

RE: 2830701 C&H/20 OSAGE

Site Information:

Customer: Project Name: 2830701 Lot/Block: Address: City:

Model: Subdivision: State:

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

Design Code: IRC2018/TPI2014 Wind Code: ASCE 7-16 Roof Load: 45.0 psf

Design Program: MiTek 20/20 8.4 Wind Speed: 115 mph Floor Load: N/A psf

This package includes 40 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I46138487	A1	6/18/2021	21	46138507	C3	6/18/2021
2	I46138488	A2	6/18/2021	22	46138508	CJ1	6/18/2021
3	I46138489	A3	6/18/2021	23	46138509	J1	6/18/2021
4	I46138490	A4	6/18/2021	24	46138510	J2	6/18/2021
5	l46138491	A5	6/18/2021	25	I46138511	L1	6/18/2021
6	l46138492	A6	6/18/2021	26	I46138512	PB1	6/18/2021
7	l46138493	A7	6/18/2021	27	I46138513	V1	6/18/2021
8	I46138494	A8	6/18/2021	28	l46138514	V2	6/18/2021
9	I46138495	A9	6/18/2021	29	l46138515	V3	6/18/2021
10	I46138496	A10	6/18/2021	30	l46138516	V4	6/18/2021
11	I46138497	A11	6/18/2021	31	l46138517	V5	6/18/2021
12	I46138498	A12	6/18/2021	32	l46138518	V6	6/18/2021
13	I46138499	B1	6/18/2021	33	l46138519	V7	6/18/2021
14	I46138500	B2	6/18/2021	34	l46138520	V8	6/18/2021
15	I46138501	B3	6/18/2021	35	l46138521	V9	6/18/2021
16	I46138502	B4	6/18/2021	36	l46138522	V10	6/18/2021
17	l46138503	B5	6/18/2021	37	46138523	V11	6/18/2021
18	l46138504	B5A	6/18/2021	38	46138524	V12	6/18/2021
19	l46138505	C1	6/18/2021	39	46138525	V13	6/18/2021
20	l46138506	C2	6/18/2021	40	46138526	V14	6/18/2021

The truss drawing(s) referenced above have been prepared by

MiTek USA, Inc under my direct supervision

based on the parameters provided by Builders FirstSource (Valley Center).

Truss Design Engineer's Name: Sevier, Scott

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







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



16023 Swingley Ridge Rd Chesterfield, MO 63017



BCDL 1	10.0	Code IRC2018/TPI2014	Matrix-S			Weight: 286 lb FT = 20%
LUMBER-				BRACING-		
TOP CHORI	D 2x4 SP	F No.2		TOP CHORD	Structural wood sheathing d	irectly applied or 6-0-0 oc purlins, except
BOT CHORI	D 2x4 SP	F No.2 *Except*			2-0-0 oc purlins (6-0-0 max.)): 14-18.
	31-33: 2	2x6 SPF No.2		BOT CHORD	Rigid ceiling directly applied	or 10-0-0 oc bracing, Except:
NEBS	2x4 SP	F No.2			6-0-0 oc bracing: 31-33.	
OTHERS	2x4 SP	F No.2		WEBS	1 Row at midpt	16-46, 15-47, 13-48, 12-49, 17-45, 19-44,
NEDGE						20-43

Left: 2x4 SPF No.2

REACTIONS. All bearings 55-0-0.

- (Ib) Max Horz 1=-183(LC 17) Max Uplift All uplift 100 lb or less at joint(s) 1, 60, 33, 31, 46, 47, 49, 51, 52, 53, 54, 55, 56, 57, 61, 45, 43, 41, 40, 39, 38, 37, 36, 35, 34 except 62=-113(LC 12)
 - Max Grav All reactions 250 lb or less at joint(s) 1, 60, 31, 46, 47, 48, 49, 51, 52, 53, 54, 55, 56, 57, 61, 45, 44, 43, 41, 40, 39, 38, 37, 36, 35, 34 except 33=321(LC 1), 62=323(LC 25)
- FORCES.
 (lb) Max. Comp./Max. Ten. All forces 250 (lb) or less except when shown.

 TOP CHORD
 10-11=-99/282, 11-12=-114/323, 12-13=-130/365, 13-14=-123/337, 14-15=-123/354, 15-16=-123/354, 16-17=-123/354, 17-18=-123/354, 18-19=-123/337, 19-20=-130/369, 20-21=-114/327, 21-22=-99/286

 WEBS
 30-33=-259/238

- NOTES-
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-0-0 to 5-6-0, Exterior(2N) 5-6-0 to 23-8-4, Corner(3R) 23-8-4 to 29-2-4, Exterior(2N) 29-2-4 to 31-3-12, Corner(3R) 31-3-12 to 36-9-12, Exterior(2N) 36-9-12 to 55-10-8 zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 60, 33, 31, 46, 47, 49, 51, 52, 53, 54, 55, 56, 57, 61, 45, 43, 41, 40, 39, 38, 37, 36, 35, 34 except (jt=lb) 62=113.
- 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 33, 46, 47, 48, 49, 51, 52, 53, 54, 55, 56, Conth Cont at joint(s) 33, 46, 47, 48, 49, 51, 52, 53, 54, 55, 56, Conth Cont at joint(s) 33, 46, 47, 48, 49, 51, 52, 53, 54, 55, 56, Cont at joint(s) 33, 46, 47, 48, 49, 51, 52, 53, 54, 55, 56, Cont at joint(s) 33, 46, 47, 48, 49, 51, 52, 53, 54, 55, 56, Cont at joint(s) 34, 40, 39, 38, 37, 36, 35, 34.





Job	Truss	Truss Type	Qty	Ply	C&H/20 OSAGE	
		- · - · -				146138488
2830701	A2	GABLE	1	1		
					Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,		8.430 s Ap	r 20 2021 MiTek Industries, Inc. Fri May 14 17:42:20 2021	Page 2
		ID:Azt	ADsLrl8Z	CsfDO1ul	d?zcLPf-rxDlkjJ_g8pG36UM09eUWV9zDaKctYHPmoZ0Jnz	GWAn

NOTES-

11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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





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Job	Truss	Truss Type	Qty	Ply	C&H/20 OSAGE		
			_			146138489	
2830701	A3	Piggyback Base	2	1			
					Job Reference (optional)		
Builders FirstSource (Valley Center), Valley Center, KS - 67147,		S - 67147,	8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 17:42:22 2021 Page 2				
		ID:Azb.	ADsLrl8Zr	CsfDO1ulc	I?zcLPf-nKL29OKECm3zJQek8ZgybwFCKOshLLyiD627Ng	JZGWAI	

NOTES-

11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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





WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss system. See MSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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MiTek



I-g-0 2-9-4 2-6-0 3-4 6-8-4 8-2-8 8-6-0 Plate Offsets (X,Y) [3:0-5-0,0-2-4], [4:0-3-0,0-2-9], [10:0-4-2,Edge], [14:0-6-12,0-3-0] 8-6-0 LOADING (psf) SPACING- 2-0-0 CSI. DEFL. in (loc) //defl L/d PLATES TCLL 25.0 Plate Grip DOL 1.15 TC 0.93 Vert(LL) -0.22 14-15 >999 240 MT20 TCDL 10.0 Lumber DOL 1.15 BC 0.96 Vert(CT) -0.45 11-13 >999 180 MT20 BCLL 0.0 Rep Stress Incr YES WB 0.67 Horz(CT) 0.31 10 n/a n/a BCDL 10.0 Code IRC2018/TPI2014 Matrix-S Weight: 200 Weight: 200 Weight: 200	GRIP 197/144 148/108 I7 lb FT = 20%
Plate Offsets (X,Y) 3:0-5-0,0-2-4], [4:0-3-0,0-2-9], [10:0-4-2,Edge], [14:0-6-12,0-3-0] LOADING (psf) SPACING- 2-0-0 CSI. DEFL. in (loc) l/defl L/d PLATES TCLL 25.0 Plate Grip DOL 1.15 TC 0.93 Vert(LL) -0.22 14-15 >999 240 MT20 TCDL 10.0 Lumber DOL 1.15 BC 0.96 Vert(CT) -0.45 11-13 >999 180 MT20HS BCLL 0.0 Rep Stress Incr YES WB 0.67 Horz(CT) 0.31 10 n/a M20HS BCDL 10.0 Code IRC2018/TPI2014 Matrix-S Weight: 207 203 203 203 203 203 203 204	GRIP 197/144 148/108 I7 lb FT = 20%
LOADING (psf) SPACING- TCLL 2-0-0 Plate Grip DOL CSI. DEFL. in (loc) l/defl L/d PLATES TCDL 25.0 Plate Grip DOL 1.15 TC 0.93 Vert(LL) -0.22 14-15 >999 240 MT20 TCDL 10.0 Lumber DOL 1.15 BC 0.96 Vert(CT) -0.45 11-13 >999 180 MT20HS BCDL 10.0 Code IRC2018/TPI2014 Matrix-S Weight: 207 0.31 10 n/a Meight: 207	GRIP 197/144 148/108 17 lb FT = 20%
LUMBER- TOP CHORD 2x4 SPF No.2 *Except* 3-4: 2x4 SPF 1650F 1.5E BRACING- TOP CHORD BOT CHORD 2x4 SPF No.2 *Except* 2-22: 2x4 SPF 1650F 1.5E TOP CHORD Structural wood sheathing directly applied or 2-2- except end verticals, and 2-0-0 oc purlins (2-2-0 BOT CHORD WEBS 2x4 SPF No.2 *Except BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing 2-22: 0 oc bracing: 21-23 7-8-2 oc bracing: 10-11. WEBS 2x4 SPF No.2 -t 3-0-12 10-0-0 oc bracing: 17-20 WEBS WEBS REACTIONS. (size) 24=0-3-8, 10=Mechanical	-2-0 oc purlins, 0 max.): 3-4. ng, Except:
Max Horz 24=-262(LC 13) Max Uplift 24=-223(LC 13), 10=-350(LC 13) Max Grav 24=1728(LC 1), 10=1710(LC 1) FORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-576/186, 2-3=-1213/326, 3-4=-1713/470, 4-5=-1948/466, 5-6=-2859/630, 6-8=-3174/685, 8-10=-3433/725, 1-24=-1465/337 BOT CHORD 23-24=-147/306, 2-23=-1327/303, 20-21=0/461, 17-20=0/461, 15-17=0/1092, 14-15=-329/2598, 5-14=-118/719, 10-11=-584/3022 WERS 4.15=-0/2413/263, 1.14=-450/2721, 6.14=-423/(191, 1-23=-328/1306)	

3-17=-783/163, 3-15=-243/1022, 2-17=-142/1064

NOTES-

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-11-6, Interior(1) 3-11-6 to 7-0-4, Exterior(2R) 7-0-4 to 12-4-13, Interior(1) 12-4-13 to 14-7-12, Exterior(2R) 14-7-12 to 20-0-5, Interior(1) 20-0-5 to 38-0-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

4) All plates are MT20 plates unless otherwise indicated.

5) The Fabrication Tolerance at joint 4 = 8%

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

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

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 24=223, 10=350.

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.







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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-11-6, Interior(1) 3-11-6 to 7-0-4, Exterior(2R) 7-0-4 to 10-9-14, Interior(1) 10-9-14 to 14-7-12, Exterior(2R) 14-7-12 to 18-5-6, Interior(1) 18-5-6 to 37-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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) Refer to girder(s) for truss to truss connections.
- 7) Bearing at joint(s) 25 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) 25=244, 10=311.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.







7-0-4	14-7-12	1	21-4-8	23-9-	14		33-0	-0	34-8-0	38-0-8		
7-0-4	7-7-8		6-8-12	2-5-	6 '		9-2-	2	1-8-0	3-4-8		
[2:0-4-0,0-2-2], [3:0-4-0,0-	-2-2], [11:0-6-1	2,Edge], [13:0-3-0,0)-1-12]									
SPACING- Plate Grip DOL	2-0-0 1.15	CSI. TC 0.54		DEFL. Vert(LL)	in -0.35	(loc) 13-14	l/defl >999	L/d 240	PLATE MT20	s	GRIP 197/144	
Lumber DOL Rep Stress Incr	1.15 YES	BC 0.81 WB 0.83		Vert(CT) Horz(CT)	-0.78 0.09	13-14 10	>578 n/a	180 n/a	Woight:	200 lb	ET - 20%	
Code IRC2018/1P	12014	Mainx-AS							weight.	200 10	FT = 20%	
PF No.2 *Except* 6 SPF No.2 PF No.2 *Except* 2x4 SPF 1650F 1.5E PF No.2				BRACING- TOP CHORE BOT CHORE WEBS))	Structu 2-0-0 o Rigid co 1 Row	ral wood s c purlins (eiling dire at midpt	sheathing dir 3-4-3 max.): ctly applied. 2	rectly applied, 2-3, 7-9. 2-18, 1-19, 4-16	except e	end verticals, a	Ind
e) 10=Mechanical, 19=0 lorz 19=-289(LC 10) lplift 10=-314(LC 13), 19=- grav 10=1699(LC 1), 19=1)-3-8 -242(LC 8) 699(LC 1)											
Comp./Max. Ten All for -1133/325, 2-3=-1540/423 -2846/495, 1-19=-1640/35	ces 250 (lb) or , 3-4=-1764/42 9	less except when sl 5, 4-5=-2493/464, 5	10wn. -7=-3345	/588,								
9=-187/277, 16-18=-134/9 =-242/1434, 10-11=-539/2	81, 14-16=-333 903	3/2232, 13-14=-477/	2690, 12-	13=-118/308,								
=-859/289, 2-16=-225/981 =-390/22, 8-10=-3187/576 =-602/234, 5-13=-45/495	, 3-16=0/284, 7 , 1-18=-286/13	7-13=-1267/342, 11- 91, 4-14=-72/582, 4	13=-449/ -16=-101	3037, 2/306,								
e loads have been conside /ult=115mph (3-second gu gable end zone and C-C i to 14-7-12, Exterior(2R) 14 right exposed;C-C for mer rainage to prevent water p designed for a 10.0 psf bo r truss to truss connections connection (by others) of	ered for this desist) Vasd=91m Exterior(2E) 0- -7-12 to 18-5-6 mbers and force onding. ottom chord live s. truss to bearin	sign. oh; TCDL=6.0psf; B 1-12 to 3-11-6, Inter , Interior(1) 18-5-6 t es & MWFRS for re e load nonconcurrer g plate capable of w	CDL=4.2 ior(1) 3-1 o 37-10-1 actions sl it with any ithstandir	osf; h=25ft; Cat 1-6 to 7-0-4, Ex 2 zone; cantile nown; Lumber I v other live loac ug 100 lb uplift a	. II; Ex terior ver lei DOL= Is. at join	kp C; En (2R) 7-0 ft and rig 1.60 plat t(s) exce	closed; I-4 to 10-9 ght expose te grip ept (jt=lb)	H-14, ed ;	STATE OF	E OF SCOT	MISSOUT M. VIER	
	7-0-4 7-0-4 7-0-4 [2:0-4-0,0-2-2], [3:0-4-0,0 Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TF PEN0.2 *Except* 6 SPF No.2 *Except* 6 SPF No.2 *Except* 7 No.2 *Except* 6 SPF No.2 *Except* 9 10=Mechanical, 19=0 10irz 19=-289(LC 10) plift 10=-314(LC 13), 19= rav 10=1699(LC 1), 19=1 Comp./Max. Ten All for 2846/495, 1-19=-1640/35 2=187/277, 16-18=-134/9 =-242/1434, 10-11=-539/2 =-859/289, 2-16=-225/881 =-300/22, 8-10=-3187/576 =-602/234, 5-13=-45/495 a loads have been consided /ult=115mph (3-second gu gable end zone and C-C 0 14-7-12, Exterior(2R) 14 right exposed;C-C for metrianinge to prevent water p designed for a 10.0 psf bar truss to truss connections connection (by others) of	7.0-4 14-/12 7.0-4 7.7-8 [2:0-4-0,0-2-2], [3:0-4-0,0-2-2], [11:0-6-1 SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Lumber DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014 2 PF No.2 *Except* 2 6 SPF No.2 *Except* 2x4 SPF 1650F 1.5E > PF No.2 *Except* e) 10=Mechanical, 19=0-3-8 forz 19=-289(LC 10) plift 10=-314(LC 13), 19=-242(LC 8) rav 10=1699(LC 1), 19=-1699(LC 1) Comp./Max. Ten All forces 250 (lb) or r1133/325, 2-3=-1540/423, 3-4=-176/42 :2846/495, 1-19=-1640/359 =-187/277, 16-18=-134/981, 14-16=-333 :=242/1434, 10-11=-539/2903 :=890/289, 2-16=-225/981, 3-16=0/284, 7 :=390/22, 8-10=-3187/576, 1-18=-286/13 :=602/234, 5-13=-45/495 e) loads have been considered for this dest/ult=115mph (3-second gust) Vasd=91mg gable end zone and C-C Exterior(2E)	7-04 14-1/12 7-04 7-7.8 [2:0-4-0,0-2-2], [3:0-4-0,0-2-2], [11:0-6-12,Edge], [13:0-3-0,0] SPACING- Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES WB 0.83 Code IRC2018/TPI2014 WB PF No.2 *Except* 6 SPF No.2 PF No.2 *Except* 2x4 SPF 1650F 1.5E PF No.2 PS No.2 No.2	14-712 214-78 7-0-4 7-7-8 6-8-12 [2:0-4-0,0-2-2], [3:0-4-0,0-2-2], [11:0-6-12,Edge], [13:0-3-0,0-1-12] SPACING- 2-0-0 CSI. Plate Grip DOL 1.15 TC 0.54 Lumber DOL 1.15 TC 0.54 Lumber DOL 1.15 BC 0.81 Rep Stress Incr YES WB 0.83 Code IRC2018/TPI2014 Matrix-AS Matrix-AS PF No.2 *Except* 2x4 SPF 1650F 1.5E YF No.2 PF No.2 *Except* 2x4 SPF 1650F 1.5E PF No.2 *Except* 2x4 SPF 1650F 1.5E PF No.2 *Except* 2x4 SPF 1650F 1.5E 2xF No.2 *Except* 2	144/12 144/12 144/12 144/12 1239 7-0-4 7.7-8 6-8-12 2-5 [2:0-4-0,0-2-2], [3:0-4-0,0-2-2], [11:0-6-12,Edge], [13:0-3-0,0-1-12] DEFL. Vert(LL) Plate Grip DOL 1.15 TC 0.54 Vert(LL) Lumber DOL 1.15 TC 0.54 Vert(LL) Rep Stress Incr YES WB 0.83 Horz(CT) Code IRC2018/TPI2014 Matrix-AS BRACING- PF No.2 *Except* BOT CHORE TOP CHORE 6 SPF No.2 PF No.2 WEBS PF No.2 PF No.2 *Except* BOT CHORE a) 10=Mechanical, 19=0-3-8 WEBS PF No.2 b) 10=Mechanical, 19=0-3-8 PS PR NO.2 PS PR NO.2 <t< td=""><td>r-0-4 14-7-12 214-8 23-9-14 7-0-4 7-7-8 6-8-12 2-5-6 [2:0-4-0,0-2-2], [3:0-4-0,0-2-2], [11:0-6-12,Edge], [13:0-3-0,0-1-12] Image: Construct of the state of the state</td><td>144 144/12 144/8 13914 7.04 7.78 68-12 2.56 [2:0-4-0,0-2-2], [3:0-4-0,0-2-2], [11:0-6-12,Edge], [13:0-3-0,0-1-12] DEFL. in (loc) Plate Grip DOL 1.15 TC 0.54 Lumber DOL 1.15 BC 0.81 Rep Stress Incr YES WB 0.83 Horz(CT) 0.09 Code IRC2018/TPI2014 Matrix-AS BRACING- FNo.2 *Except* BOT CHORD Structu 6 SPF No.2 Proc.2 2-0-0 PK No.2 *Except* BOT CHORD Structu 2x4 SPF 1650F 1.5E WEBS 1 Row PF No.2 10=Mechanical, 19=0-3-8 0T CHORD Rigid c rorz 19=-289(LC 10) pilit 10=-314(LC 13), 19=-242(LC 8) WEBS 1 Row rav 10=1699(LC 1), 19=1699(LC 1) Comp./Max. Ten All forces 250 (lb) or less except when shown. .1133/325, 2-3=-1540/423, 3-4=-176/425, 4-5=-2493/464, 5-7=-3345/588, 244/495, 1-13=-1449/3037, =-390/22, 8-10=-328/9(C2) .133/2232, 13-14=-477/2690, 12-13=-118/308, =-242/1434, 10-11=-539/2903 =-359/228, 2-16=-225/981, 3-16=-0/284, 7-13=-1267/342, 11-13=-449/3037, =-390/22, 8-10=-318/766, 1-18=-286/1391, 4-14=-72/582, 4-16=-1012/306, =-602/234, 5-13=-45/495 e loa</td><td>7:0-4 + 14:7:12 + 21:4:8 2:3:9:14 3:3:0 7:0-4 7:7:0:4 - 7:7:0:4 - 3:5:0 - 3:5:0 [2:0:4-0.0:2-2], [3:0:4-0.0:2-2], [11:0:6-12, Edge], [13:0:3-0,0-1:12] 2:5:6 9:2:0 9:2:0 SPACING- 2:0:0 CSI. DEFL. in (loc) 1/defl 9:99 Lumber DOL 1.15 BC 0.81 Vert(LL) -0:35 1:4:3 >578 Rep Stress Incr YES WB 0.83 Horz(CT) 0.09 10 n/a Code IRC2018/TPI2014 Matrix-AS BRACING- 2:0:0 co purtins (YF No.2 *Except* BOT CHORD Structural wood : 2:0:0 co purtins (6 SPF No.2 WEBS 1 Row at midpt YEBS 1 Row at midpt YF No.2 *Except* BOT CHORD Rigid ceiling dire 2:0:0 co purtins (Vert (LC 13), 19=-242(LC 8) WEBS 1 Row at midpt YF No.2 10=Mechanical, 19=0:3:8 1 Row at midpt YF No.2 5:80 10:0 r less except when shown. 1:13:3:3:2:3:2:3:3:4:4:4:7:2:6:3:3:4:3:4:5:5:8; YE No.2 10=Mechanical,</td><td>17:04 14:7/12 14:81 12:9:44 3:3:40 7:04 7:7.8 6:8:12 2:5:6 9:2:2 [2:0:4:0,0:2:2], [3:0:4:0,0:2:2], [1:0:6:12,Edge], [1:3:0:3:0,0:0:1:12] 0 9:2:0:0:0:0:0:0:0:0:0:0:0:0:0:0:0:0:0:0:</td><td>1/0-4 + 12/-12 21-48 23-914 33-00 94-90 1/2-04 -77-8 6-8-12 2-5-6 9-2.2 11-8-0 1/2-04 0.0-2-21, [3:0-4-0,0-2-21, [11:0-6-12, Edge], [13:0-3-0,0-1-12] 92.2 11-8-0 92.2 11-8-0 Plate Grip DOL 1.15 TC 0.54 Vert(L1) -0.53 13-14 >59.92 24.0 Plate Grip DOL 1.15 BC 0.61 Vert(CT) -0.78 13-14 >57.8 180 Rep Stress Incr YES WB 0.83 Horz(CT) 0.09 10 n/a n/a Verticit Matrix-AS WB 0.83 Horz(CT) 0.09 10 n/a n/a F No.2 *Except* BOT CHORD Structural wood sheathing directly applied, 20-0 op purling (3-4-3 max.): 2-3, 7-9. BOT CHORD Rigid ceiling directly applied, 20-0 op purling (3-4-3 max.): 2-3, 7-9. F No.2 *Except* BOT CHORD Rigid ceiling directly applied, 20-0 op purling (3-4-3 max.): 2-3, 7-9. BOT CHORD Rigid ceiling directly applied, 20-0 op purling (3-4-3 max.): 2-3, 7-9. P No.2 *Except* BOT CHORD <</td><td>1/3-4 14/1/2 14/48 23/9/14 33/9/0 p4/8/9/1 63/9/2 1/2-04 1/2-04 2-5/6 9-22 1/4-0/1 3/4-8 1/2-04 0.0-2-2], [3/0-4-0.0-2-2], [11/0-6-12,Edge], [13/0-3-0,0-1-12] 0.6-12 2-5/6 9-22 1/4-0/1 3/4-8 1/2-04 0.0-2-2], [3/0-4-0.0-2-2], [11/0-6-12,Edge], [13/0-3-0,0-1-12] 0.6-12 2-5/6 9-22 1/4-0/1 3/4-8 1/2-04 0.0-2-2], [3/0-4-0.0-2-2], [11/0-6-12,Edge], [13/0-3-0,0-1-12] 0.6-12 0.2-2 3/4-8 0.2-2 1/4-0/1 3/4-8 0.2-2 1/4-0/1 3/4-8 0.2-2 0.</td><td>7.0-4 + 107-12 + 21-14-9 22-9-14 30-00 34-8 7.0-4 - 7-7-8 22-9-6 9-22 1-0-0 3-4-9 12:0-4-0,02-2], [3:0-4-0,02-2], [11:0-6-12,Edge], [13:0-3-0.0-1-12] - - PLate Grp DoL 1.15 Col. 54 Vert(L1) -0.378 13-14 >599 240 MT20 197/144 Lumber DOL 1.15 BC 0.81 Vert(CT) -0.78 13-14 >599 240 Weight: 200 Ib FT = 20% Rep Stress Incr VES WB 0.83 Vert(CT) -0.78 13-14 >599 240 Weight: 200 Ib FT = 20% F No.2 *Except* BC 0.81 Vert(LD) 0.03 10 n/a Weight: 200 Ib FT = 20% PF No.2 *Except* BC T CHORD Structural wood sheathing directly applied, except end verticals, a 2-0-0 op urifing (3-4.3 max): 2-3, 7-9. WEBS 1 Row at midpt 2-18, 1-19, 4-16 244 SP 1650F 1.5E BC T CHORD Structural wood sheathing directly applied, except end verticals, a 2-20-10 curific (3-4.3 max): 2-3, 7-9. 2-18, 1-19, 4-16 2-18, 1-19, 4-16 Comp./Max. Ten All forces 250 (lb) or less except when sho</td></t<>	r-0-4 14-7-12 214-8 23-9-14 7-0-4 7-7-8 6-8-12 2-5-6 [2:0-4-0,0-2-2], [3:0-4-0,0-2-2], [11:0-6-12,Edge], [13:0-3-0,0-1-12] Image: Construct of the state	144 144/12 144/8 13914 7.04 7.78 68-12 2.56 [2:0-4-0,0-2-2], [3:0-4-0,0-2-2], [11:0-6-12,Edge], [13:0-3-0,0-1-12] DEFL. in (loc) Plate Grip DOL 1.15 TC 0.54 Lumber DOL 1.15 BC 0.81 Rep Stress Incr YES WB 0.83 Horz(CT) 0.09 Code IRC2018/TPI2014 Matrix-AS BRACING- FNo.2 *Except* BOT CHORD Structu 6 SPF No.2 Proc.2 2-0-0 PK No.2 *Except* BOT CHORD Structu 2x4 SPF 1650F 1.5E WEBS 1 Row PF No.2 10=Mechanical, 19=0-3-8 0T CHORD Rigid c rorz 19=-289(LC 10) pilit 10=-314(LC 13), 19=-242(LC 8) WEBS 1 Row rav 10=1699(LC 1), 19=1699(LC 1) Comp./Max. Ten All forces 250 (lb) or less except when shown. .1133/325, 2-3=-1540/423, 3-4=-176/425, 4-5=-2493/464, 5-7=-3345/588, 244/495, 1-13=-1449/3037, =-390/22, 8-10=-328/9(C2) .133/2232, 13-14=-477/2690, 12-13=-118/308, =-242/1434, 10-11=-539/2903 =-359/228, 2-16=-225/981, 3-16=-0/284, 7-13=-1267/342, 11-13=-449/3037, =-390/22, 8-10=-318/766, 1-18=-286/1391, 4-14=-72/582, 4-16=-1012/306, =-602/234, 5-13=-45/495 e loa	7:0-4 + 14:7:12 + 21:4:8 2:3:9:14 3:3:0 7:0-4 7:7:0:4 - 7:7:0:4 - 3:5:0 - 3:5:0 [2:0:4-0.0:2-2], [3:0:4-0.0:2-2], [11:0:6-12, Edge], [13:0:3-0,0-1:12] 2:5:6 9:2:0 9:2:0 SPACING- 2:0:0 CSI. DEFL. in (loc) 1/defl 9:99 Lumber DOL 1.15 BC 0.81 Vert(LL) -0:35 1:4:3 >578 Rep Stress Incr YES WB 0.83 Horz(CT) 0.09 10 n/a Code IRC2018/TPI2014 Matrix-AS BRACING- 2:0:0 co purtins (YF No.2 *Except* BOT CHORD Structural wood : 2:0:0 co purtins (6 SPF No.2 WEBS 1 Row at midpt YEBS 1 Row at midpt YF No.2 *Except* BOT CHORD Rigid ceiling dire 2:0:0 co purtins (Vert (LC 13), 19=-242(LC 8) WEBS 1 Row at midpt YF No.2 10=Mechanical, 19=0:3:8 1 Row at midpt YF No.2 5:80 10:0 r less except when shown. 1:13:3:3:2:3:2:3:3:4:4:4:7:2:6:3:3:4:3:4:5:5:8; YE No.2 10=Mechanical,	17:04 14:7/12 14:81 12:9:44 3:3:40 7:04 7:7.8 6:8:12 2:5:6 9:2:2 [2:0:4:0,0:2:2], [3:0:4:0,0:2:2], [1:0:6:12,Edge], [1:3:0:3:0,0:0:1:12] 0 9:2:0:0:0:0:0:0:0:0:0:0:0:0:0:0:0:0:0:0:	1/0-4 + 12/-12 21-48 23-914 33-00 94-90 1/2-04 -77-8 6-8-12 2-5-6 9-2.2 11-8-0 1/2-04 0.0-2-21, [3:0-4-0,0-2-21, [11:0-6-12, Edge], [13:0-3-0,0-1-12] 92.2 11-8-0 92.2 11-8-0 Plate Grip DOL 1.15 TC 0.54 Vert(L1) -0.53 13-14 >59.92 24.0 Plate Grip DOL 1.15 BC 0.61 Vert(CT) -0.78 13-14 >57.8 180 Rep Stress Incr YES WB 0.83 Horz(CT) 0.09 10 n/a n/a Verticit Matrix-AS WB 0.83 Horz(CT) 0.09 10 n/a n/a F No.2 *Except* BOT CHORD Structural wood sheathing directly applied, 20-0 op purling (3-4-3 max.): 2-3, 7-9. 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P No.2 *Except* BOT CHORD <	1/3-4 14/1/2 14/48 23/9/14 33/9/0 p4/8/9/1 63/9/2 1/2-04 1/2-04 2-5/6 9-22 1/4-0/1 3/4-8 1/2-04 0.0-2-2], [3/0-4-0.0-2-2], [11/0-6-12,Edge], [13/0-3-0,0-1-12] 0.6-12 2-5/6 9-22 1/4-0/1 3/4-8 1/2-04 0.0-2-2], [3/0-4-0.0-2-2], [11/0-6-12,Edge], [13/0-3-0,0-1-12] 0.6-12 2-5/6 9-22 1/4-0/1 3/4-8 1/2-04 0.0-2-2], [3/0-4-0.0-2-2], [11/0-6-12,Edge], [13/0-3-0,0-1-12] 0.6-12 0.2-2 3/4-8 0.2-2 1/4-0/1 3/4-8 0.2-2 1/4-0/1 3/4-8 0.2-2 0.	7.0-4 + 107-12 + 21-14-9 22-9-14 30-00 34-8 7.0-4 - 7-7-8 22-9-6 9-22 1-0-0 3-4-9 12:0-4-0,02-2], [3:0-4-0,02-2], [11:0-6-12,Edge], [13:0-3-0.0-1-12] - - PLate Grp DoL 1.15 Col. 54 Vert(L1) -0.378 13-14 >599 240 MT20 197/144 Lumber DOL 1.15 BC 0.81 Vert(CT) -0.78 13-14 >599 240 Weight: 200 Ib FT = 20% Rep Stress Incr VES WB 0.83 Vert(CT) -0.78 13-14 >599 240 Weight: 200 Ib FT = 20% F No.2 *Except* BC 0.81 Vert(LD) 0.03 10 n/a Weight: 200 Ib FT = 20% PF No.2 *Except* BC T CHORD Structural wood sheathing directly applied, except end verticals, a 2-0-0 op urifing (3-4.3 max): 2-3, 7-9. WEBS 1 Row at midpt 2-18, 1-19, 4-16 244 SP 1650F 1.5E BC T CHORD Structural wood sheathing directly applied, except end verticals, a 2-20-10 curific (3-4.3 max): 2-3, 7-9. 2-18, 1-19, 4-16 2-18, 1-19, 4-16 Comp./Max. Ten All forces 250 (lb) or less except when sho

referenced standard ANSI/TPI 1.

8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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



May 17,2021





Max Horz 19=-288(LC 10) Max Uplift 19=-242(LC 8), 10=-315(LC 13) Max Grav 19=1699(LC 1), 10=1699(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-1133/324, 2-3=-1541/422, 3-4=-1763/423, 4-5=-2479/465, 5-7=-3333/595, 7-8=-2525/438, 1-19=-1640/359

 BOT CHORD
 18-19=-190/277, 16-18=-145/980, 14-16=-342/2227, 13-14=-464/2636, 12-13=-109/290, 8-11=-223/1385, 10-11=-483/2575

 WEBS
 2-18=-859/289, 2-16=-224/983, 3-16=0/283, 7-13=-1036/293, 11-13=-447/2915, 7-11=-756/95, 8-10=-2920/530, 1-18=-286/1390, 4-14=-82/601, 4-16=-1004/302, 5-14=-583/223, 5-13=-74/514

NOTES-

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-11-6, Interior(1) 3-11-6 to 7-0-4, Exterior(2R) 7-0-4 to 10-9-14, Interior(1) 10-9-14 to 14-7-12, Exterior(2R) 14-7-12 to 18-5-6, Interior(1) 18-5-6 to 37-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 3) Provide adequate drainage to prevent water ponding.4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 19=242, 10=315.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.







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	1-15=-1040/550
BOT CHORD	14-15=-168/281, 13-14=-9/985, 11-13=-265/2265, 9-11=-521/2994, 8-9=-521/2994
WEBS	2-14=-867/273, 2-13=-263/985, 3-13=0/300, 6-11=-805/279, 6-9=0/305, 1-14=-265/1397,
	4-11=-51/528 4-13=-1050/336

NOTES-

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-11-6, Interior(1) 3-11-6 to 7-0-4, Exterior(2R) 7-0-4 to 12-4-13, Interior(1) 12-4-13 to 14-7-12, Exterior(2R) 14-7-12 to 20-0-5, Interior(1) 20-0-5 to 38-0-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

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

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

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=251, 8=334.

7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MIT-74/3 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITER® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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Job	Truss	Truss Type	Qty	Ply	C&H/20 OSAGE	
						146138497
2830701	A11	Piggyback Base Supported Gable	2	1		
					Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,		3.430 s Ap	r 20 2021 MiTek Industries, Inc. Fri May 14 17:42:16 2021	Page 2
		ID:Azi	oADsLrl8Z	rCsfDO1u	Id?zcLPf-yAznuLGUcwJqbVAbnJZYLf?FNzyMxmhqrAbpA0)zGWAr

NOTES-

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





Scale = 1:84.6



I	5-9-1 8-4-2 11-2-11 1 5-9-1 2-7-1 2-10-9	6-8-4 <u>24-3-12</u> 5-5-9 7-7-8	<u>30-11-10</u> 6-7-14	32-6-2 37-7-8 1-6-8 5-1-6	<u>38-7-840-8-8</u> 44-3-6 48-0-0
Plate Offsets (X,Y)	[1:0-3-0,0-1-12], [2:0-4-0,Edge], [4:0-4	-0,0-2-2], [5:0-4-0,0-2-2], [16:	0-3-8,0-3-0], [17:0-3-8,0	-2-0]	
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.94 BC 0.75 WB 0.71 Matrix-AS	DEFL. in Vert(LL) -0.45 1 Vert(CT) -0.85 1 Horz(CT) 0.36	(loc) l/defl L/d 1-12 >999 240 1-12 >670 180 10 n/a n/a	PLATES GRIP MT20 197/144 MT20HS 148/108 MT18HS 197/144 Weight: 250 lb FT = 20%
LUMBER- TOP CHORD 2x4 SF 4-5: 2x 8-10: 2 BOT CHORD 2x4 SF 9-13: 2 WEBS 2x4 SF 9-13: 2 WEBS 2x4 SF 2x4 SF OTHERS LBR SCAB 8-10 23 REACTIONS. (size	PF No.2 *Except* 6 SPF No.2, 5-6,6-8: 2x4 SPF 1650F 1 x8 SP 2400F 2.0E PF No.2 *Except* x4 SP 2400F 2.0E, 13-16: 2x4 SPF 16 PF No.2 2400F 2.0E x8 SP 2400F 2.0E one side e) 10=0-3-8, 18=0-3-8	.5E 50F 1.5E	BRACING- TOP CHORD S2 BOT CHORD F WEBS 1	Structural wood sheathing 2-0-0 oc purlins (3-11-7 ma Rigid ceiling directly applie 1 Row at midpt	directly applied, except end verticals, and ix.): 4-5. d. 3-15, 7-14, 8-12
Max H Max U Max G	orz 18=-203(LC 13) plift 10=-393(LC 13), 18=-336(LC 12) rav 10=2151(LC 1), 18=2147(LC 1)				
FORCES. (lb) - Max. TOP CHORD 1-3=- 8-9=- BOT CHORD 17-18 9-11 9-11 WEBS 4-15= 7-12=	Comp./Max. Ten All forces 250 (b) 6 3012/527, 3-4=-2930/582, 4-5=-2859/ 6258/1131, 9-10=-818/172, 1-18=-206 3=-70/260, 15-17=-403/2689, 14-15=-2 =-1013/6026 =-37/358, 4-14=-205/632, 5-14=-67/654 =-54/686, 7-14=-1432/408, 8-11=0/303	or less except when shown. 523, 5-7=-3228/626, 7-8=-449 4/384 53/2589, 12-14=-526/4050, 1 4, 1-17=-391/2634, 3-17=-524 , 8-12=-2052/499	5/798, 1-12=-1009/6038, /178,		
NOTES- 1) Attached 7-9-8 scab 0-0-12 from end at ju 2) Unbalanced roof live 3) Wind: ASCE 7-16; W MWFRS (envelope) 23-5-11, Interior(1) 2 exposed ; end vertic grip DOL=1.60 4) Provide adequate dh 5) All plates are MT20 6) This truss has been 7) Bearing at joint(s) 10 capacity of bearing s 8) Provide mechanical 10=393, 18=336. 9) This truss is designer referenced standard Continued on page 2	8 to 10, front face(s) 2x8 SP 2400F 2. bint 8, nail 2 row(s) at 2" o.c. for 5-8-14 loads have been considered for this of fult=115mph (3-second gust) Vasd=91 gable end zone and C-C Exterior(2E) 23-5-11 to 24-3-12, Exterior(2R) 24-3-1 al left and right exposed;C-C for memb rainage to prevent water ponding. plates unless otherwise indicated. designed for a 10.0 psf bottom chord I 0, 18 considers parallel to grain value u surface. connection (by others) of truss to bear ed in accordance with the 2018 Interna ANSI/TPI 1.	0E with 2 row(s) of 10d (0.13 - esign. mph; TCDL=6.0psf; BCDL=4. 0-1-12 to 4-11-6, Interior(1) 4- 2 to 31-1-3, Interior(1) 31-1-3 bers and forces & MWFRS for ve load nonconcurrent with an using ANSI/TPI 1 angle to grain ing plate capable of withstand tional Residential Code section	"x3") nails spaced 9" o. 2psf; h=25ft; Cat. II; Exp 11-6 to 16-8-4, Exteriori to 47-10-4 zone; cantile reactions shown; Lumb ny other live loads. n formula. Building des ing 100 lb uplift at joint(ns R502.11.1 and R802	c.except : starting at c; Enclosed; (2R) 16-8-4 to ever left and right er DOL=1.60 plate igner should verify s) except (jt=lb) 2.10.2 and	PE-2001018807 May 17,2021
WARNING - Verify Design valid for use o a truss system. Before	design parameters and READ NOTES ON THIS AI nly with MiTek® connectors. This design is based a use, the building designer must verify the applic	ND INCLUDED MITEK REFERENCE P only upon parameters shown, and is ability of design parameters and prop	AGE MII-7473 rev. 5/19/2020 E for an individual building comp rly incorporate this design into	BEFORE USE. ponent, not o the overall	MII

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



Job	Truss	Truss Type	Qty	Ply	C&H/20 OSAGE	
						146138498
2830701	A12	Piggyback Base	2	1		
					Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,		8.430 s Ap	or 20 2021 MiTek Industries, Inc. Fri May 14 17:42:18 2021	Page 2
		ID:AzbA	DsLrl8ZrC	sfDO1uld?	?zcLPf-vY5YJ1Hk8XZYqpKzvkc0R44RQnUYPWq7IU4wEu;	zGWAp

NOTES-

10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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





WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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 IOP CHORD
 2x4 SPF No.2

 BOT CHORD
 2x4 SPF No.2

 WEBS
 2x4 SPF No.2

 SLIDER
 Left 2x4 SPF No.2 -t 2-0-0, Right 2x4 SPF No.2 -t 2-0-2

BRACING-TOP CHORD BOT CHORD WEBS

Structural wood sheathing directly applied.Rigid ceiling directly applied.1 Row at midpt5-11, 3-11

REACTIONS. (size) 1=0-3-8, 10=0-3-8 Max Horz 1=244(LC 9) Max Uplift 1=-157(LC 12), 10=-248(LC 13) Max Grav 1=906(LC 1), 10=1614(LC 1)

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

TOP CHORD 1-3=-1018/226, 3-5=-672/193, 5-7=-679/224, 7-9=-274/466

BOT CHORD 1-13=-262/1011, 11-13=-262/1011, 10-11=-258/256, 9-10=-258/256

WEBS 7-11=-136/796, 7-10=-1431/461, 3-13=0/272, 3-11=-617/291

NOTES-

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 14-0-0, Exterior(2R) 14-0-0 to 17-0-0, Interior(1) 17-0-0 to 28-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=157, 10=248.

5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=158, 7=149.

5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses sand truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

16023 Swingley Ridge Rd Chesterfield, MO 63017



- Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 1-4-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 30, 31, 32, 34, 35, 36, 28, 27, 26, 25, 24, 23, 20 except (jt=lb) 37=117, 22=103.
- 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.







NOTES-

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 11-0-0, Exterior(2R) 11-0-0 to 14-0-0, Interior(1) 14-0-0 to 22-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=172, 8=172.

5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



May 17,2021





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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 11-0-0, Exterior(2R) 11-0-0 to 14-0-0, Interior(1) 14-0-0 to 22-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=152, 7=152.

5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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16023 Swingley Ridge Rd Chesterfield, MO 63017

MiTek

Job	Truss	Truss Type	Qty	Ply	C&H/20 OSAGE	
						146138505
2830701	C1	ROOF SPECIAL GIRDER	2	3		
				J	Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,		8.430 s Ap	or 20 2021 MiTek Industries, Inc. Fri May 14 17:42:39 2021	Page 2

ID:AzbADsLrl8ZrCsfDO1uld?zcLPf-nbsUjCXvC_CZr1R?deUxnWS5SEkfq5qC7FgXUBzGWAU

LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: 3-11=-70, 3-14=-70, 1-8=-20, 17-20=-20, 5-6=-20 Concentrated Loads (lb)

Vert: 17=-1685(F) 19=-1679(F) 23=-1679(F) 24=-1679(F) 25=-1679(F) 26=-1686(F)

L	2-3-8		6-0-8	7-3-8	11-0-8	13-4-0	
	2-3-8		3-9-0	1-3-0	3-9-0	2-3-8	
Plate Offsets (X,Y) [2:0-0-0,0-1-5], [2:0-2-2,0-6-2], [3:0-4-0,Edge], [6:0-4-0,Edge], [7:0-0-0,0-1-5], [7:0-2-2,0-6-2]							
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- Plate Grip DO Lumber DOL Rep Stress Ind Code IRC201	2-0-0 L 1.15 1.15 cr YES 8/TPI2014	CSI. TC 0.66 BC 0.89 WB 0.06 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) l/defl L/c -0.15 12-13 >999 240 -0.27 12-13 >575 180 0.23 7 n/a n/a	H PLATES MT20 Weight: 46 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD BRACING- 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2 WEBS 2x4 SPF No.2 WEDS 2x4 SPF No.2 BOT CHORD Rigid ceiling directly applied or 10-0- oc br 100 0 no broging 10 11							7 oc purlins, except Except:

Left: 2x4 SPF No.2 , Right: 2x4 SPF No.2

REACTIONS. (size) 2=0-3-8, 7=0-3-8

Max Horz 2=50(LC 12) Max Uplift 2=-124(LC 12), 7=-124(LC 13) Max Grav 2=658(LC 1), 7=658(LC 1)

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

- TOP CHORD 2-3=-373/129, 3-4=-1168/320, 4-5=-1041/341, 5-6=-1169/318, 6-7=-373/126
- BOT CHORD 3-13=-217/1051, 12-13=-217/1051, 11-12=-216/1040, 10-11=-211/1053, 6-10=-211/1053

NOTES-

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-0-8, Exterior(2E) 6-0-8 to 7-3-8, Exterior(2R) 7-3-8 to 11-6-7, Interior(1) 11-6-7 to 14-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=124, 7=124.

6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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

L	2-3-8	4-0-8		9-3-8			11-0-8	13-4-0	
1	2-3-8	1-9-0		5-3-0		1	1-9-0	2-3-8	1
Plate Offsets (X,Y)	[3:0-1-9,0-3-15], [4:0-6-0,0	0-2-6], [6:0-1-9),0-3-15]						
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TP	2-0-0 1.15 1.15 NO 12014	CSI. TC 0.85 BC 0.69 WB 0.10 Matrix-S	DEFL. Vert(LL) -(Vert(CT) -(Horz(CT) (in (loc) 0.15 10-11 0.28 10-11 0.19 7	l/defl >999 >552 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 51 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD 2x6 SF 4-5: 2x	PF 2100F 1.8E *Except*			BRACING- TOP CHORD	Structu	iral wood	sheathing di	rectly applied or 4-9-9	oc purlins, except
BOT CHORD 2x4 SF 3-6: 2x WEBS 2x4 SF	2F No.2 *Except* 4 SPF 1650F 1.5E 2F No.2			BOT CHORD	Rigid c	eiling dire	ectly applied	or 6-0-0 oc bracing.	
REACTIONS. (siz Max H Max U Max G	e) 2=0-3-8, 7=0-3-8 orz 2=-36(LC 30) plift 2=-270(LC 8), 7=-270 rav 2=1055(LC 1), 7=105)(LC 9) 5(LC 1)							
FORCES.(lb) - Max.TOP CHORD2-3=-BOT CHORD3-11=WEBS4-11=	Comp./Max. Ten All ford 457/154, 3-4=-2918/798, 4 =-733/2817, 10-11=-742/28 =-80/390, 5-10=-89/412	ces 250 (lb) or 4-5=-2849/788 866, 6-10=-725	less except when shown , 5-6=-2901/791, 6-7=-45 5/2800	7/147					
NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-16; V MWFRS (envelope) grip DOL=1.60 3) Provide adequate dr 4) This truss has been 5) Provide mechanical 2=270, 7=270. 6) This truss is designer referenced standard 7) Graphical purlin reput 8) "NAILED" indicates 9) Hanger(s) or other of 4-0-8, and 265 lb do responsibility of other 10) In the LOAD CASE	e loads have been conside (ult=115mph (3-second gu gable end zone; cantileve rainage to prevent water p designed for a 10.0 psf bc connection (by others) of f ad in accordance with the 2 ANSI/TPI 1. resentation does not depic 3-10d (0.148'x3") or 3-12c connection device(s) shall i wn and 124 lb up at 9-2-1 ers. (S) section, loads applied dard	ered for this desist) Vasd=91m r left and right onding. ottom chord live truss to bearing 2018 Internation at the size or th d (0.148"x3.25" be provided su 12 on bottom ch to the face of	sign. ph; TCDL=6.0psf; BCDL= exposed ; end vertical lef e load nonconcurrent with g plate capable of withsta anal Residential Code sec e orientation of the purlin (ficient to support concer hord. The design/selection the truss are noted as fro	=4.2psf; h=25ft; Cat. it and right exposed; n any other live loads anding 100 lb uplift at stions R502.11.1 and along the top and/or ines. trated load(s) 265 lb on of such connectio nt (F) or back (B).	II; Exp C; Er Lumber DO joint(s) exco R802.10.2 : bottom cho down and 1 n device(s) i	nclosed; L=1.60 pl ept (jt=lb) and rd. 24 lb up a s the	ate at	SINTE OF SCO SE SUM SE NU PE-200	MISSOLA DIT M. VIER
LOAD CASE(S) Stand 1) Dead + Roof Live (b Uniform Loads (plf) Vert: 1-4=-7	dard alanced): Lumber Increas 70, 4-5=-70, 5-8=-70, 2-12:	e=1.15, Plate I =-20, 3-6=-20,	ncrease=1.15 7-9=-20					FESSION	AL ENGINE

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1** Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

May 17,2021

Job	Truss	Truss Type	Qty	Ply	C&H/20 OSAGE	
					1461	138507
2830701	C3	HIP GIRDER	2	1		
					Job Reference (optional)	
Builders FirstSource (Valley	Center), Valley Center, K	S - 67147,		8.430 s Ap	r 20 2021 MiTek Industries, Inc. Fri May 14 17:42:41 2021 Pag	ge 2

8.430 s Apr 20 2021 MiTek Industries, Inc. Fri May 14 17:42:41 2021 Page 2 ID:AzbADsLrl8ZrCsfDO1uld?zcLPf-kz_E8uZ9kbSH4LbOl3WPsxXN32MyI3zVbZ9eY3zGWAS

LOAD CASE(S) Standard Concentrated Loads (Ib)

Vert: 4=-34(B) 5=-34(B) 11=-265(B) 10=-265(B) 13=-34(B) 14=-34(B) 15=-50(B) 16=-50(B)

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

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

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

 Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 2=105.

- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.

7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 6 lb down at 2-11-10, and 6 lb down at 2-11-10 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: 1-4=-70, 4-5=-20, 9-10=-20, 6-8=-20 Concentrated Loads (lb)

Vert: 9=-5(F=-2, B=-2)


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

Structural wood sheathing directly applied. Rigid ceiling directly applied.

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical Max Horz 2=80(LC 12) Max Uplift 4=-42(LC 12), 2=-45(LC 12), 5=-15(LC 12) Max Grav 4=98(LC 1), 2=247(LC 1), 5=74(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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-1, Interior(1) 2-1-1 to 3-11-12 zone; cantilever left and right
- exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2, 5.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and
- referenced standard ANSI/TPI 1.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

BRACING-

TOP CHORD

BOT CHORD

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

REACTIONS. 3=Mechanical, 2=0-3-8, 4=Mechanical (size)

Max Horz 2=46(LC 12)

Max Uplift 3=-28(LC 12), 2=-34(LC 8)

Max Grav 3=53(LC 1), 2=162(LC 1), 4=34(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

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

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2. 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Structural wood sheathing directly applied or 1-11-7 oc purlins.

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

BOT CHORD

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

TOP CHORD2x4 SPF No.2BOT CHORD2x4 SPF No.2WEBS2x4 SPF No.2

REACTIONS. All bearings 4-11-4.

(lb) - Max Horz 1=-62(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 7, 6

Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 6

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

NOTES-

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Gable requires continuous bottom chord bearing.

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 7, 6.

6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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

			7-7-8 7-7-8						———————————————————————————————————————
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.12 BC 0.07 WB 0.02	DEFL. Vert(LL) Vert(CT) Horz(CT)	in 0.00 0.01 0.00	(loc) 5 5 4	l/defl n/r n/r n/a	L/d 120 120 n/a	PLATES MT20	GRIP 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P		0.00	•		1.70	Weight: 16 lb	FT = 20%
LUMBER-			BRACING-						

TOP CHORD

BOT CHORD

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

2x4 SPF No.2

REACTIONS. 6=5-5-8, 4=5-5-8, 2=5-5-8 (size) Max Horz 2=-25(LC 13) Max Uplift 6=-16(LC 12), 4=-53(LC 13), 2=-49(LC 12) Max Grav 6=239(LC 1), 4=170(LC 1), 2=170(LC 1)

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

NOTES-

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-7 to 3-5-7, Interior(1) 3-5-7 to 3-9-12, Exterior(2R) 3-9-12 to 6-6-8, Interior(1) 6-6-8 to 7-2-1 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Gable requires continuous bottom chord bearing.

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 4, 2.

6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and

referenced standard ANSI/TPI 1. 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer

Structural wood sheathing directly applied or 6-0-0 oc purlins.

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

LUMBER-

Max Uplift All uplift 100 lb or less at joint(s) 13, 14, 15, 16, 17, 18, 19, 20, 21, 22

Max Grav All reactions 250 lb or less at joint(s) 13, 1, 14, 15, 16, 17, 18, 19, 20, 21 except 22=286(LC 1)

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

TOP CHORD 1-2=-424/214, 2-4=-351/177, 4-5=-332/179, 5-6=-297/167, 6-7=-265/157

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-8-12 to 3-9-11, Exterior(2N) 3-9-11 to 15-7-15 zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60

2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

3) All plates are 2x4 MT20 unless otherwise indicated.

4) Gable requires continuous bottom chord bearing.

5) Gable studs spaced at 1-4-0 oc.

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

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 14, 15, 16, 17, 18, 19, 20, 21, 22.

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.

REACTIONS. All bearings 12-9-1.

(lb) - Max Horz 1=217(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 5 except 6=-113(LC 12), 7=-124(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=372(LC 1), 7=406(LC 1)

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

TOP CHORD 1-2=-286/171

WEBS 3-6=-292/197, 2-7=-307/198

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 12-7-15 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) Gable requires continuous bottom chord bearing.

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

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 6=113, 7=124.

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.

LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	тс	0.30	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/T	PI2014	Matri	x-S						Weight: 28 lb	FT = 20%
	5_			1		BRACING						

LOWRES-

 TOP CHORD
 2x4 SPF No.2

 BOT CHORD
 2x4 SPF No.2

 WEBS
 2x4 SPF No.2

 OTHERS
 2x4 SPF No.2

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

REACTIONS. (size) 1=9-6-11, 4=9-6-11, 5=9-6-11 Max Horz 1=159(LC 9)

Max Uplift 1=-12(LC 12), 4=-28(LC 9), 5=-124(LC 12)

Max Grav 1=176(LC 1), 4=120(LC 1), 5=487(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. WEBS 2-5=-369/249

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 9-5-9 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) 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.

 Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4 except (jt=lb) 5=124.

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.

nt 16023 Swingley Ridge Rd Chesterfield, MO 63017

		1		-		1					1	
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	тс	0.59	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.32	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/TI	PI2014	Matri	x-P						Weight: 17 lb	FT = 20%
) _	ц		1		BRACING						

TOP CHORD

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

BOT CHORD

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

REACTIONS. 1=6-4-5, 3=6-4-5 (size) Max Horz 1=101(LC 9) Max Uplift 1=-44(LC 12), 3=-68(LC 12)

Max Grav 1=248(LC 1), 3=248(LC 1)

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

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 6-3-2 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) Gable requires continuous bottom chord bearing.

- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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2x4 ⋍

2x4 ||

except end verticals.

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

OADING (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
CLL 25.0	Plate Grip DOL	1.15	тс	0.09	Vert(LL)	n/a	-	n/a	999	MT20	197/144
CDL 10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
CLL 0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
CDL 10.0	Code IRC2018/TF	42014	Matrix	k-P						Weight: 7 lb	FT = 20%

BOT CHORD

TOP CHORD2x4 SPF No.2BOT CHORD2x4 SPF No.2WEBS2x4 SPF No.2

REACTIONS. (size) 1=3-1-14, 3=3-1-14 Max Horz 1=42(LC 9) Max Uplift 1=-19(LC 12), 3=-28(LC 12) Max Grav 1=104(LC 1), 3=104(LC 1)

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

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) Gable requires continuous bottom chord bearing.

- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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0111EK3 2x4 3FF N0.2

REACTIONS. All bearings 12-6-11.

(lb) - Max Horz 1=214(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 5 except 6=-114(LC 12), 7=-120(LC 12) Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=376(LC 1), 7=393(LC 1)

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

TOP CHORD 1-2=-284/169

WEBS 3-6=-295/200, 2-7=-298/194

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 12-5-9 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) 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.

 Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 6=114, 7=120.

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.

LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI. TC 0.28 BC 0.15 WB 0.05 Matrix-S	DEFL. Vert(LL) n. Vert(CT) n. Horz(CT) -0.0	in (loc ′a - ′a - 0 4	l/defl n/a n/a 1 n/a	L/d 999 999 n/a	PLATES GRIP MT20 197/144 Weight: 27 lb FT = 20%
LUMBER- TOP CHORD 2x4 S	PF No.2		BRACING- TOP CHORD	Struc	tural wood	l sheathing d	irectly applied or 6-0-0 oc purlins,

BOT CHORD

except end verticals.

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

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

REACTIONS. (size) 1=9-4-5, 4=9-4-5, 5=9-4-5

Max Horz 1=155(LC 9) Max Uplift 1=-11(LC 12), 4=-28(LC 9), 5=-122(LC 12)

Max Grav 1=169(LC 1), 4=124(LC 1), 5=473(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-5=-359/246WEBS

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 9-3-2 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) Gable requires continuous bottom chord bearing.

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

4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4 except (jt=lb) 5=122.

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.

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) 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: 16 lb	FT = 20%
LUMBER-			BRACING-					

TOP CHORD

BOT CHORD

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

2x4 SPF No.2

REACTIONS. 1=6-1-14, 3=6-1-14 (size) Max Horz 1=97(LC 9) Max Uplift 1=-42(LC 12), 3=-66(LC 12)

Max Grav 1=239(LC 1), 3=239(LC 1)

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

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 6-0-12 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) Gable requires continuous bottom chord bearing.

- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

2x4 ⋍

2x4 ||

except end verticals.

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

LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2018/TPI2014	CSI. TC 0.07 BC 0.04 WB 0.00 Matrix-P	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 7 lb	GRIP 197/144 FT = 20%
LUMBER- TOP CHORD 2x4 SF	PF No.2		BRACING- TOP CHORD		Structu	ral wood	sheathing di	rectly applied or 3-0-	-1 oc purlins,

BOT CHORD

 TOP CHORD
 2x4 SPF No.2

 BOT CHORD
 2x4 SPF No.2

 WEBS
 2x4 SPF No.2

REACTIONS. (size) 1=2-11-8, 3=2-11-8 Max Horz 1=39(LC 9) Max Uplift 1=-18(LC 12), 3=-25(LC 12)

Max Uplift 1=-18(LC 12), 3=-25(LC 12) Max Grav 1=95(LC 1), 3=95(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=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) Gable requires continuous bottom chord bearing.

- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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LUMBER-

TOP CHORD 2x4 SPF No 2 BOT CHORD OTHERS

2x4 SPF No.2 2x4 SPF No.2

BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 4-8-11 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. 1=4-7-15, 3=4-7-15, 4=4-7-15 (size) Max Horz 1=33(LC 9) Max Uplift 1=-23(LC 12), 3=-27(LC 13), 4=-8(LC 12) Max Grav 1=92(LC 1), 3=92(LC 1), 4=155(LC 1)

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

NOTES-

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed;

- MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right
- exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Gable requires continuous bottom chord bearing.

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 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.

BOT CHORD 2x4 SPF No.2 OTHERS

2x4 SPF No.2

REACTIONS. 1=7-1-15, 3=7-1-15, 4=7-1-15 (size) Max Horz 1=-55(LC 8) Max Uplift 1=-38(LC 12), 3=-45(LC 13), 4=-13(LC 12) Max Grav 1=153(LC 1), 3=153(LC 1), 4=258(LC 1)

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

NOTES-

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed;

- MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right
- exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Gable requires continuous bottom chord bearing.

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 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.

LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IBC 2018/TPI2014	CSI. TC 0.53 BC 0.29 WB 0.00 Matrix-P	DEFL. i Vert(LL) n/ Vert(CT) n/ Horz(CT) 0.0	n (loc) a - a - D 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 16 lb	GRIP 197/144 FT = 20%
			BRACINC					

TOP CHORD

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

Structural wood sheathing directly applied or 6-0-0 oc purlins, TOP CHORD except end verticals.

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

REACTIONS. 1=6-1-1, 3=6-1-1 (size) Max Horz 1=96(LC 9) Max Uplift 1=-44(LC 12), 3=-63(LC 12)

Max Grav 1=236(LC 1), 3=236(LC 1)

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

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 5-11-15 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) Gable requires continuous bottom chord bearing.

- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

2x4 ⋍

2x4 ||

except end verticals.

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

LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.07 BC 0.04 WB 0.00 Matrix-P	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 7 lb	GRIP 197/144 FT = 20%
LUMBER-	BRACING-	חי	Structu	ral wood	sheathing di	rectly applied or 2-1	1-5 oc purlins		

BOT CHORD

TOP CHORD2x4 SPF No.2BOT CHORD2x4 SPF No.2WEBS2x4 SPF No.2

REACTIONS. (size) 1=2-10-11, 3=2-10-11 Max Horz 1=38(LC 9) Max Uplift 1=-17(LC 12), 3=-25(LC 12)

Max Oplift 1=-17(LC 12), 3=-25(LC 12)Max Grav 1=92(LC 1), 3=92(LC 1)

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

NOTES-

 Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) Gable requires continuous bottom chord bearing.

- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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