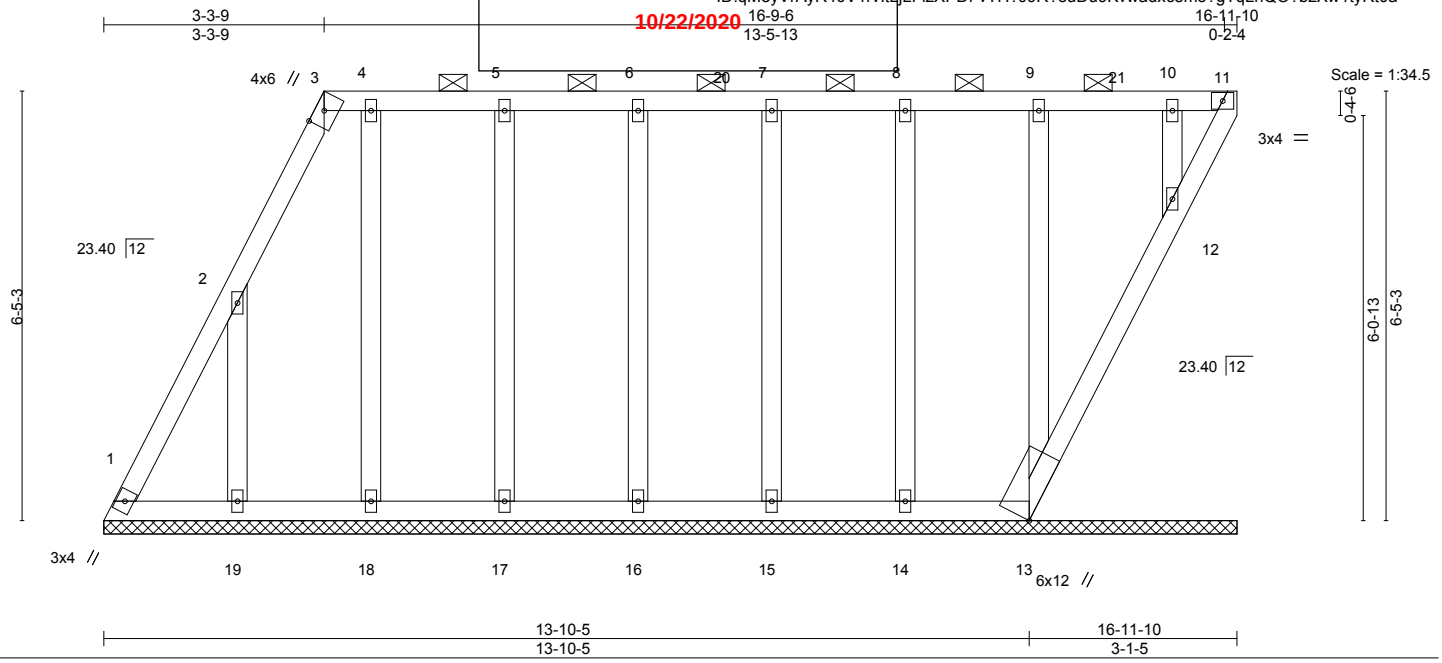

Plate Offsets (X,Y)-- [3:0-2-14,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	-0.00	11	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 92 lb	FT = 20%
BCDL	10.0											

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, except 2-0-0 oc purlins (6-0-0 max.): 3-11.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 11-12.

REACTIONS. All bearings 16-11-10.
(lb) - Max Horz 1=165(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 1, 11, 13, 18, 17, 16, 15, 14, 12 except 19=-211(LC 14)
Max Grav All reactions 250 lb or less at joint(s) 1, 11, 13, 18, 17, 16, 15, 14, 12 except 19=297(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-255/214
WEBS 2-19=-292/288

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) C-C wind load user defined.
4) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) Provide adequate drainage to prevent water ponding.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
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) 1, 11, 13, 18, 17, 16, 15, 14, 12 except (jt=lb) 19=211.
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 11, 12.
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) Load case(s) 6, 7 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
13) 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 Except:
6) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60

October 20,2020

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard Except:
Uniform Loads (plf)
Vert: 1-3=24, 3-9=45, 9-11=57, 1-13=-8, 11-13=-8
Horz: 1-3=-36, 10-11=69

7) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=24, 3-9=45, 9-11=57, 1-13=-8, 11-13=-8
Horz: 1-3=-36, 10-11=69

8) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-50, 3-11=-31, 1-13=-20, 11-13=-20
Horz: 1-3=30, 10-11=-11

9) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-50, 3-11=-31, 1-13=-20, 11-13=-20
Horz: 1-3=30, 10-11=-11

10) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-7, 3-6=18, 6-21=14, 11-21=7, 1-13=-8, 11-13=-8
Horz: 1-3=-5, 10-11=19

11) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=8, 3-20=14, 11-20=18, 1-13=-8, 11-13=-8
Horz: 1-3=-20, 10-11=30

12) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-41, 3-11=-21, 1-13=-20, 11-13=-20
Horz: 1-3=21, 10-11=-1

13) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-10, 3-11=-21, 1-13=-20, 11-13=-20
Horz: 1-3=-10, 10-11=-1

14) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=16, 3-11=16, 1-13=-8, 11-13=-8
Horz: 1-3=-28, 10-11=28

15) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=1, 3-11=1, 1-13=-8, 11-13=-8
Horz: 1-3=-13, 10-11=13

16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-21, 3-11=-21, 1-13=-20, 11-13=-20
Horz: 1-3=1, 10-11=-1

17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-21, 3-11=-21, 1-13=-20, 11-13=-20
Horz: 1-3=1, 10-11=-1

19) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-66, 3-11=-51, 1-13=-20, 11-13=-20
Horz: 1-3=16, 10-11=-1

20) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-43, 3-11=-51, 1-13=-20, 11-13=-20
Horz: 1-3=-7, 10-11=-1

21) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-51, 3-11=-51, 1-13=-20, 11-13=-20
Horz: 1-3=1, 10-11=-1

22) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-51, 3-11=-51, 1-13=-20, 11-13=-20
Horz: 1-3=1, 10-11=-1

23) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-73, 3-11=-58, 1-13=-20, 11-13=-20
Horz: 1-3=16, 10-11=-1

24) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-50, 3-11=-58, 1-13=-20, 11-13=-20
Horz: 1-3=-7, 10-11=-1

25) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-58, 3-11=-58, 1-13=-20, 11-13=-20
Horz: 1-3=1, 10-11=-1

Continued on page 3

LOAD CASE(S) Standard Except:

26) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-58, 3-11=-58, 1-13=-20, 11-13=-20
Horz: 1-3=1, 10-11=-1

28) Dead + 0.6 C-C Wind Min. Down: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-28, 3-11=-28, 1-13=-8, 11-13=-8
Horz: 1-3=16, 10-11=-16

29) Dead + 0.6 C-C Wind Min. Upward: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=4, 3-11=4, 1-13=-8, 11-13=-8
Horz: 1-3=-16, 10-11=16

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	LG8	Lay-In Gable	1	1	I43262603

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:38 2020 Page 1
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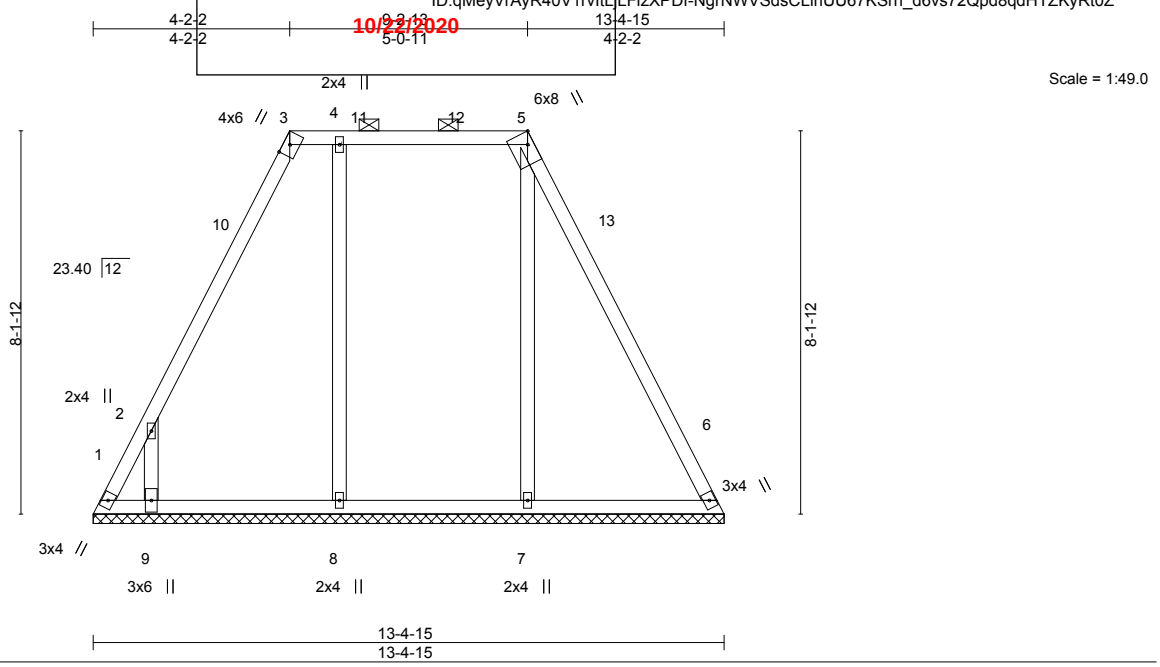

Plate Offsets (X,Y)-- [3:0-2-14,Edge], [5:0-3-2,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.35	Horz(CT)	-0.00	6	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 60 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, except 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 13-4-15.
(lb) - Max Horz 1=-240(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 6, 8 except 1=-211(LC 12), 7=-158(LC 10), 9=-318(LC 14)
Max Grav All reactions 250 lb or less at joint(s) 1 except 6=343(LC 23), 7=481(LC 24), 8=335(LC 29), 9=458(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-343/241, 5-6=-344/222
WEBS 5-7=-358/179, 4-8=-256/43, 2-9=-484/488

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3) 0-2-14 to 3-2-14, Exterior(2) 3-2-14 to 10-2-1, Corner(3) 10-2-1 to 13-2-1 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Provide adequate drainage to prevent water ponding.
5) Gable requires continuous bottom chord bearing.
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) 6, 8 except (jt=lb) 1=211, 7=158, 9=318.
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.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	LG9	Lay-In Gable	1	1	I43262604

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:39 2020 Page 1
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8-0-13 8-0-13

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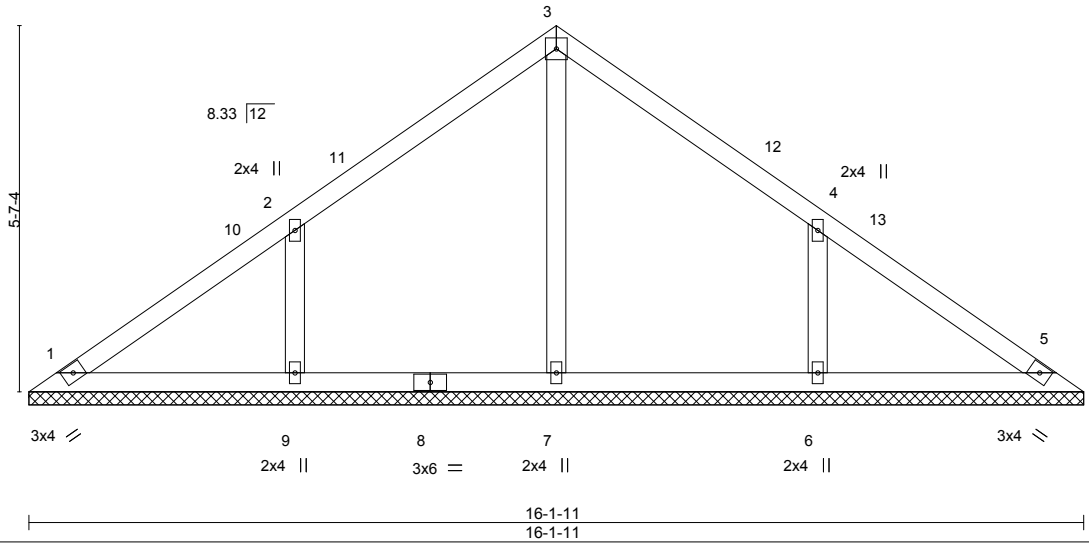

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 51 lb	FT = 20%
BCDL	10.0											

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 16-1-11.
(lb) - Max Horz 1=-115(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 9, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=274(LC 2), 9=408(LC 23), 6=408(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-316/156, 4-6=-316/156

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-5-9 to 3-5-9, Interior(1) 3-5-9 to 8-0-13, Exterior(2R) 8-0-13 to 11-0-13, Interior(1) 11-0-13 to 15-8-2 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
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
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, 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.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	LG10	Lay-In Gable	1	1	I43262605

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:28 2020 Page 1
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RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

3-0-14 3-4-7 0-3-9

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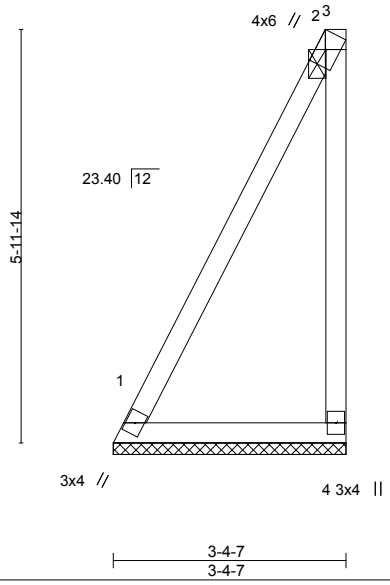


Plate Offsets (X,Y)-- [2:0-1-9,0-0-13], [2:0-2-14,Edge], [3:0-0-13,0-1-9]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-R								
BCDL	10.0										Weight: 18 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 3-4-7 oc purlins, except end verticals, and 2-0-0 oc purlins: 2-3.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-4-7, 4=3-4-7
Max Horz 1=199(LC 11)
Max Uplift 1=-62(LC 12), 4=-191(LC 11)
Max Grav 1=247(LC 24), 4=252(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-387/339, 3-4=-362/388

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Provide adequate drainage to prevent water ponding.
5) Gable requires continuous bottom chord bearing.
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) 1 except (jt=lb) 4=191.
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.

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	LG11	Lay-In Gable	1	1	I43262606

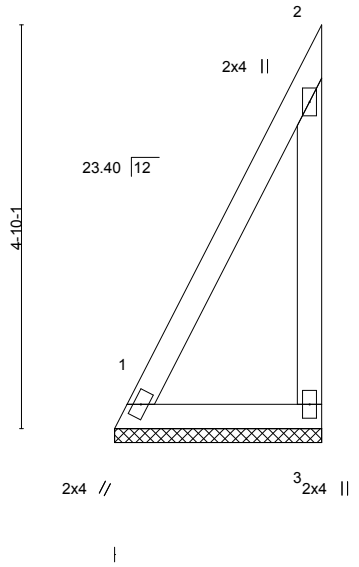
Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:28 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-glEbQ5KLD74AaxjBYEGVHtDR7qlB4MggX3sxCvyRt0j

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

2-5-12
2-5-12

Scale = 1:27.6



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 13 lb	FT = 20%
BCDL	10.0											

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 2-5-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-5-12, 3=2-5-12
Max Horz 1=143(LC 11)
Max Uplift 1=-48(LC 12), 3=-139(LC 11)
Max Grav 1=178(LC 24), 3=182(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-324/291, 2-3=-303/317

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
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 100 lb uplift at joint(s) 1 except (jt=lb) 3=139.
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.

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	V1	Valley	1	1	I43262607

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:40 2020 Page 1
ID:qMeyVrAyR40V1rvItLjLFlzXPDf-J2z7xBTtOpbT0ndVFlUJmPjUXgq1unMRHxmaeCyRt0X

11-8-4
11-8-4

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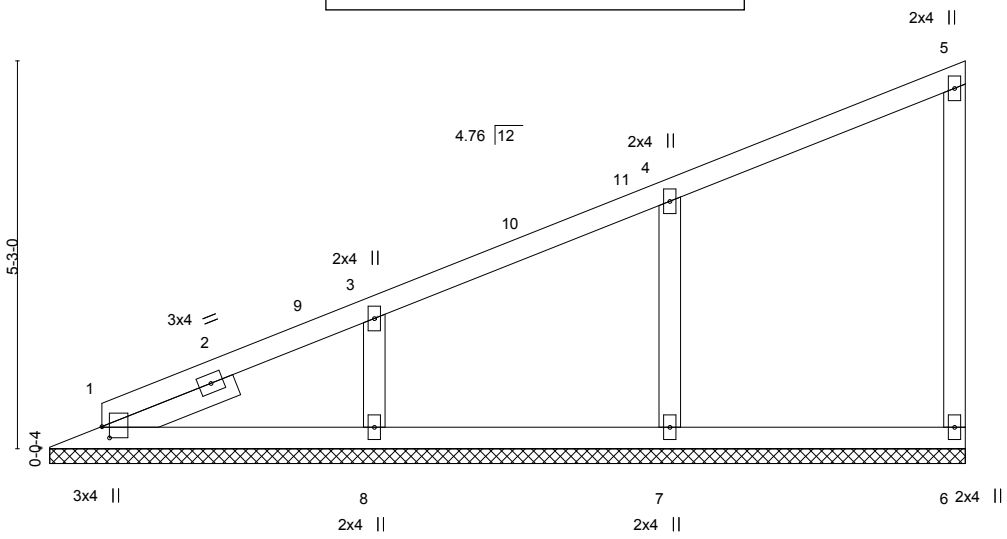

Plate Offsets (X,Y)-- [1:0-1-13,0-1-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	-0.00	6	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 41 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
SLIDER	Left 2x4 SPF No.2 1-11-3

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 12-4-12.
(lb) - Max Horz 1=171(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 6, 7, 8
Max Grav All reactions 250 lb or less at joint(s) 6, 1 except 7=456(LC 20), 8=378(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 4-7=-374/169, 3-8=-290/152

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-0-4 to 2-11-12, Interior(1) 2-11-12 to 11-6-8 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
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
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) 6, 7, 8.
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.

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER
PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	V2	Valley	1	1	I43262608

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:41 2020 Page 1
ID:qMeyVrAyR40V1rvItLiLFlzXPDf-nFXV8XUV97jJexChpT?YJcFe749XdF_bWbV7AfyRt0W

9-5-7
9-5-7

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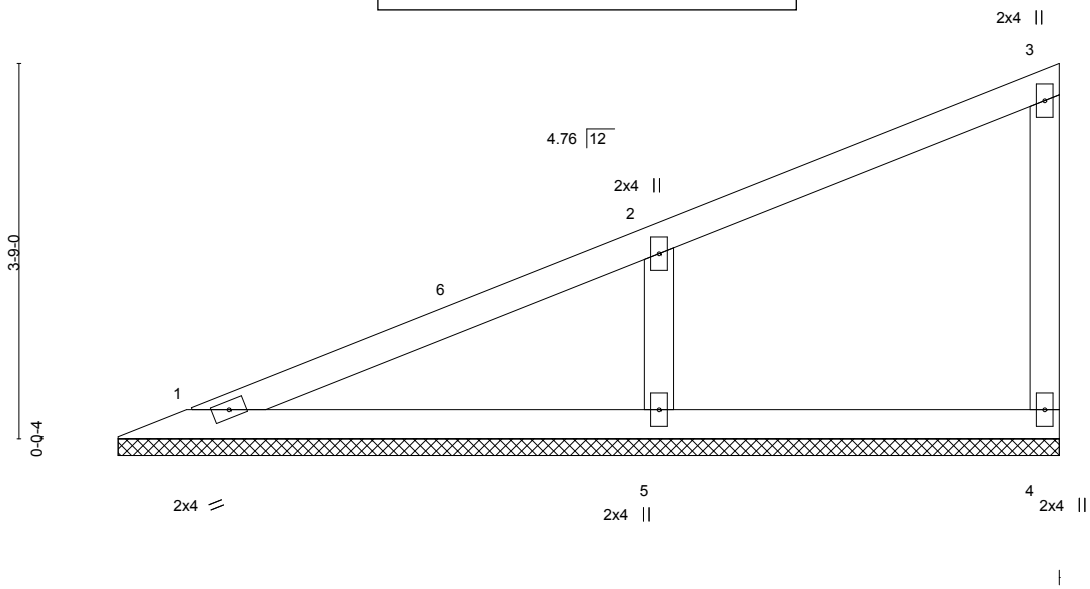

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	-0.00	4	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 27 lb	FT = 20%
BCDL	10.0											

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. (size) 1=9-4-13, 4=9-4-13, 5=9-4-13
Max Horz 1=118(LC 13)
Max Uplift 4=-14(LC 13), 5=-61(LC 16)
Max Grav 1=169(LC 2), 4=159(LC 20), 5=539(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-427/255

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3) 0-9-8 to 5-0-7, Exterior(2R) 5-0-7 to 9-3-11 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
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) 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.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	V3	Valley	1	1	I43262609

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:41 2020 Page 1
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5-8-1
5-8-1

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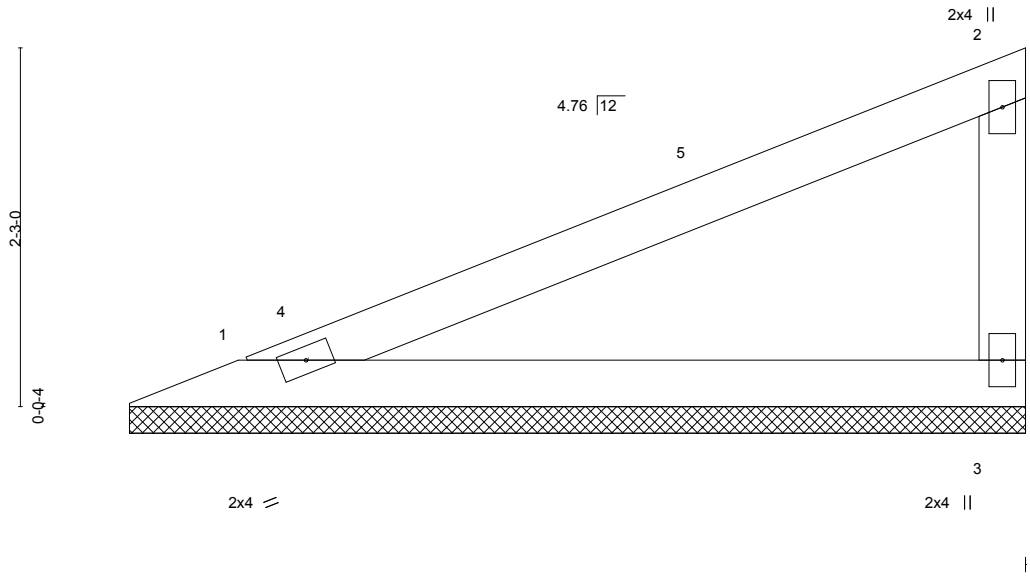


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 14 lb	FT = 20%
BCDL	10.0											

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 5-8-1 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=5-7-7, 3=5-7-7
Max Horz 1=66(LC 13)
Max Uplift 1=-15(LC 16), 3=-19(LC 16)
Max Grav 1=258(LC 20), 3=258(LC 20)

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-9-8 to 3-9-8, Interior(1) 3-9-8 to 5-6-5 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
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
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) 1, 3.
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.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

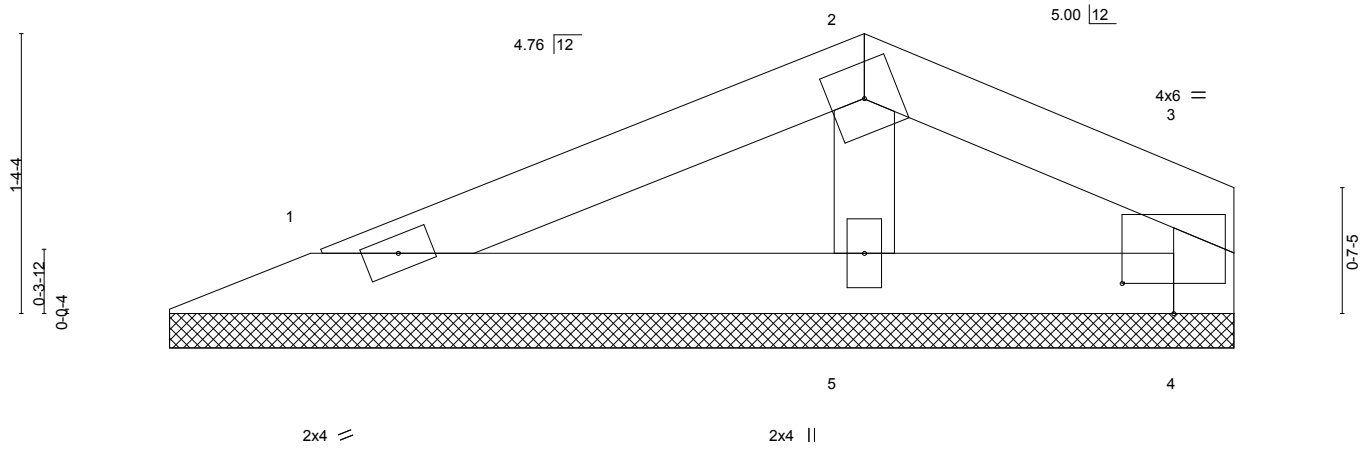
Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	V4	Valley	1	1	I43262610

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:42 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-GR5uMtV8wQrAG5ntMAWnrqorhUXOMipkIFFhi5yRt0V

3-5-0 5-2-7
3-5-0 1-9-7

Scale = 1:11.2



0-0-10 5-2-7
0-0-10 5-1-13

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P								
BCDL	10.0										Weight: 12 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 5-2-7 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=5-1-13, 4=5-1-13, 5=5-1-13
Max Horz 1=24(LC 15)
Max Uplift 1=-15(LC 16), 4=-15(LC 16), 5=-1(LC 16)
Max Grav 1=122(LC 20), 4=76(LC 21), 5=205(LC 2)

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

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
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) 4 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, 4, 5.
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) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	V5	Valley	1	1	I43262611

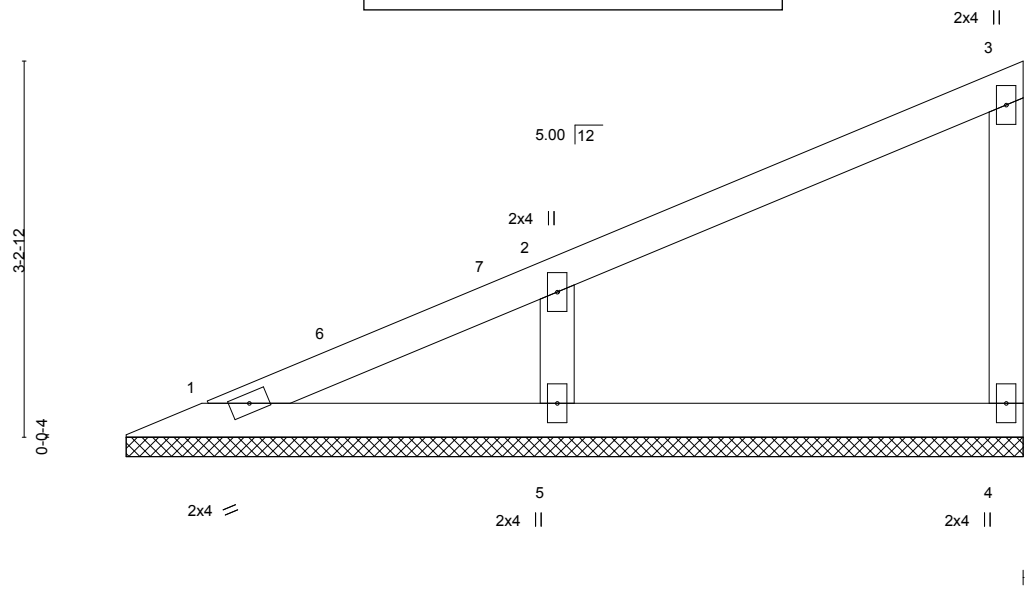
Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:43 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-kdeGZDVmhkz1tFM3wu10O1L?dtsi59duzv_EEXyRt0U

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/22/2020

7-9-0
7-9-0

Scale = 1:19.8



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.00	4	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 22 lb	FT = 20%
BCDL	10.0											

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. (size) 1=7-8-6, 4=7-8-6, 5=7-8-6
Max Horz 1=100(LC 15)
Max Uplift 4=-14(LC 13), 5=-53(LC 16)
Max Grav 1=89(LC 2), 4=170(LC 20), 5=468(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-381/213

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-9-1 to 3-9-0, Interior(1) 3-9-0 to 7-7-4 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
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) 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.

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER
PE-2001018807
PROFESSIONAL ENGINEER

October 20,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

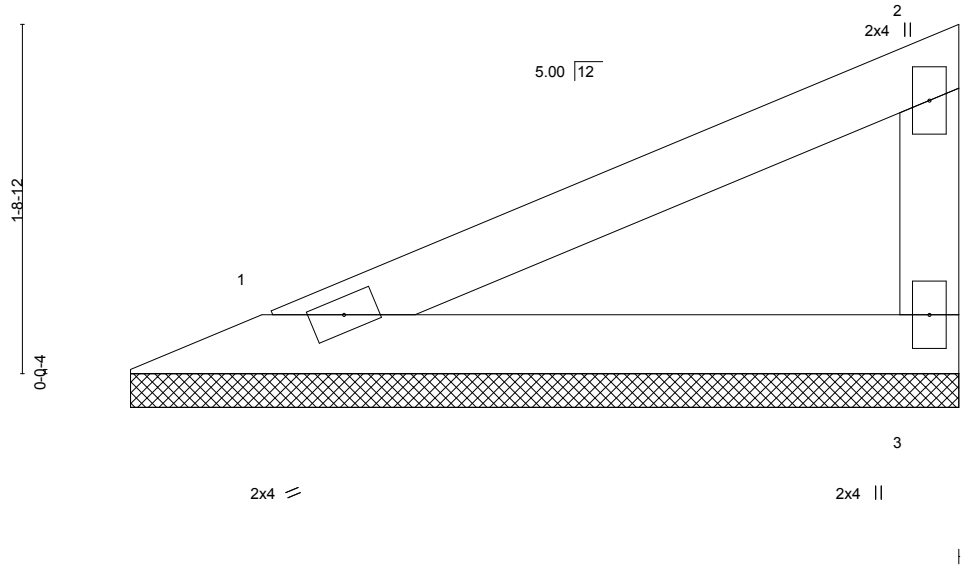
Job	Truss	Truss Type	Qty	Ply	Roeser 1470 Winterset
2472503	V6	Valley	1	1	I43262612

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Oct 19 11:03:43 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFlzXPDf-CqCenZWOS25uVPxGUbZFwFtAfHCxqbe1CZknn_yRt0T

4-1-13

Scale = 1:11.4



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 10 lb	FT = 20%
BCDL	10.0											

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 4-1-13 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-1-3, 3=4-1-3
Max Horz 1=48(LC 13)
Max Uplift 1=-10(LC 16), 3=-13(LC 16)
Max Grav 1=170(LC 20), 3=170(LC 20)

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
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) 1, 3.
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.

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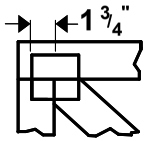
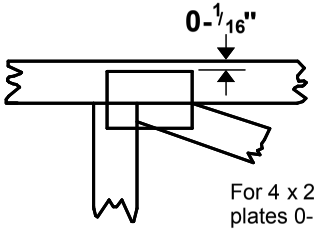
Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



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

This symbol indicates the required direction of slots in connector plates.

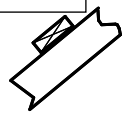
Plate location details available in MiTek 20/20 software or upon request.

PLATE SIZE

4 X 4

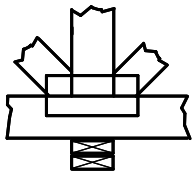
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING

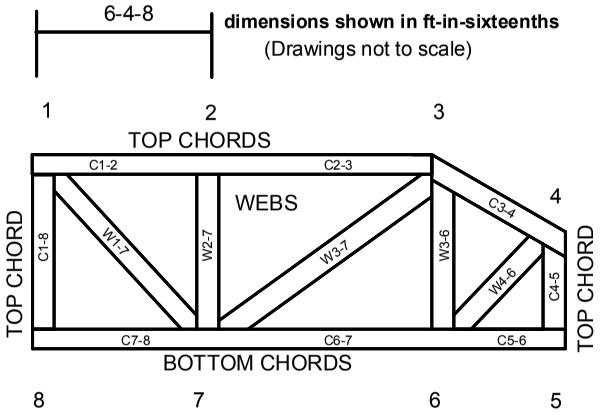


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

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

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

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.

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