



04/22/2020

RE: 400213
Lot 53 H4

MiTek USA, Inc.

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

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2018/TPI2014

Design Program: MiTek 20/20 8.2

Wind Code: N/A

Wind Speed: 115 mph

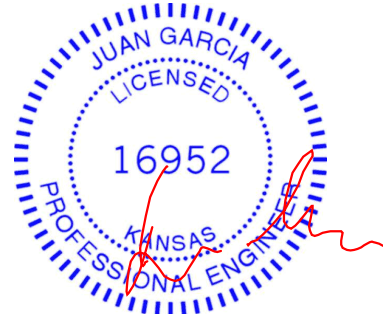
Roof Load: 45.0 psf

Floor Load: N/A psf

This package includes 78 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I40861142	a1	4/3/2020	27	I40861168	e1	4/3/2020
2	I40861143	a2	4/3/2020	28	I40861169	e2	4/3/2020
3	I40861144	a3	4/3/2020	29	I40861170	j1	4/3/2020
4	I40861145	a4	4/3/2020	30	I40861171	j2	4/3/2020
5	I40861146	a5	4/3/2020	31	I40861172	j3	4/3/2020
6	I40861147	a6	4/3/2020	32	I40861173	j4	4/3/2020
7	I40861148	b1	4/3/2020	33	I40861174	j5	4/3/2020
8	I40861149	b2	4/3/2020	34	I40861175	j6	4/3/2020
9	I40861150	b3	4/3/2020	35	I40861176	j7	4/3/2020
10	I40861151	b4	4/3/2020	36	I40861177	j8	4/3/2020
11	I40861152	b5	4/3/2020	37	I40861178	j9	4/3/2020
12	I40861153	b6	4/3/2020	38	I40861179	j10	4/3/2020
13	I40861154	b7	4/3/2020	39	I40861180	j11	4/3/2020
14	I40861155	c1	4/3/2020	40	I40861181	j12	4/3/2020
15	I40861156	c2	4/3/2020	41	I40861182	j13	4/3/2020
16	I40861157	d1	4/3/2020	42	I40861183	j14	4/3/2020
17	I40861158	d2	4/3/2020	43	I40861184	j15	4/3/2020
18	I40861159	d3	4/3/2020	44	I40861185	j16	4/3/2020
19	I40861160	d4	4/3/2020	45	I40861186	j17	4/3/2020
20	I40861161	d5	4/3/2020	46	I40861187	j18	4/3/2020
21	I40861162	d6	4/3/2020	47	I40861188	j19	4/3/2020
22	I40861163	d7	4/3/2020	48	I40861189	j20	4/3/2020
23	I40861164	d8	4/3/2020	49	I40861190	j21	4/3/2020
24	I40861165	d9	4/3/2020	50	I40861191	j22	4/3/2020
25	I40861166	d10	4/3/2020	51	I40861192	j23	4/3/2020
26	I40861167	d11	4/3/2020	52	I40861193	j24	4/3/2020

The truss drawing(s) referenced above have been prepared by
MiTek USA, Inc. under my direct supervision
based on the parameters provided by Wheeler - Waverly.
Truss Design Engineer's Name: Garcia, Juan
My license renewal date for the state of Kansas is April 30, 2022.
Kansas COA: E-943



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. Any project specific information included is for MiTek customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek 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.



04/22/2020

RE: 400213 - Lot 53 H4

MiTek USA, Inc.

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

Site Information:

Project Customer: Project Name:

Lot/Block:

Subdivision:

Address:

City, County:

State:

No.	Seal#	Truss Name	Date
53	I40861194	j25	4/3/2020
54	I40861195	j26	4/3/2020
55	I40861196	j27	4/3/2020
56	I40861197	j28	4/3/2020
57	I40861198	j29	4/3/2020
58	I40861199	j30	4/3/2020
59	I40861200	j31	4/3/2020
60	I40861201	lay1	4/3/2020
61	I40861202	lay2	4/3/2020
62	I40861203	lay3	4/3/2020
63	I40861204	lay4	4/3/2020
64	I40861205	p1	4/3/2020
65	I40861206	p2	4/3/2020
66	I40861207	r1	4/3/2020
67	I40861208	v1	4/3/2020
68	I40861209	v2	4/3/2020
69	I40861210	v3	4/3/2020
70	I40861211	v4	4/3/2020
71	I40861212	v5	4/3/2020
72	I40861213	v6	4/3/2020
73	I40861214	v7	4/3/2020
74	I40861215	v8	4/3/2020
75	I40861216	v9	4/3/2020
76	I40861217	v10	4/3/2020
77	I40861218	v11	4/3/2020
78	I40861219	v12	4/3/2020



04/22/2020

RE: 400213
Lot 53 H4

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314-434-1200

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2018/TPI2014

Design Program: MiTek 20/20 8.2

Wind Code: N/A

Wind Speed: 115 mph

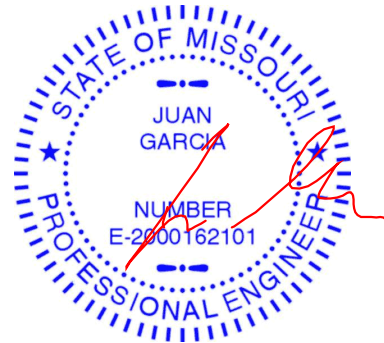
Roof Load: 45.0 psf

Floor Load: N/A psf

This package includes 78 individual, dated Truss Design Drawings and 0 Additional Drawings.

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8	I40861149	b2	4/3/2020	34	I40861175	j6	4/3/2020
9	I40861150	b3	4/3/2020	35	I40861176	j7	4/3/2020
10	I40861151	b4	4/3/2020	36	I40861177	j8	4/3/2020
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The truss drawing(s) referenced above have been prepared by
MiTek USA, Inc. under my direct supervision
based on the parameters provided by Wheeler - Waverly.
Truss Design Engineer's Name: Garcia, Juan
My license renewal date for the state of Missouri is December 31, 2020.
Missouri COA: 001193



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. Any project specific information included is for MiTek customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek 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.



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Chesterfield, MO 63017
314-434-1200

Site Information:

Project Customer: Project Name:

Lot/Block:

Subdivision:

Address:

City, County:

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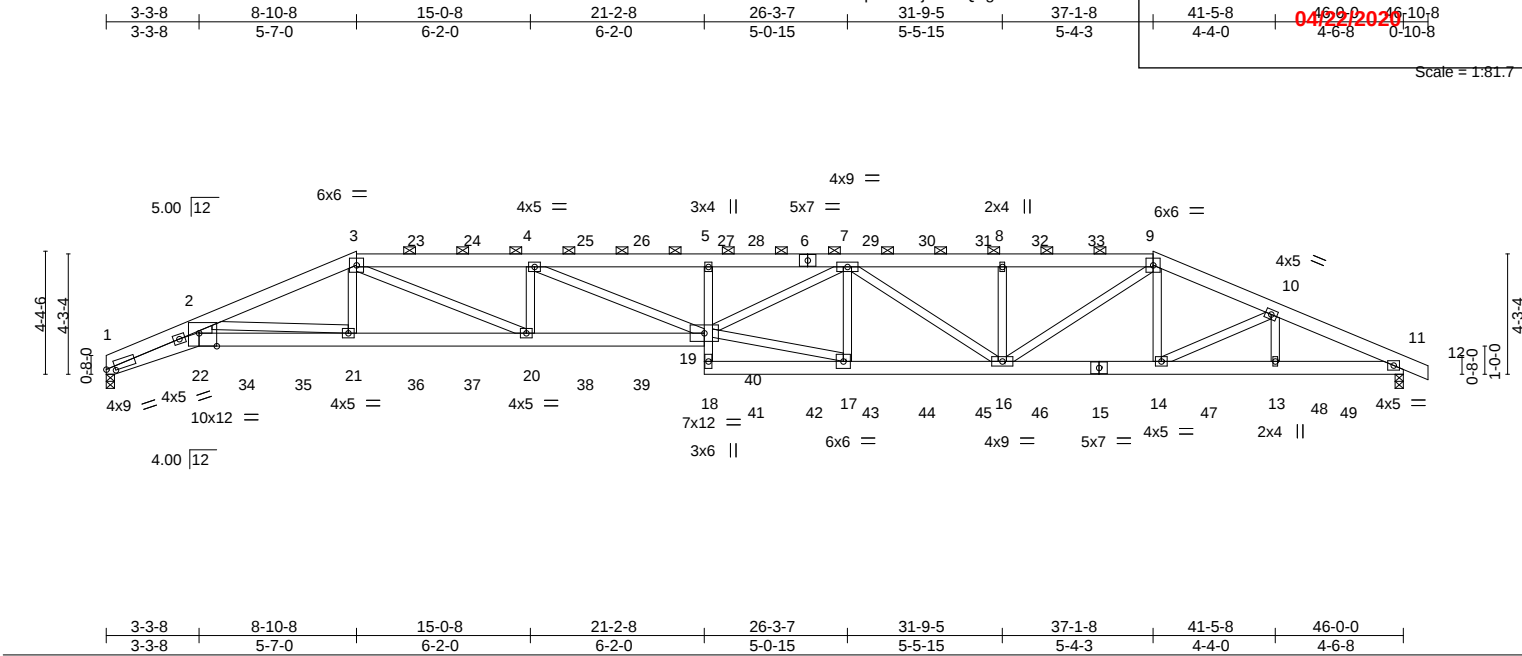
No.	Seal#	Truss Name	Date
53	I40861194	j25	4/3/2020
54	I40861195	j26	4/3/2020
55	I40861196	j27	4/3/2020
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57	I40861198	j29	4/3/2020
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68	I40861209	v2	4/3/2020
69	I40861210	v3	4/3/2020
70	I40861211	v4	4/3/2020
71	I40861212	v5	4/3/2020
72	I40861213	v6	4/3/2020
73	I40861214	v7	4/3/2020
74	I40861215	v8	4/3/2020
75	I40861216	v9	4/3/2020
76	I40861217	v10	4/3/2020
77	I40861218	v11	4/3/2020
78	I40861219	v12	4/3/2020

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4
400213	A1	HIP GIRDER	1	3	

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Job Reference (optional)

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/22/2020
140861142

Scale = 1:81.7



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.58	Vert(LL)	-0.40	19-20	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.51	Vert(CT)	-0.72	19-20	>760		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.63	Horz(CT)	0.24	11	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.53	19-20	>999	Weight: 808 lb	FT = 10%

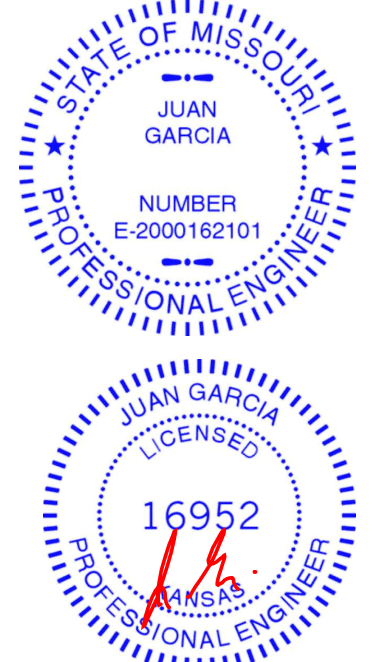
LUMBER-	BRACING-
TOP CHORD 2x6 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except
BOT CHORD 2x6 SP 2400F 2.0E *Except*	2-0-0 oc purlins (6-0-0 max.): 3-9.
5-18: 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2 *Except*	
2-22: 2x6 SPF No.2	

REACTIONS. (size) 1=0-3-8, 11=0-3-8
Max Horz 1=-74(LC 34)
Max Uplift 1=-1231(LC 4), 11=-1265(LC 5)
Max Grav 1=2924(LC 1), 11=3077(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-13403/5849, 2-3=-8301/3858, 3-4=-10538/5133, 4-5=-11736/5741, 5-7=-11588/5671,
7-8=-7558/3656, 8-9=-7560/3657, 9-10=-6044/2791, 10-11=-6368/2733
BOT CHORD 1-22=-5360/12309, 21-22=-4611/10559, 20-21=-3513/7668, 19-20=-5025/10537,
5-19=-459/354, 17-18=-556/1138, 16-17=-4125/8659, 14-16=-2488/5554,
13-14=-2418/5700, 11-13=-2418/5700
WEBS 2-22=-1568/3700, 2-21=-2859/1208, 3-21=-376/1069, 3-20=-1678/3292, 4-20=-1221/762,
4-19=-676/1394, 17-19=-3641/7675, 7-19=-1658/3371, 7-17=-1460/801, 7-16=-1400/709,
8-16=-555/406, 9-16=-1300/2541, 9-14=-86/417, 10-14=-156/260, 10-13=-50/261

- NOTES-
- 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 1=1231, 11=1265.

Continued on page 2



April 3, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEES SUMMIT, MISSOURI 04/22/2020
400213	A1	HIP GIRDER	1	3	Job Reference (optional)	
Wheeler Lumber, Waverly, KS 66871		8.240 s Mar 9 2020 MiTek Industries, Inc. 11084415035 Page 2			ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-653C7AYP?cPD4CJaedt97DS?PrxZfR2X5ViFYzUTrs	

- NOTES-**
- 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) 110 lb down and 121 lb up at 8-10-8, 115 lb down and 121 lb up at 10-11-4, 115 lb down and 121 lb up at 12-11-4, 115 lb down and 121 lb up at 14-11-4, 115 lb down and 121 lb up at 16-11-4, 115 lb down and 121 lb up at 18-11-4, 115 lb down and 121 lb up at 20-11-12, 114 lb down and 118 lb up at 23-0-0, 114 lb down and 118 lb up at 25-0-12, 114 lb down and 118 lb up at 27-0-12, 114 lb down and 118 lb up at 29-0-12, 114 lb down and 118 lb up at 31-0-12, 114 lb down and 118 lb up at 33-0-12, and 114 lb down and 118 lb up at 35-0-12, and 108 lb down and 118 lb up at 37-1-8 on top chord, and 195 lb down and 137 lb up at 4-11-4, 139 lb down and 91 lb up at 6-11-4, 37 lb down and 24 lb up at 8-11-4, 37 lb down and 24 lb up at 10-11-4, 37 lb down and 24 lb up at 12-11-4, 37 lb down and 24 lb up at 14-11-4, 37 lb down and 24 lb up at 16-11-4, 37 lb down and 24 lb up at 18-11-4, 37 lb down and 24 lb up at 20-11-12, 37 lb down and 23 lb up at 23-0-0, 37 lb down and 23 lb up at 25-0-12, 37 lb down and 23 lb up at 27-0-12, 37 lb down and 23 lb up at 29-0-12, 37 lb down and 23 lb up at 31-0-12, 37 lb down and 23 lb up at 33-0-12, 37 lb down and 23 lb up at 35-0-12, 37 lb down and 23 lb up at 37-0-12, 139 lb down and 90 lb up at 39-0-12, and 139 lb down and 75 lb up at 41-0-12, and 142 lb down and 76 lb up at 43-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

- LOAD CASE(S)** Standard
- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-3=-70, 3-9=-70, 9-12=-70, 1-22=-20, 19-22=-20, 11-18=-20
- Concentrated Loads (lb)
- Vert: 3=-48(F) 6=-48(F) 15=-23(F) 21=-22(F) 20=-22(F) 4=-48(F) 9=-48(F) 14=-23(F) 23=-48(F) 24=-48(F) 25=-48(F) 26=-48(F) 27=-48(F) 28=-48(F) 29=-48(F) 30=-48(F) 31=-48(F) 32=-48(F) 33=-48(F) 34=-195(F) 35=-139(F) 36=-22(F) 37=-22(F) 38=-22(F) 39=-22(F) 40=-22(F) 41=-23(F) 42=-23(F) 43=-23(F) 44=-23(F) 45=-23(F) 46=-23(F) 47=-139(F) 48=-139(F) 49=-142(F)

 **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4
400213	A2	Hip	1	1	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. 140861143

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/22/2020
Scale = 1:83.3

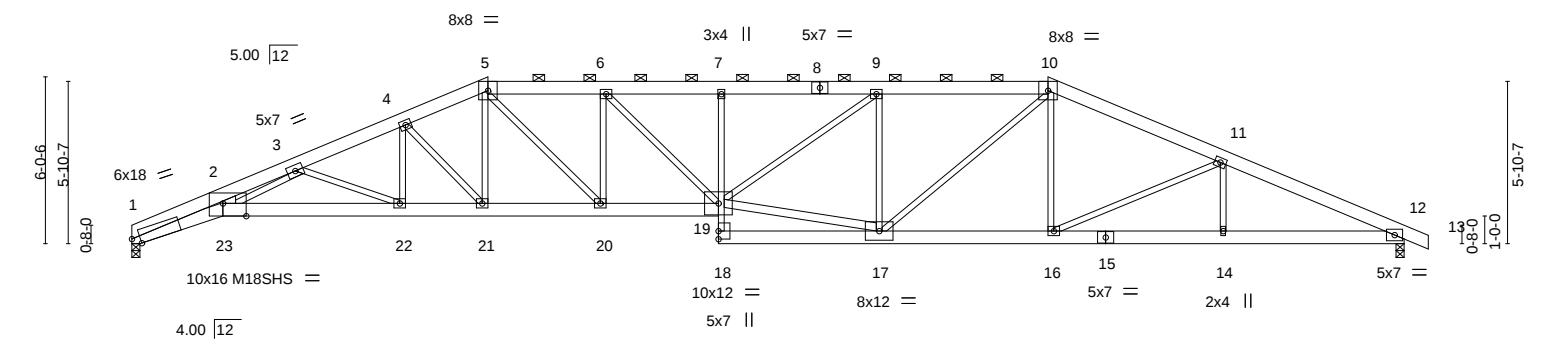
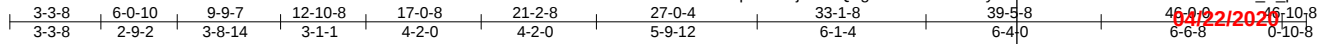


Plate Offsets (X,Y)--	[1:0-3-9,Edge], [2:0-2-12,0-1-2], [23:0-10-2,Edge]
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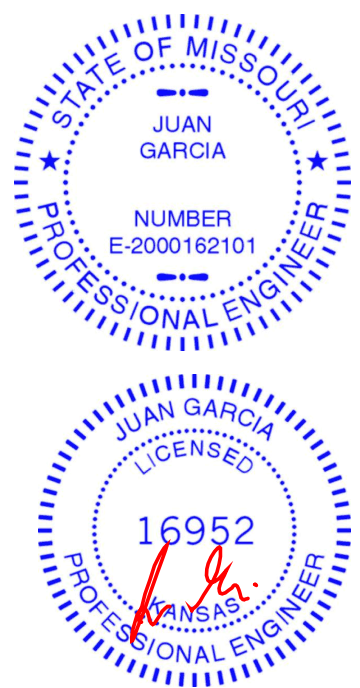
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.82	Vert(LL)	-0.54	19-20	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.92	Vert(CT)	-0.96	19-20	>569	M18SHS	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.98	Horz(CT)	0.45	12	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.38	19-20	>999	Weight: 246 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x6 SPF No.2 *Except* 1-5: 2x6 SP DSS	TOP CHORD Structural wood sheathing directly applied or 2-0-11 oc purlins, except
BOT CHORD 2x6 SPF No.2 *Except* 1-23: 2x6 SP DSS, 19-23: 2x6 SPF 1650F 1.4E, 7-18: 2x3 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS 2x3 SPF No.2 *Except* 2-23: 2x6 SPF No.2, 17-19: 2x4 SPF No.2	8-11-9 oc bracing: 1-23 2-2-0 oc bracing: 22-23.

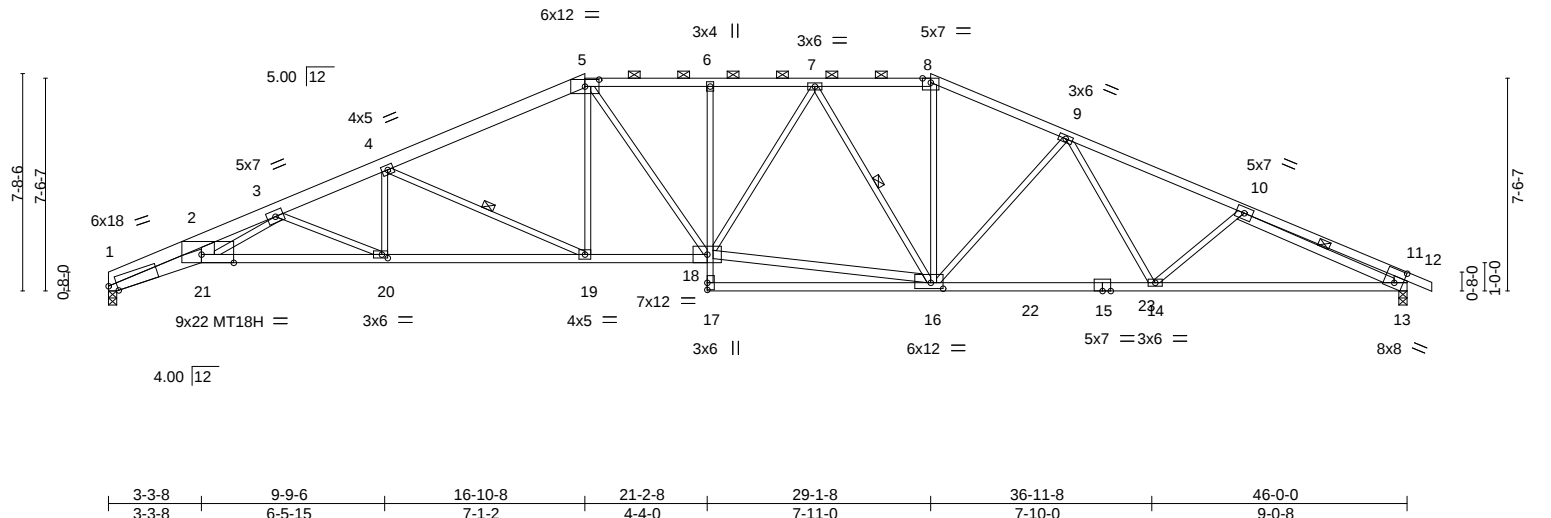
REACTIONS. (size) 1=0-3-8, 12=0-3-8
Max Horz 1=-102(LC 13)
Max Uplift 1=-234(LC 4), 12=-266(LC 5)
Max Grav 1=2056(LC 1), 12=2129(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-8977/1019, 2-3=-7495/918, 3-4=-5281/692, 4-5=-4583/670, 5-6=-4982/765,
6-7=-5269/821, 7-9=-5262/821, 9-10=-4245/684, 10-11=-3851/563, 11-12=-4392/539
BOT CHORD 1-23=-914/8181, 22-23=-734/6193, 21-22=-538/4813, 20-21=-484/4234, 19-20=-614/4979,
7-19=-332/136, 17-18=-41/327, 16-17=-376/3482, 14-16=-427/3918, 12-14=-427/3918
WEBS 2-23=-163/1990, 3-23=-165/1111, 3-22=-1489/269, 4-22=-41/779, 4-21=-837/168,
5-21=-92/649, 6-19=-97/545, 17-19=-494/3974, 9-19=-183/1309, 9-17=-1304/307,
10-17=-203/1162, 10-16=-18/397, 11-16=-491/210, 5-20=-204/1204, 6-20=-746/205

- 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=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) All plates are MT20 plates unless otherwise indicated.
 - 5) All plates are 4x5 MT20 unless otherwise indicated.
 - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 8) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=234, 12=266.
 - 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.



April 3, 2020



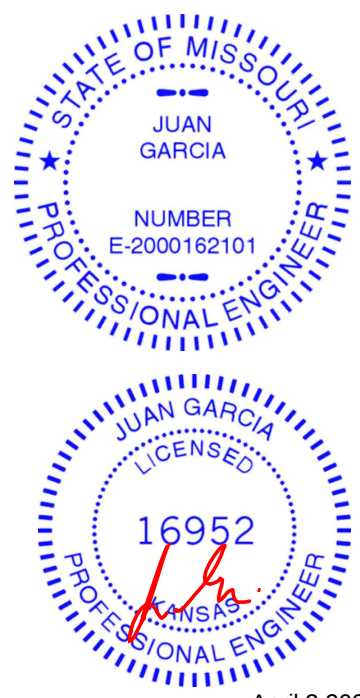
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.87	Vert(LL)	-0.53 19-20 >999	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.95 19-20 >577	MT18H		197/144	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.49 13 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.32 20-21 >999			Weight: 213 lb	FT = 10%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2 *Except* 1-5: 2x6 SP DSS	TOP CHORD	Structural wood sheathing directly applied or 1-10-13 oc purlins, except end verticals, and 2-0-0 oc purlins (2-8-13 max.): 5-8.
BOT CHORD	2x4 SPF 2100F 1.8E *Except* 1-21: 2x6 SPF 1650F 1.4E, 6-17: 2x3 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 1-21,20-21.
WEBS	2x3 SPF No.2 *Except* 2-21: 2x6 SPF No.2, 16-18,10-13: 2x4 SPF No.2, 11-13: 2x6 SP DSS	WEBS	1 Row at midpt 4-19, 7-16, 10-13

REACTIONS. (size) 1=0-3-8, 13=0-3-8
Max Horz 1=-121(LC 9)
Max Uplift 1=-212(LC 8), 13=-237(LC 9)
Max Grav 1=2118(LC 2), 13=2199(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-9173/949, 2-3=-7684/887, 3-4=-5337/528, 4-5=-3982/471, 5-6=-3860/509, 6-7=-3851/507, 7-8=-3117/416, 8-9=-3420/433, 9-10=-4068/412, 10-11=-1075/156, 11-13=-658/158
BOT CHORD 1-21=-954/8366, 20-21=-674/6204, 19-20=-444/4892, 18-19=-258/3623, 6-18=-310/121, 14-16=-270/3492, 13-14=-331/3744
WEBS 2-21=-108/2067, 3-21=-236/1325, 3-20=-1426/250, 4-20=-8/810, 4-19=-1415/318, 5-19=-58/845, 5-18=-104/598, 16-18=-297/3355, 7-18=-66/643, 7-16=-1016/179, 8-16=-76/1077, 9-16=-583/227, 9-14=-27/423, 10-13=-3152/344

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=212, 13=237.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 3,2020

**RELEASE FOR
CONSTRUCTION**

AS NOTED ON PLANS REVIEW

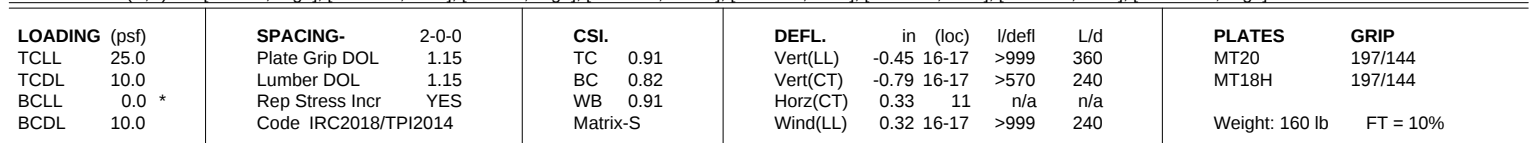
DEVELOPMENT SERVICES

CE-15-0106M12-M185-DGR1

HDQHLWYbvFvohV6QfCcil48hiZ?ezUTrl

38-0-0
8-6-11

04/22/2020



REACTIONS. (size) 2=0-3-8, 11=0-3-8
 Max Horz 2=210(LC 8)
 Max Uplift 2=-265(LC 8), 11=-182(LC 9)
 Max Grav 2=1834(LC 2), 11=1790(LC 2)

A circular professional engineer seal for the State of Missouri. The outer ring contains the text "STATE OF MISSOURI" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. Inside the ring, the name "JUAN GARCIA" is centered, followed by "NUMBER E-2000162101" below it. The seal is blue and white.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job	Truss	Truss Type	Qty	Ply	Lot 53 H4	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 04/22/2020
400213	B1	ROOF SPECIAL	3	1	Job Reference (optional)	
Wheeler Lumber, Waverly, KS 66871		8.240 s Mar 9 2020 MiTek Industries, Inc. 140861148				ID: 2ncXplsXOfBj1B617Q?gPMzrYWU-teYDpwfQ73P42Rw66J01RvnJ93aIRGEDNKR7X4zUTrk 0-10-8 3-3-8 6-0-12 9-9-8 16-6-11 21-2-0 23-0-0 28-4-0 0-10-8 3-3-8 2-9-4 3-8-13 6-9-2 4-7-5 1-10-0 5-4-0
		5x7 =				Scale = 1:61.6

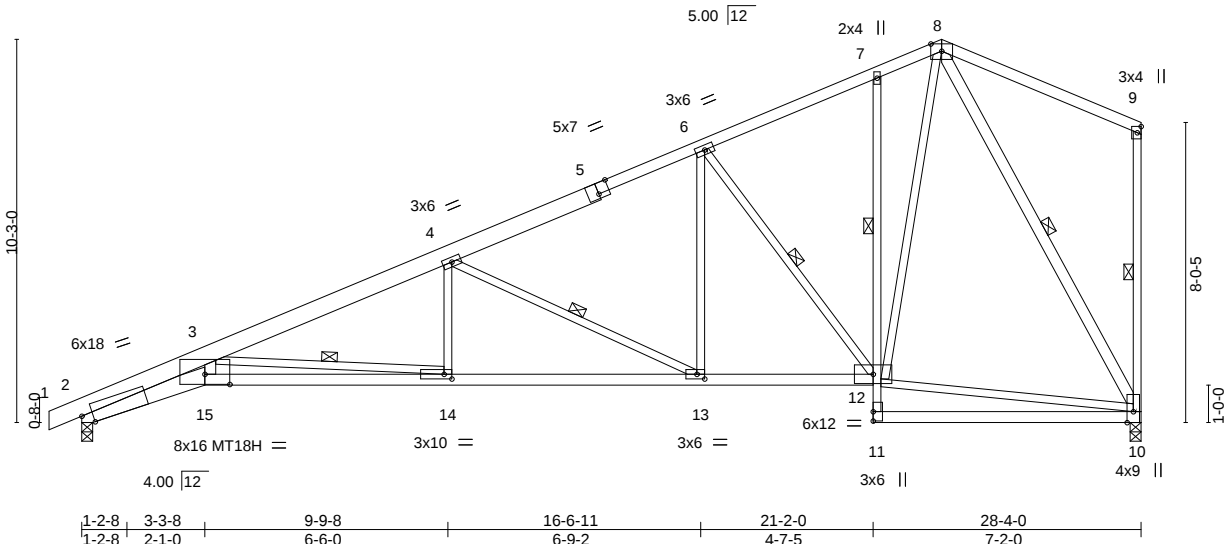
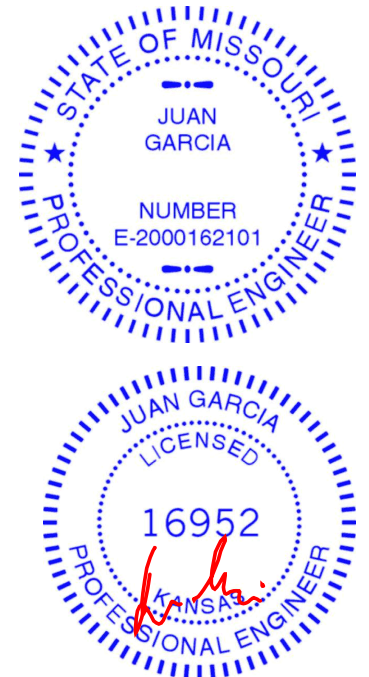


Plate Offsets (X,Y)--		[2:0-3-9,Edge], [5:0-3-8,Edge], [13:0-2-8,0-1-8], [14:0-2-8,0-1-8], [15:0-8-0,0-3-4]									
LOADING (psf)		SPACING-2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP			
TCLL	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.32 14-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.96	Vert(CT)	-0.60 14-15	>566	240	MT18H	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.28 10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.28 14-15	>999	240	Weight: 145 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 1-5: 2x6 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2 *Except* 2-15: 2x6 SPF No.2, 12-15: 2x4 SPF 2100F 1.8E, 7-11: 2x3 SPF No.2	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. Except: 1 Row at midpt 7-12
WEBS 2x3 SPF No.2 *Except* 3-15,8-10: 2x4 SPF No.2	WEBS 1 Row at midpt 3-14, 4-13, 6-12, 9-10, 8-10

REACTIONS.	(size) 2=0-3-8, 10=0-3-8 Max Horz 2=336(LC 7) Max Uplift 2=-217(LC 8), 10=-186(LC 8) Max Grav 2=1337(LC 1), 10=1262(LC 1)
FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-5309/997, 3-4=-2763/464, 4-6=-1643/293, 6-7=-947/223, 7-8=-880/275
BOT CHORD	2-15=-1084/4829, 14-15=-975/4268, 13-14=-509/2549, 12-13=-211/1405
WEBS	3-15=-265/1548, 3-14=-1729/468, 4-14=0/423, 4-13=-1276/333, 6-13=-71/682, 6-12=-992/257, 8-12=-271/1196, 10-12=-167/512, 8-10=-1242/176

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=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60	
3) All plates are MT20 plates unless otherwise indicated.	
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.	
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.	
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 100 lb uplift at joint(s) except (jt=lb) 2=217, 10=186.	
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.	



April 3,2020

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 140861149
400213	B2	COMMON	1	1	Job Reference (optional)	
Wheeler Lumber, Waverly, KS 66871		8.240 s Mar 9 2020 MiTek Industries, Inc. 140861149				
		ID:2ncXplsXOfbjlB6l7Q?gPMzrYWU-Lq6b0F2uNXxgbVJg0YG_6KYtTvwAf1Nb_Bg3XzUTrj				
		23-0-0 28-4-0 5-4-0				04/22/2020

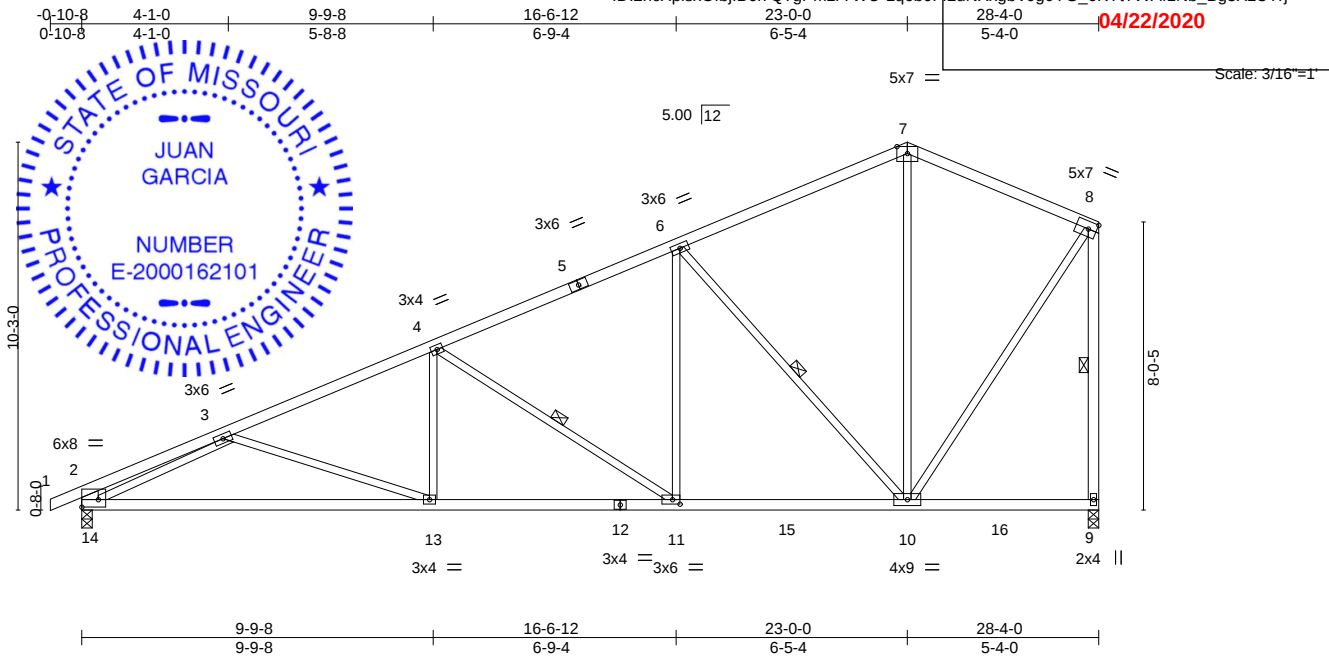


Plate Offsets (X,Y)-- [2:Edge,0-2-8], [2:0-2-12,0-1-2], [11:0-2-8,0-1-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.53	Vert(LL)	-0.23 13-14	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.96	Vert(CT)	-0.47 13-14	>712	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.92	Horz(CT)	0.07 9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.09 11-13	>999	240	Weight: 124 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-14: 2x6 SPF No.2, 8-9: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-7-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 4-11, 6-10, 8-9

REACTIONS. (size) 14=0-3-8, 9=0-3-8
Max Horz 14=342(LC 5)
Max Uplift 14=-218(LC 8), 9=-186(LC 8)
Max Grav 14=1376(LC 2), 9=1359(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-719/30, 3-4=-2182/319, 4-6=-1477/261, 6-7=-721/184, 7-8=-695/207,
2-14=-448/85, 8-9=-1260/220
BOT CHORD 13-14=-514/2033, 11-13=-355/1962, 10-11=-190/1296
WEBS 4-13=0/352, 4-11=-797/197, 6-11=-37/682, 6-10=-1067/288, 3-14=-1691/389,
8-10=-138/1052

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=218, 9=186.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 3,2020

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job

400213

Truss

B3

Truss Type

Half Hip

Qty

1

Ply

1

Lot 53 H4

Wheeler Lumber,

Waverly, KS 66871

8.240 s Mar 9 2020

MiTek Industries, Inc.

Lee's Summit, MO 64086

Job Reference (optional)

8.240 s Mar 9 2020

140861150

RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

04/22/2020

0-10-8

2-9-8

6-11-8

10-10-0

18-11-7

24-10-8

26-2-8

28-4-0

0-10-8

2-9-8

4-2-0

3-10-9

8-1-7

5-11-1

1-4-0

2-1-8

11-0-6

10-10-7

5.00

12

6x6

3x4

8

9

6x8

5x7

2x4

3x4

4

5

6

7

7-10-7

10-10-7

3-0-0

2x4

3x4

19

18

7x12

16

15

14

13

3x4

2x4

3x6

3x10

2x4

0-8-0

6x4

1

2

3

2-9-8

6-11-8

10-10-0

18-11-7

24-10-8

26-2-8

28-4-0

2-9-8

4-2-0

3-10-9

8-1-7

5-11-1

1-4-0

2-1-8

Plate Offsets (X,Y)--

[2:0-0-4,0-0-8], [3:0-1-9,0-3-3], [6:0-3-8,Edge], [9:Edge,0-2-8], [12:0-5-8,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.86	Vert(LL)	-0.31	19	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.66	Vert(CT)	-0.56	19	>605	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.98	Horz(CT)	0.26	10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.30	19	>999	240		
									Weight: 161 lb	FT = 10%

LUMBER-

TOP CHORD

2x4 SPF No.2 *Except*

1-6: 2x6 SP 2400F 2.0E

BOT CHORD

2x4 SPF No.2 *Except*

3-17: 2x4 SPF 2100F 1.8E, 5-16: 2x3 SPF No.2

WEBS

2x3 SPF No.2 *Except*

7-17,8-14: 2x4 SPF No.2

BRACING-

TOP CHORD

Structural wood sheathing directly applied or 2-2-1 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 8-9.

BOT CHORD

Rigid ceiling directly applied or 6-0-0 oc bracing.

WEBS

1 Row at midpt 9-10, 7-15, 7-12, 8-10

JOINTS

1 Brace at Jt(s): 9, 12

REACTIONS.

(size) 10=0-3-8, 2=0-3-8

Max Horz 2=413(LC 5)

Max Uplift 10=-225(LC 8), 2=-202(LC 8)

Max Grav 10=1264(LC 1), 2=1351(LC 1)

FORCES.

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

TOP CHORD

2-3=-724/0, 3-4=-3399/587, 4-5=-2509/466, 5-7=-2562/604, 7-8=-628/160

BOT CHORD

3-18=-769/3233, 17-18=-769/3233, 5-17=-410/247, 11-12=-126/498, 10-11=-126/498

WEBS

4-17=-1114/253, 15-17=-198/869, 7-17=-486/1687, 7-15=-450/219, 7-12=-672/220, 8-12=-211/1027, 8-10=-1236/251, 12-15=-214/1114

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=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=225, 2=202.

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.

STATE OF MISSOURI

JUAN GARCIA

NUMBER E-2000162101

PROFESSIONAL ENGINEER

STATE OF KANSAS

JUAN GARCIA

16952

PROFESSIONAL ENGINEER

April 3,2020

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MiTek

16023 Swingley Ridge Rd

Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4	
400213	B4	Half Hip	1	1	Job Reference (optional)	

**RELEASE FOR
CONSTRUCTION**
AS NOTED ON PLANS REVIEW
10861151
LEE'S SUMMIT MISSOURI
Development Services
04/22/2020

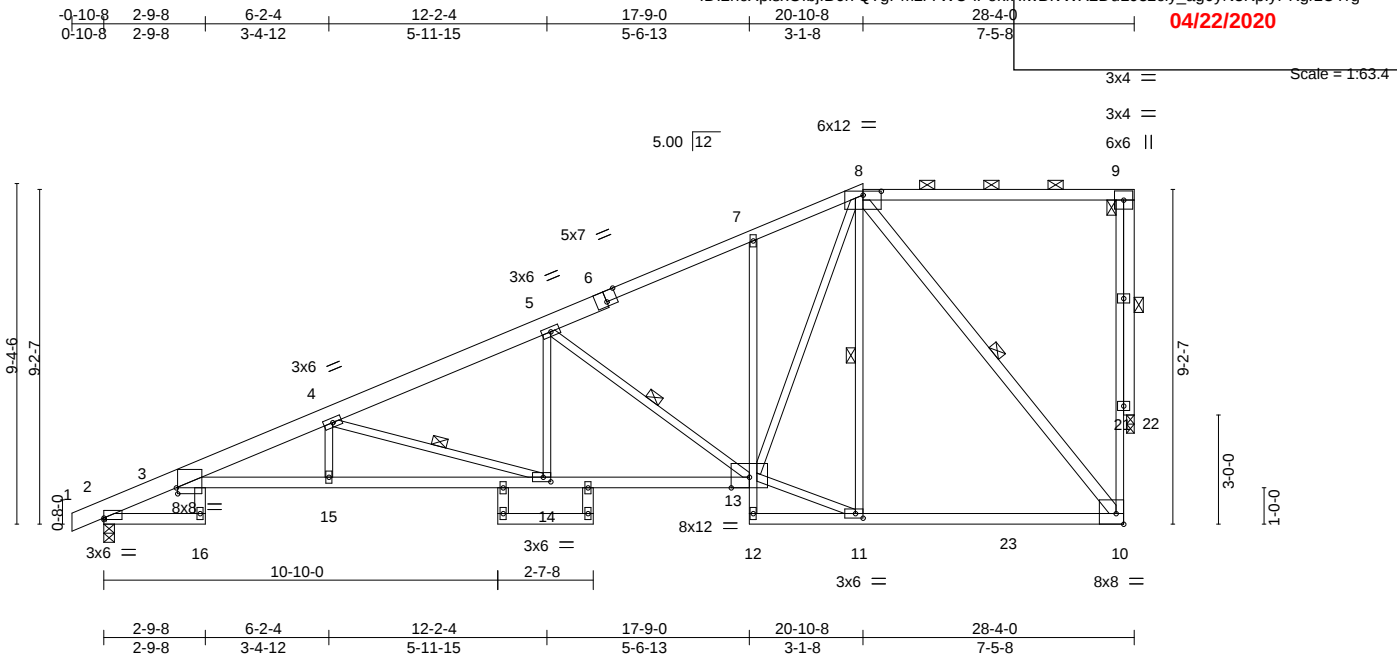


Plate Offsets (X,Y)-- [2:0-0-0,0-0-8], [3:0-0-7,0-1-15], [6:0-3-8,Edge], [8:0-6-0,0-1-5], [10:Edge,0-3-8], [11:0-2-8,0-1-8], [14:0-2-8,0-1-8]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.31	16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.54	16	>622	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.76	Horz(CT)	0.53	22	n/a	n/a		
BCDL	10.0	Code IRC2018/TP12014		Matrix-S		Wind(LL)	0.27	16	>999	240	Weight: 156 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 1-6: 2x6 SP 2400F 2.0E
BOT CHORD	2x4 SPF No.2 *Except* 3-13: 2x4 SPF 2100F 1.8E, 7-12: 2x3 SPF No.2
WEBS	2x3 SPF No.2 *Except* 3-16,8-10,17-19,18-20: 2x4 SPF No.2
OTHERS	2x4 SPF No.2

[illegible]

REACTIONS. (size) 2=0-3-8, 22=0-2-8
 Max Horz 2=311(LC 8)
 Max Uplift 2=-179(LC 8), 22=-181(LC 4)
 Max Grav 2=1394(LC 2), 22=1323(LC 2)

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

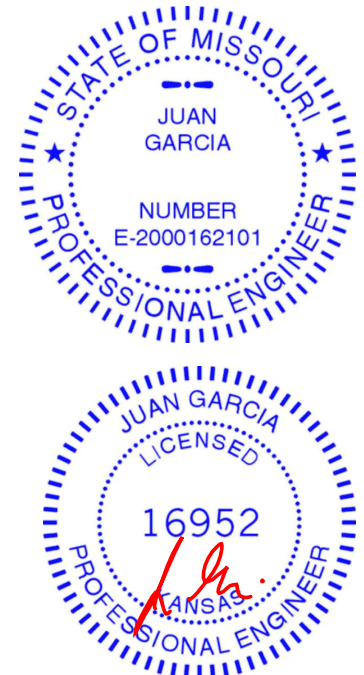
TOP CHORD 2-3=-697/0, 3-4=-3707/565, 4-5=-2406/334, 5-7=-1485/210, 7-8=-1403/274,
10-21=-138/1127, 9-21=-138/1127

BOT CHORD 3-15=-789/3561, 14-15=-789/3561, 13-14=-438/2153, 10-11=-129/846

WEBS 5-14=-32/662, 5-13=-1085/282, 11-13=-105/904, 8-13=-327/1249, 8-10=-1266/227,
4-14=-1473/368, 9-22=-1325/181

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDD=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Bearing at joint(s) 22 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 at joint(s) 22.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=179, 22=181.
- 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.



April 3, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 04/22/2020
400213	B5	Half Hip	1	1		
Wheeler Lumber, Waverly, KS 66871					Job Reference (optional)	

8.240 s Mar 9 2020 MiTek Industries, Inc. ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-DbM6sdizyc2N8Co4vscC8yU9G4LC6Y CzwC9uClzUTrf

Scale = 1:52.4

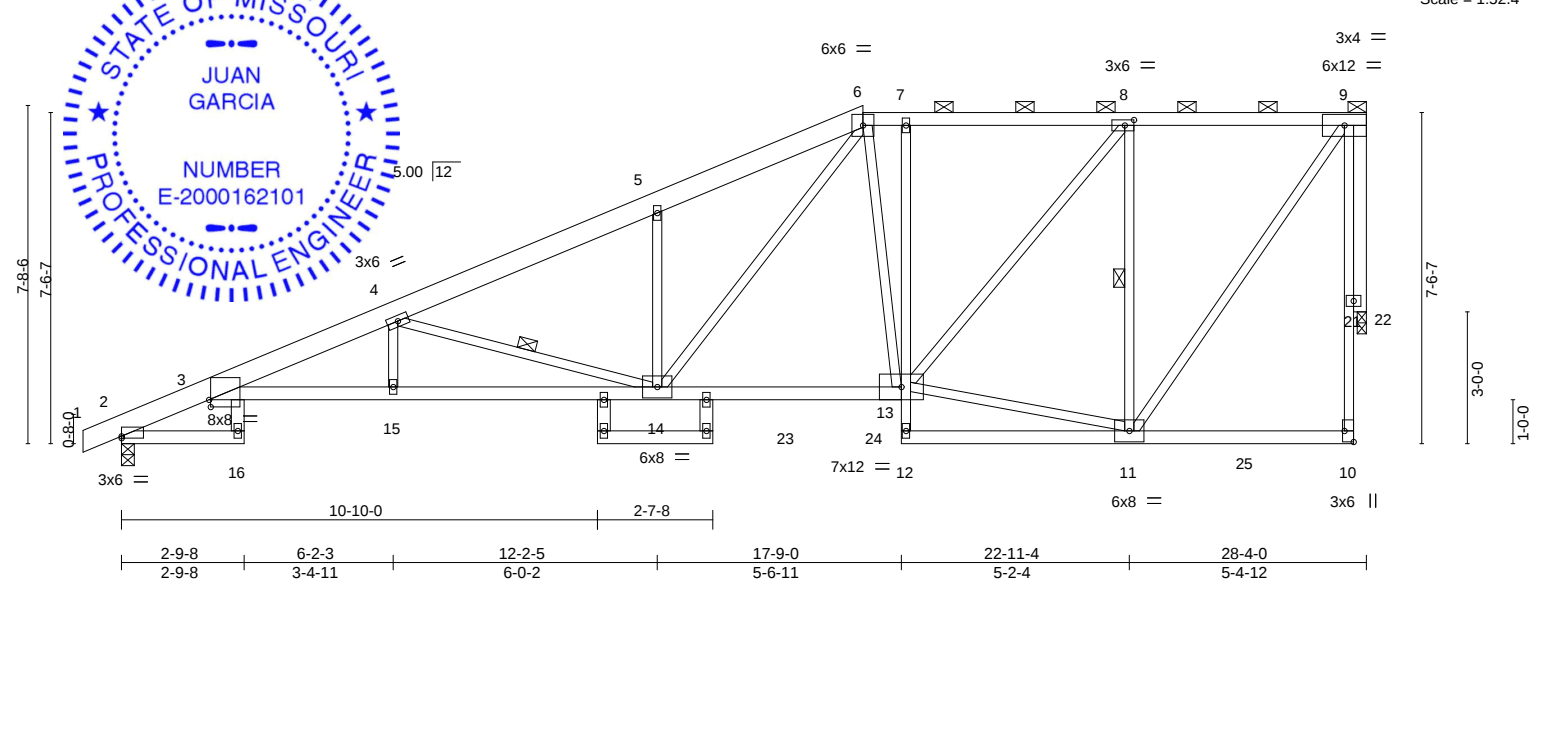


Plate Offsets (X,Y)--		[2:0-0,0,0-8], [3:0-0,7,0-1-15], [8:0-2,8,0-1-8], [10:Edge,0-2-8]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.31	16	>999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.54	16	>626		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.59	Horz(CT)	0.46	22	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.25	16	>999	Weight: 156 lb	FT = 10%

LUMBER-		BRACING-	
TOP CHORD	2x6 SP 2400F 2.0E *Except* 6-9: 2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (4-9-3 max.): 6-9.
BOT CHORD	2x4 SPF No.2 *Except* 3-13: 2x4 SPF 2100F 1.8E, 7-12: 2x3 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	2x3 SPF No.2 *Except* 3-16,17-19,18-20: 2x4 SPF No.2	WEBS	1 Row at midpt 4-14, 8-11
OTHERS	2x4 SPF No.2		

REACTIONS.		(size) 2=0-3-8, 22=0-2-8
		Max Horz 2=245(LC 5)
		Max Uplift 2=-176(LC 8), 22=-197(LC 4)
		Max Grav 2=1397(LC 2), 22=1324(LC 2)

FORCES.		(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-682/0, 3-4=-3733/525, 4-5=-2401/294, 5-6=-2361/386, 6-7=-1412/199, 7-8=-1408/200, 8-9=-822/133	
BOT CHORD	3-15=-678/3589, 14-15=-678/3589, 13-14=-227/1442, 7-13=-252/109	
WEBS	4-14=-1515/366, 5-14=-324/193, 6-14=-279/1165, 11-13=-144/810, 8-13=-164/928, 8-11=-1093/262, 9-11=-196/1336, 9-22=-1327/198	

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Bearing at joint(s) 22 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide moment connection (by others) of truss to bearing plate at joint(s) 22.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

MiTek

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 04/22/2020
400213	B5	Half Hip	1	1	Job Reference (optional)	
Wheeler Lumber, Waverly, KS 66871		8.240 s Mar 9 2020 MiTek Industries, Inc. 11:53 AM 28/03/2020 Page 2			ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-DbM6sdiZyc2N8Co4vscC8yU9G4LC6YCzWc9uClzUTrf	

- NOTES-**
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=176, 22=197.
 - 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.

 **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4
400213	B6	Half Hip	1	1	

Wheeler Lumber, Waverly, KS 66871

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES

140861153

04/22/2020

Scale = 1:52.4

8.240 s Mar 9 2020 MiTek Industries, Inc. 140861153					
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-0-10-8	2-9-8	7-4-11	12-10-8	17-9-0	22-11-4
0-10-8	2-9-8	4-7-3	5-5-13	4-10-8	5-2-4
					28-4-0
					5-4-12

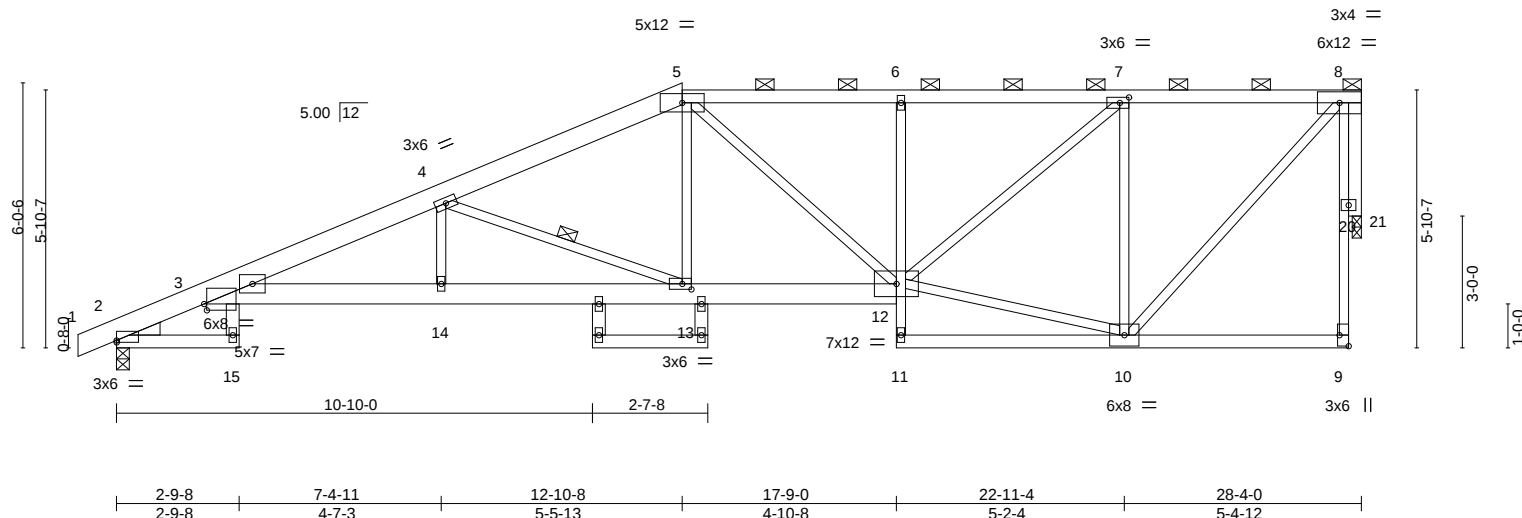


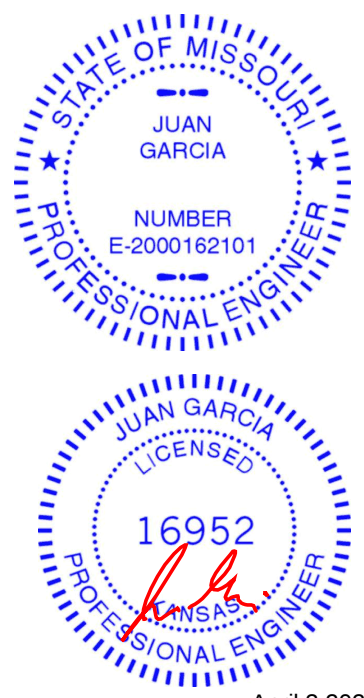
Plate Offsets (X,Y)--		[2:0-0-0,0-0-8], [3:0-0-12,0-1-11], [7:0-2-8,0-1-8], [9:Edge,0-2-8], [13:0-2-8,0-1-8]
LOADING (psf)	SPACING-	2-0-0
TCLL 25.0	Plate Grip DOL	1.15
TCDL 10.0	Lumber DOL	1.15
BCLL 0.0 *	Rep Stress Incr	YES
BCDL 10.0	Code IRC2018/TPI2014	
		Matrix-S
		DEFL. in (loc) l/defl L/d
		Vert(LL) -0.28 15 >999 360
		Vert(CT) -0.51 15 >657 240
		Horz(CT) 0.42 21 n/a n/a
		Wind(LL) 0.23 15 >999 240
		PLATES GRIP
		MT20 197/144
		Weight: 148 lb FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x6 SP 2400F 2.0E *Except* 5-8: 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-9-12 oc purlins, except end verticals, and 2-0-0 oc purlins (4-0-1 max.): 5-8.
BOT CHORD 2x4 SPF No.2 *Except* 3-12: 2x6 SPF 1650F 1.4E, 6-11: 2x3 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-15.
WEBS 2x3 SPF No.2 *Except* 3-15,16-18,17-19: 2x4 SPF No.2	WEBS 1 Row at midpt 4-13
OTHERS 2x4 SPF No.2	
WEDGE Left: 2x4 SP No.3	

REACTIONS.	(size) 2=0-3-8, 21=0-2-8 Max Horz 2=200(LC 5) Max Uplift 2=-158(LC 8), 21=-210(LC 4) Max Grav 2=1349(LC 1), 21=1237(LC 1)
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FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-625/0, 3-4=-3413/394, 4-5=-2213/302, 5-6=-1861/311, 6-7=-1854/310, 7-8=-1011/183
BOT CHORD	3-14=-476/3206, 13-14=-476/3206, 12-13=-327/1972, 6-12=-370/152
WEBS	4-14=0/321, 4-13=-1348/321, 5-13=-51/628, 10-12=-191/941, 7-12=-190/1126, 7-10=-1148/292, 8-10=-231/1403, 8-21=-1245/212

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Bearing at joint(s) 21 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate at joint(s) 21.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=158, 21=210.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 3,2020

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 04/22/2020 Scale = 1:50.6
400213	B7	HALF HIP GIRDER	1	2	Job Reference (optional)	
Wheeler Lumber, Waverly, KS 66871						

8.240 s Mar 9 2020 MiTek Industries, Inc. 140861154
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 21-0-8 6-0-12 28-4-0 7-3-8

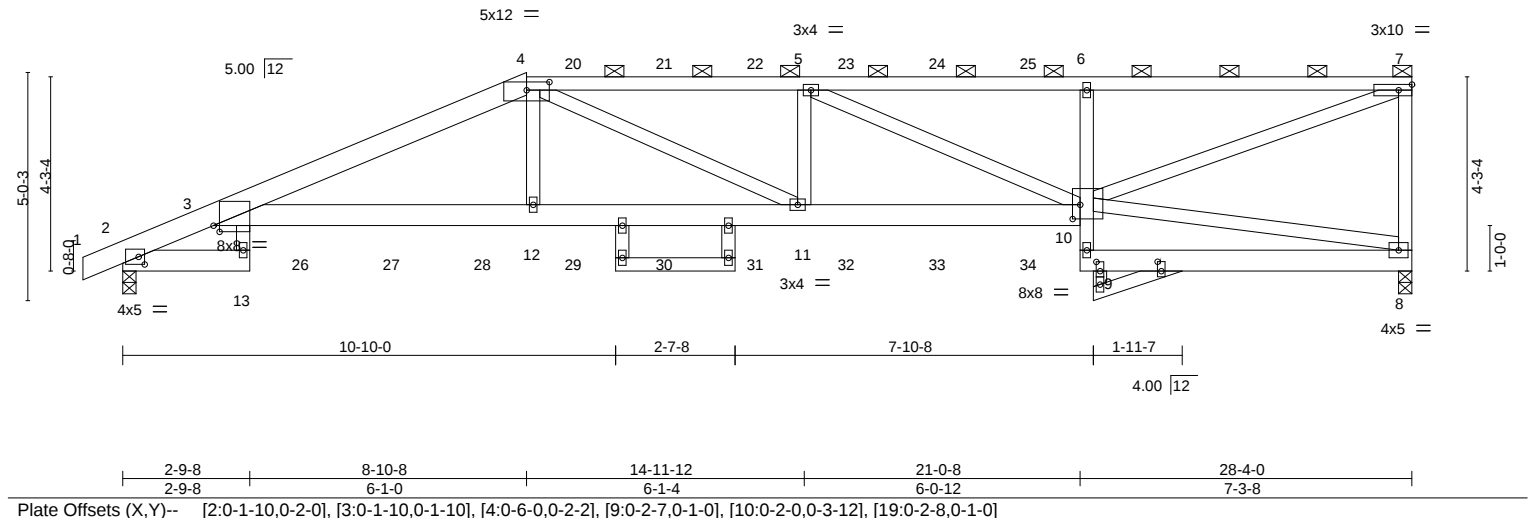


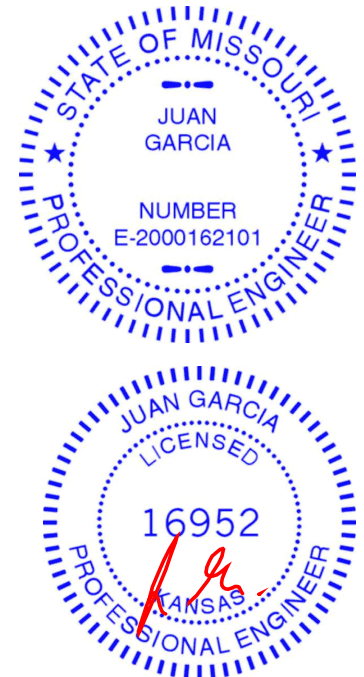
Plate Offsets (X,Y)--		[2:0-1-10,0-2-0], [3:0-1-10,0-1-10], [4:0-6-0,0-2-2], [9:0-2-7,0-1-0], [10:0-2-0,0-3-12], [19:0-2-8,0-1-0]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.72
TCDL 10.0	Lumber DOL	1.15	BC 0.47
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.48
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.26 3-12 >999 360
			Vert(CT) -0.46 3-12 >732 240
			Horz(CT) 0.25 8 n/a n/a
			Wind(LL) 0.30 3-12 >999 240
			PLATES
			MT20
			GRIP
			197/144
			Weight: 335 lb FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x6 SP DSS *Except* 4-7: 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (5-4-14 max.): 4-7.
BOT CHORD 2x4 SPF No.2 *Except* 2-13,3-10,8-9: 2x6 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-13.
WEBS 2x4 SPF No.2	

REACTIONS.	(size) 8=0-3-8, 2=0-3-8 Max Horz 2=174(LC 5) Max Uplift 8=692(LC 5), 2=690(LC 8) Max Grav 8=1799(LC 1), 2=1990(LC 1)
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FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-877/308, 3-4=-4706/1872, 4-5=-4700/2083, 5-6=-3679/1598, 6-7=-3639/1565, 7-8=-1704/725
BOT CHORD	3-12=-1865/4373, 11-12=-1877/4415, 10-11=-2130/4700, 6-10=-564/320
WEBS	3-13=-86/290, 4-12=-250/838, 4-11=-300/426, 5-10=-1126/550, 7-10=-1679/3887

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=692, 2=690.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 3,2020

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEES SUMMIT, MISSOURI 04/22/2020
400213	B7	HALF HIP GIRDER	1	2	Job Reference (optional)	
Wheeler Lumber, Waverly, KS 66871		8.240 s Mar 9 2020 MiTek Industries, Inc. 11-11-4, 115 lb down and 121 lb up at 13-11-4, 115 lb down and 121 lb up at 15-11-4, and 115 lb down and 121 lb up at 17-11-4, and 115 lb down and 121 lb up at 19-11-4 on top chord, and 171 lb down and 108 lb up at 3-11-4, 139 lb down and 80 lb up at 5-11-4, 142 lb down and 95 lb up at 7-11-4, 63 lb down and 25 lb up at 9-11-4, 37 lb down and 23 lb up at 11-11-4, 37 lb down and 24 lb up at 13-11-4, 37 lb down and 24 lb up at 15-11-4, 37 lb down and 24 lb up at 17-11-4, and 37 lb down and 24 lb up at 19-11-4, and 289 lb down and 146 lb up at 21-2-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.				

NOTES-

11) Hammer(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 110 lb down and 105 lb up at 9-11-4, 114 lb down and 118 lb up at 11-11-4, 115 lb down and 121 lb up at 13-11-4, 115 lb down and 121 lb up at 15-11-4, and 115 lb down and 121 lb up at 17-11-4, and 115 lb down and 121 lb up at 19-11-4 on top chord, and 171 lb down and 108 lb up at 3-11-4, 139 lb down and 80 lb up at 5-11-4, 142 lb down and 95 lb up at 7-11-4, 63 lb down and 25 lb up at 9-11-4, 37 lb down and 23 lb up at 11-11-4, 37 lb down and 24 lb up at 13-11-4, 37 lb down and 24 lb up at 15-11-4, 37 lb down and 24 lb up at 17-11-4, and 37 lb down and 24 lb up at 19-11-4, and 289 lb down and 146 lb up at 21-2-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

NOTES-

11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 110 lb down and 105 lb up at 9-11-4, 114 lb down and 118 lb up at 11-11-4, 115 lb down and 121 lb up at 13-11-4, 115 lb down and 121 lb up at 15-11-4, and 115 lb down and 121 lb up at 17-11-4, and 115 lb down and 121 lb up at 19-11-4 on top chord, and 171 lb down and 108 lb up at 3-11-4, 139 lb down and 80 lb up at 5-11-4, 142 lb down and 95 lb up at 7-11-4, 63 lb down and 25 lb up at 9-11-4, 37 lb down and 23 lb up at 11-11-4, 37 lb down and 24 lb up at 13-11-4, 37 lb down and 24 lb up at 15-11-4, 37 lb down and 24 lb up at 17-11-4, and 37 lb down and 24 lb up at 19-11-4, and 289 lb down and 146 lb up at 21-2-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-4=-70, 4-7=-70, 2-13=-20, 3-10=-20, 8-9=-20

Concentrated Loads (lb)

Vert: 10=-289(B) 20=-44(B) 21=-48(B) 22=-48(B) 23=-48(B) 24=-48(B) 25=-48(B) 26=-171(B) 27=-139(B) 28=-139(B) 29=-45(B) 30=-23(B) 31=-22(B) 32=-22(B) 33=-22(B) 34=-22(B)

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4	140861155 CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 04/22/2020 Scale = 1:19.2
400213	C1	ROOF SPECIAL	1	1		
Wheeler Lumber, Waverly, KS 66871					Job Reference (optional)	
8.240 s Mar 9 2020 MiTek Industries, Inc. 140861155						

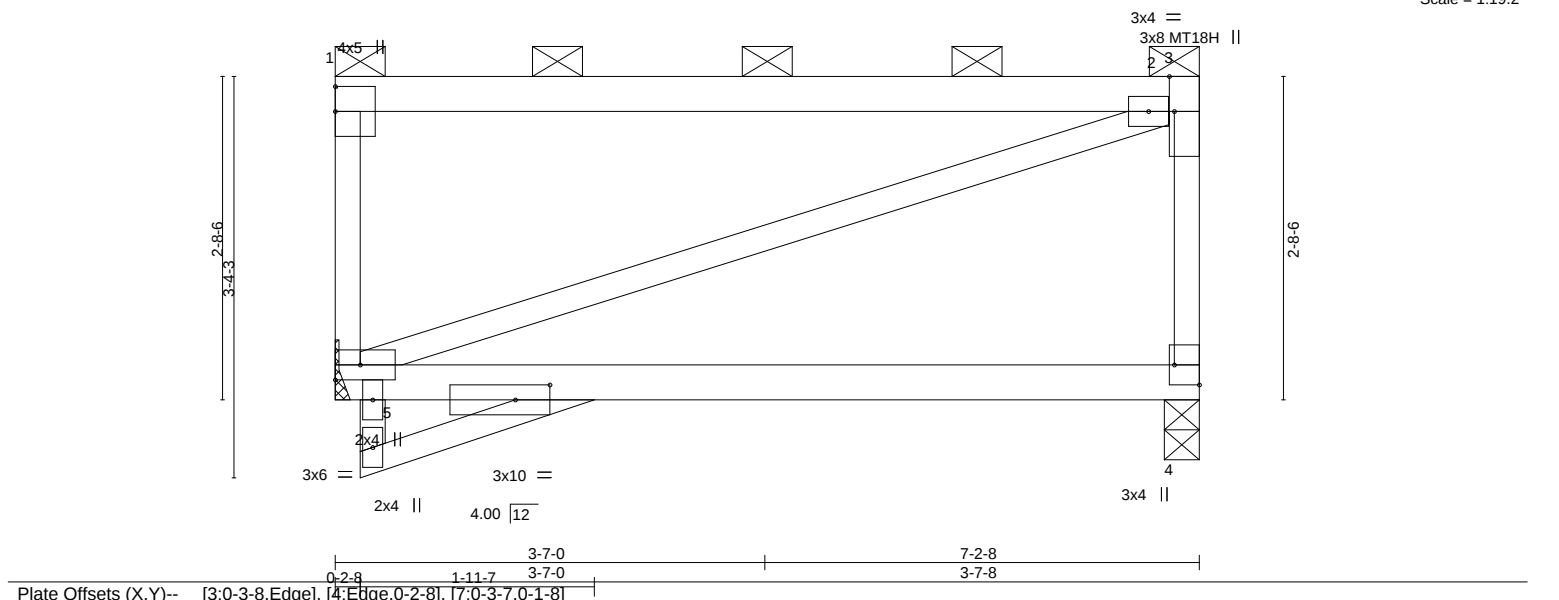
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7-2-8

7-1-10

0-2-5

0-0-11



LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.73	Vert(LL) -0.10 4-5 >848 360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.40	Vert(CT) -0.19 4-5 >438 240	MT18H	197/144
BCLL 0.0 *	Rep Stress Incr YES	WB 0.06	Horz(CT) 0.00 4 n/a n/a	Weight: 28 lb FT = 10%	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) -0.01 4-5 >999 240		

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-3, except end verticals.
BOT CHORD 2x3 SPF No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
4-5: 2x4 SPF No.2	
WEBS 2x3 SPF No.2	

REACTIONS.	(size) 5=Mechanical, 4=0-3-8
	Max Horz 5=92(LC 5)
	Max Uplift 5=-75(LC 4), 4=-75(LC 5)
	Max Grav 5=315(LC 1), 4=315(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
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- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Provide adequate drainage to prevent water ponding.
 - 3) All plates are MT20 plates unless otherwise indicated.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 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) 5, 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 3,2020

Job

400213

Truss

C2

Truss Type

MONOPITCH

Qty

4

Ply

1

Lot 53 H4

Job Reference (optional)

Wheeler Lumber,

Waverly, KS 66871

8.240 s Mar 9 2020

MiTek Industries, Inc.

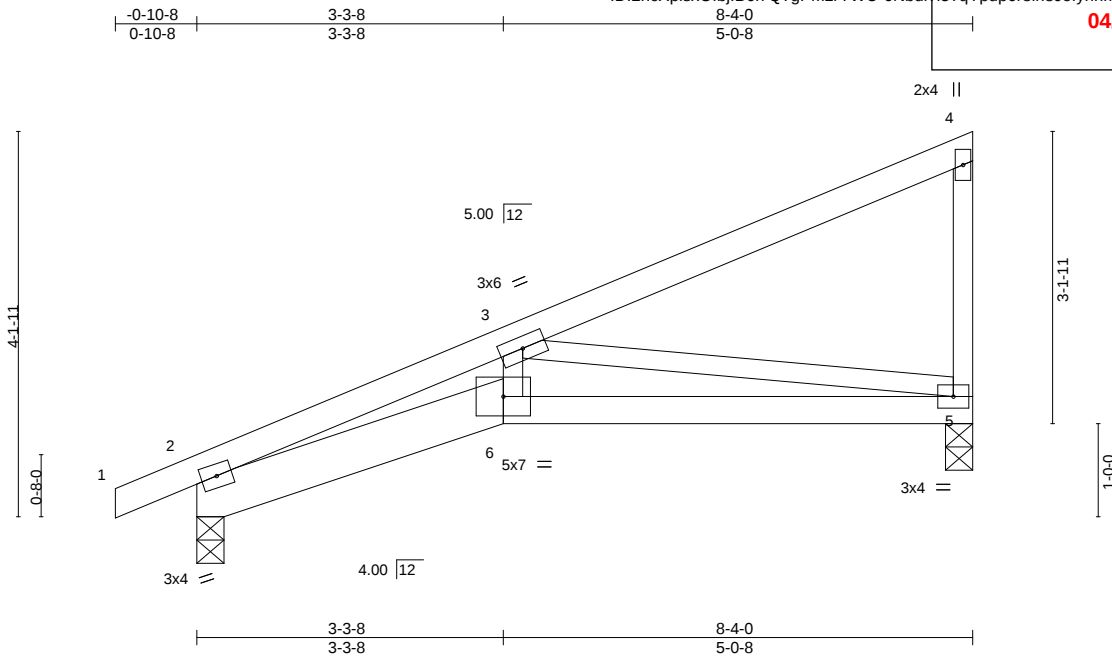
Lee's Summit, MO 64086

1156

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04/22/2020

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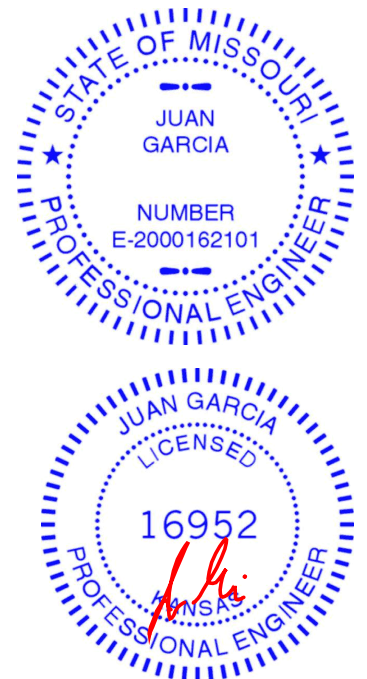
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.41	Vert(LL)	-0.05	6	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.50	Vert(CT)	-0.10	5-6	>960	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.64	Horz(CT)	0.04	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P	Wind(LL)	0.05	6	>999	240		
									Weight: 30 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 5-0-14 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

REACTIONS.	(size) 5=0-3-8, 2=0-3-8
Max Horz	2=149(LC 5)
Max Uplift	5=-86(LC 8), 2=-74(LC 8)
Max Grav	5=359(LC 1), 2=440(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-1303/304
BOT CHORD	2-6=-349/1172, 5-6=-320/1046
WEBS	3-6=-60/448, 3-5=-1059/352

- NOTES-**
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 3,2020

Job

400213

Truss

D1

Truss Type

GABLE

Qty

1

Ply

1

Lot 53 H4

Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. 140861157

Wheeler Lumber,

Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. 140861157

AS NOTED ON PLANS REVIEW

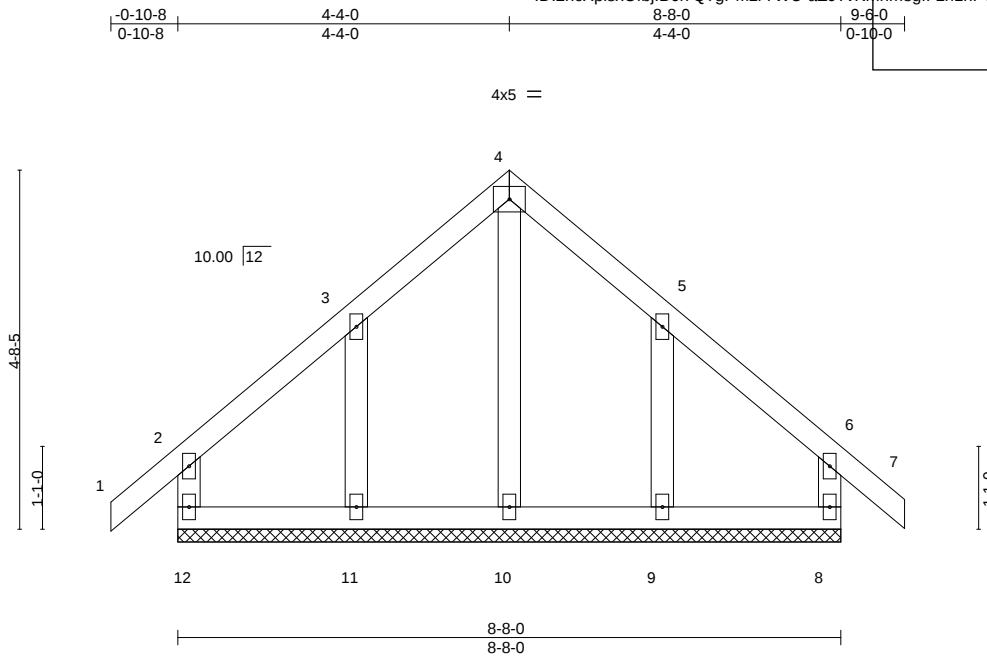
DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

04/22/2020

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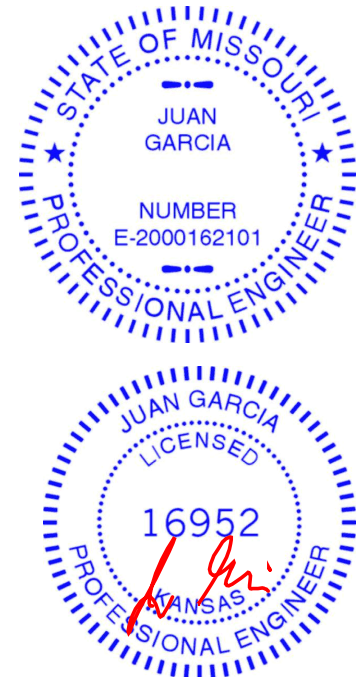
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	-0.00	7	n/r	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	-0.00	7	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	8	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						
								Weight: 38 lb	FT = 10%

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

REACTIONS. All bearings 8-8-0.
 (lb) - Max Horz 12=146(LC 7)
 Max Uplift All uplift 100 lb or less at joint(s) 12, 8 except 11=123(LC 8), 9=122(LC 9)
 Max Grav All reactions 250 lb or less at joint(s) 12, 8, 10, 11, 9

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 8 except (jt=lb) 11=123, 9=122.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 3, 2020

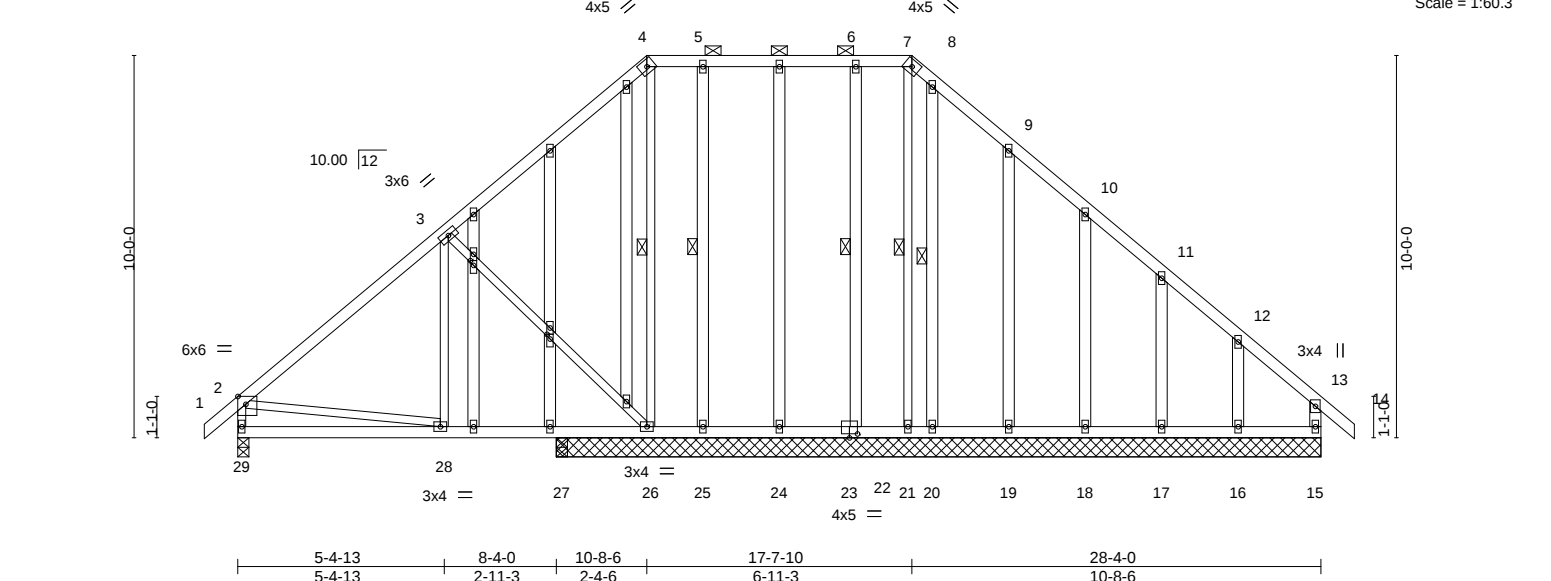


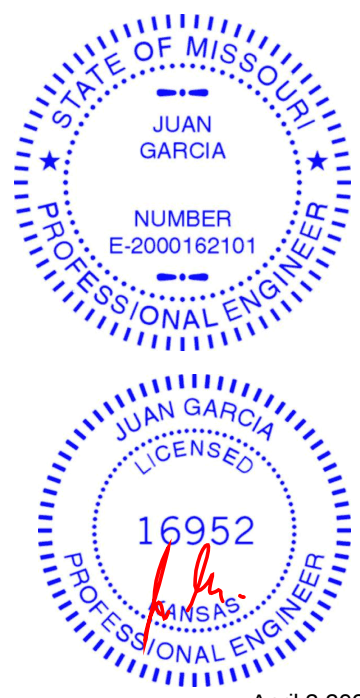
Plate Offsets (X,Y)--		[2:0-2-8,Edge], [22:0-1-12,0-0-0], [23:0-0-0,0-1-12], [23:0-2-8,0-1-4], [33:0-1-8,0-1-0], [36:0-1-8,0-1-0]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.37
TCDL 10.0	Lumber DOL	1.15	BC 0.19
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.66
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S
		DEFL.	in (loc) l/defl L/d
		Vert(LL)	-0.02 28-29 >999 360
		Vert(CT)	-0.05 28-29 >999 240
		Horz(CT)	0.01 15 n/a n/a
		Wind(LL)	0.01 28 >999 240
		PLATES	MT20
		GRIP	197/144
		Weight:	195 lb
		FT =	10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 4-7.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except:
WEBS 2x3 SPF No.2 *Except*	10-0-0 oc bracing: 28-29,27-28,26-27.
13-15: 2x4 SPF No.2	WEBS 1 Row at midpt 4-26, 7-21, 5-25, 6-22, 8-20
OTHERS 2x4 SPF No.2	

REACTIONS. All bearings 20-0-0 except (jt=length) 29=0-3-8, 27=0-3-8.
(lb) - Max Horz 29=285(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 21, 15, 25, 22, 18, 17 except 29=-135(LC 9), 26=-159(LC 8), 19=-105(LC 9), 16=-170(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 21, 15, 24, 20, 19, 18, 17, 27 except 29=551(LC 16), 26=664(LC 15), 25=260(LC 22), 22=277(LC 21), 16=271(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-501/214, 3-4=-193/294, 4-5=-79/259, 5-6=-79/258, 6-7=-79/258, 7-8=-92/289, 8-9=-96/281, 2-29=-467/162
BOT CHORD 28-29=-268/348, 27-28=-105/369, 26-27=-105/369
WEBS 3-26=-475/226, 4-26=-275/78

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 21, 15, 25, 22, 18, 17 except (jt=lb) 29=135, 26=159, 19=105, 16=170.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 3,2020

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 140861159
400213	D3	Piggyback Base	1	1	Job Reference (optional)	8.240 s Mar 9 2020 MiTek Industries, Inc. 11:38:38 PM
Wheeler Lumber,	Waverly, KS 66871					ID:2ncXplsXOfjIB6I7Q?gPMzrYWU-xWyuy2cqbglYkZ?UzoYY3vym6I6S1DRpAaQZjzUTrV
						22-11-3 5-3-9 28-4-0 5-4-13 28-2-9 0-10-8 04/22/2020

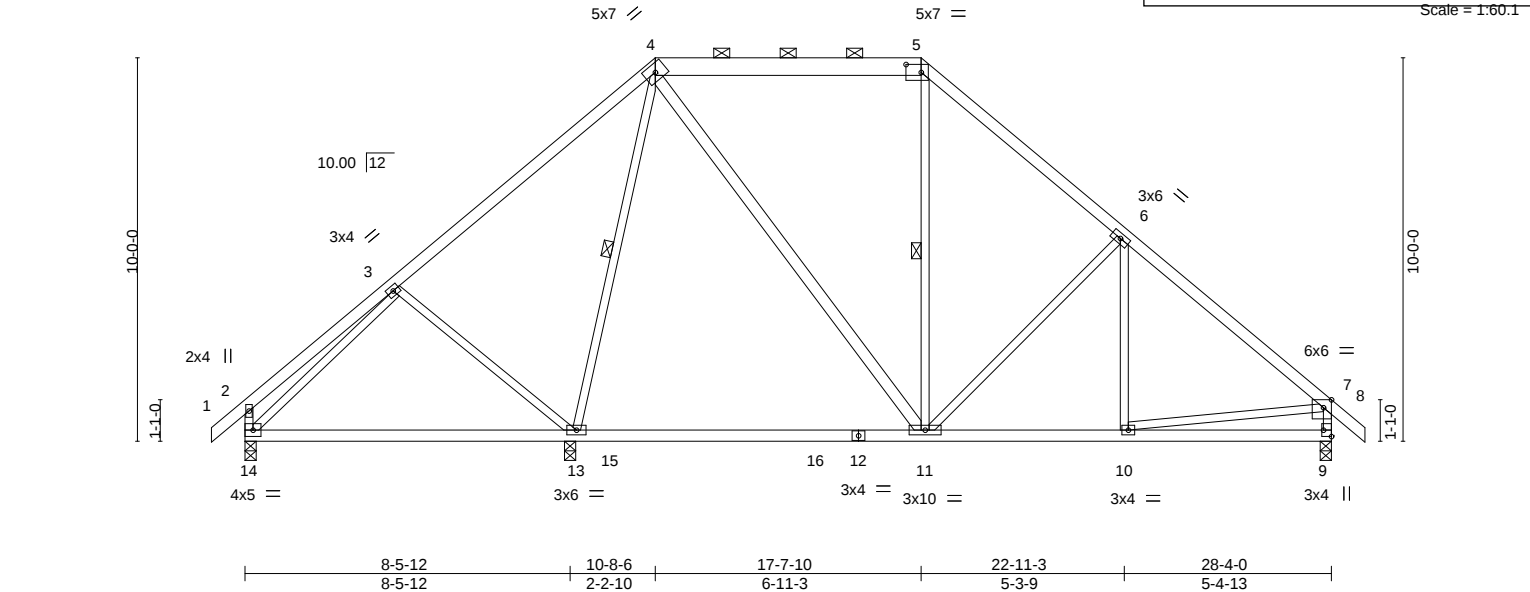


Plate Offsets (X,Y)-- [5:0-4-12,0-2-8], [7:0-2-8,Edge], [9:Edge,0-2-8]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	-0.25 11-13 >940 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.36 11-13 >649 240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.01 9 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.02 10-11 >999 240	Weight: 132 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 4-5: 2x6 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 5-6-4 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2 *Except* 4-11: 2x4 SPF No.2	WEBS 1 Row at midpt 4-13, 5-11

REACTIONS.	(size) 13=0-3-8, 14=0-3-8, 9=0-3-8 Max Horz 14=283(LC 7) Max Uplift 13=-148(LC 8), 14=-46(LC 9), 9=-129(LC 9) Max Grav 13=1351(LC 15), 14=497(LC 21), 9=1007(LC 16)
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FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 4-5=-521/216, 5-6=-774/197, 6-7=-1031/144, 7-9=-913/158
BOT CHORD 13-14=-188/381, 11-13=-100/303, 10-11=0/721
WEBS 3-13=-364/287, 4-13=-835/86, 4-11=-75/559, 6-11=-388/223, 3-14=-331/104, 7-10=0/572

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14 except (jt=lb) 13=148, 9=129.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 3,2020

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES
400213	D5	Piggyback Base	1	1	8.240 s Mar 9 2020 MiTek Industries, Inc.	140861161
Wheeler Lumber, Waverly, KS 66871						Job Reference (optional)
ID:2ncXplsXOfjIB6I7Q?gPMzrYWU-tv4eNks47IYga2jNcNqOdU_IewQcwxsKHU3WebzUTrT						22-10-11 28-2-0 5-3-5
3-10-12 3-10-12 10-7-14 6-9-2 17-7-2 6-11-3 22-10-11 5-3-9 28-2-0 5-3-5						04/22/2020

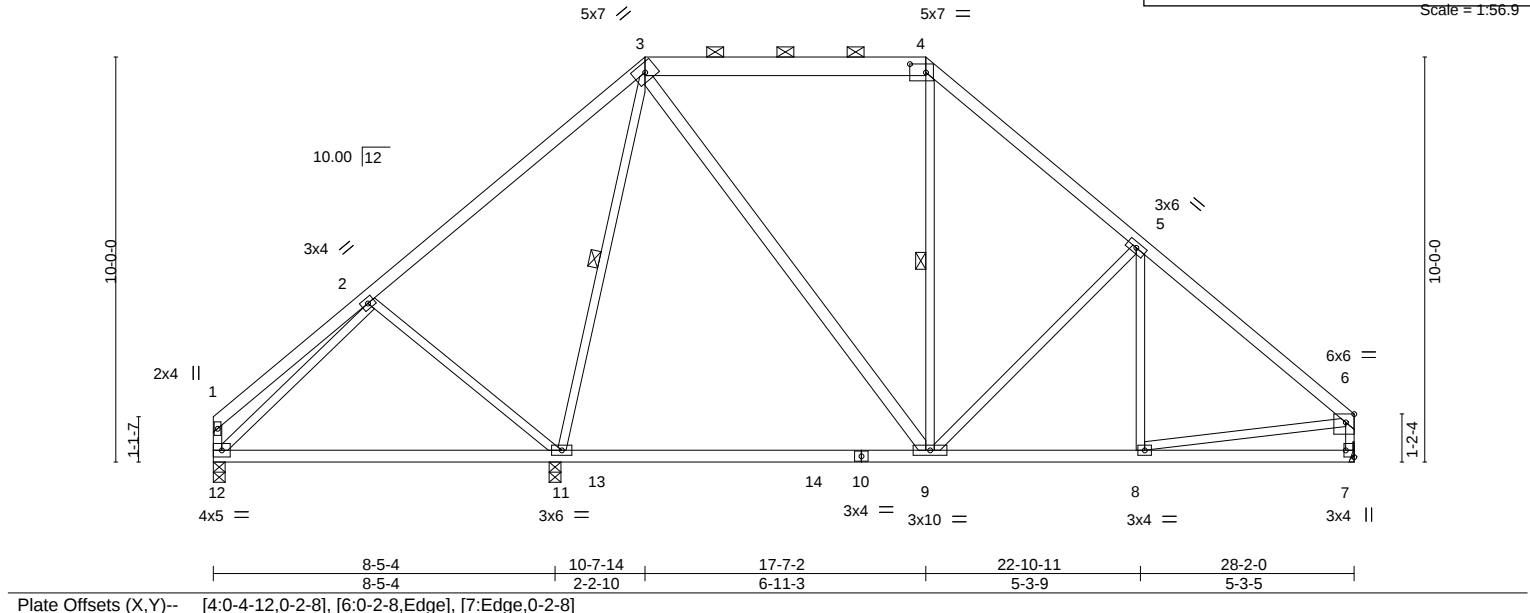


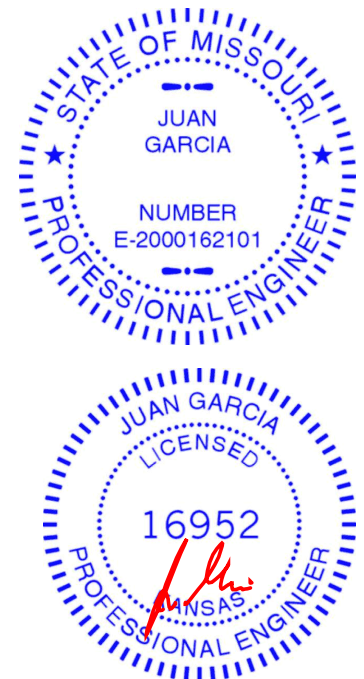
Plate Offsets (X,Y)--		[4:0-4-12,0-2-8], [6:0-2-8,Edge], [7:Edge,0-2-8]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.50	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.71	Vert(LL) -0.25 9-11 >933 360
BCLL 0.0 *	Rep Stress Incr YES	WB 0.74	Vert(CT) -0.36 9-11 >644 240
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT) 0.01 7 n/a n/a
			Wind(LL) 0.02 8-9 >999 240
			PLATES MT20
			GRIP 197/144
			Weight: 129 lb FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except*	TOP CHORD Structural wood sheathing directly applied or 5-5-12 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
3-4: 2x6 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
BOT CHORD 2x4 SPF No.2	WEBS 1 Row at midpt 3-11, 4-9
WEBS 2x3 SPF No.2 *Except*	
3-9: 2x4 SPF No.2	

REACTIONS.	(size) 11=0-3-8, 12=0-3-8, 7=Mechanical
	Max Horz 12=263(LC 7)
	Max Uplift 11=-155(LC 8), 12=-32(LC 9), 7=-101(LC 9)
	Max Grav 11=1340(LC 15), 12=426(LC 21), 7=936(LC 16)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	3-4=-518/210, 4-5=-772/190, 5-6=-1009/133, 6-7=-844/129
BOT CHORD	11-12=-196/380, 9-11=-99/285, 8-9=-24/711
WEBS	2-11=-367/288, 3-11=-825/93, 3-9=-79/552, 5-9=-379/222, 2-12=-326/103, 6-8=0/609

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12 except (jt=lb) 11=155, 7=101.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 3,2020

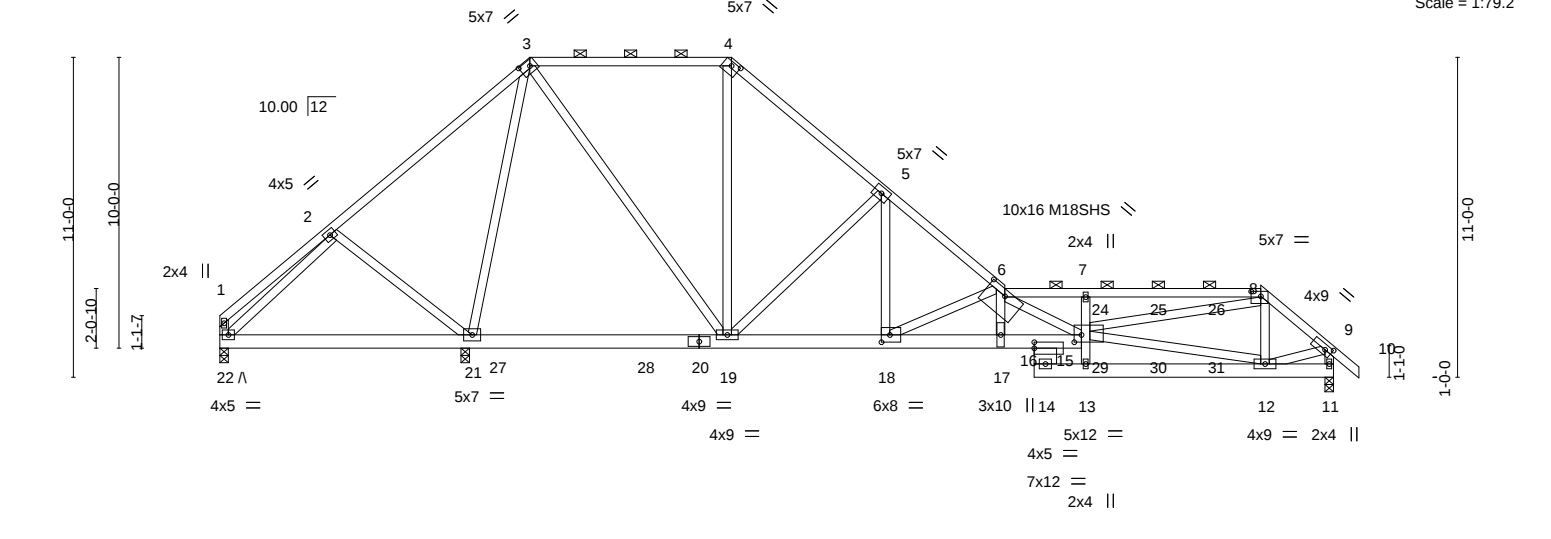


Plate Offsets (X,Y)--	[3:0-4-4,0-2-4], [4:0-3-8,0-1-10], [6:0-8-0,0-2-7], [8:0-4-0,0-2-0], [9:0-2-14,0-2-0], [15:0-3-0,0-3-0], [16:0-0-0,0-2-8], [18:0-3-8,0-3-0]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.65	Vert(LL)	-0.30 16-17	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.95	Vert(CT)	-0.52 16-17	>682	240	M18SHS	197/144
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.79	Horz(CT)	0.08 11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.19 16-17	>999	240	Weight: 483 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 6-8: 2x4 SPF 2100F 1.8E	TOP CHORD Structural wood sheathing directly applied or 5-11-7 oc purlins, except end verticals, and 2-0-0 oc purlins (5-1-1 max.): 3-4, 6-8.
BOT CHORD 2x6 SP 2400F 2.0E *Except* 14-16: 2x10 SP DSS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 21-22.
WEBS 2x4 SPF No.2	

REACTIONS.	(size)	11=0-3-8, 21=0-3-8, 22=0-3-8
	Max Horz	22=-300(LC 4)
	Max Uplift	11=-454(LC 9), 21=-870(LC 9), 22=REL
	Max Grav	11=2767(LC 22), 21=2785(LC 2), 22=481(LC 9)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-624/671, 3-4=-1230/50, 4-5=-1714/0, 5-6=-4202/218, 6-7=-7938/986, 7-8=-7871/996, 8-9=-3146/478, 9-11=-2915/447
BOT CHORD	21-22=-329/650, 19-21=-212/642, 18-19=-5/3186, 17-18=-959/10439, 16-17=-935/10279, 15-16=-488/6796, 14-16=-116/682, 13-14=-446/3483, 12-13=-439/3600
WEBS	2-21=-430/351, 3-21=-2323/859, 3-19=-472/1810, 4-19=0/628, 5-19=-2709/515, 5-18=-341/3134, 6-18=-7860/1033, 6-17=-286/1891, 6-15=-2796/55, 12-15=-1155/115, 8-15=-596/5608, 2-22=-521/268, 9-12=-337/2582, 13-15=-609/223, 7-15=-698/323

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x10 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=454, 21=870.
 - 10) "A" indicates Released bearing: allow for upward movement at joint(s) 22.
 - 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and conform to standard ANSI/TPI 1.



April 3,2020

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 04/22/2020
400213	D6	Piggyback Base Girder	1	2	Job Reference (optional)	
Wheeler Lumber, Waverly, KS 66871		8.240 s Mar 9 2020 MiTek Industries, Inc. 11:08 AM 12/15/2019 Page 2			ID:2ncXplsXOfbjlB6i7Q?gPMzrYWU-plCPoPtLfvoOqMtmjosUjv4bVj3lOqW0koYdiUzUTrR	

NOTES-

12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 162 lb down and 99 lb up at 30-2-12, and 162 lb down and 99 lb up at 32-2-12, and 162 lb down and 99 lb up at 34-2-12 on top chord, and 1218 lb down and 265 lb up at 28-1-12, 69 lb down at 30-2-12, 69 lb down at 32-2-12, and 69 lb down at 34-2-12, and 230 lb down and 123 lb up at 35-9-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-3=-70, 3-4=-70, 4-6=-70, 6-8=-70, 8-9=-70, 9-10=-70, 16-22=-20, 11-14=-20

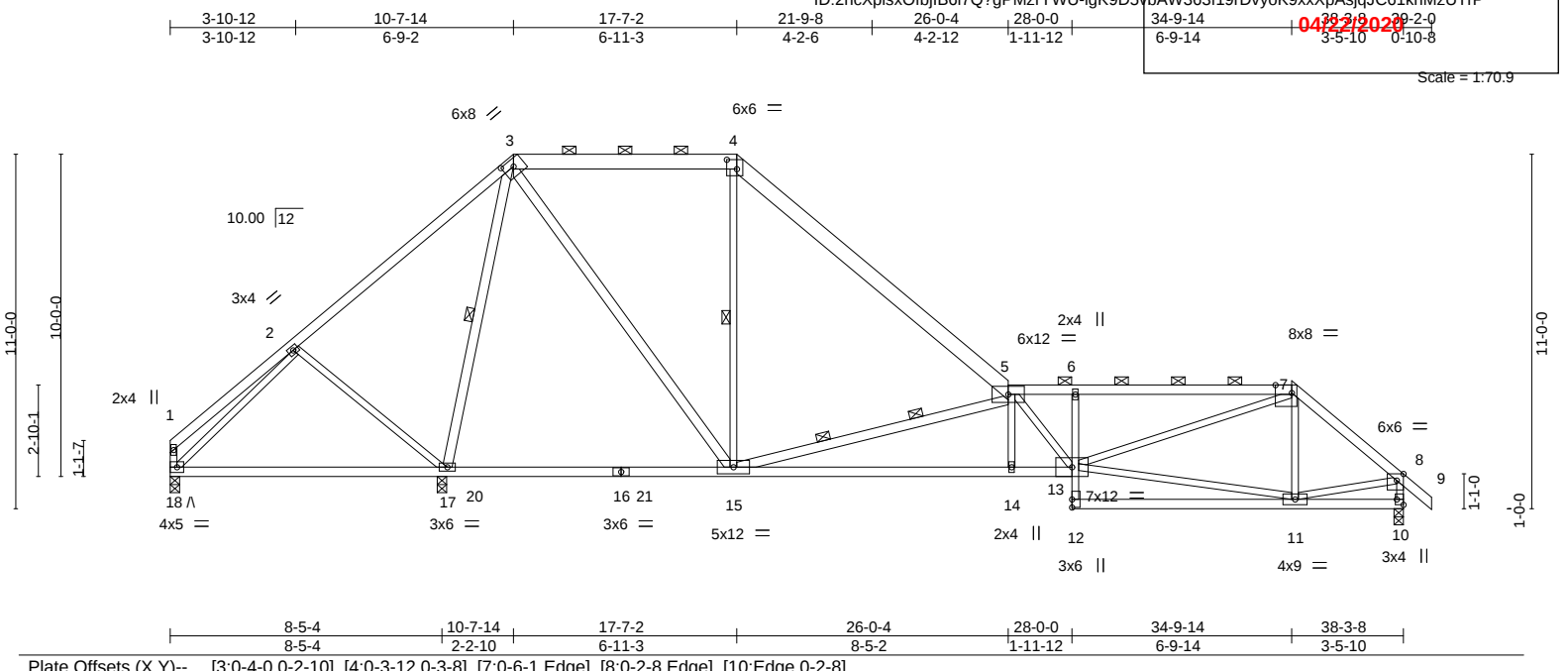
Concentrated Loads (lb)

Vert: 16=-1218(F) 12=-230(F) 24=-112(F) 25=-112(F) 26=-112(F) 29=-53(F) 30=-53(F) 31=-53(F)

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4
400213	D7	Piggyback Base	1	1	

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. Job Reference (optional)

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
40861163
04/22/2020
Scale = 1:70.9



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.65	Vert(LL)	-0.29 14-15	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.67	Vert(CT)	-0.52 14-15	>683	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.87	Horz(CT)	0.11 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.16 14	>999	240	Weight: 184 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except*	TOP CHORD Structural wood sheathing directly applied or 4-7-13 oc purlins, except end verticals, and 2-0-0 oc purlins (3-4-15 max.): 3-4, 5-7.
3-4,4-5: 2x6 SPF No.2, 5-7: 2x4 SPF 2100F 1.8E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
BOT CHORD 2x4 SPF 2100F 1.8E *Except*	6-0-0 oc bracing: 17-18,15-17.
6-12: 2x3 SPF No.2, 10-12: 2x4 SPF No.2	WEBS 1 Row at midpt 3-17, 4-15
WEBS 2x3 SPF No.2 *Except*	2 Rows at 1/3 pts 5-15
3-17,3-15,5-15: 2x4 SPF No.2	

REACTIONS. (size) 10=0-3-8, 17=0-3-8 (req. 0-3-11), 18=0-3-8
Max Horz 18=-300(LC 4)
Max Uplift 10=-184(LC 9), 17=-298(LC 9), 18=REL
Max Grav 10=1365(LC 24), 17=2336(LC 2), 18=128(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-134/676, 3-4=-808/177, 4-5=-1166/89, 5-6=-3335/376, 6-7=-3330/386, 7-8=-1511/188, 8-10=-1343/188
BOT CHORD 17-18=-334/316, 15-17=-241/371, 14-15=-236/3624, 13-14=-233/3635, 6-13=-370/220
WEBS 2-17=-436/288, 3-17=-1810/317, 3-15=-228/1277, 5-15=-2941/494, 5-14=0/327, 5-13=-527/0, 11-13=-88/928, 7-13=-203/2353, 7-11=-284/102, 2-18=-101/323, 8-11=-34/1126

- 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=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 6) WARNING: Required bearing size at joint(s) 17 greater than input bearing size.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=184, 17=298.
 - 8) "A" indicates Released bearing: allow for upward movement at joint(s) 18.
 - 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.



April 3,2020

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

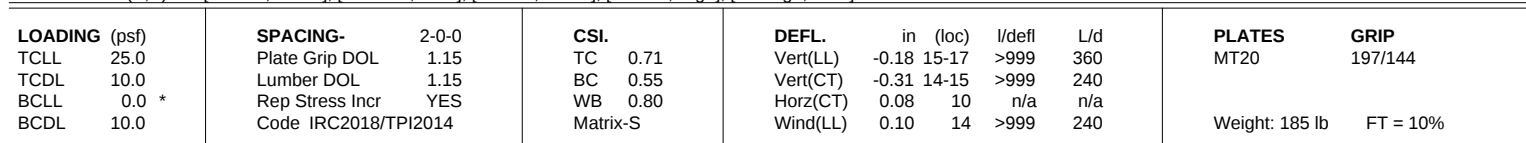
DEVELOPMENT SERVICES

FOR SUBMITTAL TO THE

CITY OF CHICAGO

04-22-2028

Scale = 1/70.8



REACTIONS. (size) 10=0-3-8, 17=0-3-8 (req. 0-3-11), 18=0-3-8
 Max Horz 18=-300(LC 4)
 Max Uplift 10=-200(LC 9), 17=-227(LC 9), 18=REL
 Max Grav 10=1365(LC 24), 17=2336(LC 2), 18=78(LC 5)



The seal is circular with a blue border. The outer ring contains the text "STATE OF MISSOURI" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. The center of the seal contains the name "JUAN GARCIA" and the license number "NUMBER E-2000162101".

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

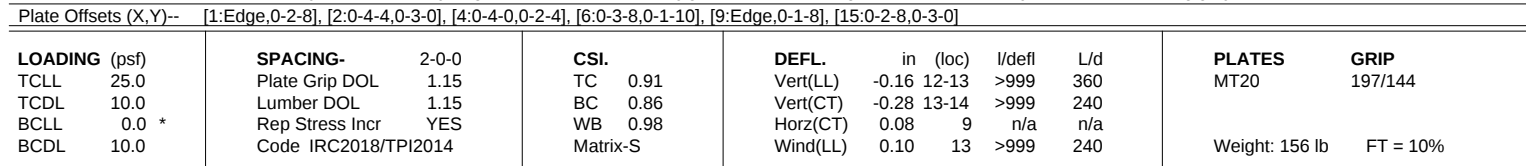
EIS SUMMARY DISCUSSION

100861165

(onal) industries, Inc. E-AP 4/19/2014 467 pages Page 1
wnwri8JplzAXyexQIIEJDJKSGkbacFPWrrFzUTrN

30-0-0 30-0-2
5-5-10 0-10-8

04/22/2020



REACTIONS. (size) 16=0-3-8, 9=0-3-8
Max Horz 16=-373(LC 9)
Max Uplift 16=-163(LC 9), 9=-198(LC 9)
Max Grav 16=1430(LC 2), 9=1445(LC 2)

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

TOP CHORD 1-2=-444/74, 2-3=-967/208, 3-4=-1379/150, 4-5=-2208/301, 5-6=-2201/303,
6-7=-1632/224, 1-16=-1455/156, 7-9=-1359/225

BOT CHORD 15-16=-196/373, 14-15=-102/477, 13-14=-85/2458, 12-13=-87/2454, 5-12=-355/169,
9-10=-127/254

WEBS 2-15=-935/178, 2-14=-227/1087, 3-14=0/430, 4-14=-1793/354, 4-12=-379/0,
10-12=-45/1130, 6-12=-97/1375, 6-10=-269/85, 1-15=-107/1188, 7-10=-74/969



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Components**.

Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job

400213

Truss

D10

Truss Type

Piggyback Base

Qty

2

Ply

1

Lot 53 H4

Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. 140861166

Wheeler Lumber,

Waverly, KS 66871

ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-2ljN7gnJXSoWs7GEF7jcODkCnVNEWC9rvYcCQxzUTrZ

11/11/2020

RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES

11/11/2020

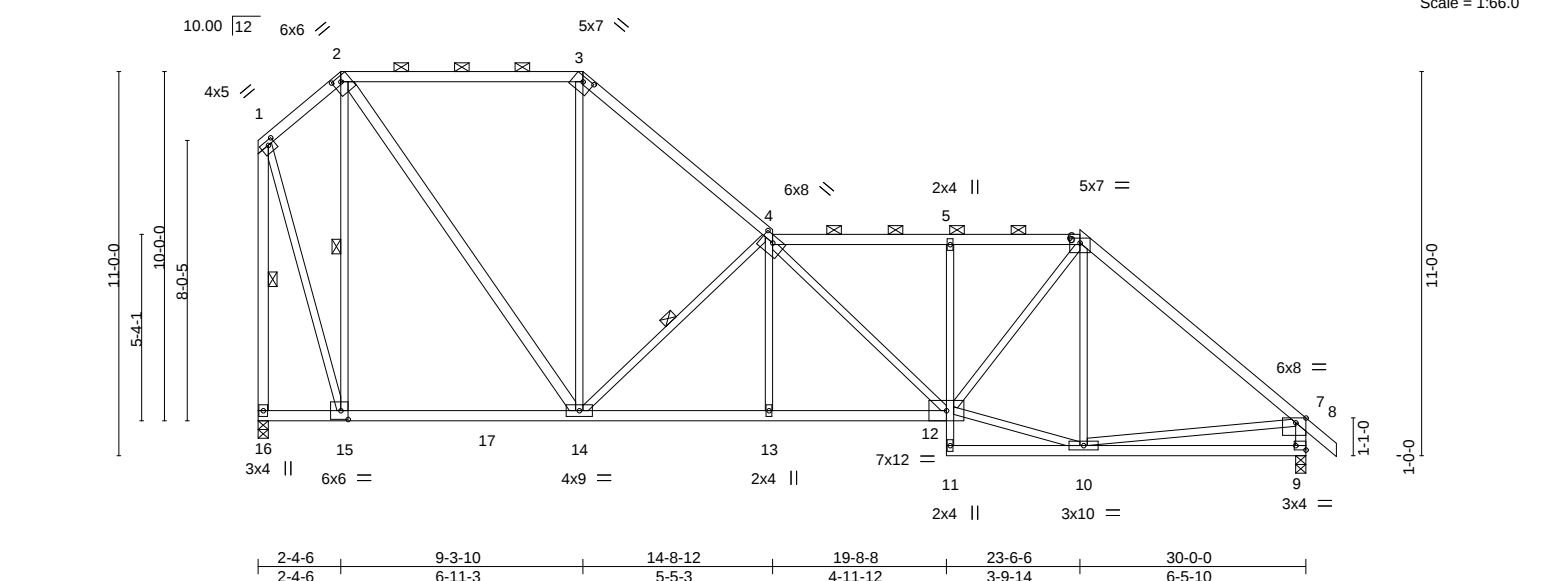


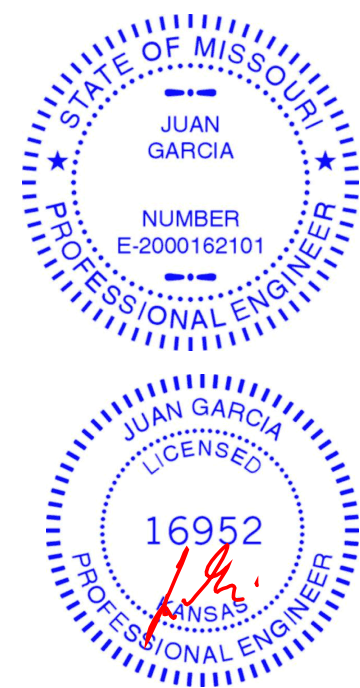
Plate Offsets (X,Y)--		[1:0-2-4,0-1-8], [2:0-2-12,0-1-12], [3:0-3-8,0-1-10], [4:0-4-0,0-2-4], [6:0-3-8,0-1-10], [7:0-3-8,Edge], [9:Edge,0-1-8], [15:0-2-8,0-3-0]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.82
TCDL 10.0	Lumber DOL	1.15	BC 0.71
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.82
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.14 12-13 >999 360
			Vert(CT) -0.24 12-13 >999 240
			Horz(CT) 0.07 9 n/a n/a
			Wind(LL) 0.08 13 >999 240
			PLATES
			MT20
			GRIP
			197/144
			Weight: 157 lb FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-8-15 oc purlins, except end verticals, and 2-0-0 oc purlins (3-7-9 max.): 2-3, 4-6.
BOT CHORD 2x4 SPF No.2 *Except* 5-11: 2x3 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2 *Except* 2-14,1-16,7-9: 2x4 SPF No.2	WEBS 1 Row at midpt 2-15, 4-14, 1-16

REACTIONS.	(size) 16=0-3-8, 9=0-3-8
	Max Horz 16=-397(LC 4)
	Max Uplift 16=-144(LC 9), 9=-218(LC 9)
	Max Grav 16=1425(LC 2), 9=1443(LC 2)

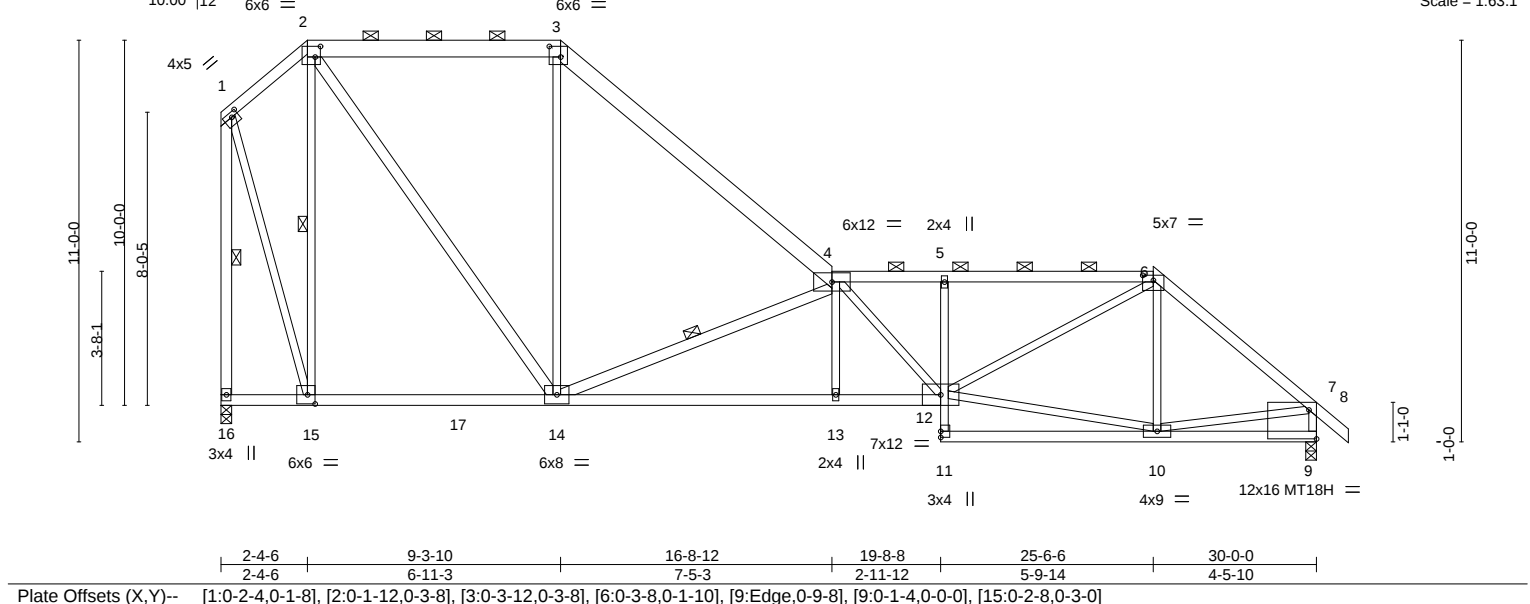
FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-513/168, 2-3=-937/242, 3-4=-1314/216, 4-5=-1849/323, 5-6=-1841/322, 6-7=-1631/253, 1-16=-1438/168, 7-9=-1347/252
BOT CHORD	15-16=-234/331, 14-15=-145/465, 13-14=-116/2055, 12-13=-117/2051, 5-12=-357/173, 9-10=-190/373
WEBS	2-15=-937/238, 2-14=-189/1058, 3-14=-2/475, 4-14=-1525/345, 4-12=-297/0, 10-12=-30/1173, 6-12=-157/1152, 6-10=-282/95, 1-15=-150/1180, 7-10=-121/846

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - The Fabrication Tolerance at joint 7 = 6%
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=144, 9=218.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 3,2020

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 140861167
400213	D11	Piggyback Base	1	1	Job Reference (optional)	8.240 s Mar 9 2020 MiTek Industries, Inc. 11:11 AM
Wheeler Lumber, Waverly, KS 66871						ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-8r8YMPa332E6RQcNYI4TeqYQl6i_6G8Ms5JUqzUTrX
2-4-6 9-3-10 16-8-12 19-8-8 25-6-6 30-0-0 2-4-6 6-11-3 7-5-3 2-11-12 5-9-14 4-5-10						0-10-8
10.00 12 6x6 = 2 6x6 = 3 4x5 1 3x4 6x6 = 15 17 6x8 = 14 6x12 = 2x4 5 5x7 = 6 7x12 = 12 2x4 11 3x4 4x9 = 10 12x16 MT18H = 9 7 8						11-0-0
2-4-6 9-3-10 16-8-12 19-8-8 25-6-6 30-0-0 2-4-6 6-11-3 7-5-3 2-11-12 5-9-14 4-5-10						1-0-0
Plate Offsets (X,Y)-- [1:0-2-4,0-1-8], [2:0-1-12,0-3-8], [3:0-3-12,0-3-8], [6:0-3-8,0-1-10], [9:Edge,0-9-8], [9:0-1-4,0-0-0], [15:0-2-8,0-3-0]						Scale = 1:63.1



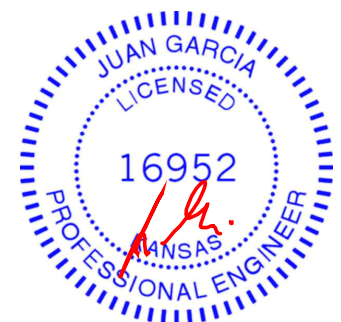
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.75	Vert(LL)	-0.20	13-14	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.52	Vert(CT)	-0.37	13-14	>960	MT18H	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.78	Horz(CT)	0.09	9	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.12	13	>999		
								Weight: 165 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 2-3,3-4: 2x6 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-5-11 oc purlins, except end verticals, and 2-0-0 oc purlins (2-7-15 max.): 2-3, 4-6.
BOT CHORD 2x4 SPF No.2 *Except* 12-16: 2x4 SPF 2100F 1.8E, 5-11: 2x3 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2 *Except* 2-14,4-14,1-16: 2x4 SPF No.2	WEBS 1 Row at midpt 2-15, 4-14, 1-16

REACTIONS.	(size) 16=0-3-8, 9=0-3-8 Max Horz 16=-396(LC 4) Max Uplift 16=-143(LC 9), 9=-218(LC 9) Max Grav 16=1427(LC 2), 9=1442(LC 2)
-------------------	--

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-514/168, 2-3=-962/247, 3-4=-1344/181, 4-5=-2747/404, 5-6=-2744/410, 6-7=-1630/242, 1-16=-1427/172, 7-9=-1381/234
BOT CHORD 15-16=-232/330, 14-15=-136/459, 13-14=-244/3063, 12-13=-242/3070, 5-12=-354/177
WEBS 2-15=-923/222, 2-14=-201/1109, 3-14=0/414, 4-14=-2307/451, 4-13=0/263, 4-12=-514/0, 10-12=-95/1069, 6-12=-190/1797, 6-10=-274/94, 1-15=-139/1149, 7-10=-65/1105

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=143, 9=218.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 3,2020

Job

400213

Truss

E1

Truss Type

Hip Girder

Qty

1

Ply

1

Lot 53 H4

Wheeler Lumber,

Waverly, KS 66871

8.240 s Mar 9 2020

MiTek Industries, Inc.

Lee's Summit, MO 64086-1168

Job Reference (optional)

8240 s Mar 9 2020 MiTek Industries, Inc. Lee's Summit, MO 64086-1168

140861168

400213

04/22/2020

0-10-8

2-0-0

4-0-0

8-0-0

10-0-0

12-0-0

13-10-8

0-10-8

2-0-0

2-0-0

2-0-0

4-0-0

2-0-0

0-10-8

Scale = 1:22.8

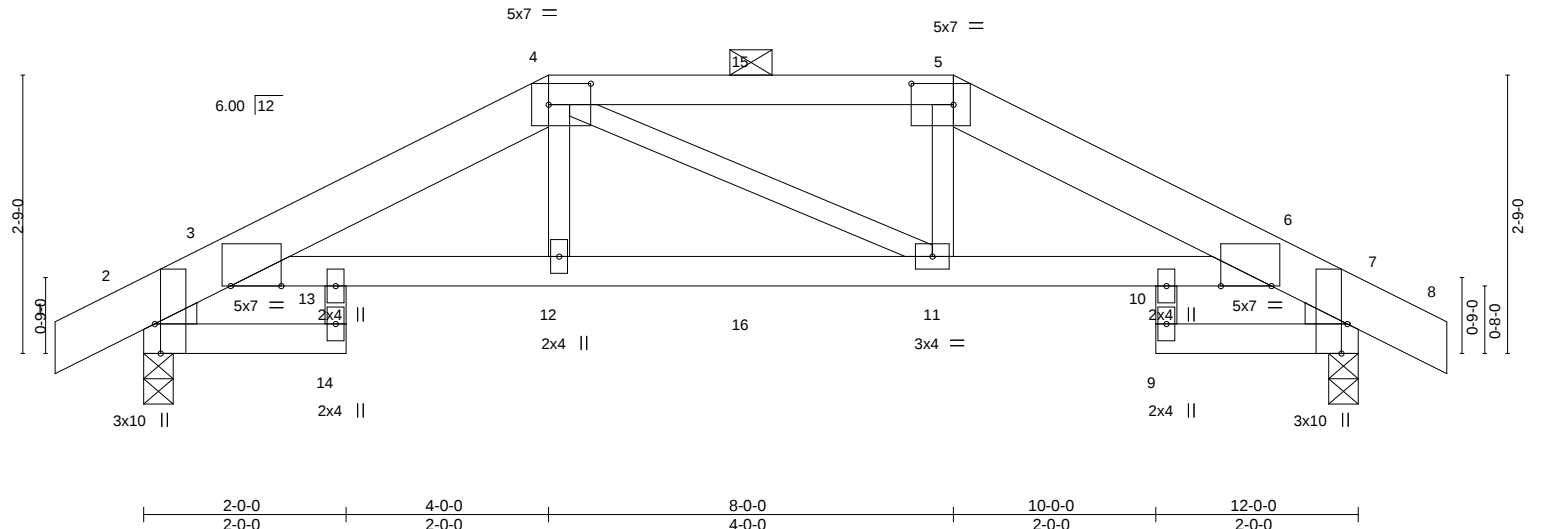


Plate Offsets (X,Y)--		[2:0-0-5,0-0-10], [2:0-0-10,0-4-10], [2:0-3-8,Edge], [3:0-6-0,Edge], [4:0-5-0,0-2-8], [5:0-5-0,0-2-8], [6:0-6-0,Edge], [7:0-0-5,0-0-10], [7:0-0-10,0-4-10], [7:0-3-8,Edge]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in (loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0		Plate Grip DOL 1.15		TC 0.47		Vert(LL)	-0.05 11-12	>999	360	MT20	197/144
TCDL 10.0		Lumber DOL 1.15		BC 0.59		Vert(CT)	-0.09 11-12	>999	240		
BCLL 0.0 *		Rep Stress Incr NO		WB 0.13		Horz(CT)	0.10 7	n/a	n/a		
BCDL 10.0		Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.04 12	>999	240	Weight: 48 lb	FT = 10%

LUMBER-

TOP CHORD 2x6 SPF No.2 *Except*
4-5: 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2

WEBS 2x3 SPF No.2

WEDGE
Left: 2x3 SPF No.2, Right: 2x3 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-10-10 oc purlins, except
2-0-0 oc purlins (4-4-2 max.): 4-5.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
10-0-0 oc bracing: 10-11

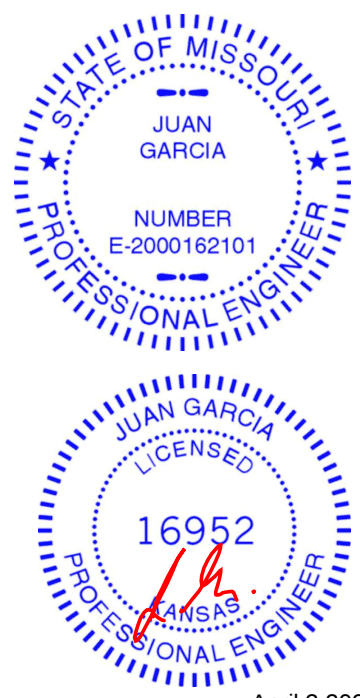
REACTIONS. (size) 2=0-3-8, 7=0-3-8
Max Horz 2=44(LC 33)
Max Uplift 2=-189(LC 8), 7=-189(LC 9)
Max Grav 2=920(LC 1), 7=920(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-593/140, 3-4=-1731/343, 4-5=-1560/325, 5-6=-1733/329, 6-7=-594/135
BOT CHORD 3-13=-294/1535, 12-13=-294/1535, 11-12=-295/1558, 10-11=-269/1537, 6-10=-269/1537
WEBS 4-12=-13/372, 5-11=-20/387

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=189, 7=189.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 80 lb down and 70 lb up at 4-0-0, and 88 lb down and 70 lb up at 6-0-0, and 80 lb down and 70 lb up at 8-0-0 on top chord, and 235 lb down and 74 lb up at 4-0-0, and 43 lb down at 6-0-0, and 235 lb down and 74 lb up at 7-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

Continued on page 2



April 3,2020

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4
400213	E1	Hip Girder	1	1	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. 11:48 AM Page 2
ID:2ncXplsXOfbjlB6l7Q?gPMzrYWU-eSZg3Ty6ElZXyHKw43zuyAJgo8BOohKv7J?yw8zUTrL

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AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/22/2020

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-70, 4-5=-70, 5-8=-70, 2-14=-20, 10-13=-20, 7-9=-20
Concentrated Loads (lb)
Vert: 4=-46(B) 5=-46(B) 12=-235(B) 11=-235(B) 15=-46(B) 16=-36(B)

 **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job

400213

Truss

E2

Truss Type

Roof Special

Qty

3

Ply

1

Lot 53 H4

Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. 140861169

Wheeler Lumber,

Waverly, KS 66871

ID:2ncXplsXOfbjlB6l7Q?gPMzrYWU-6e72Gpzk?3hO9Rv6dmU7VOsrNYYSX992LNkVSazUTrK

10-0-0
4-0-0

12-0-0
2-0-0

12-10-8
0-10-8

0-10-8
0-10-8

2-0-0
2-0-0

6-0-0
4-0-0

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

MISSOURI

04/22/2020

Scale = 1.25:1

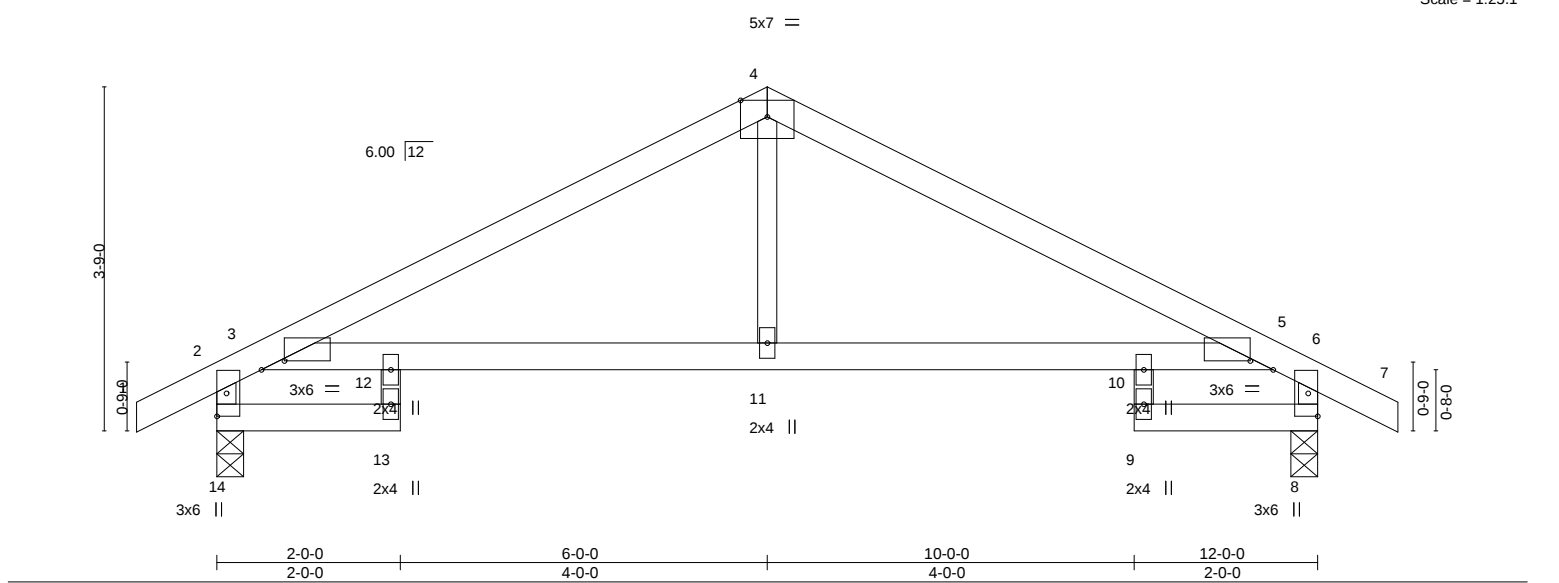
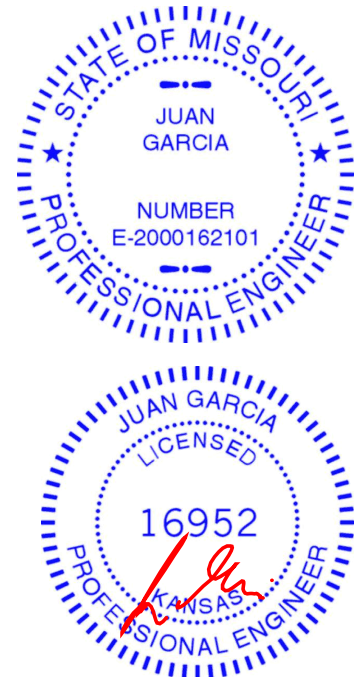


Plate Offsets (X,Y)-- [2:0-0-10,0-1-4], [3:0-3-0,0-1-3], [5:0-3-0,0-1-3], [6:0-0-10,0-1-4], [8:0-0-0,0-1-4], [14:0-0-0,0-1-4]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.48	Vert(LL)	-0.06	10-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.12	10-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.12	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.06	11-12	>999	240	Weight: 38 lb	FT = 10%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 5-5-7 oc purlins, except end verticals.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
WEBS	2x3 SPF No.2		10-0-0 oc bracing: 10-11
REACTIONS.			
(size) 14=0-3-8, 8=0-3-8			
Max Horz 14=-63(LC 6)			
Max Uplift 14=-88(LC 8), 8=-88(LC 9)			
Max Grav 14=599(LC 1), 8=599(LC 1)			

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	3-4=-796/83, 4-5=-796/98, 2-14=-604/114, 6-8=-604/108
BOT CHORD	3-12=-21/658, 11-12=-21/658, 10-11=-21/658, 5-10=-21/658
WEBS	4-11=0/304

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 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.

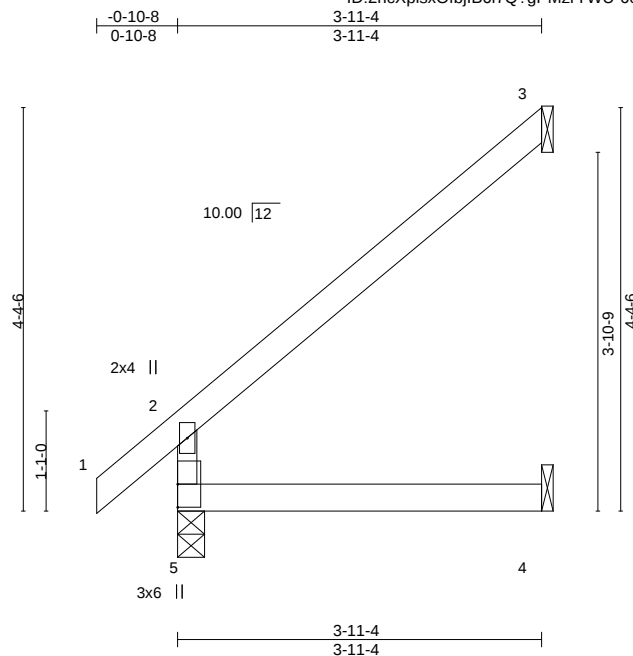


Job	Truss	Truss Type	Qty	Ply	Lot 53 H4
400213	J1	Jack-Open	9	1	
Wheeler Lumber,		Waverly, KS 66871		Job Reference (optional)	

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04/22/2020

140861170

Scale = 1:24.9



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.25	Vert(LL)	0.02	4-5	>999	240	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	-0.02	4-5	>999	240	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.04	3	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						
									Weight: 12 lb FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2

BRACING-

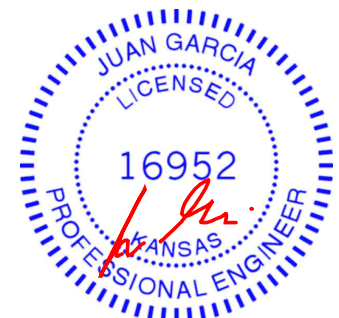
TOP CHORD Structural wood sheathing directly applied or 3-11-4 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
 Max Horz 5=145(LC 8)
 Max Uplift 3=-109(LC 8), 4=-3(LC 8)
 Max Grav 5=247(LC 1), 3=133(LC 15), 4=73(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 3=109.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 3, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4
400213	J2	Jack-Open	11	1	
Wheeler Lumber,		Waverly, KS 66871	Job Reference (optional)		

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AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/22/2020

140861171

Scale = 1:24.9

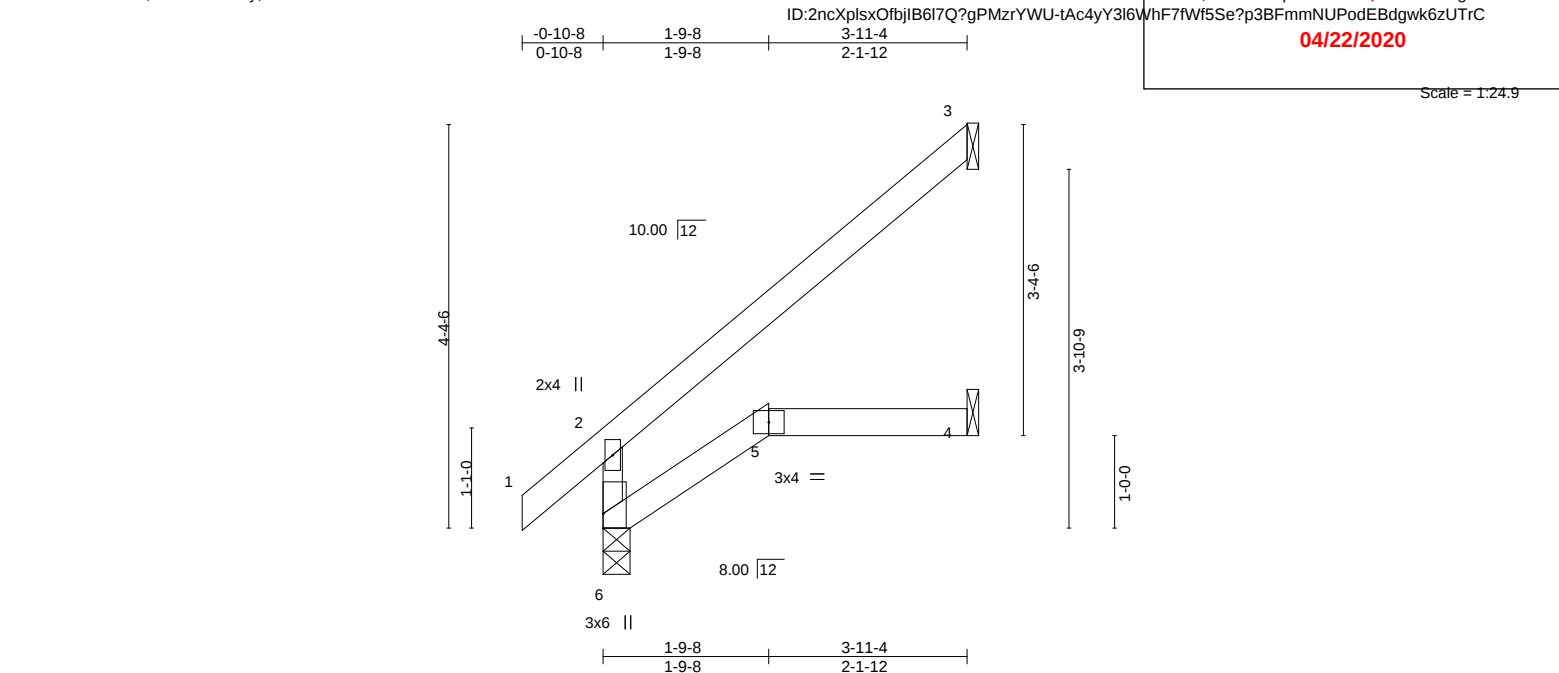


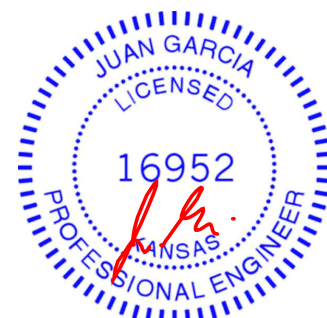
Plate Offsets (X,Y)--		[6:0-1-14,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.26
TCDL 10.0	Lumber DOL	1.15	BC 0.14
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R
			DEFL. in (loc) l/defl L/d
			Vert(LL) 0.02 5 >999 240
			Vert(CT) -0.02 5 >999 240
			Horz(CT) -0.05 3 n/a n/a
			PLATES GRIP
			MT20 197/144
			Weight: 13 lb FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-11-4 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x3 SPF No.2	

REACTIONS.	(size) 6=0-3-8, 3=Mechanical, 4=Mechanical
	Max Horz 6=144(LC 8)
	Max Uplift 3=-112(LC 8), 4=-4(LC 8)
	Max Grav 6=247(LC 1), 3=135(LC 15), 4=73(LC 3)

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

- NOTES-**
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Refer to girder(s) for truss to truss connections.
 - Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 3=112.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 3, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4
400213	J3	Jack-Closed	1	1	
Wheeler Lumber,		Waverly, KS 66871	Job Reference (optional)		

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04/22/2020

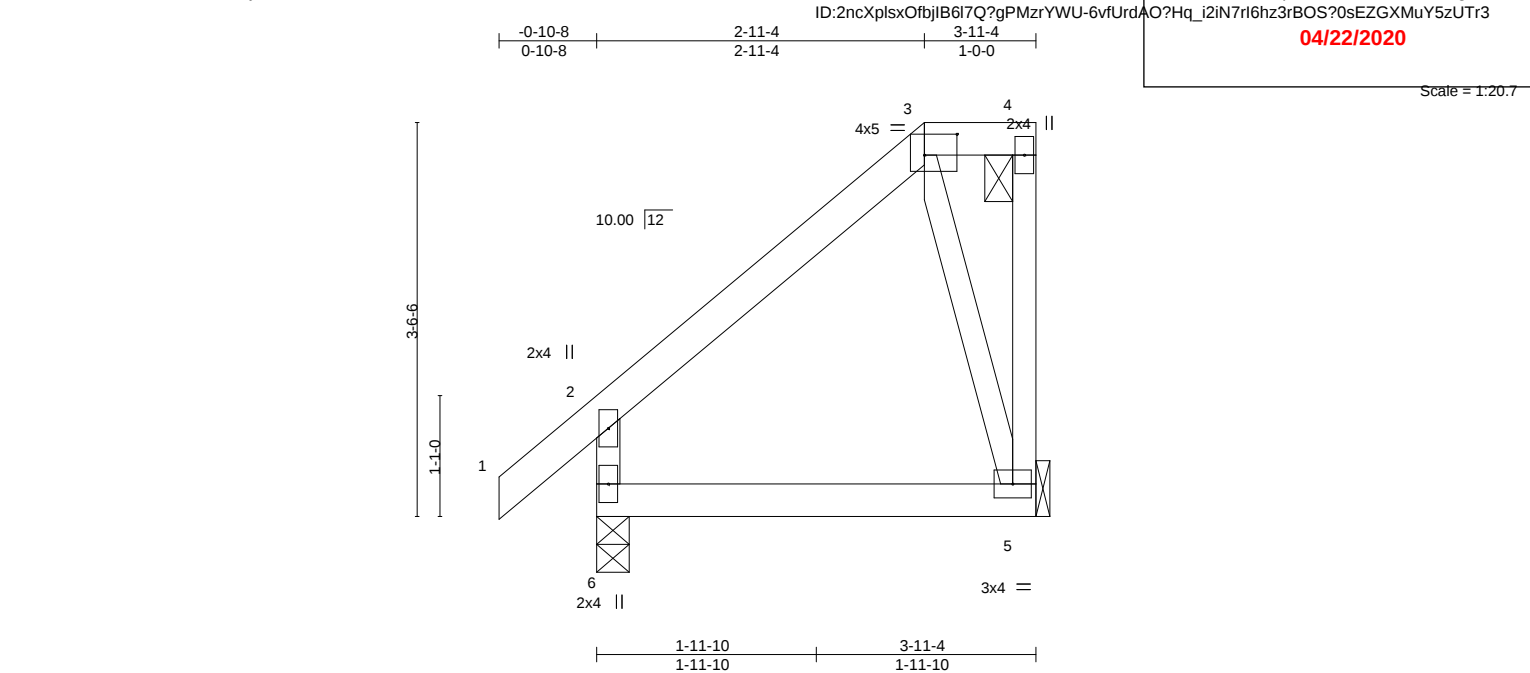


Plate Offsets (X,Y)--		[3:0-3-8,0-2-4]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.09	Vert(LL) -0.01 5-6 >999 360	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.11	Vert(CT) -0.02 5-6 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.04	Horz(CT) -0.00 5 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.01 5-6 >999 240	Weight: 17 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-11-4 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

REACTIONS.	(size) 6=0-3-8, 5=Mechanical
	Max Horz 6=142(LC 5)
	Max Uplift 6=28(LC 8), 5=70(LC 5)
	Max Grav 6=245(LC 1), 5=159(LC 1)

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

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Provide adequate drainage to prevent water ponding.
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 5) Refer to girder(s) for truss to truss connections.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 3, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4
400213	J4	Jack-Closed	1	1	
Wheeler Lumber, Waverly, KS 66871		Job Reference (optional)			

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LEE'S SUMMIT, MISSOURI
04/22/2020

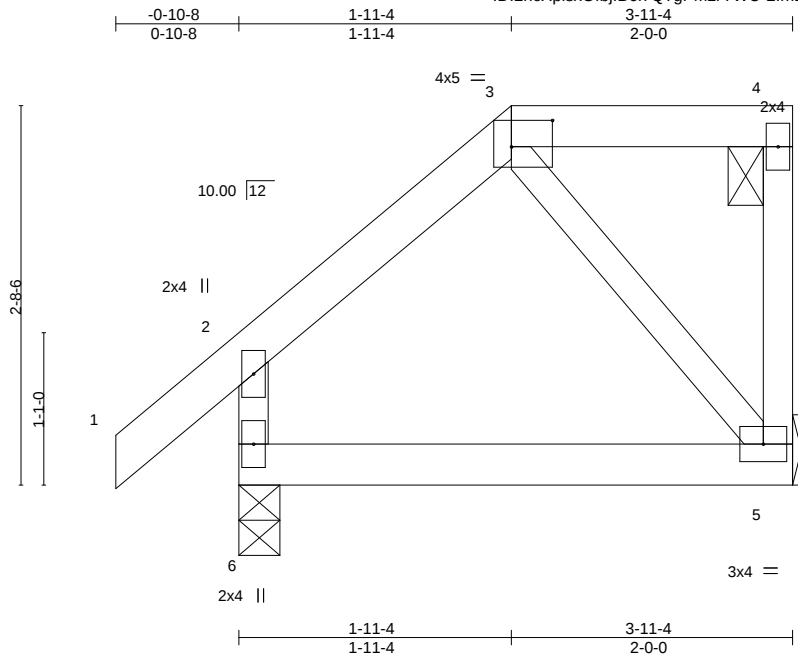


Plate Offsets (X,Y)-- [3:0-3-8,0-2-4]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	-0.01	5-6	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	-0.02	5-6	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	-0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.00	5-6	>999	240	Weight: 16 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

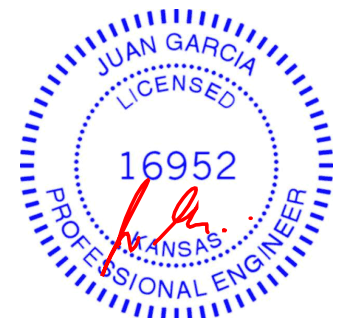
BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-4 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 6=0-3-8, 5=Mechanical
Max Horz 6=109(LC 5)
Max Uplift 6=-34(LC 8), 5=-55(LC 5)
Max Grav 6=245(LC 1), 5=159(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 3, 2020

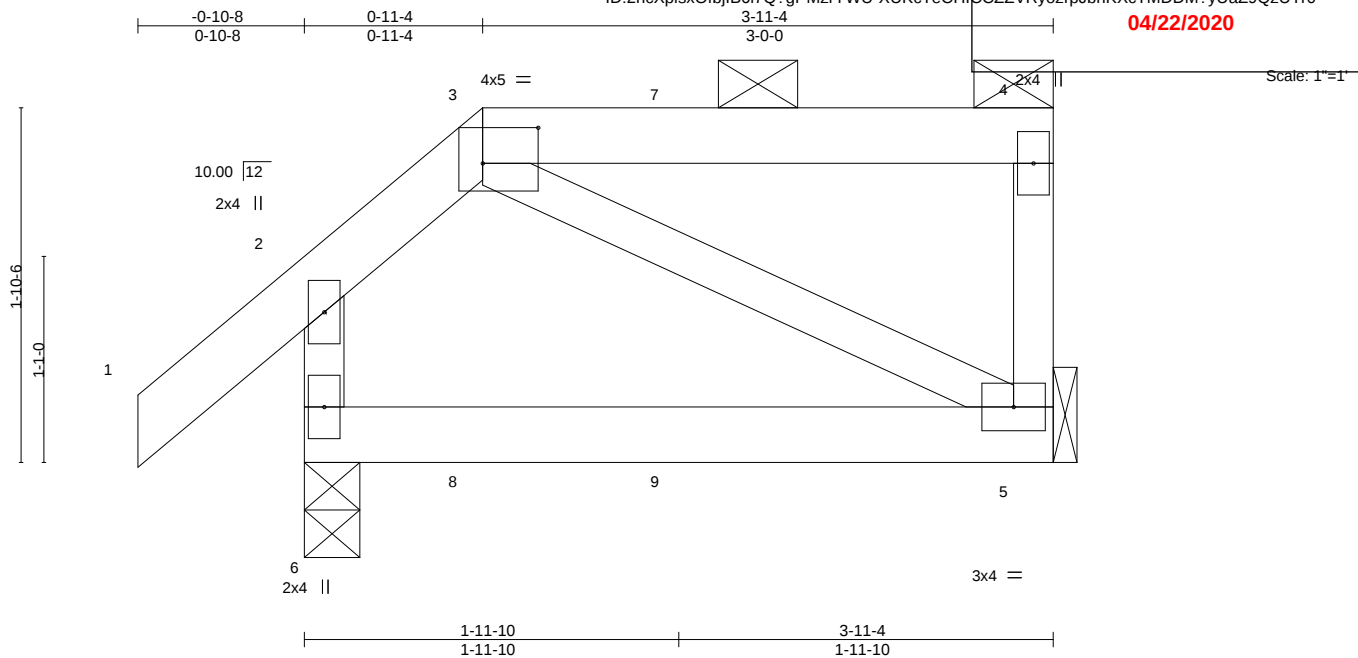
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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4	CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES
400213	J5	Jack-Closed Girder	1	1	Job Reference (optional)	

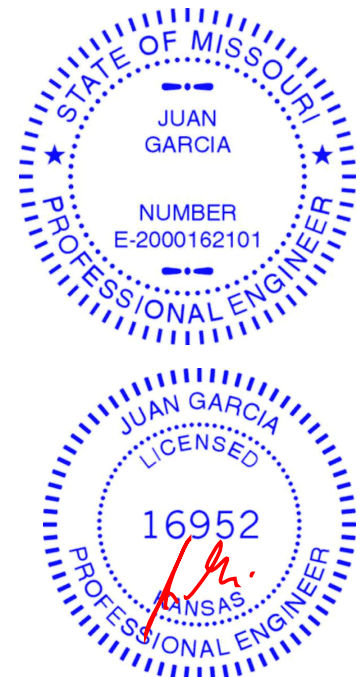


LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

REACTIONS. (size) 6=0-3-8, 5=Mechanical
Max Horz 6=76(LC 7)
Max Uplift 6=-67(LC 8), 5=-56(LC 5)
Max Grav 6=231(LC 1), 5=162(LC 1)

NOTES-

LOAD CASE(S) Standard



April 3, 2020



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4
400213	J6	Jack-Closed	1	1	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. File Path: C:\Users\mike\Documents\400213.dwg

-0-10-8	1-9-8	2-11-4	3-11-4
0-10-8	1-9-8	1-1-12	1-0-0

ID:2ncXplsOfbJlB6l7Q?gPMzrYWU-XUKcTeCHICCCZZVryozrPjhl9cVaDD9?yUaZ9QzUTr0

RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

04/22/2020

140861175

8.240 s Mar 9 2020 MiTek Industries, Inc. File Path: C:\Users\mike\Documents\400213.dwg

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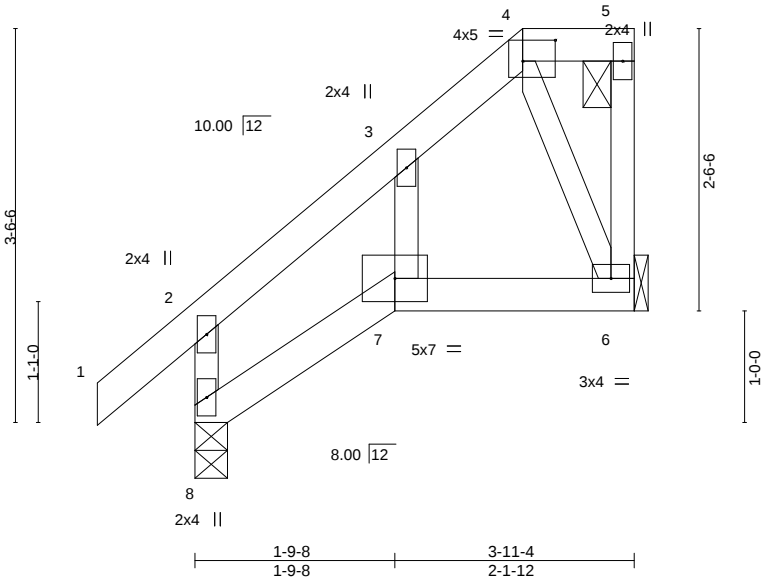


Plate Offsets (X,Y)-- [4:0-3-8,0-2-4]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.10	Vert(LL)	-0.01	7	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	-0.01	7	>999	240	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.01	6	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.01	7	>999	240	
								Weight: 17 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-11-4 oc purlins, except end verticals, and 2-0-0 oc purlins: 4-5.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

REACTIONS. (size) 8=0-3-8, 6=Mechanical

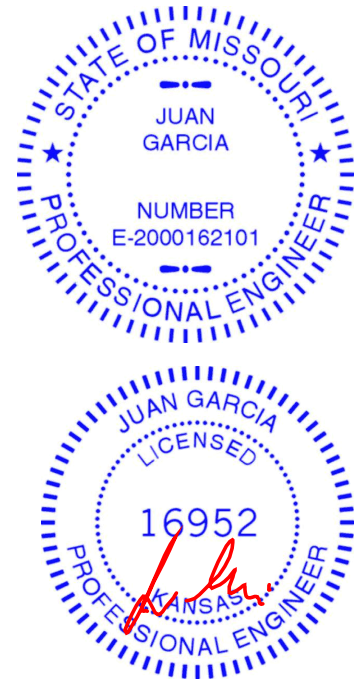
Max Horz 8=128(LC 5)

Max Uplift 8=-23(LC 8), 6=-71(LC 5)

Max Grav 8=245(LC 1), 6=159(LC 1)

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

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Provide adequate drainage to prevent water ponding.
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 5) Refer to girder(s) for truss to truss connections.
 - 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) 8, 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.



April 3,2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

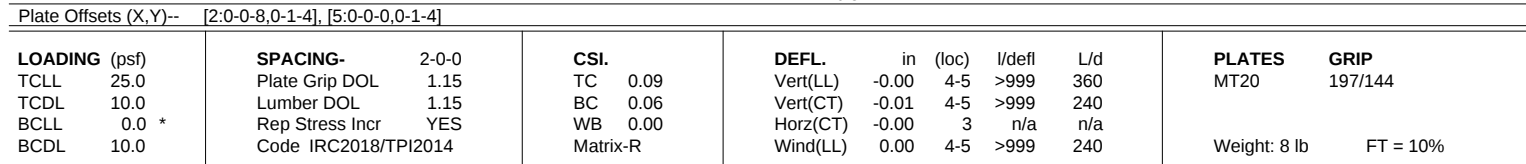
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd
Chesterfield, MO 63017

**RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW** 140861177
DEVELOPMENT SERVICES
LEE'S SUMMIT MISSOURI

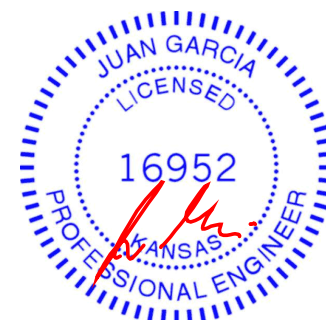
ries, Inc. in App. 3/08/85 11/03/85 Page
GopblwOuHOmhrPB_h75IPo3fElzUTr_
04/22/2020



REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
 Max Horz 5=55(LC 8)
 Max Uplift 5=-32(LC 8), 3=-44(LC 8)
 Max Grav 5=203(LC 1), 3=81(LC 1), 4=51(LC 3)

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 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.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job

400213

Truss

J9

Truss Type

Jack-Open Girder

Qty

1

Ply

1

Lot 53 H4

Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. 140861178

Wheeler Lumber,

Waverly, KS 66871

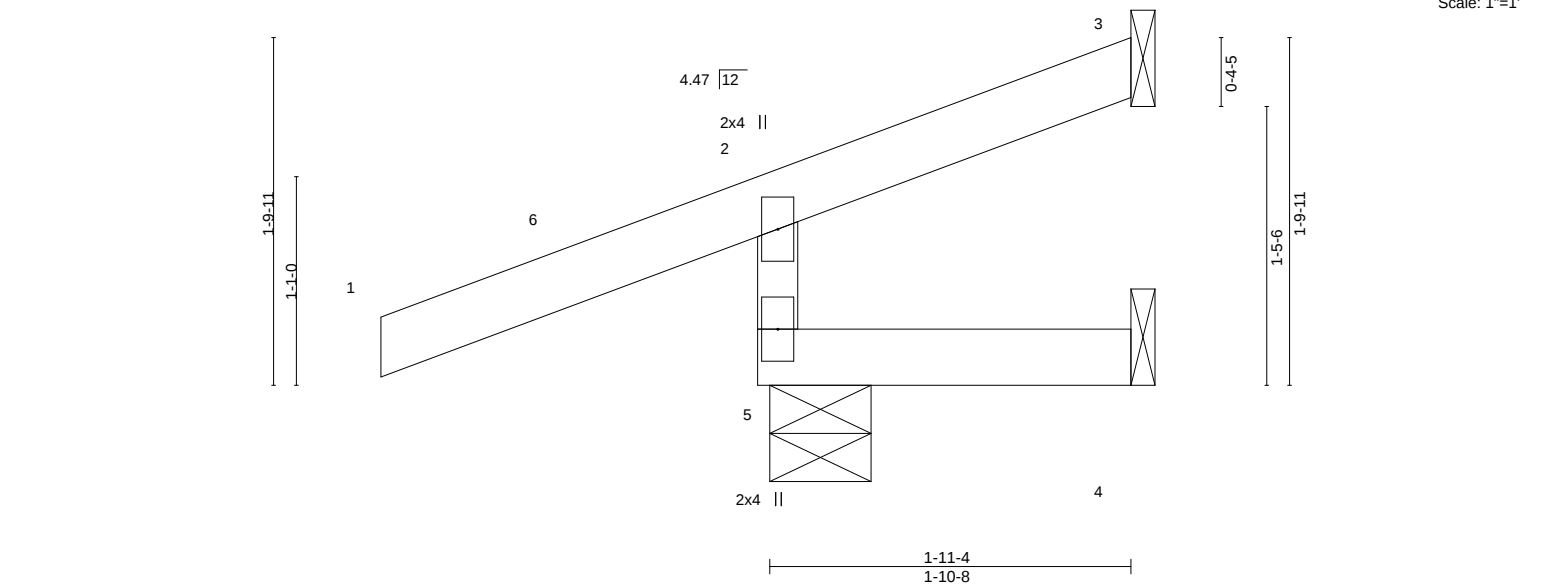
8.240 s Mar 9 2020 MiTek Industries, Inc. 140861178

Lee's Summit, Missouri

04/22/2020

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Scale: 1"=1'



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.22	Vert(LL)	0.00	5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.00	5	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						Weight: 8 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 1-11-4 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

REACTIONS. (size) 5=0-6-5, 3=Mechanical, 4=Mechanical
Max Horz 5=69(LC 7)
Max Uplift 5=-115(LC 12), 3=-22(LC 17), 4=-5(LC 16)
Max Grav 5=155(LC 1), 3=15(LC 4), 4=24(LC 3)

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

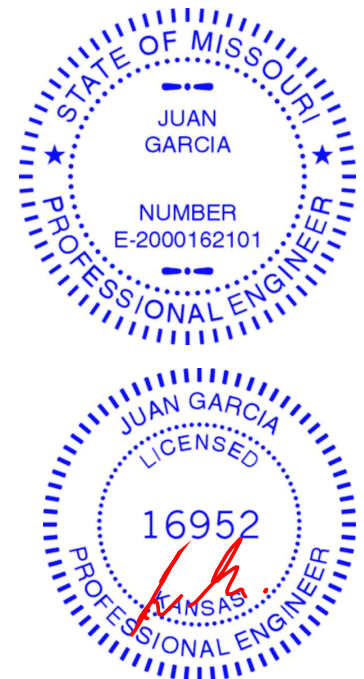
- NOTES-**
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 5=115.
 - 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.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 25 lb down and 9 lb up at -1-11-8, and 25 lb down and 9 lb up at -1-11-8 on top chord. The design/selection of such connection device(s) is the responsibility of others.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Concentrated Loads (lb)
Vert: 1=-38(F=-19, B=-19)

Trapezoidal Loads (plf)
Vert: 1=-0(F=35, B=35)-to-6=-33(F=19, B=19), 6=0(F=35, B=35)-to-2=-17(F=26, B=26), 2=-17(F=26, B=26)-to-3=-50(F=10, B=10), 5=-5(F=8, B=8)-to-4=-14(F=3, B=3)



April 3,2020

Job

400213

Truss

J10

Truss Type

Jack-Open

Qty

1

Ply

1

Lot

53 H4

Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. File: ps 3084450150150 Page 1

Wheeler Lumber,

Waverly, KS 66871

ID:2ncXplsXOfbjlB6l7Q?gPMzrYWU-aqhQU8zMrhMpFnaUIBU?M1bP2qyzxGdvCa1U2_OzUTrJ

140861179

RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

04/22/2020

Scale = 1:16.3

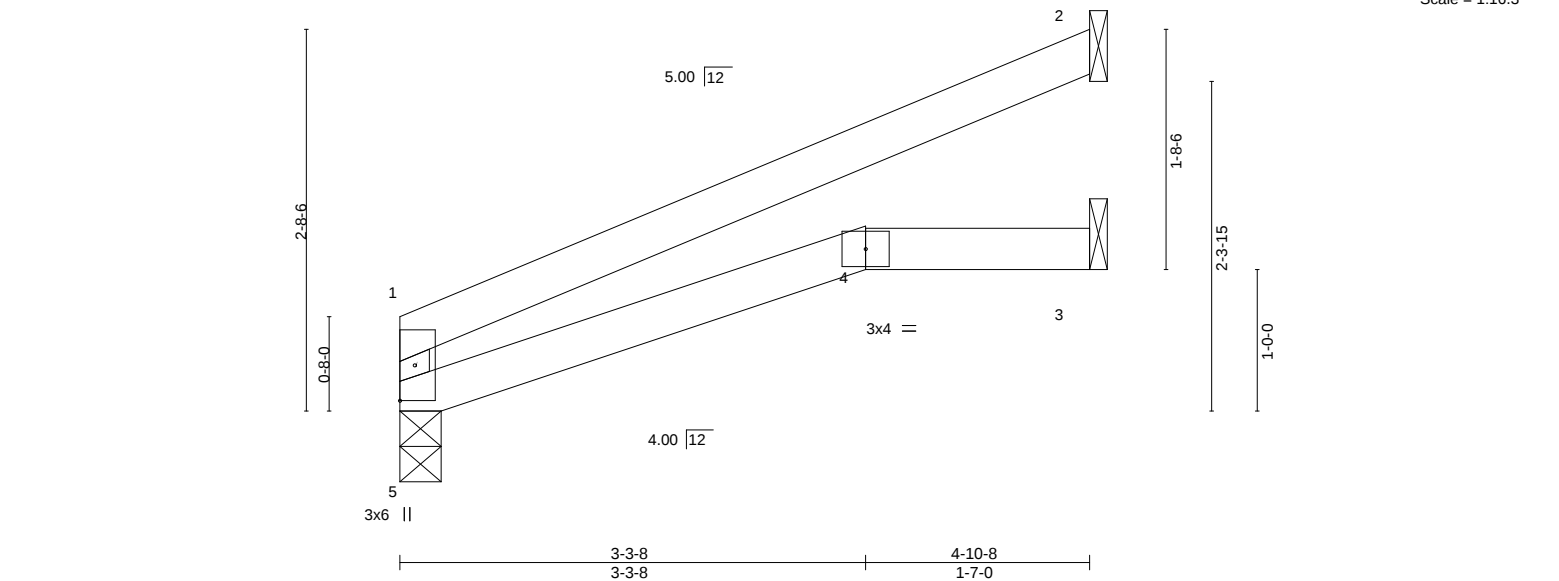


Plate Offsets (X,Y)--		[1:0-0-8,0-1-4], [5:0-0-7,0-1-4]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	2-0-0	TC 0.37	in (loc) l/defl L/d
TCDL 10.0	Plate Grip DOL 1.15	BC 0.20	Vert(LL) -0.02 4-5 >999 360
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.06 4-5 >999 240
BCDL 10.0	Rep Stress Incr YES	Matrix-R	Horz(CT) 0.02 2 n/a n/a
	Code IRC2018/TPI2014		Wind(LL) 0.02 4-5 >999 240
			PLATES GRIP
			MT20 197/144
			Weight: 12 lb FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-10-8 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x3 SPF No.2	

REACTIONS. (size) 5=0-3-8, 2=Mechanical, 3=Mechanical
 Max Horz 5=74(LC 8)
 Max Uplift 5=-15(LC 8), 2=-78(LC 8)
 Max Grav 5=212(LC 1), 2=154(LC 1), 3=90(LC 3)

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

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 4) Refer to girder(s) for truss to truss connections.
 - 5) 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.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2.
 - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 3,2020

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4	CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUBMITTAL MISSOURI 04/22/2020
400213	J11	Jack-Open Girder	1	1		
Wheeler Lumber, Waverly, KS 66871						

Job Reference (optional)

8.240 s Mar 9 2020 MITek Industries, Inc. Truss 400213, MISSOURI

ID:2ncXplsOfthjB6l7Q?gPmZrYWU-20FpHU_Xgx6Pk3VIBXbaoxAUUKu?48LphDcWSzUtrI

-1-11-8

1-11-8

4-2-2

4-2-2

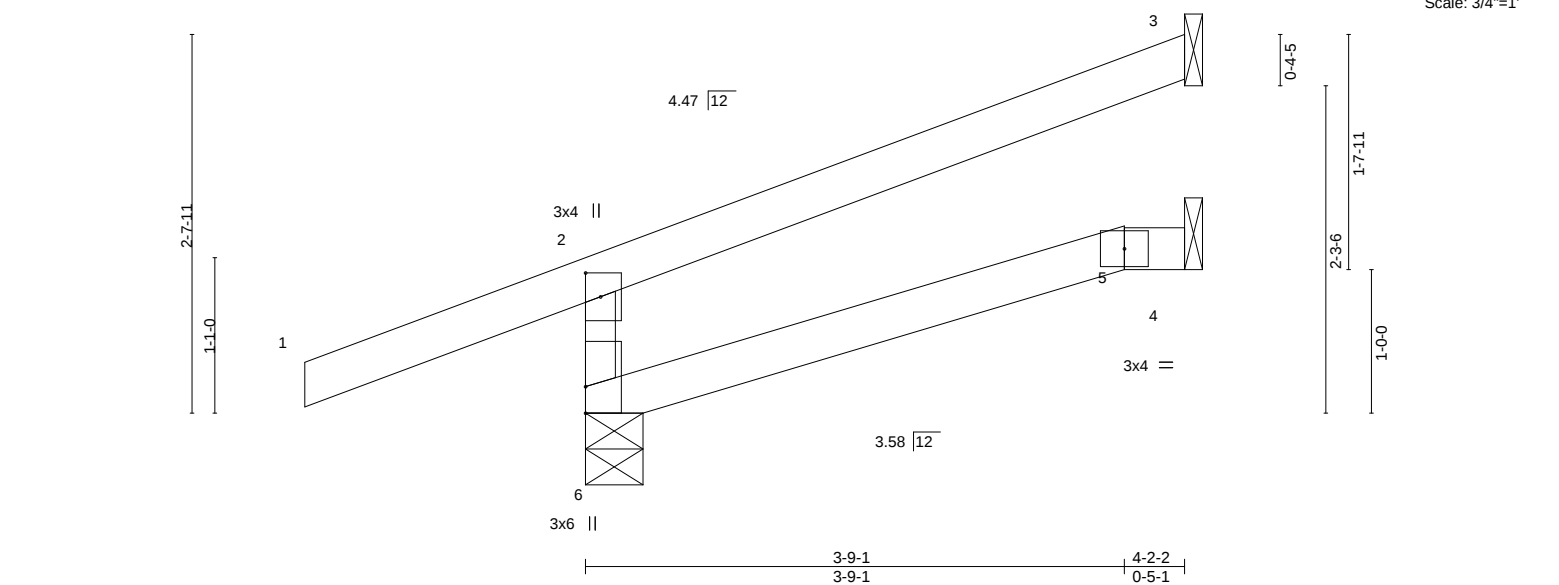


Plate Offsets (X,Y)-- [2:0-2-0,0-1-4], [6:0-2-3,Edge]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	-0.01 5-6 >999	360	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.02 5-6 >999	240	
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.03 3 n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.02 5-6 >999	240	Weight: 13 lb FT = 10%

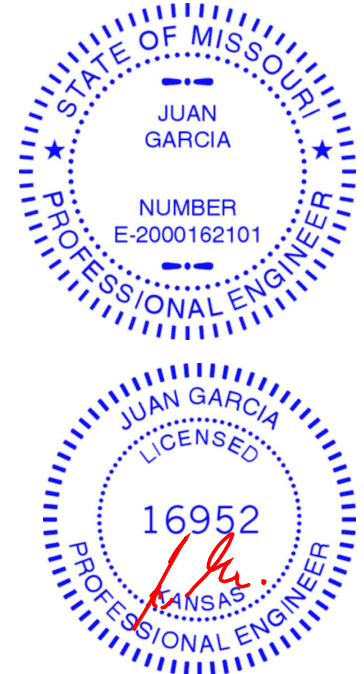
LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-2-2 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x3 SPF No.2	

REACTIONS.	(size) 6=0-4-13, 3=Mechanical, 4=Mechanical
	Max Horz 6=90(LC 7)
	Max Uplift 6=-102(LC 4), 3=-73(LC 12)
	Max Grav 6=266(LC 1), 3=54(LC 1), 4=61(LC 3)

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

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 4) Refer to girder(s) for truss to truss connections.
 - 5) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 6=102.
 - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 60 lb down and 23 lb up at -1-11-8, and 60 lb down and 23 lb up at -1-11-8 on top chord. The design/selection of such connection device(s) is the responsibility of others.
 - 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Concentrated Loads (lb)
Vert: 1=-92(F=-46, B=-46)
Trapezoidal Loads (plf)
Vert: 1=-0(F=35, B=35)-to-2=-51(F=9, B=9), 2=-2(F=34, B=34)-to-3=-73(F=-2, B=-2), 6=-0(F=10, B=10)-to-5=-19(F=0, B=0), 5=-19(F=0, B=0)-to-4=-21(F=-0, B=-0)



April 3,2020

Job

400213

Truss

J12

Truss Type

Jack-Closed

Qty

1

Ply

1

Lot 53 H4

Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. 140861181

Wheeler Lumber,

Waverly, KS 66871

ID:GQ4OYcwcFBC2HwG5R3Y0anz37vs-20FphU

Xgx6Pk3VIBXbaoxGZLLm?4qLphDcWSzUTri

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

04/22/2020

Scale = 1:18.5

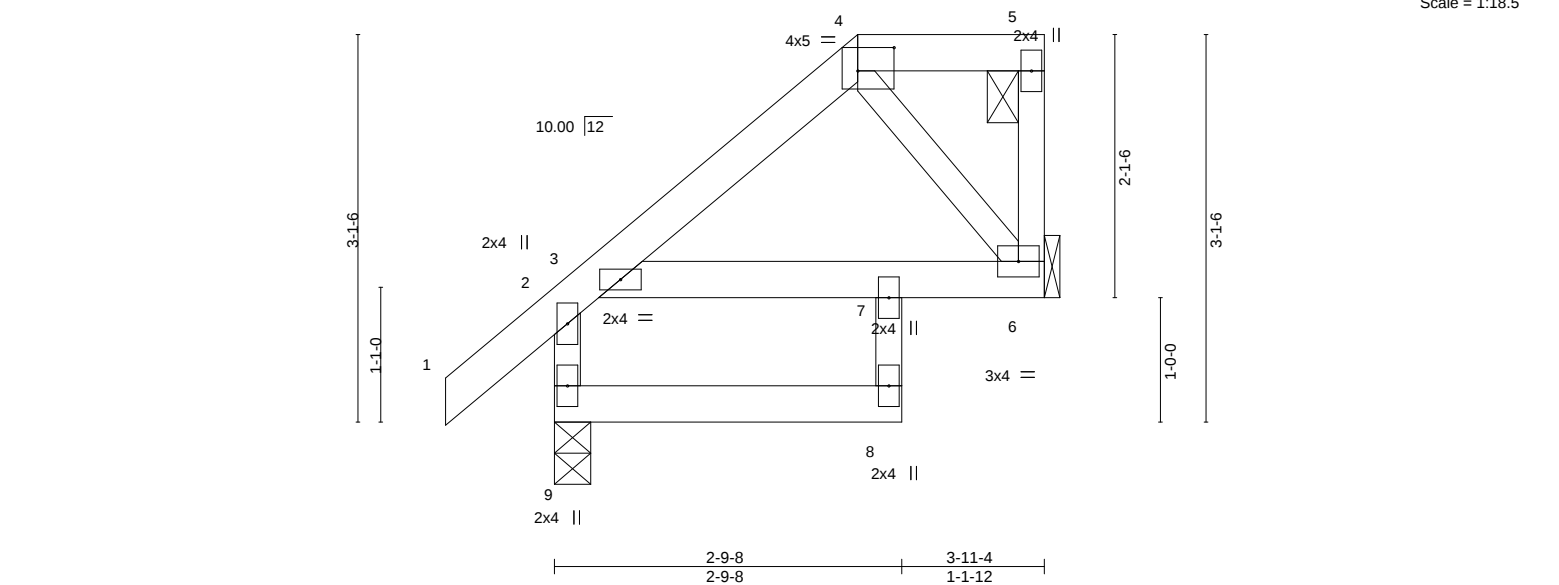


Plate Offsets (X,Y)--		[4:0-3-8,0-2-4]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.11
TCDL 10.0	Lumber DOL	1.15	BC 0.10
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S
			DEFL. in (loc) l/defl L/d
			Vert(LL) -0.01 8 >999 360
			Vert(CT) -0.01 8-9 >999 240
			Horz(CT) -0.02 6 n/a n/a
			Wind(LL) 0.01 3-7 >999 240
			PLATES GRIP
			MT20 197/144
			Weight: 18 lb FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-11-4 oc purlins, except end verticals, and 2-0-0 oc purlins: 4-5.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

REACTIONS.	(size) 9=0-3-8, 6=Mechanical
Max Horz 9=109(LC 5)	
Max Uplift 9=-29(LC 8), 6=-60(LC 5)	
Max Grav 9=245(LC 1), 6=159(LC 1)	

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

- NOTES-**
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 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.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 3,2020

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4
400213	J13	Jack-Closed	1	1	
Wheeler Lumber,		Waverly, KS 66871	Job Reference (optional)		

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/22/2020

140861182

Scale = 1:22.8

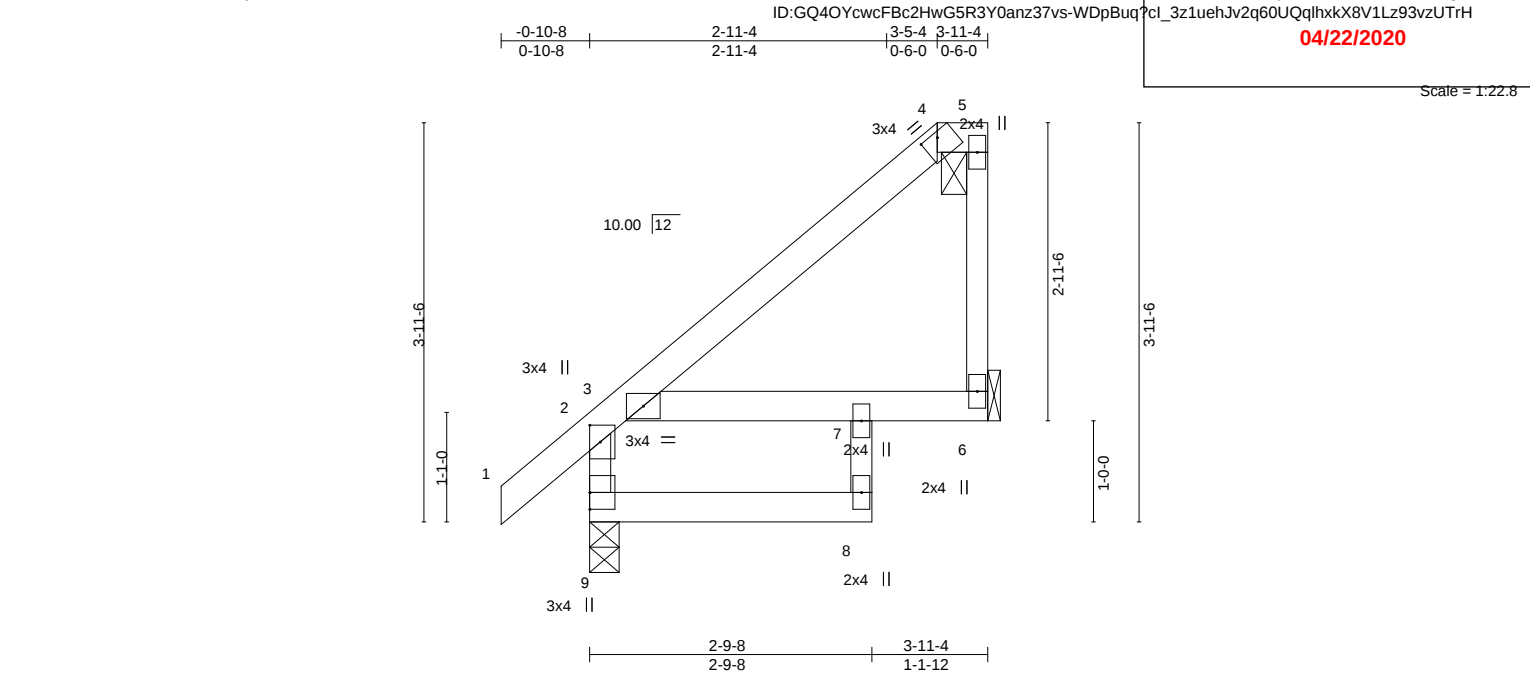


Plate Offsets (X,Y)--		[2:0-2-0,0-1-4], [4:0-2-0,0-0-10]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.14	Vert(LL) 0.01 3-7 >999 240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.10	Vert(CT) -0.02 3-7 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.02	Horz(CT) -0.03 6 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R		Weight: 17 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-11-4 oc purlins, except end verticals, and 2-0-0 oc purlins: 4-5.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

REACTIONS.	(size) 9=0-3-8, 6=Mechanical
	Max Horz 9=142(LC 5)
	Max Uplift 9=-18(LC 8), 6=-75(LC 5)
	Max Grav 9=245(LC 1), 6=178(LC 15)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
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- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 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.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



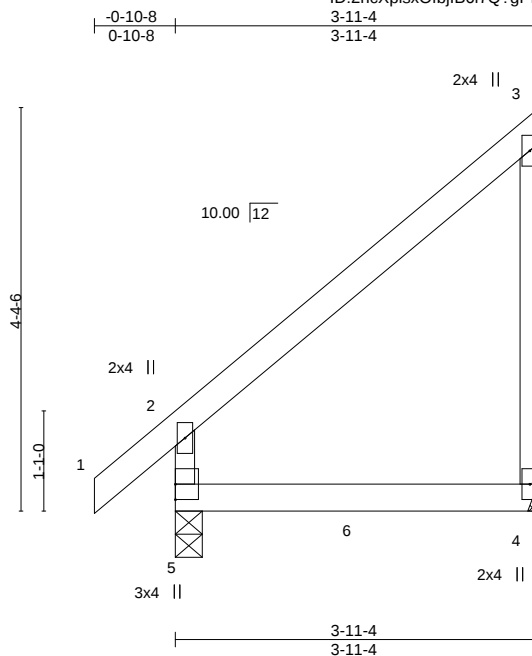
April 3,2020

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4
400213	J15	Jack-Closed Girder	1	1	
Wheeler Lumber, Waverly, KS 66871		Job Reference (optional)			

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/22/2020

140861184

Scale = 1:24.9



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.24	Vert(LL)	-0.04	4-5	>999	360	MT20
BCLL 10.0	Lumber DOL	1.15	BC 0.65	Vert(CT)	-0.07	4-5	>636	240	197/144
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-0.00	4	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.04	4-5	>999	240	
								Weight: 15 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-11-4 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 5=0-3-8, 4=Mechanical
 Max Horz 5=170(LC 5)
 Max Uplift 5=-58(LC 8), 4=-126(LC 5)
 Max Grav 5=390(LC 1), 4=318(LC 31)

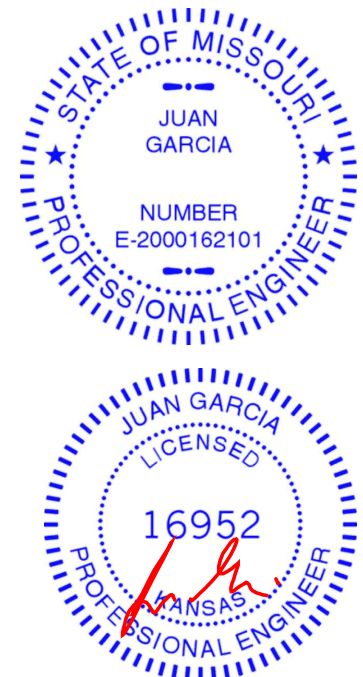
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 4=126.
- 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.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 295 lb down and 95 lb up at 2-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-2=-70, 2-3=-70, 4-5=-20
 Concentrated Loads (lb)
 Vert: 6=-295(B)



April 3, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job

400213

Truss

J16

Truss Type

Diagonal Hip Girder

Qty

2

Ply

1

Lot 53 H4

Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. 140861185

Wheeler Lumber,

Waverly, KS 66871

ID:2ncXplsXOfbjIB6I7Q?gPMzrYWU-xoUJXs1VbvRYuMMG_1bXke6uQzgKxuvxkJBpfEzUTrE

4/22/2020

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

Scale = 1:17.1

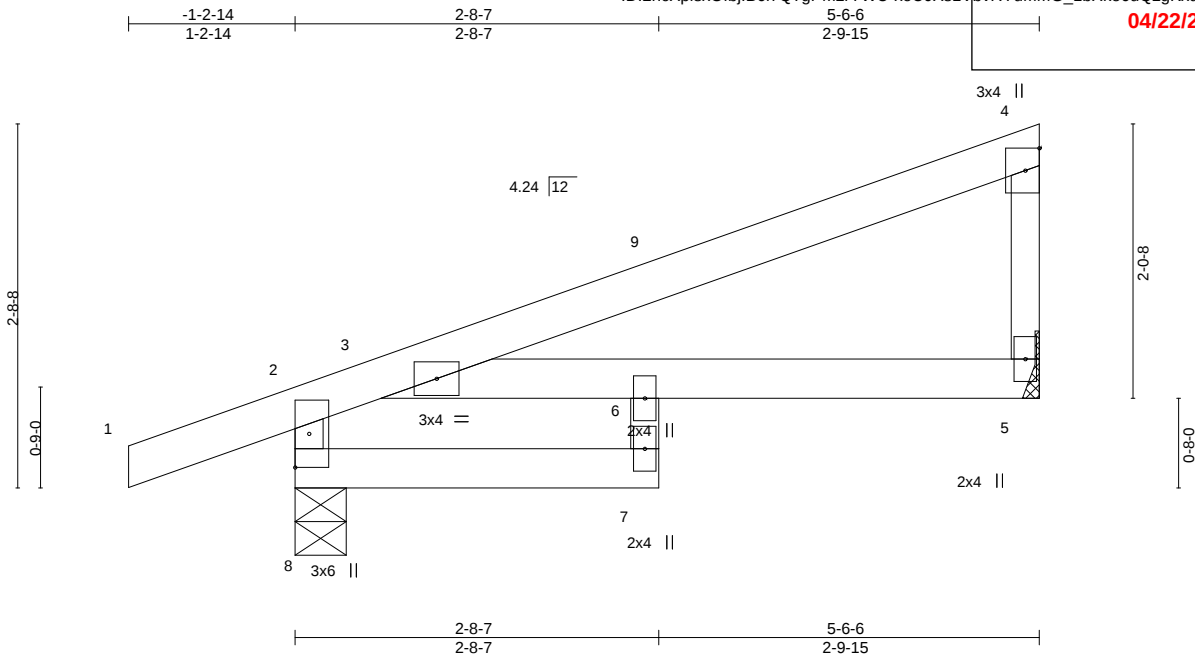


Plate Offsets (X,Y)--		[2:0-0-7,0-1-4], [8:0-0-0,0-1-4]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.38
TCDL 10.0	Lumber DOL	1.15	BC 0.25
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.02
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.03 6 >999 360
			Vert(CT) -0.06 7 >999 240
			Horz(CT) 0.03 5 n/a n/a
			Wind(LL) 0.03 6 >999 240
			PLATES GRIP
			MT20 197/144
			Weight: 19 lb FT = 10%

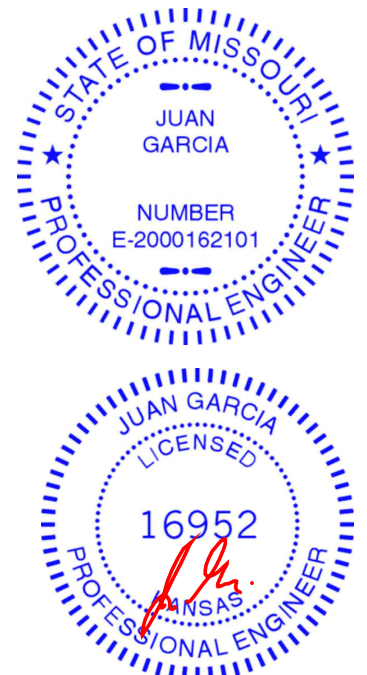
LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 5-6-6 oc purlins, except end verticals.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x3 SPF No.2		

REACTIONS.	
(size)	8=0-4-9, 5=Mechanical
Max Horz	8=103(LC 5)
Max Uplift	8=-98(LC 4), 5=-52(LC 8)
Max Grav	8=345(LC 1), 5=227(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-8=-327/121

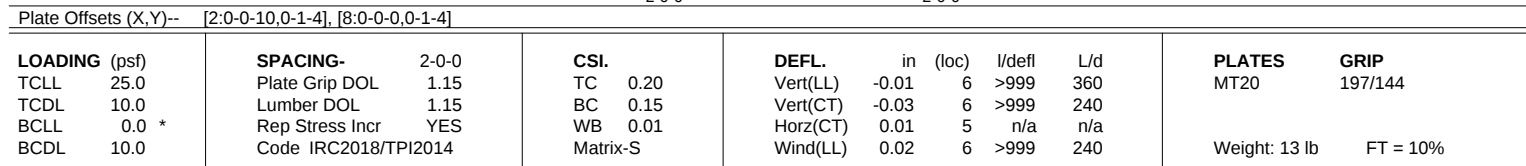
- NOTES-**
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 5.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 69 lb down and 38 lb up at 2-9-8, and 69 lb down and 38 lb up at 2-9-8 on top chord, and 3 lb down and 0 lb up at 2-7-3, and 3 lb down and 0 lb up at 2-7-3 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard	
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15	
Uniform Loads (plf)	
Vert: 1-2=-70, 2-4=-70, 7-8=-20, 5-6=-20	
Concentrated Loads (lb)	
Vert: 7=1(F=0, B=0)	



April 3,2020

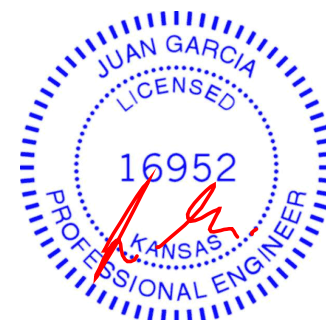
**RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW** 140861186
DEVELOPMENT SERVICES
LEE'S SUMMIT MASSCOURT
ries, Inc. in App. 3/10/2015 10:23 Page
YUuMMG_1bXke6WdzhpxuizkxJBpfEzUTrE
04/22/2020



REACTIONS. (size) 8=0-3-8, 4=Mechanical, 5=Mechanical
 Max Horz 8=88(LC 8)
 Max Uplift 8=-15(LC 8), 4=-61(LC 8)
 Max Grav 8=270(LC 1), 4=116(LC 1), 5=83(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=258/41

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCdL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 4.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 3, 2020



Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job

400213

Truss

J18

Truss Type

Jack-Open

Qty

4

Ply

1

Lot 53 H4

Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. File Path: \\msb\4500\4500 Page 1

Wheeler Lumber,

Waverly, KS 66871

ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-P_2ikC27MCZPVVxSYk6mHsf72M33gLO4yzxNCgzUTrD

1-10-15

1-10-15

RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

04/22/2020

Scale = 1:11.4

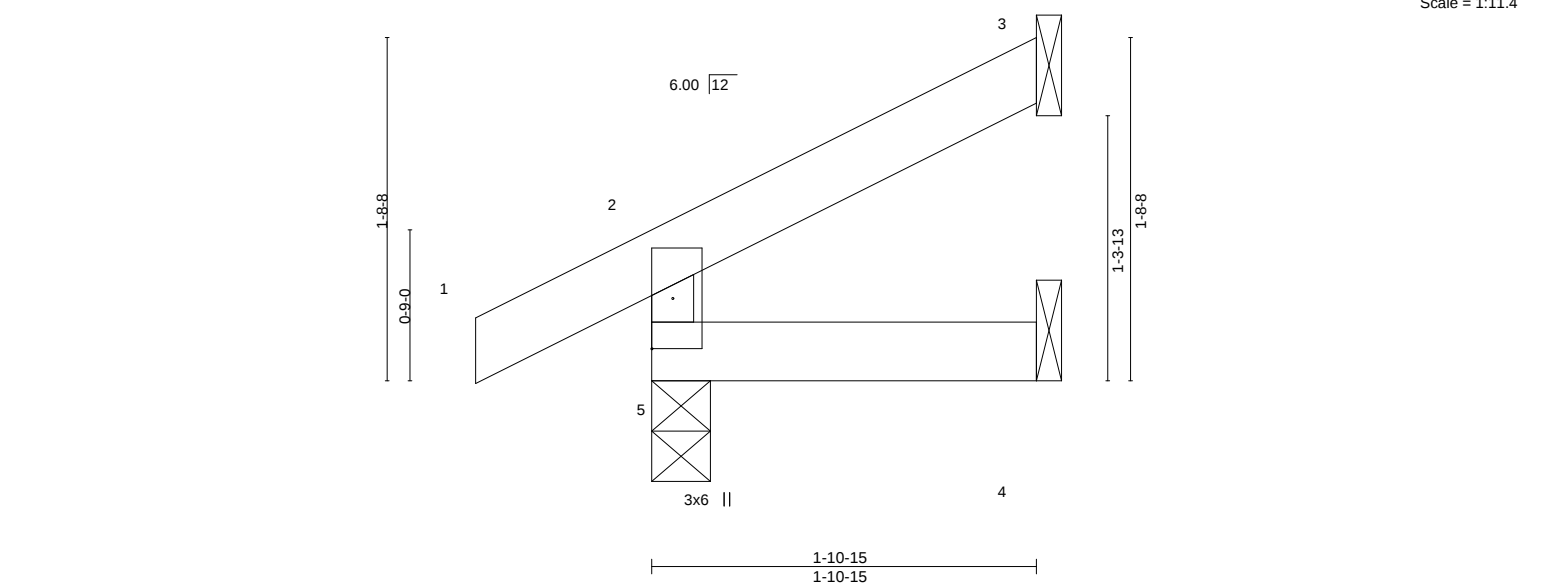


Plate Offsets (X,Y)--		[2:0-0-10,0-1-4], [5:0-0-0,0-1-4]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07
TCDL 10.0	Lumber DOL	1.15	BC 0.02
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-R
		DEFL.	in (loc)
		Vert(LL)	-0.00 5 >999
		Vert(CT)	-0.00 4-5 >999
		Horz(CT)	-0.00 3 n/a
		Wind(LL)	0.00 5 >999
		L/d	
		360	
		240	
		n/a	
		240	
		PLATES	GRIP
		MT20	197/144
		Weight: 6 lb	FT = 10%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 1-10-15 oc purlins, except end verticals.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x3 SPF No.2		

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=47(LC 8)
Max Uplift 5=23(LC 8), 3=33(LC 8)
Max Grav 5=168(LC 1), 3=46(LC 1), 4=34(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 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.



April 3,2020

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 04/22/2020
400213	J19	Jack-Closed Girder	1	1	8.240 s Mar 9 2020 MiTek Industries, Inc. 140861188	

Wheeler Lumber, Waverly, KS 66871

Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. 140861188

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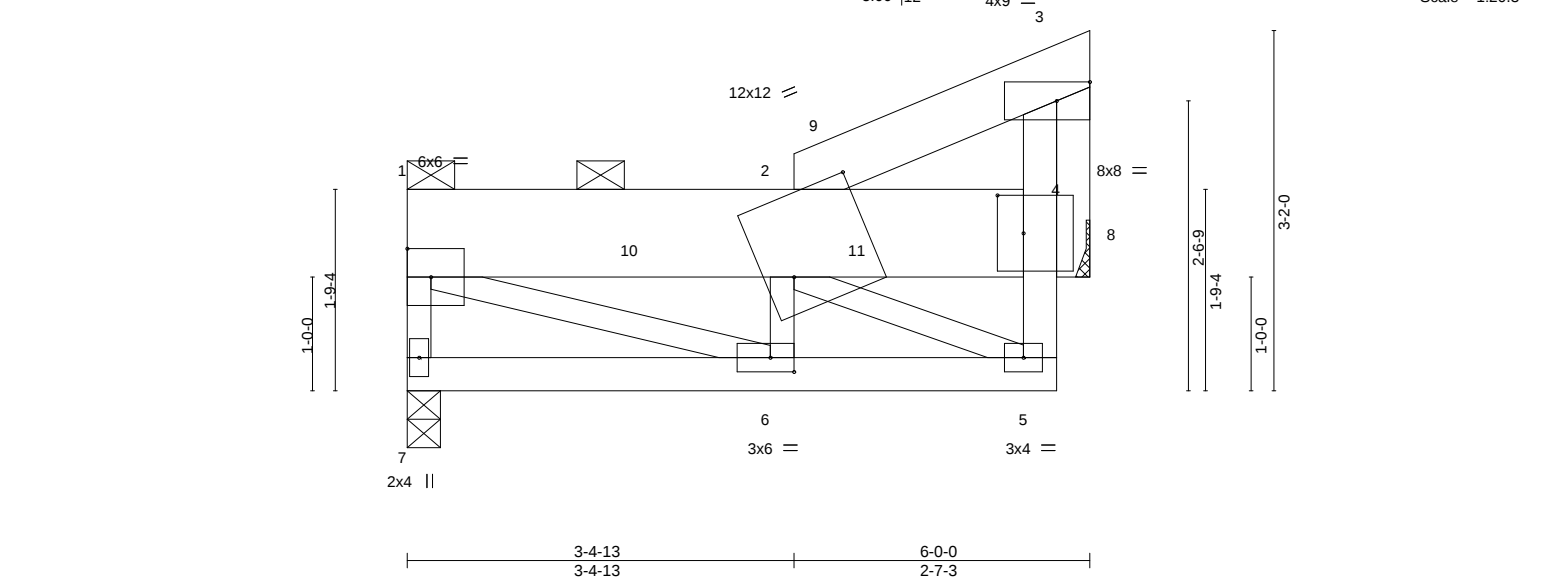


Plate Offsets (X,Y)-- [2:0-9-0,0-8-4], [4:0-2-12,0-4-0], [6:0-2-8,0-1-8]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	-0.02 6 >999 360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.03 6 >999 240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.43	Horz(CT)	-0.00 8 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P		Wind(LL)	0.01 6 >999 240	Weight: 43 lb	FT = 10%

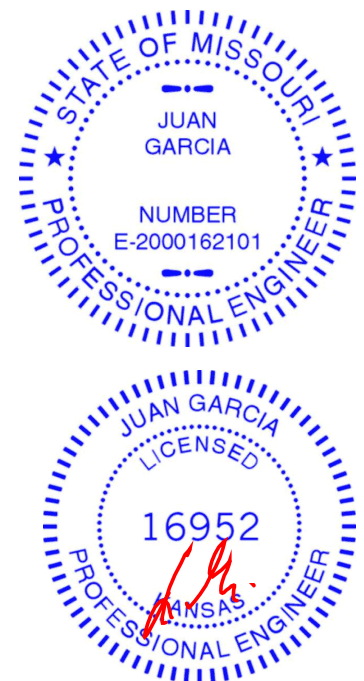
LUMBER-	BRACING-
TOP CHORD 2x6 SPF No.2 *Except* 1-4: 2x10 SP DSS	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 1-4.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2 *Except* 3-5: 2x4 SPF No.2	
OTHERS 2x4 SPF No.2	

REACTIONS.	(size) 7=0-3-8, 8=Mechanical Max Horz 7=86(LC 5) Max Uplift 7=-215(LC 8), 8=-245(LC 8) Max Grav 7=1234(LC 15), 8=1257(LC 15)
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FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-7=-1193/228, 2-3=-614/71, 4-5=-107/638, 3-4=-155/969, 1-2=-1206/179
BOT CHORD 5-6=-211/1197
WEBS 1-6=-203/1280, 2-6=-431/122, 2-5=-1238/232, 3-8=-1274/248

- NOTES-**
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=215, 8=245.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1080 lb down and 184 lb up at 2-0-12, and 1080 lb down and 184 lb up at 4-0-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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



April 3, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4
400213	J19	Jack-Closed Girder	1	1	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. File Path: \\msc9157\B30912

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RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/22/2020

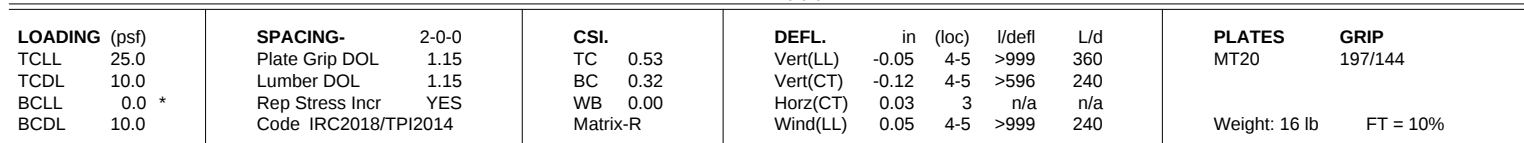
LOAD CASE(S) Standard
Uniform Loads (plf)
Vert: 2-3=-70, 5-7=-20, 1-2=-70
Concentrated Loads (lb)
Vert: 9=-984(B) 10=-984(B)

 **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd
Chesterfield, MO 63017



REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
 Max Horz 5=107(LC 8)
 Max Uplift 5=-46(LC 8), 3=-90(LC 8)
 Max Grav 5=338(LC 1), 3=182(LC 1), 4=109(LC 3)

NOTES-

-

 **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

 16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job

400213

Truss

J21

Truss Type

Jack-Closed Girder

Qty

1

Ply

1

Lot 53 H4

Wheeler Lumber,

Waverly, KS 66871

8.240 s Mar 9 2020

MiTek Industries, Inc.

Lee's Summit, Missouri

Job Reference (optional)

8.240 s Mar 9 2020

140861190

RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES

04/22/2020

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL)	-0.01	8	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.22	Vert(CT)	-0.01	8	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.02	Horz(CT)	-0.01	6	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Wind(LL)	0.01	8	>999	Weight: 15 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except*
4-8: 2x3 SPF No.2

WEBS 2x3 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-11-4 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-5.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 9=0-3-8, 6=Mechanical

Max Horz 9=76(LC 5)

Max Uplift 9=-100(LC 8), 6=-88(LC 5)

Max Grav 9=274(LC 1), 6=191(LC 1)

FORCES.

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

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

2) Provide adequate drainage to prevent water ponding.

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

5) Refer to girder(s) for truss to truss connections.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 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.

8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 45 lb down and 100 lb up at 1-5-4, and 79 lb down and 69 lb up at 2-0-0 on top chord, and 7 lb down and 15 lb up at 1-5-4, and 30 lb down at 2-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-2=-70, 2-3=-70, 8-9=-20, 6-7=-20, 3-5=-70

Concentrated Loads (lb)

Vert: 10=7(F) 11=-22(F) 12=-45(F)

STATE OF MISSOURI

JUAN GARCIA

NUMBER E-2000162101

PROFESSIONAL ENGINEER

STATE OF MISSOURI

JUAN GARCIA

16952

PROFESSIONAL ENGINEER

April 3,2020

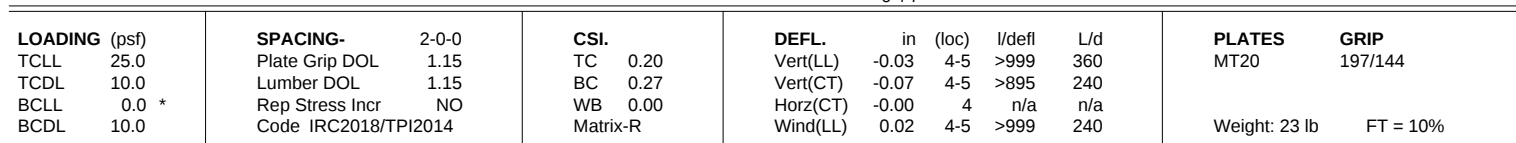
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

MiTek

16023 Swingley Ridge Rd
Chesterfield, MO 63017

**RELEASE FOR
CONSTRUCTION**
AS NOTED ON PLANS REVIEW
140861191
DEVELOPMENT SERVICES
LEE'S SUMMIT MISSOURI
04/22/2020



REACTIONS. (size) 5=0-6-5, 4=Mechanical
 Max Horz 5=132(LC 5)
 Max Uplift 5=-143(LC 4), 4=-101(LC 5)
 Max Grav 5=418(LC 1), 4=253(LC 1)

NOTES-

-
- STATE OF MISSOURI
- JUAN GARCIA
- NUMBER
E-2000162101
- PROFESSIONAL ENGINEER
- JUAN GARCIA
- LICENSED
- 16952
- KANSAS
- PROFESSIONAL ENGINEER

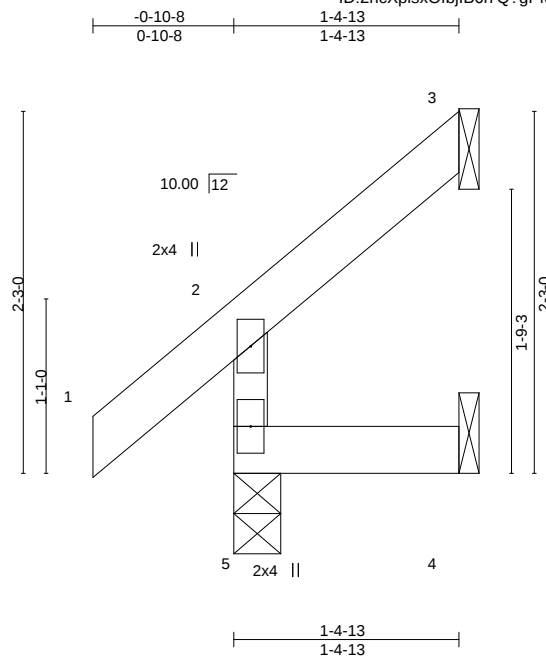
April 3, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4
400213	J23	Jack-Open	1	1	
Wheeler Lumber, Waverly, KS 66871		Job Reference (optional)			

RELEASE FOR
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AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/22/2020

140861192

Scale = 1:14.3



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.08	Vert(LL)	0.00	5	>999	240	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	5	>999	180	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						
									Weight: 6 lb FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2

BRACING-

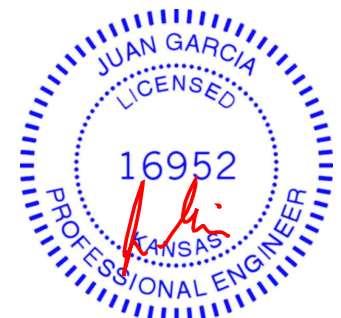
TOP CHORD Structural wood sheathing directly applied or 1-4-13 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
 Max Horz 5=60(LC 8)
 Max Uplift 3=-41(LC 8), 4=-13(LC 8)
 Max Grav 5=152(LC 1), 3=34(LC 15), 4=24(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 3, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job

400213

Truss

J24

Truss Type

Jack-Open

Qty

1

Ply

1

Lot 53 H4

Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. 140861193

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. 140861193

RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

04/22/2020

Scale = 1:16.3

-0-10-8

0-10-8

4-10-5

4-10-5

2-8-5

0-8-0

5.00

12

2-1-11

2-8-5

3x4 =

4-10-5

4-10-5

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.16	Vert(LL)	-0.03	2-4	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.22	Vert(CT)	-0.06	2-4	>994	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P	Wind(LL)	0.00	2	****	240		
									Weight: 17 lb	FT = 10%

LUMBER-

TOP CHORD 2x6 SPF No.2

BOT CHORD 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-10-5 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=96(LC 8)
 Max Uplift 3=-87(LC 8), 2=-42(LC 8)
 Max Grav 3=155(LC 1), 2=289(LC 1), 4=93(LC 3)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 3,2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

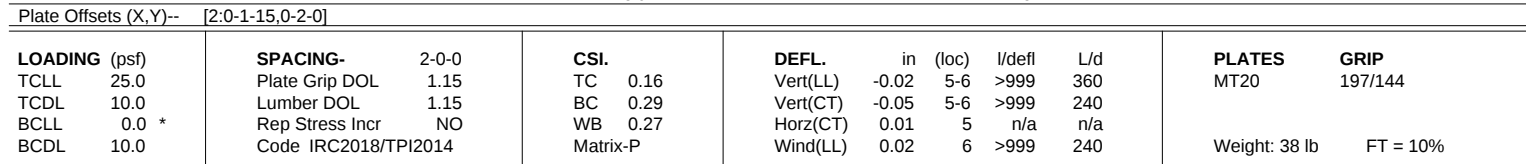
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MiTek

16023 Swingley Ridge Rd

Chesterfield, MO 63017

**RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW** 140861194
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
ries, Inc. 11/15/2013 10:02:03 Page
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04/22/2020



REACTIONS. (size) 7=0-4-13, 5=0-3-9
 Max Horz 7=161(LC 5)
 Max Uplift 7=-183(LC 4), 5=-235(LC 5)
 Max Grav 7=523(LC 1), 5=404(LC 1)

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

TOP CHORD	2-7=-487/228, 2-3=-720/280
BOT CHORD	5-6=-357/594
WEBS	2-6=-219/661, 3-5=-606/347

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 4) 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.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=183, 5=235.
 - 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 73 lb down and 42 lb up at 3-2-6, 138 lb down and 94 lb up at 4-2-11, and 86 lb down and 73 lb up at 5-5-3, and 96 lb down and 104 lb up at 7-7-3 on top chord, and 14 lb down and 22 lb up at 3-2-6, 13 lb down at 4-2-11, and 20 lb down and 22 lb up at 5-5-3, and 34 lb down and 20 lb up at 7-7-3 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

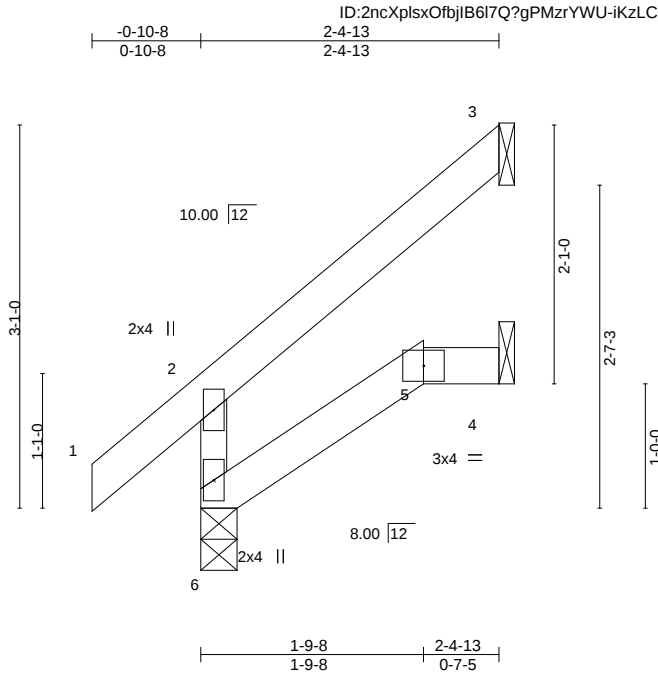
LOAD CASE(S) Standard
 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-2=-70, 2-4=-70, 6-7=-20, 5-6=-20
 Concentrated Loads (lb)
 Vert: 9=-5(F) 11=-48(B) 12=1(B) 13=-5(F) 14=-1(B) 15=-20(B)



April 3, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4
400213	J26	Jack-Open	1	1	
Wheeler Lumber, Waverly, KS 66871		Job Reference (optional)			

**RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/22/2020**



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.13	Vert(LL)	0.00	5	>999	240	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	-0.00	5-6	>999	180	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.01	3	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						
				Weight: 9 lb	FT = 10%				

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-4-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 6=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 6=91(LC 8)
Max Uplift 3=-72(LC 8), 4=-9(LC 8)
Max Grav 6=184(LC 1), 3=77(LC 15), 4=43(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 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.



April 3, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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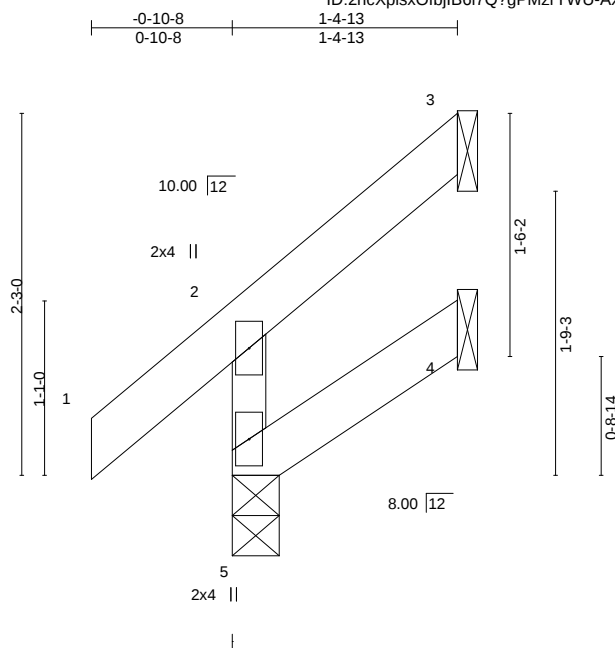
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4
400213	J27	Jack-Open	1	1	
Wheeler Lumber, Waverly, KS 66871		Job Reference (optional)			

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/22/2020

140861196

Scale = 1:14.3



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	0.00	5	>999	240	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.00	5	>999	180	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.01	3	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						
									Weight: 6 lb FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2

BRACING-

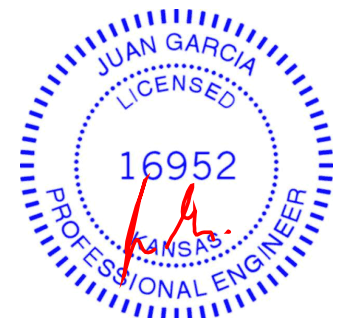
TOP CHORD Structural wood sheathing directly applied or 1-4-13 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
 Max Horz 5=59(LC 8)
 Max Uplift 3=-44(LC 8), 4=-15(LC 8)
 Max Grav 5=152(LC 1), 3=35(LC 15), 4=26(LC 6)

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=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) 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.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 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.



April 3, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job

400213

Truss

J28

Truss Type

Jack-Open

Qty

1

Ply

1

Lot 53 H4

Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. 140861197

Wheeler Lumber,

Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. 140861197

Lee's Summit, Missouri

04/22/2020

0-10-8

0-10-8

3-3-8

3-3-8

4-8-13

1-5-5

2-7-11

0-8-0

5.00

12

4.00

12

3x4 =

3x4 =

3-3-8

3-3-8

4-8-13

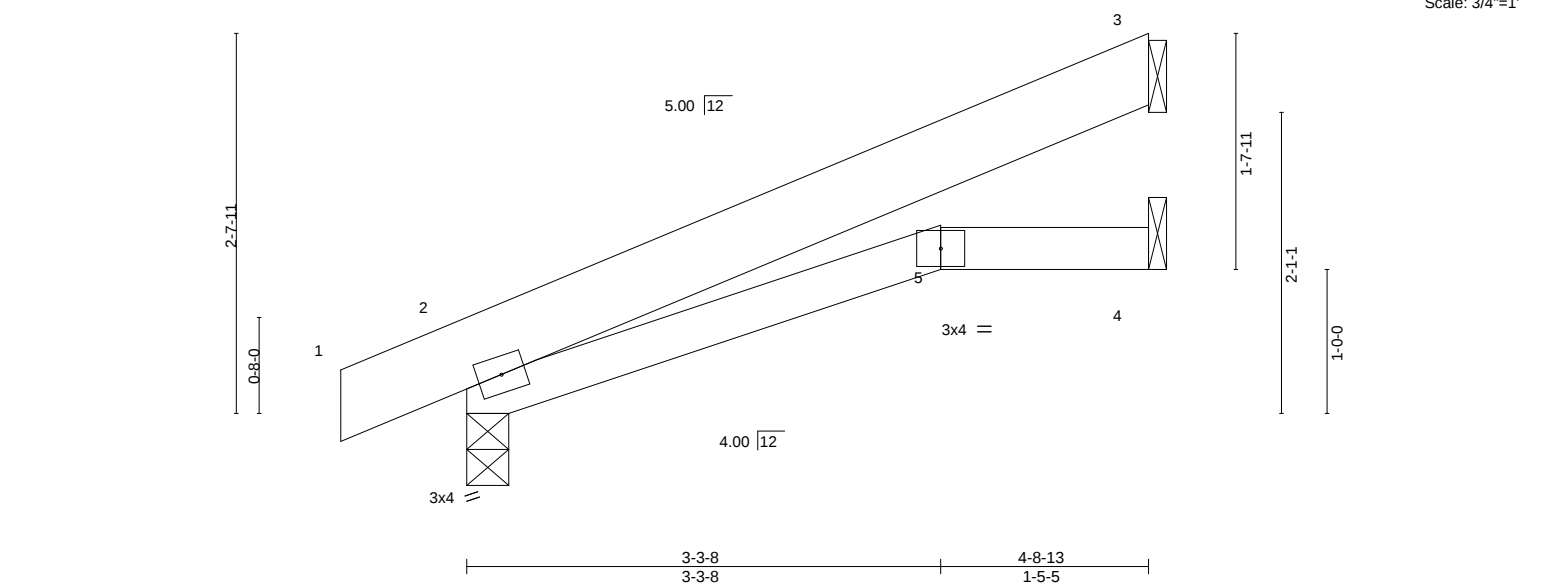
1-5-5

1-7-11

2-1-1

1-0-0

Scale: 3/4"=1'



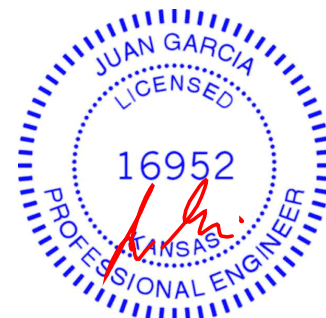
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.18	Vert(LL)	-0.01	2-5	>999	360	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	-0.03	2-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P	Wind(LL)	0.01	2-5	>999	240		
									Weight: 17 lb	FT = 10%

LUMBER-			BRACING-		
TOP CHORD	2x6 SPF No.2		TOP CHORD	Structural wood sheathing directly applied or 4-8-13 oc purlins.	
BOT CHORD	2x4 SPF No.2		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=94(LC 8)
Max Uplift 3=-76(LC 8), 2=-41(LC 8)
Max Grav 3=152(LC 1), 2=283(LC 1), 4=75(LC 3)

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

- NOTES-**
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Refer to girder(s) for truss to truss connections.
 - 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 3,2020

Job

400213

Truss

J29

Truss Type

Jack-Open Girder

Qty

1

Ply

1

Lot 53 H4

Job Reference (optional)

Wheeler Lumber,

Waverly, KS 66871

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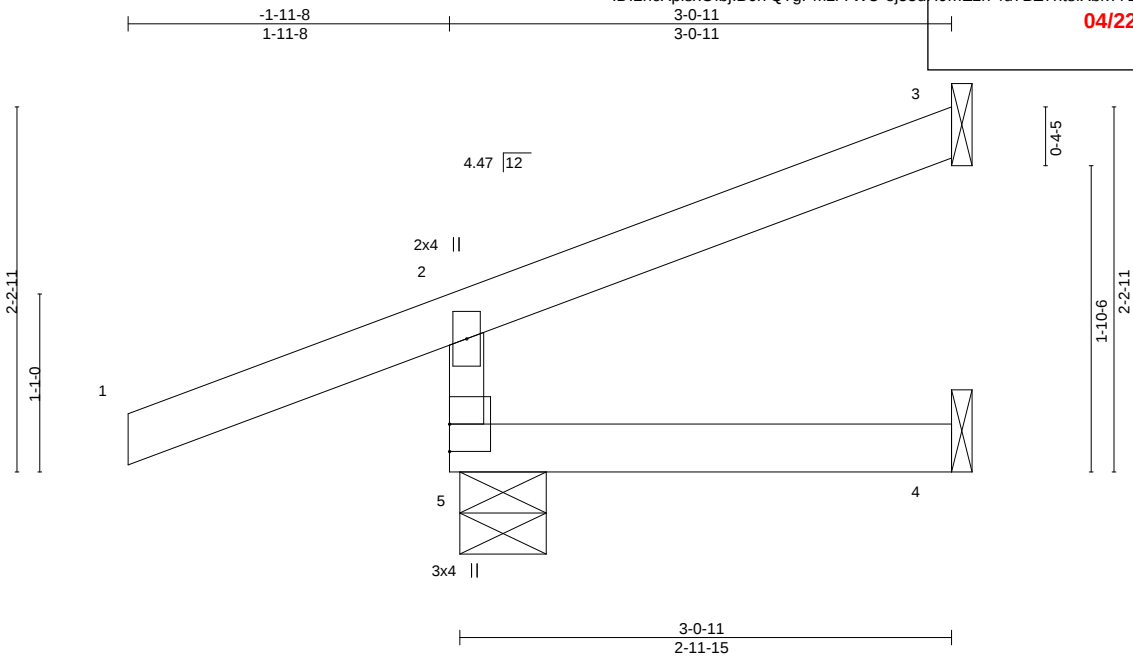
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140861198

Lee's Summit, Missouri

04/22/2020

Scale = 1:14.0



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.39	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
BCLL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	-0.00	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R	Wind(LL)	0.00	4-5	>999	240		
									Weight: 10 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-0-11 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

REACTIONS. (size) 5=0-6-5, 3=Mechanical, 4=Mechanical
Max Horz 5=81(LC 7)
Max Uplift 5=-96(LC 4), 3=-65(LC 12), 4=-7(LC 19)
Max Grav 5=214(LC 1), 3=13(LC 9), 4=38(LC 3)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3, 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 44 lb down and 16 lb up at -1-11-8, and 44 lb down and 16 lb up at -1-11-8 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Concentrated Loads (lb)
Vert: 1=-67(F=-33, B=-33)
Trapezoidal Loads (plf)
Vert: 1=-0(F=35, B=35)-to-2=-51(F=9, B=9), 2=-2(F=34, B=34)-to-3=-54(F=8, B=8), 5=-0(F=10, B=10)-to-4=-15(F=2, B=2)



April 3,2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 04/22/2020
400213	J30	Jack-Open	1	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. 140861199

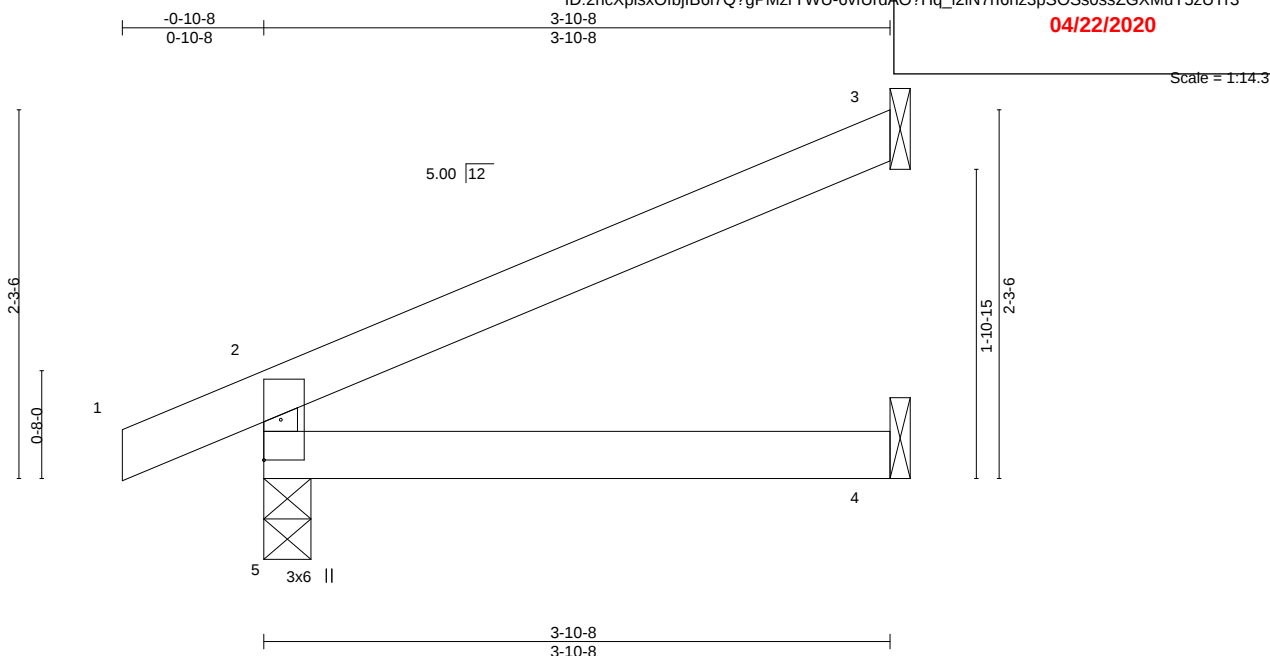


Plate Offsets (X,Y)-- [2:0-0-8,0-1-4], [5:0-0-0,0-1-4]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	-0.01 4-5 >999	360	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.02 4-5 >999	240	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01 3 n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01 4-5 >999	240	Weight: 11 lb FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2

BRACING-

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

REACTIONS.

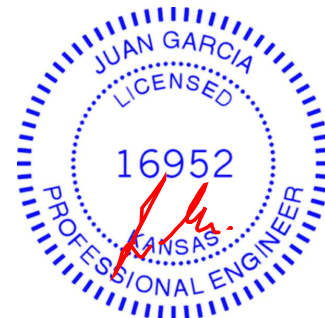
(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
 Max Horz 5=72(LC 8)
 Max Uplift 5=-36(LC 8), 3=-60(LC 8)
 Max Grav 5=244(LC 1), 3=115(LC 1), 4=70(LC 3)

FORCES.

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 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.



April 3, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4
400213	J31	Jack-Open	1	1	
Wheeler Lumber, Waverly, KS 66871		Job Reference (optional)			

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/22/2020

140861200

Scale = 1:22.6

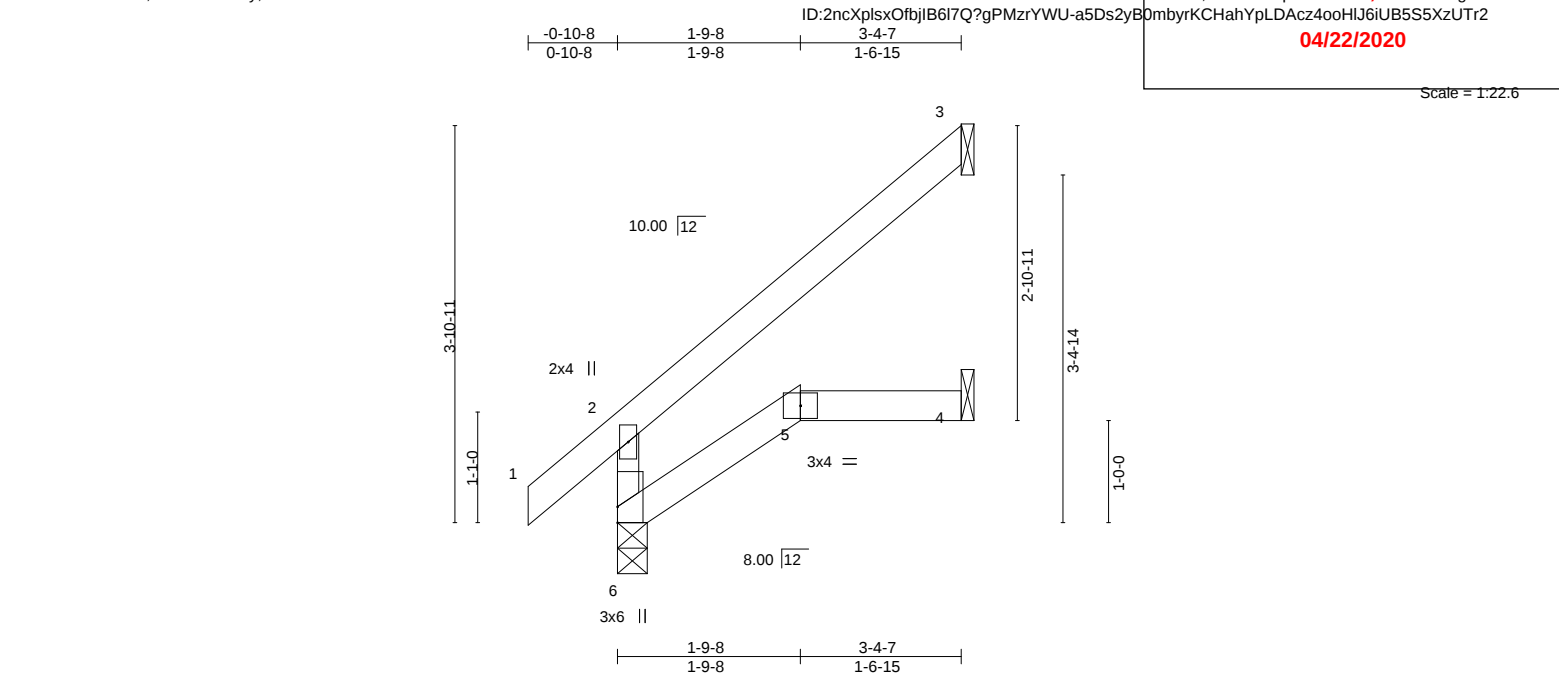


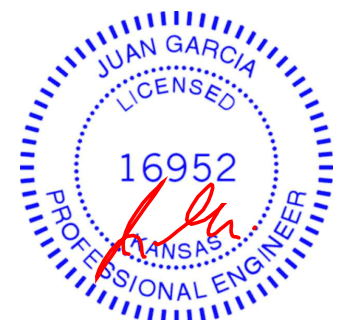
Plate Offsets (X,Y)--		[6:0-1-14,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.21
TCDL 10.0	Lumber DOL	1.15	BC 0.11
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-R
			DEFL. in (loc) l/defl L/d
			Vert(LL) 0.01 5 >999 240
			Vert(CT) -0.01 5 >999 240
			Horz(CT) -0.03 3 n/a n/a
			PLATES GRIP
			MT20 197/144
			Weight: 12 lb FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-4-7 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x3 SPF No.2	

REACTIONS.	(size) 6=0-3-8, 3=Mechanical, 4=Mechanical
	Max Horz 6=124(LC 8)
	Max Uplift 3=-98(LC 8), 4=-6(LC 8)
	Max Grav 6=223(LC 1), 3=114(LC 15), 4=62(LC 3)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
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- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 4) Refer to girder(s) for truss to truss connections.
 - 5) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 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.



April 3, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4	
400213	LAY1	GABLE	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Apr 3 04:58:15 2020 Page 1

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Job Reference (optional)

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
es. Inc. 2005-15-0025 Page 1

Scale = 1:57.5

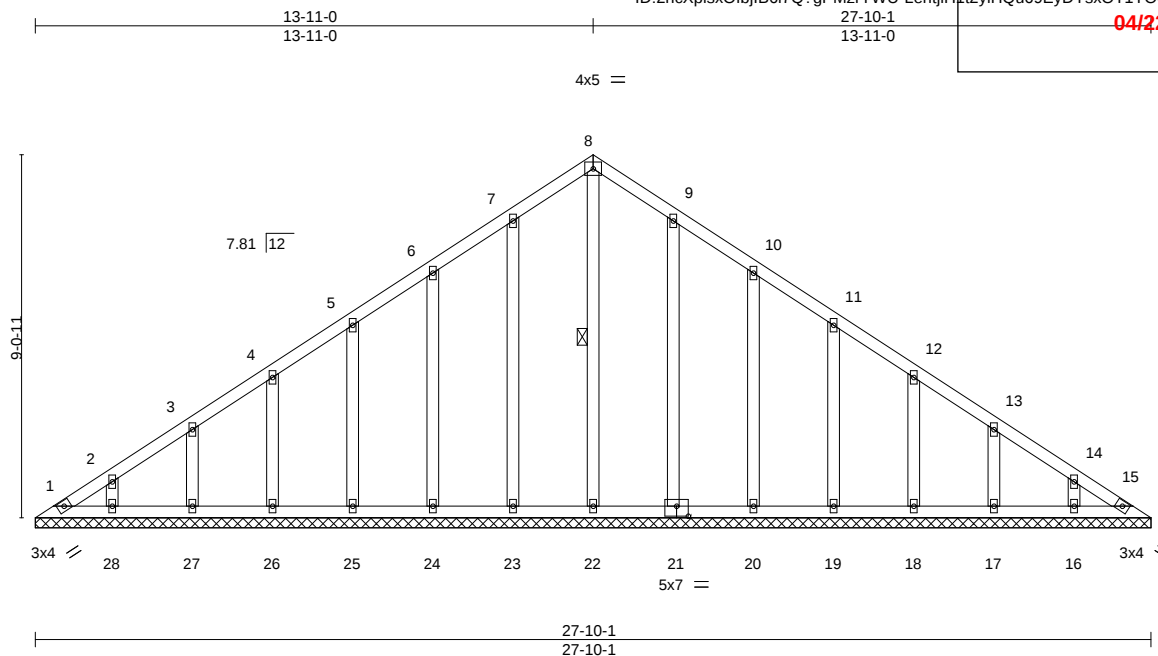


Plate Offsets (X,Y)-- [21:0-3-8,0-3-0]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.01	15	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 132 lb	FT = 10%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS	2x4 SPF No.2	WEBS	1 Row at midpt 8-22

REACTIONS. All bearings 27-10-1.
(lb) - Max Horz 1--228(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 1, 15, 23, 24, 25, 26, 27, 28, 21, 20, 19, 18, 17, 16
Max Grav All reactions 250 lb or less at joint(s) 1, 15, 22, 23, 24, 25, 26, 27, 28, 21, 20, 19, 18, 17, 16

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; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 15, 23, 24, 25, 26, 27, 28, 21, 20, 19, 18, 17, 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.



April 3, 2020

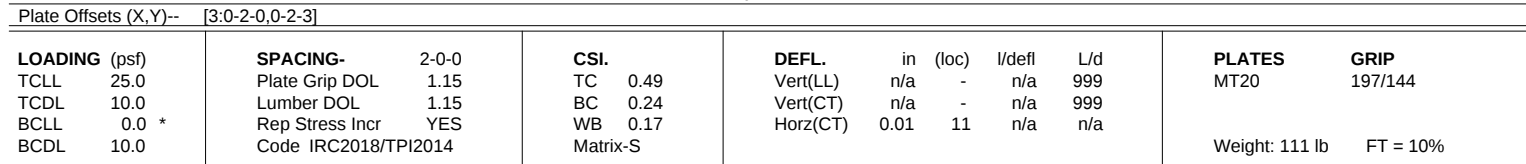


Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd
Chesterfield, MO 63017

**RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW**
140861202
**DEVELOPMENT SERVICES
LEE'S SUMMIT ASSOCIATES**
04/22/2020



REACTIONS. All bearings 19-2-12.
(lb) - Max Horz 20=-404(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 20, 11, 19, 18, 17, 16, 15, 14, 13, 12
Max Grav All reactions 250 lb or less at joint(s) 20, 11, 19, 18, 17, 16, 15, 14, 13, 12

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 7-8=-256/164, 8-9=-291/187, 9-10=-326/207, 10-11=-369/240
BOT CHORD 19-20=-199/319, 18-19=-199/319, 17-18=-199/319, 16-17=-199/319, 15-16=-199/319,
14-15=-199/319, 13-14=-199/319, 12-13=-199/319, 11-12=-199/319

-
- STATE OF MISSOURI
JUAN GARCIA
NUMBER
E-2000162101
PROFESSIONAL ENGINEER
- JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Components**

Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job	Truss	Truss Type	Qty	Ply	Lot 53 H4	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 04/22/2020 Scale = 1:52.8
400213	LAY3	GABLE	1	1		

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. 140861203

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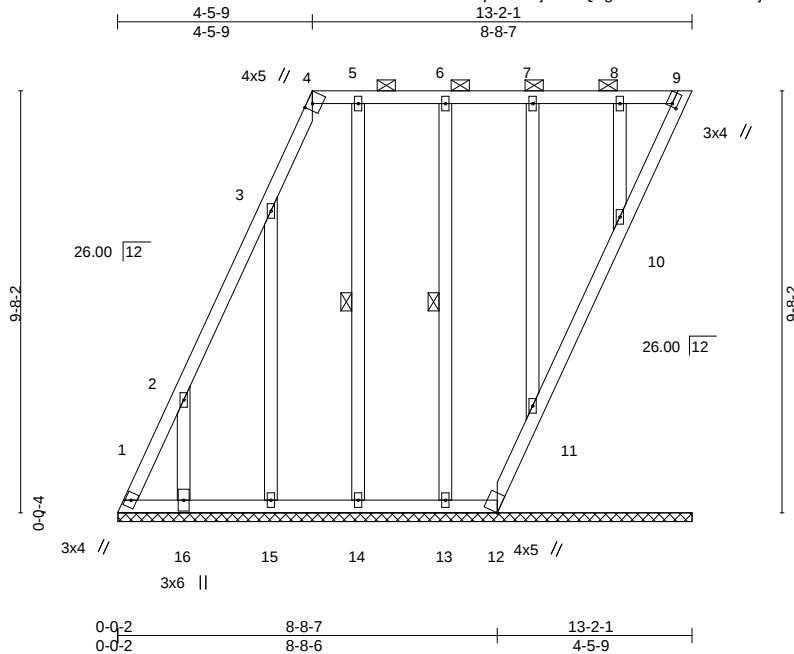


Plate Offsets (X, Y)-- [4:0-1-13,Edge], [9:0-0-13,0-1-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.11	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.20	Horz(CT)	-0.01	9	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 87 lb	FT = 10%

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.): 4-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-14, 6-13

REACTIONS. All bearings 13-1-15.
(lb) - Max Horz 1=383(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 12, 14, 13, 11, 10 except 1=-296(LC 6), 9=-123(LC 8), 16=-409(LC 8), 15=-318(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 9, 12, 14, 13, 11, 10 except 1=623(LC 8), 16=320(LC 15), 15=279(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-687/364, 2-3=-294/161
WEBS 2-16=-277/418, 3-15=-240/344

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 14, 13, 11, 10 except (jt=lb) 1=296, 9=123, 16=409, 15=318.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 9, 11, 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 3,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4
400213	LAY4	GABLE	1	1	
Wheeler Lumber, Waverly, KS 66871		Job Reference (optional)			

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/22/2020

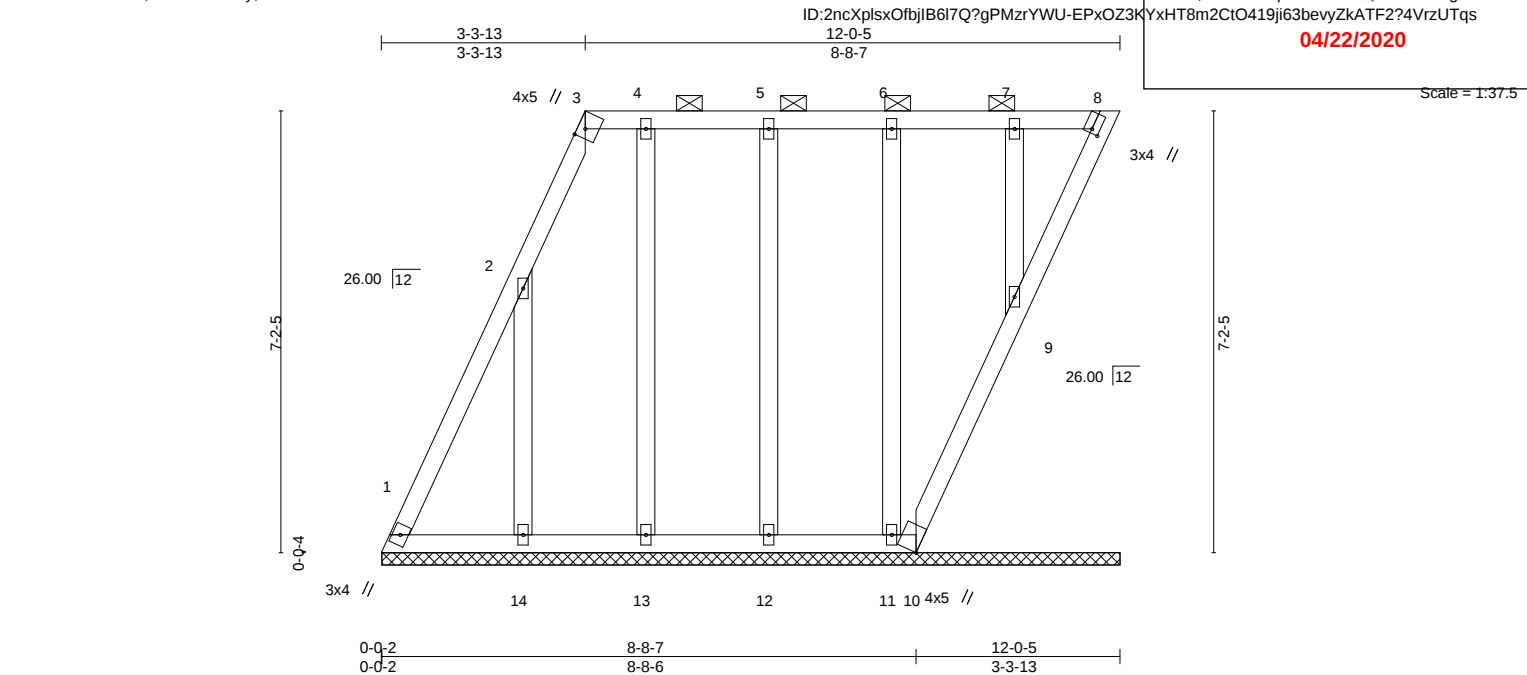


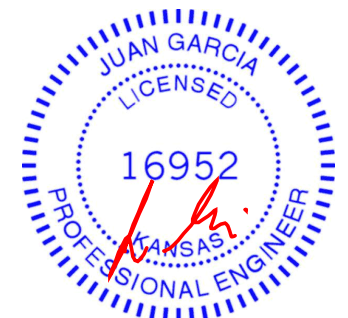
Plate Offsets (X,Y)--		[3:0-1-13,Edge], [8:0-0-13,0-1-8]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	2-0-0	TC 0.11	in (loc) l/defl L/d
TCDL 10.0	Plate Grip DOL 1.15	BC 0.06	Vert(LL) n/a - n/a 999
BCLL 0.0 *	Lumber DOL 1.15	WB 0.12	Vert(CT) n/a - n/a 999
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) -0.00 8 n/a n/a
	Code IRC2018/TPI2014		
		PLATES	GRIP
		MT20	197/144
		Weight: 68 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except
BOT CHORD 2x4 SPF No.2	2-0-0 oc purlins (6-0-0 max.): 3-8.
OTHERS 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 12-0-3.
(lb) - Max Horz 1=282(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 8, 10, 13, 12, 11, 9 except 1=129(LC 6), 14=-414(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 8, 10, 13, 12, 11, 9 except 1=337(LC 8), 14=347(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-376/208
WEBS 2-14=-281/411

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 10, 13, 12, 11, 9 except (jt=lb) 1=129, 14=414.
 - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 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.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 3, 2020

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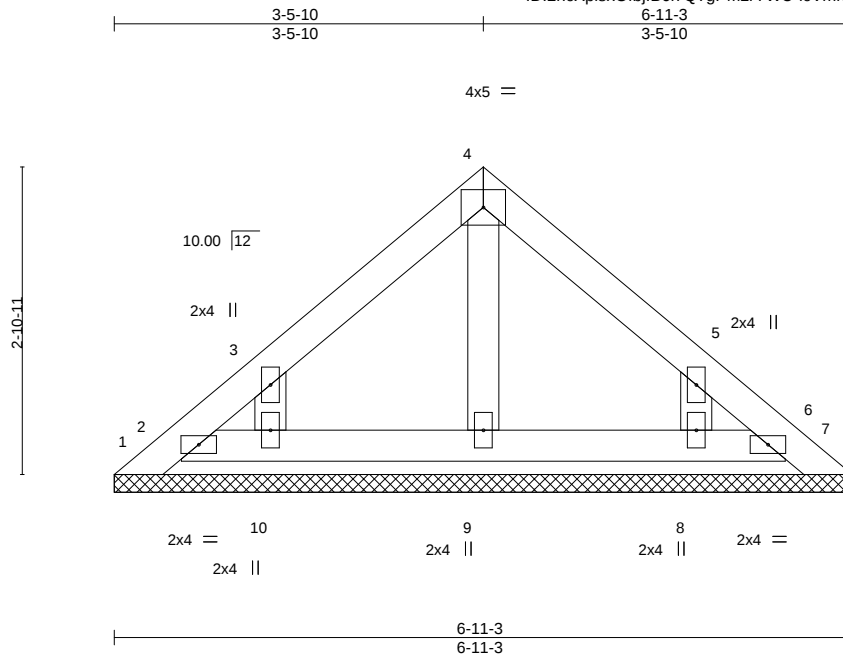
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4
400213	P1	GABLE	1	1	
Wheeler Lumber,		Waverly, KS 66871		Job Reference (optional)	

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/22/2020

140861205

Scale = 1:21.6



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	n/a	-	n/a	999	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a	999	
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	7	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						
				Weight: 20 lb				FT = 10%	

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.

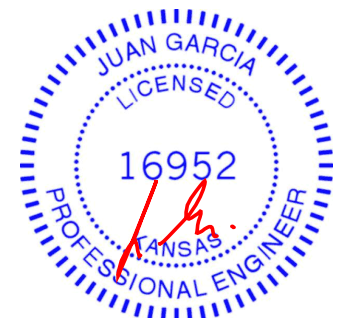
REACTIONS.

All bearings 6-11-3.
(lb) - Max Horz 1=-70(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 6, 8 except 10=-101(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 2, 6, 9, 10, 8

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 6, 8 except (jt=lb) 10=101.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



April 3, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR
CONSTRUCTION
120861206
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT MISSOURI
FujisLMGVU3do7BObRaC1f9mImUBZjzUTqq
04/22/2020



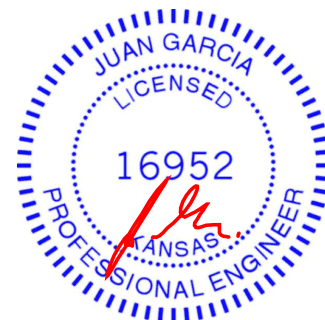
Weight: 18 lb FT = 10%

Structural wood sheathing directly applied or 6-0-0 oc purlins
Rigid ceiling directly applied or 10-0-0 oc bracing.

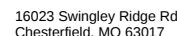
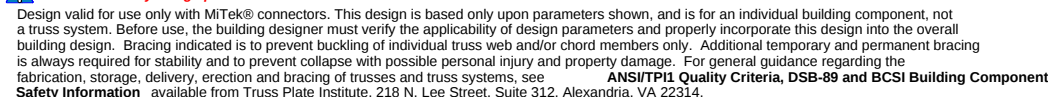
(size) 2=5-8-1, 4=5-8-1, 6=5-8-1
 Max Horz 2=70(LC 7)
 Max Uplift 2=-43(LC 8), 4=-51(LC 9)
 Max Grav 2=184(LC 1), 4=184(LC 1), 6=198(LC 1)

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

- 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=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

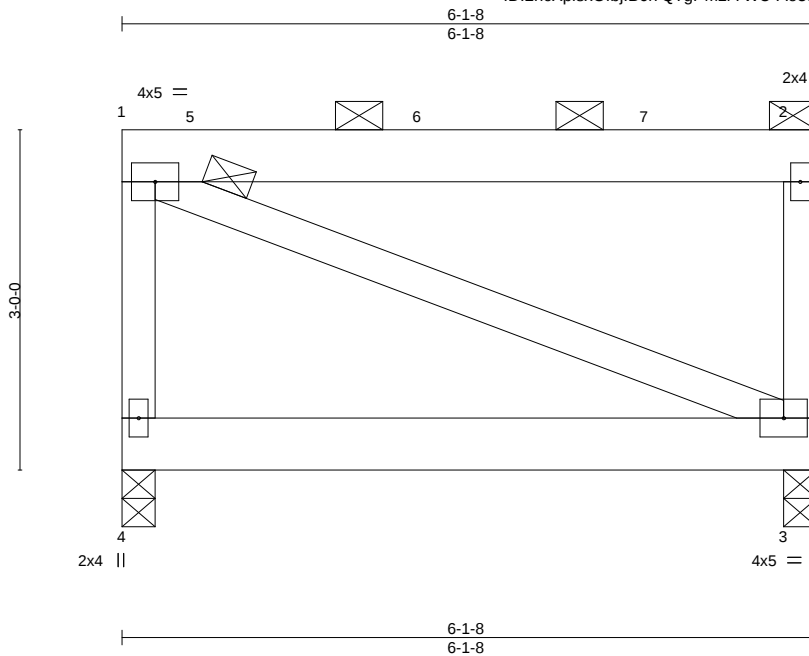


April 3, 2020



Job	Truss	Truss Type	Qty	Ply	Lot 53 H4	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 04/22/2020 Scale = 1:20.3
400213	R1	Flat	1	2	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871 8.240 s Mar 9 2020 MiTek Industries, Inc. File Ap 10861207
ID:2ncXplsXOfbjB6l7Q?gPMzrYWU-Ao38_ILcTujs?LMGVU3do7BF7Ra21fTmiMUBZjzUTqq



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.75	Vert(LL)	-0.01	3-4	>999	360	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	-0.02	3-4	>999	240	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.01	Horz(CT)	-0.00	3	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P	Wind(LL)	0.00	4	****	240	
									Weight: 74 lb FT = 10%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 4=0-3-8, 3=0-3-8
Max Horz 4=-97(LC 4)
Max Uplift 4=-361(LC 4), 3=-284(LC 5)
Max Grav 4=2214(LC 1), 3=1895(LC 2)

FORCES.

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

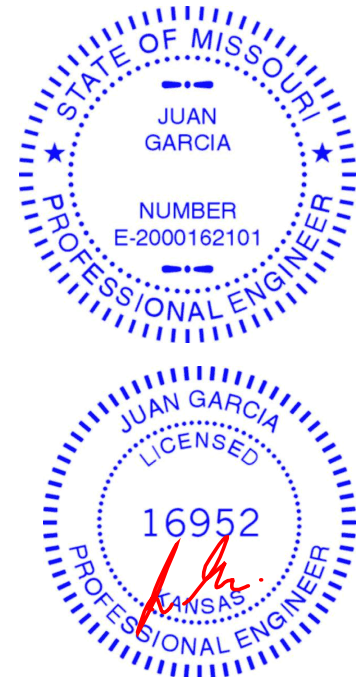
TOP CHORD 1-4=-2155/396, 2-3=-1837/298

NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=361, 3=284.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1181 lb down and 200 lb up at 0-9-0, and 1266 lb down and 188 lb up at 2-9-0, and 1265 lb down and 172 lb up at 4-9-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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



April 3,2020

Continued on page 2

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4
400213	R1	Flat	1	2	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. 11:35:52 AM Page 2
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RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

04/22/2020

140861207

LOAD CASE(S) Standard
 Concentrated Loads (lb)
 Vert: 5=-1181 6=-1167 7=-1167

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job

400213

Truss

V1

Truss Type

Valley

Qty

1

Ply

1

Lot 53 H4

Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. 140861208

Wheeler Lumber,

Waverly, KS 66871

ID:2ncXplsXOfbjlB6l7Q?gPMzrYWU-e_dXB5MQECridVxS3CaskLKkVyrugm5Wvx0EI69zUTqp

12-1-8

6-0-12

RELEASE FOR CONSTRUCTION

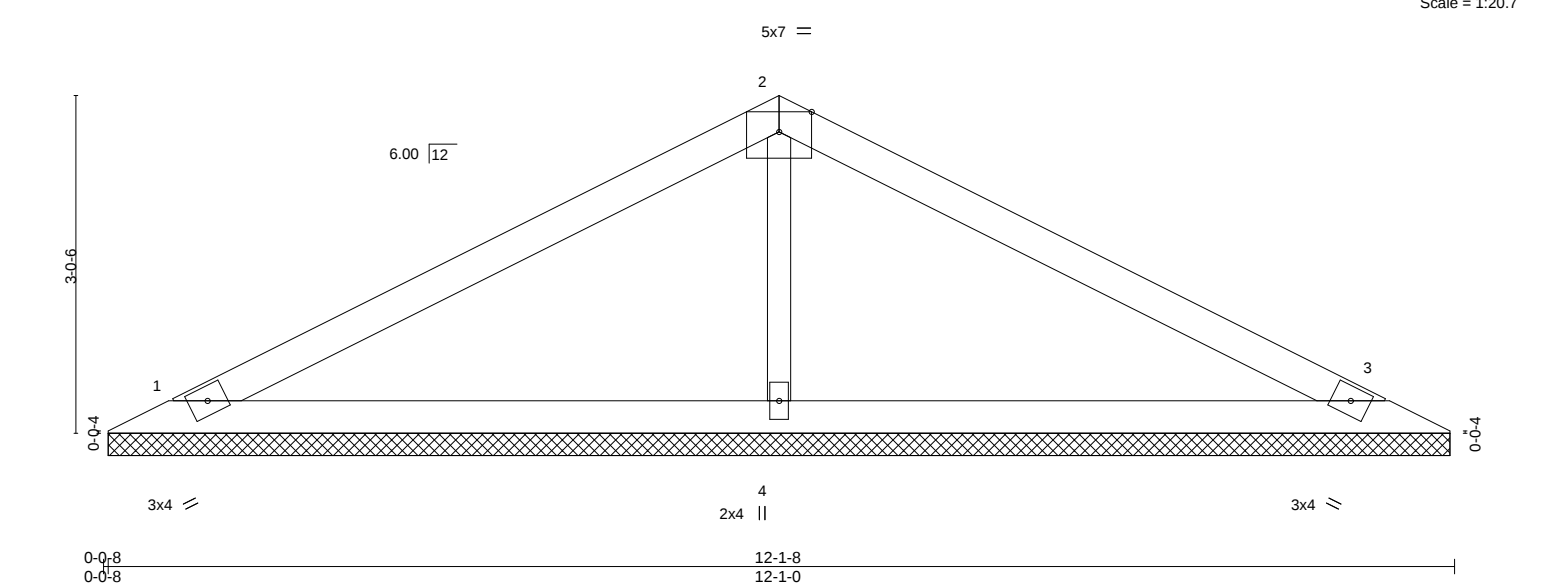
AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

04/22/2020

Scale = 1:20.7



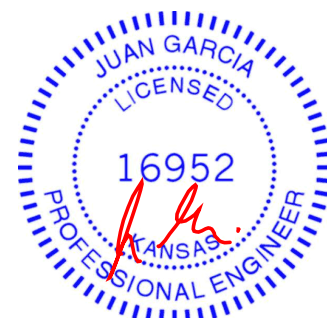
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.42	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.25	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.08	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S							
									Weight: 30 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x3 SPF No.2	

REACTIONS. (size) 1=12-0-8, 3=12-0-8, 4=12-0-8
Max Horz 1=-48(LC 13)
Max Uplift 1=-47(LC 8), 3=-56(LC 9), 4=-29(LC 8)
Max Grav 1=230(LC 21), 3=230(LC 22), 4=519(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-354/93

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

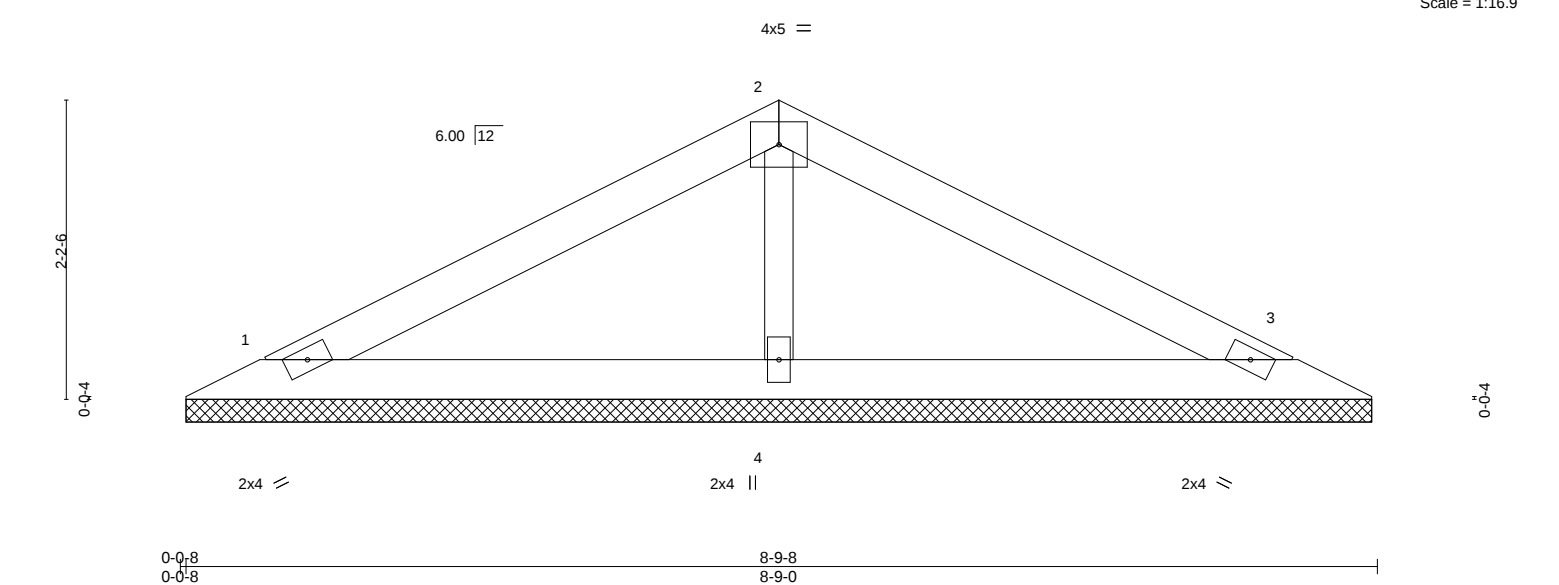


April 3, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 04/22/2020 Scale = 1:16.9
400213	V2	Valley	1	1	Job Reference (optional)	
Wheeler Lumber, Waverly, KS 66871						

8.240 s Mar 9 2020 MiTek Industries, Inc. 140861209

ID:2ncXplsXOfjIB6I7Q?gPMzrYWU-3ZIfq6PJW7DHUzf1kK8ZyzM1f3xLzStMd_SPIUzUTqm



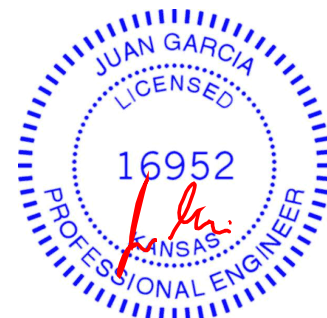
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	n/a	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							
								Weight: 21 lb		FT = 10%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS	2x3 SPF No.2		

REACTIONS. (size) 1=8-8-8, 3=8-8-8, 4=8-8-8
Max Horz 1=33(LC 12)
Max Uplift 1=40(LC 8), 3=46(LC 9), 4=40(LC 8)
Max Grav 1=177(LC 1), 3=177(LC 1), 4=324(LC 1)

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 3, 2020

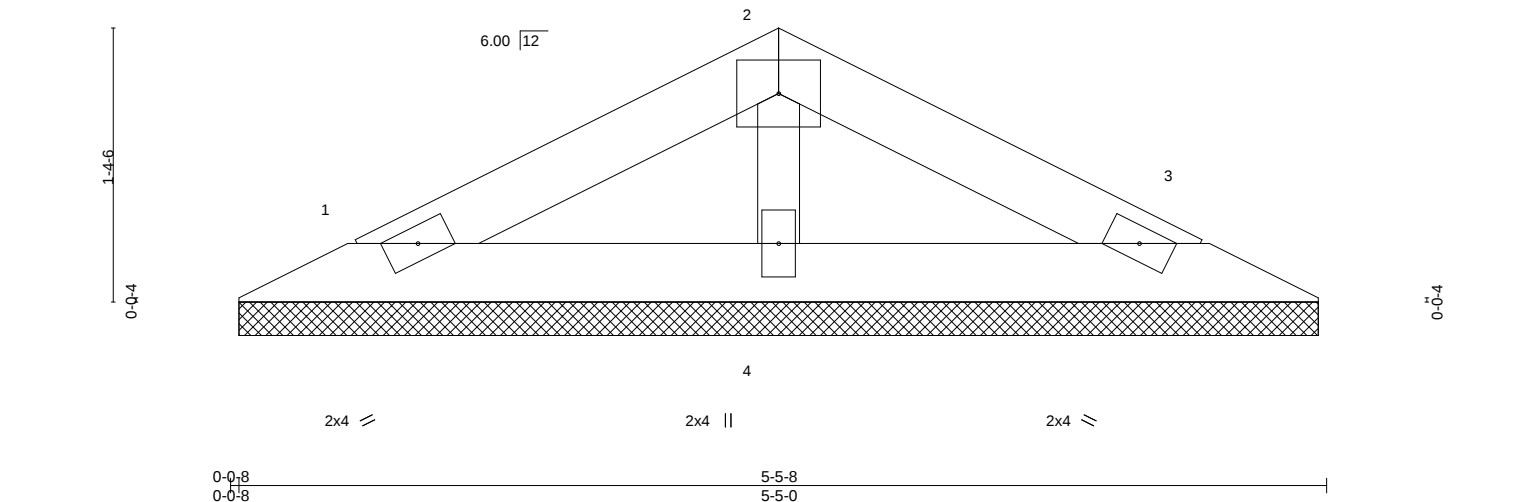
Job	Truss	Truss Type	Qty	Ply	Lot 53 H4	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 04/22/2020 Scale = 1:11.5
400213	V3	Valley	1	1		
Wheeler Lumber, Waverly, KS 66871						

8.240 s Mar 9 2020 MiTek Industries, Inc. 140861210

ID:2ncXplsXOfbjlB6l7Q?gPMzrYWU-XIs11SPxHQL866EDl2foVBuFMSltivTVSeCyFzUTql

2-8-12 2-8-12 5-5-8 2-8-12

4x5 =



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 12 lb	FT = 10%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 5-5-8 oc purlins.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x3 SPF No.2	

REACTIONS. (size) 1=5-4-8, 3=5-4-8, 4=5-4-8
Max Horz 1=-19(LC 13)
Max Uplift 1=-23(LC 8), 3=-26(LC 9), 4=-2(LC 8)
Max Grav 1=99(LC 1), 3=99(LC 1), 4=180(LC 1)

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

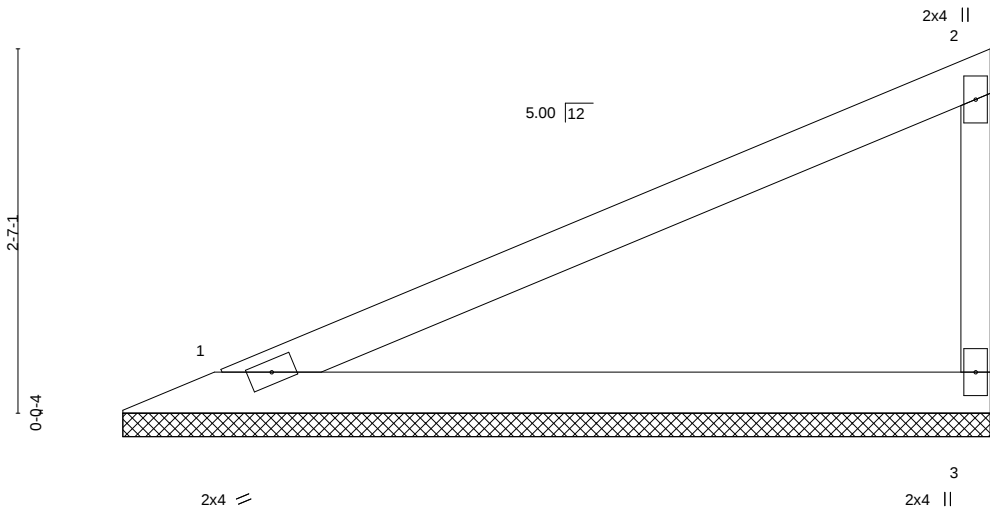
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 3,2020

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 04/22/2020 Scale = 1:16.4
400213	V4	Valley	1	1	Job Reference (optional)	
Wheeler Lumber, Waverly, KS 66871					8.240 s Mar 9 2020 MiTek Industries, Inc. 11:45:58 PM	

ID:2ncXplsxOfbjlB6l7Q?gPMzrYWU-?yQQFoQZ2kt?jGpQsIA11ORJYsazRM3e5lxWnNzUTqk



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.56	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.30	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 15 lb	FT = 10%

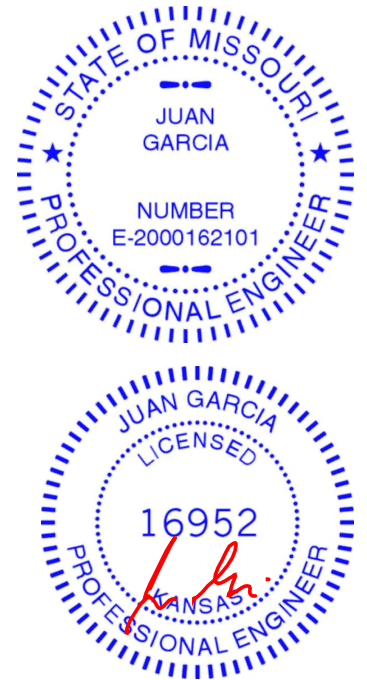
LUMBER-
 TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-2-8 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=6-1-14, 3=6-1-14
 Max Horz 1=98(LC 5)
 Max Uplift 1=-35(LC 8), 3=-55(LC 8)
 Max Grav 1=241(LC 1), 3=241(LC 1)

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

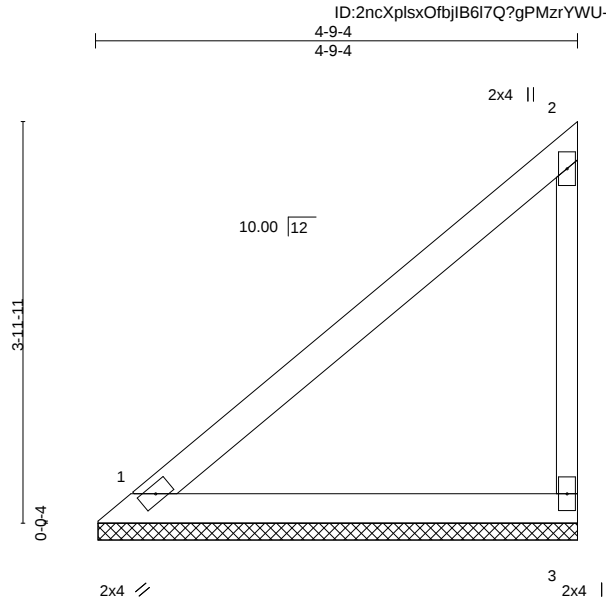
- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Gable requires continuous bottom chord bearing.
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 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.



April 3,2020

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4
400213	V5	Valley	1	1	
Wheeler Lumber,		Waverly, KS 66871		Job Reference (optional)	

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/22/2020



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.35	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 15 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2

BRACING-

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

REACTIONS.

(size) 1=4-8-15, 3=4-8-15
 Max Horz 1=142(LC 5)
 Max Uplift 1=5(LC 8), 3=67(LC 8)
 Max Grav 1=192(LC 1), 3=216(LC 15)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 3, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



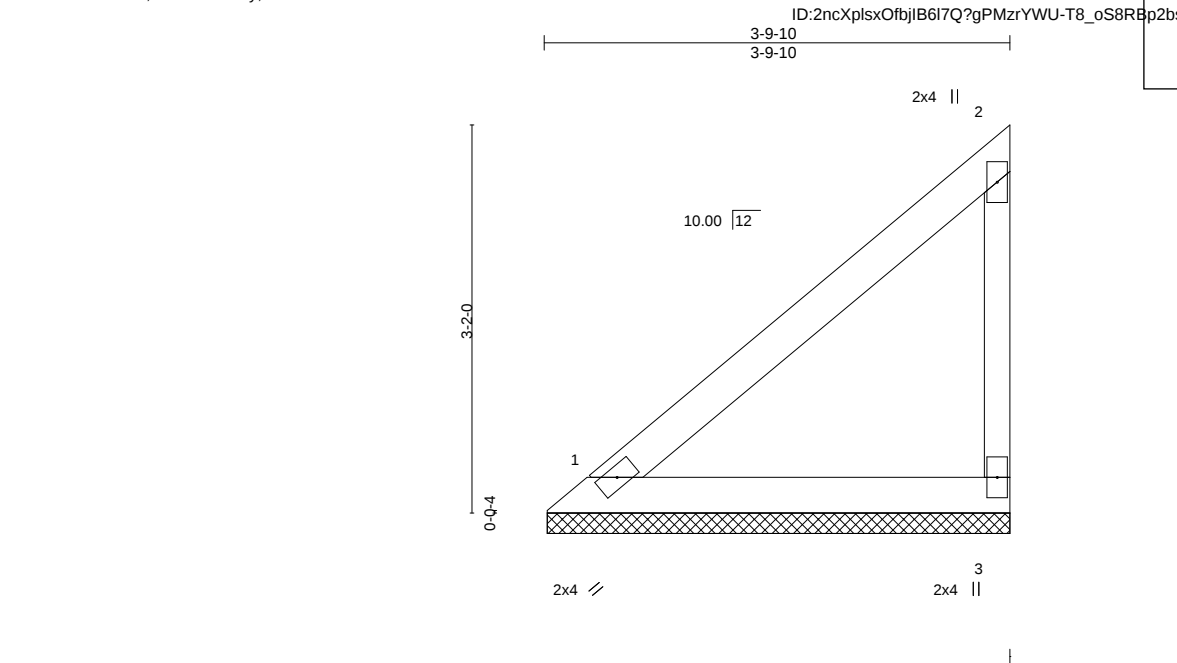
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4
400213	V6	Valley	1	1	
Wheeler Lumber,		Waverly, KS 66871	Job Reference (optional)		

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/22/2020

140861213

Scale = 1:18.8



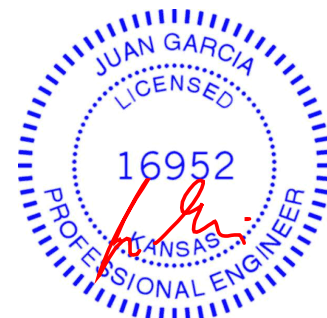
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.20	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						
								Weight: 11 lb	FT = 10%

LUMBER-		BRACING-	
TOP CHORD 2x4 SPF No.2		TOP CHORD	Structural wood sheathing directly applied or 3-9-10 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2		BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2			

REACTIONS.	(size) 1=3-9-5, 3=3-9-5
	Max Horz 1=109(LC 5)
	Max Uplift 1=-4(LC 8), 3=-52(LC 8)
	Max Grav 1=148(LC 1), 3=167(LC 15)

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=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Gable requires continuous bottom chord bearing.
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 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.

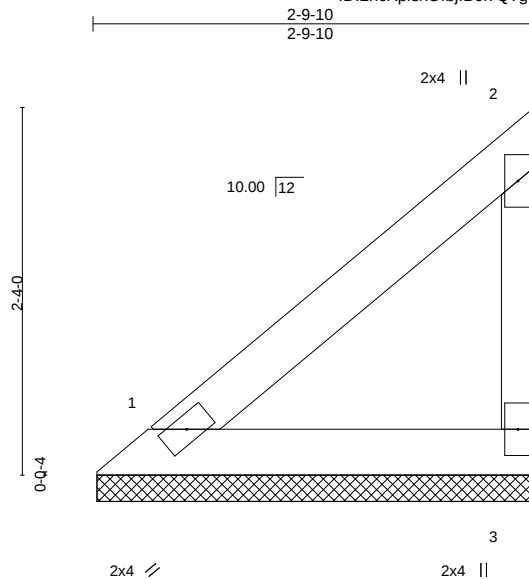


April 3, 2020

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4
400213	V7	Valley	1	1	
Wheeler Lumber,		Waverly, KS 66871	Job Reference (optional)		

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/22/2020

Scale = 1:14.6



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 8 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-9-10 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=2-9-5, 3=2-9-5
 Max Horz 1=76(LC 5)
 Max Uplift 1=-3(LC 8), 3=-36(LC 8)
 Max Grav 1=103(LC 1), 3=116(LC 15)

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=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 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.



April 3, 2020

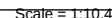
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

**RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW** 140861215
DEVELOPMENT SERVICES
LEE'S SUMMIT TISSOURI
ries, Inc. in App. 140861215 Page 2
jizazozACV6pWnKgKxvGYxYcQcrFzUqtj
04/22/2010



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job

400213

Truss

V9

Truss Type

Valley

Qty

1

Ply

1

Lot

53 H4

Wheeler Lumber,

Waverly, KS 66871

8.240 s Mar 9 2020

MiTek Industries, Inc.

Lee's Summit, Missouri

ID:2ncXplsXOfbIB6l7Q?gPMzrYWU-PX6YtqSSLfraakY_Xtjkl13w4fCeia5nGAAOizUTqh

Job Reference (optional)

8240 s Mar 9 2020 MiTek Industries, Inc. Lee's Summit, Missouri

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

04/22/2020

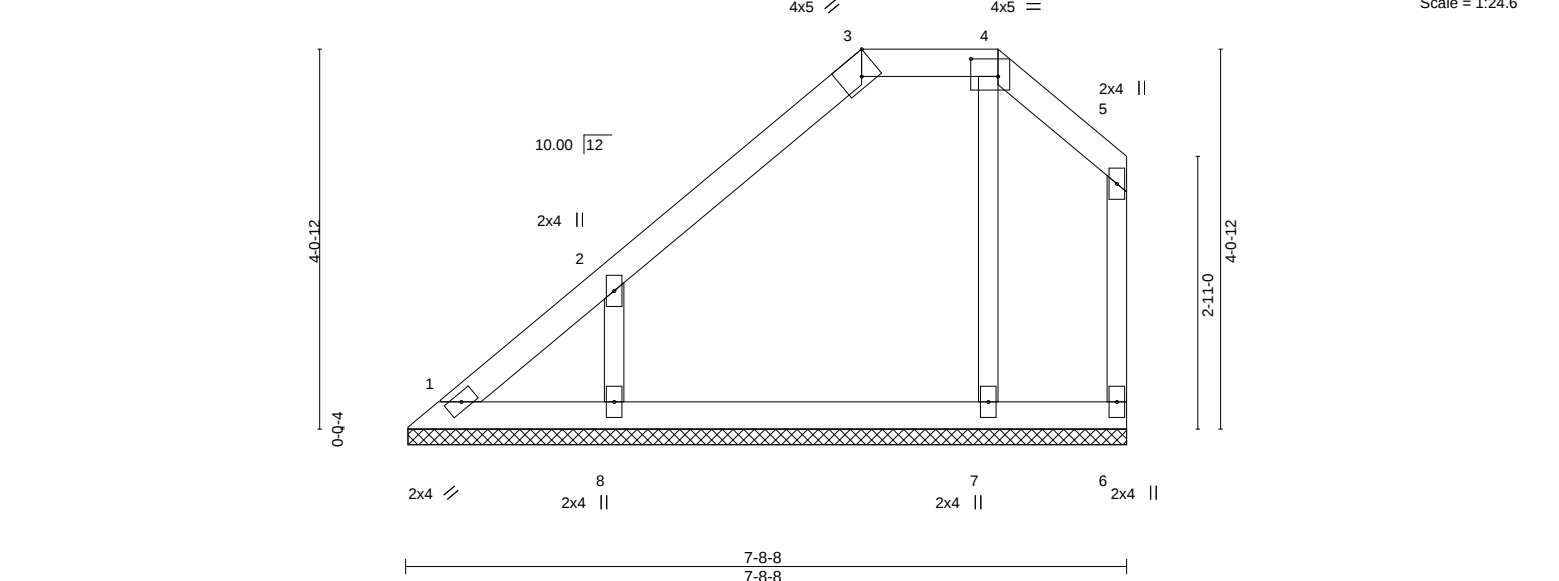


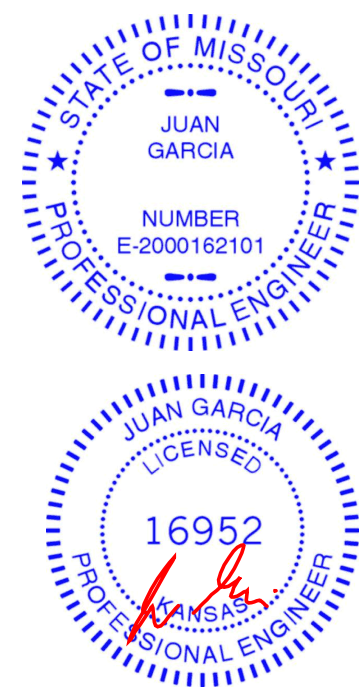
Plate Offsets (X,Y)--		[3:0-2-4,Edge], [4:0-3-8,0-2-4]	
LOADING (psf)		SPACING-	2-0-0
TCLL 25.0		Plate Grip DOL	1.15
TCDL 10.0		Lumber DOL	1.15
BCLL 0.0 *		Rep Stress Incr	YES
BCDL 10.0		Code IRC2018/TPI2014	
		CSI.	
		TC	0.18
		BC	0.08
		WB	0.08
		Matrix-S	
		DEFL.	
		in (loc)	l/defl
		Vert(LL)	n/a
		Vert(CT)	n/a
		Horz(CT)	-0.00
			6 n/a
			n/a
		PLATES	GRIP
		MT20	197/144
		Weight: 25 lb	FT = 10%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x3 SPF No.2		
OTHERS	2x3 SPF No.2		

REACTIONS. All bearings 7-8-3.
 (lb) - Max Horz 1=134(LC 5)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 6, 7 except 8=134(LC 8)
 Max Grav All reactions 250 lb or less at joint(s) 1, 6 except 7=270(LC 1), 8=354(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 2-8=-285/176

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 6, 7 except (jt=lb) 8=134.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 3,2020

Job	Truss	Truss Type	Qty	Ply	Lot 53 H4	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 140861217
400213	V10	Valley	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. File Path: C:\Users\jgarcia\Documents\400213\Truss\400213.dwg
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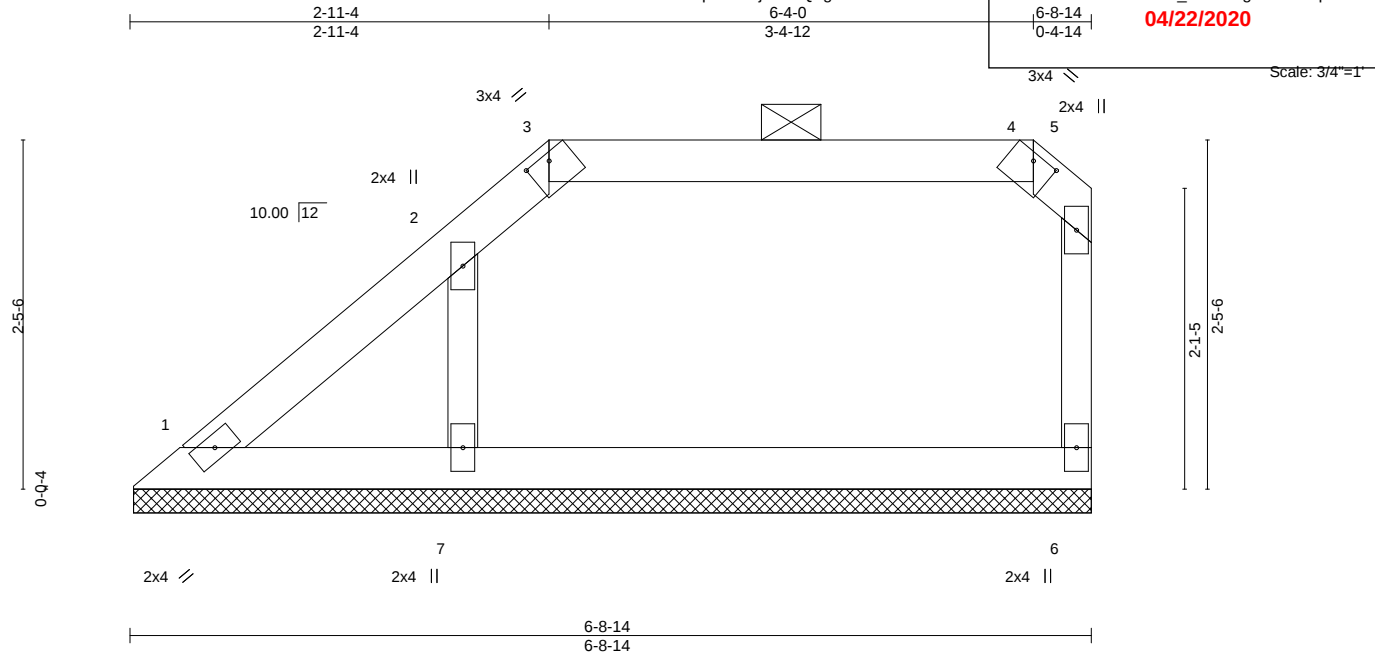


Plate Offsets (X,Y)-- [3:0-2-0,0-0-10], [4:0-2-0,0-0-10]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.19	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	-0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 19 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2
OTHERS 2x3 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) 1=6-8-9, 6=6-8-9, 7=6-8-9
Max Horz 1=82(LC 5)
Max Uplift 1=-8(LC 4), 6=-31(LC 4), 7=-63(LC 5)
Max Grav 1=76(LC 16), 6=182(LC 22), 7=321(LC 21)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 3,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

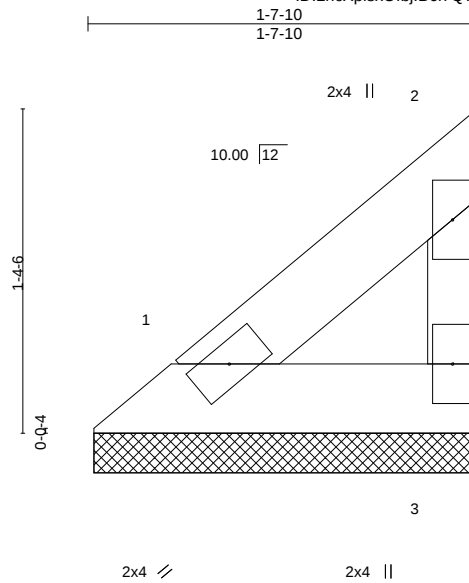
Job	Truss	Truss Type	Qty	Ply	Lot 53 H4
400213	V12	Valley	1	1	

Wheeler Lumber, Waverly, KS 66871

8.240 s Mar 9 2020 MiTek Industries, Inc. 1-800-368-2400

Job Reference (optional)

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/22/2020



Scale = 1/8" = 1'-0"

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.02	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.01	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						
								Weight: 4 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x3 SPF No.2

BRACING-

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

REACTIONS.

(size) 1=1-7-6, 3=1-7-6
 Max Horz 1=38(LC 5)
 Max Uplift 1=-1(LC 8), 3=-18(LC 8)
 Max Grav 1=51(LC 1), 3=57(LC 15)

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=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 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.



April 3, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



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Symbols

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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- 1/8" from outside edge of truss.

This symbol indicates the required direction of slots in connector plates.

* Plate location details available in MitTek 20120 software or upon request.

PLATE SIZE

4 X 4

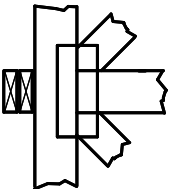
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING



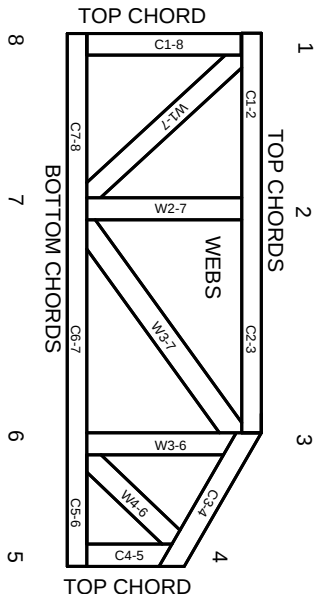
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI.1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System

6-4-8 dimensions shown in ft-in-sixteenths (Drawings not to scale)



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

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MitTek Engineering Reference Sheet: MII-7473 rev. 10/03/2015



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.