MiTek USA, Inc.
MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661
Telephone 916-755-3571

Re: 2191
KB Home 2191

The truss drawing(s) referenced below have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by U.S. Components-Tucson,Az.

Pages or sheets covered by this seal: R71430113 thru R71430141

My license renewal date for the state of Arizona is December 31, 2024.

Arizona COA: 11906-0

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

July 1,2022

Reinmuth, Dustin

IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

Job	Truss	Truss Type	Qty	Ply	KB Home 2191
2191	A1E	GABLE	1	1	R71430113
					Job Reference (optional)

US Components, Tucson, AZ - 85713, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 1 10:43:05 2022 Page 1
ID:8uiY8KuqgA7JVDu1wNQYGJzuWCd-?Lyx5SSvwSbDmM9BU2ARAEjB_KSZ8KfhCFLzpQz0Sjq

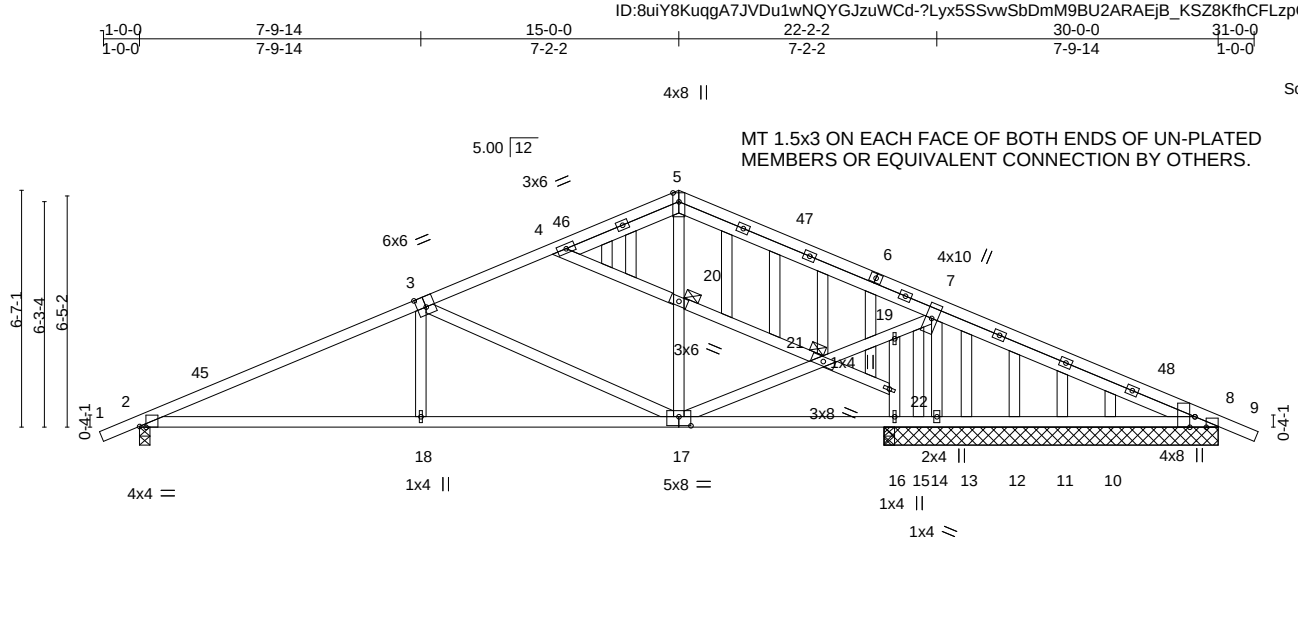

Plate Offsets (X,Y)-- [2:0-2-2,Edge], [3:0-3-0,Edge], [8:0-3-13,Edge], [8:0-3-8,Edge], [17:0-4-0,0-3-0]

LOADING (psf)		SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES GRIP
TCLL 16.0		Plate Grip DOL 1.25	TC 0.55	Vert(LL) -0.08 18-41 >999 360	MT20 185/144
TCDL 18.0		Lumber DOL 1.25	BC 0.53	Vert(CT) -0.24 18-41 >999 240	
BCLL 0.0	*	Rep Stress Incr NO	WB 0.83	Horz(CT) 0.03 16 n/a n/a	
BCDL 10.0		Code IRC2018/TPI2014	Matrix-AS	Wind(LL) 0.09 18-41 >999 240	Weight: 164 lb FT = 20%

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 HF/SPF Stud/Std *Except*
3-17: 2x4 SPF 1650F 1.5E
OTHERS 2x4 HF/SPF Stud/Std

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
JOINTS 1 Brace at Jt(s): 20, 21

REACTIONS. All bearings 9-3-8 except (jt=length) 2=0-3-8.
(lb) - Max Horz 2=105(LC 34)
Max Uplift All uplift 100 lb or less at joint(s) 11, 10 except 2=-390(LC 35), 14=-234(LC 36), 8=-237(LC 36), 15=-313(LC 3)
Max Grav All reactions 250 lb or less at joint(s) 13, 12, 11, 10, 8 except 2=989(LC 1), 14=1375(LC 1), 16=366(LC 3), 16=265(LC 1), 8=276(LC 33)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1949/817, 3-4=-1027/498, 4-5=-743/300, 5-7=-867/383, 7-8=-460/621
BOT CHORD 2-18=-695/1748, 17-18=-410/1485, 16-17=-281/163, 15-16=-358/214, 14-15=-378/234, 13-14=-411/267, 12-13=-464/320, 11-12=-518/374, 10-11=-571/423, 8-10=-635/491
WEBS 17-21=-123/944, 19-21=-116/917, 7-19=-95/891, 7-14=-1293/276, 3-17=-842/130, 3-18=0/336

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=6.0psf; h=25ft; B=45ft; L=30ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-11 to 1-11-5, Interior(1) 1-11-5 to 15-0-0, Exterior(2R) 15-0-0 to 18-0-0, Interior(1) 18-0-0 to 31-0-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 3x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 1-4-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 10 except (jt=lb) 14=234, 8=237, 15=313, 8=237.
9) TBE4 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a total drag load of 1200 lb. Lumber DOL=(1.33) Plate grip DOL=(1.33) Connect truss to resist drag loads along bottom chord from 0-0-0 to 30-0-0 for 40.0 plf.

Continued on page 2

EXPIRES: 12/31/2024
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MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

NOTES-

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

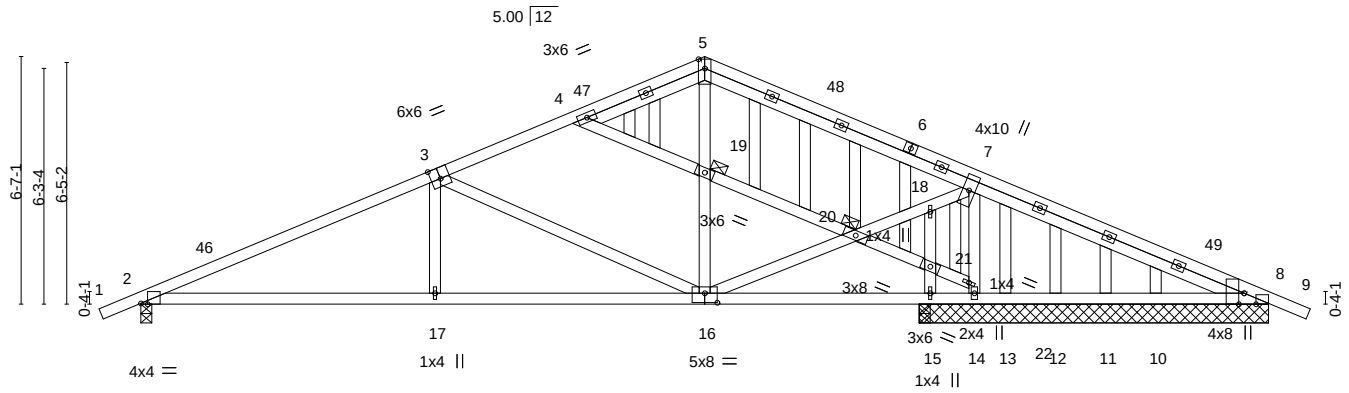
Job	Truss	Truss Type	Qty	Ply	KB Home 2191
2191	A1EP	GABLE	1	1	R71430114
					Job Reference (optional)

US Components, Tucson, AZ - 85713, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 1 10:43:07 2022 Page 1
ID:8uiY8KuqgA7JVDu1wNQYGJzuWCd-xk3iW8T9S3rx?gJabTCvFfoYg89ocET_gZq3uJz0Sjo

1-0-0 7-9-14 15-0-0 22-2-2 30-0-0 31-0-0
1-0-0 7-9-14 7-2-2 7-2-2 7-9-14 1-0-0

Scale = 1:61.3

MT 1.5x3 ON EACH FACE OF BOTH ENDS OF UN-PLATED MEMBERS OR EQUIVALENT CONNECTION BY OTHERS.



7-9-14 15-0-0 21-0-0 22-2-2 30-0-0
7-9-14 7-2-2 6-0-0 1-2-2 7-9-14

Plate Offsets (X,Y)-- [2:0-2-2,Edge], [3:0-3-0,Edge], [8:0-3-13,Edge], [8:0-3-8,Edge], [16:0-4-0,0-3-0]

LOADING (psf)		SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 16.0		Plate Grip DOL 1.25	TC 0.47	Vert(LL) -0.08 17-42 >999 360	MT20	185/144
TCDL 18.0		Lumber DOL 1.25	BC 0.48	Vert(CT) -0.24 17-42 >999 240		
BCLL 0.0	*	Rep Stress Incr YES	WB 0.81	Horz(CT) 0.03 15 n/a n/a		
BCDL 10.0		Code IRC2018/TPI2014	Matrix-AS	Wind(LL) 0.09 17-42 >999 240	Weight: 164 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 HF/SPF Stud/Std *Except*
3-16: 2x4 SPF 1650F 1.5E
OTHERS 2x4 HF/SPF Stud/Std

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
JOINTS 1 Brace at Jt(s): 19, 20

REACTIONS. All bearings 9-3-8 except (jt=length) 2=0-3-8.
(lb) - Max Horz 2=-105(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 8, 11, 10 except 2=-126(LC 12), 14=-215(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 15, 8, 13, 12, 11, 10, 8 except 2=989(LC 1), 14=1222(LC 1), 15=251(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1658/204, 3-4=-845/176, 4-5=-634/161, 5-7=-723/141, 7-8=-14/367
BOT CHORD 2-17=-99/1471, 16-17=-101/1466, 13-14=-259/74, 12-13=-259/74, 11-12=-259/74, 10-11=-259/74, 8-10=-259/74
WEBS 16-20=-27/938, 18-20=-20/916, 7-18=-9/904, 14-22=-1322/225, 7-22=-1304/217, 3-16=-838/116, 3-17=0/336

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=6.0psf; h=25ft; B=45ft; L=30ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-11 to 1-11-5, Interior(1) 1-11-5 to 15-0-0, Exterior(2R) 15-0-0 to 18-0-0, Interior(1) 18-0-0 to 31-0-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 3x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 1-4-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 11, 10, 8 except (jt=lb) 14=215.
9) TBE4 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

EXPIRES: 12/31/2024
July 1,2022

MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

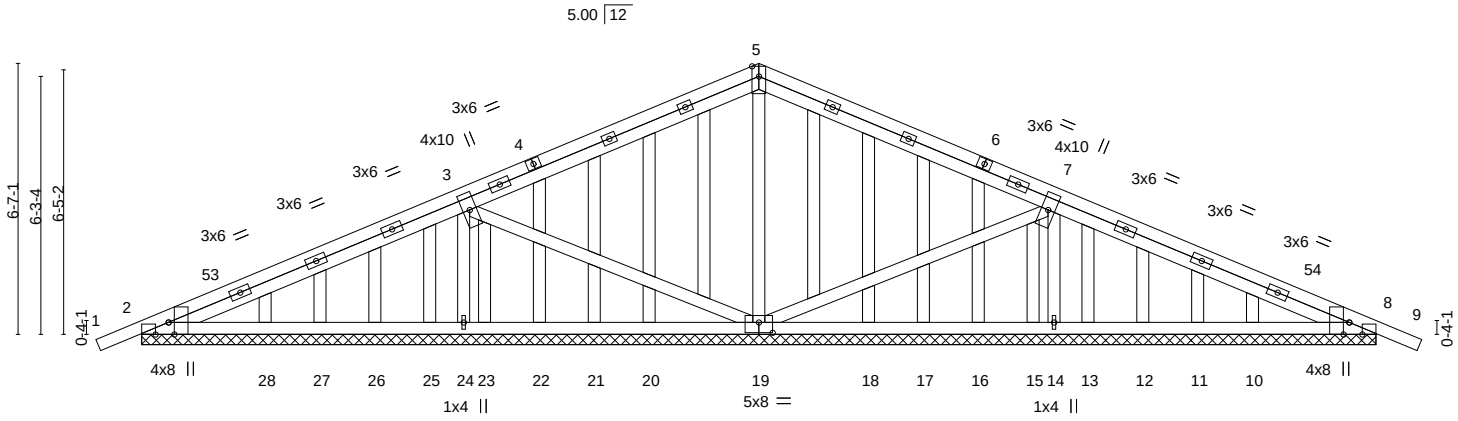
Job	Truss	Truss Type	Qty	Ply	KB Home 2191
2191	A1EPX	GABLE	1	1	R71430115
					Job Reference (optional)

US Components, Tucson, AZ - 85713, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 1 10:43:10 2022 Page 1
ID:8uiY8KuqgA7JVDu1wNQYGJzuWCd-MJlq8AV2l_EWs719GblctHQ7lLGgpiWRMX3kVez0SjI

1-0-0	7-9-14	15-0-0	22-2-2	30-0-0	31-0-0
1-0-0	7-9-14	7-2-2	7-2-2	7-9-14	1-0-0

Scale = 1:56.0

MT 1.5x3 ON EACH FACE OF BOTH ENDS OF UN-PLATED MEMBERS OR EQUIVALENT CONNECTION BY OTHERS.



7-9-14	15-0-0	22-2-2	30-0-0
7-9-14	7-2-2	7-2-2	7-9-14

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [2:0-3-13,Edge], [8:0-3-8,Edge], [8:0-3-13,Edge], [19:0-4-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	16.0	Plate Grip DOL	1.25	TC	0.22	Vert(LL)	0.01	9	n/r	120	MT20	185/144
TCDL	18.0	Lumber DOL	1.25	BC	0.15	Vert(CT)	0.02	9	n/r	120		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.35	Horz(CT)	0.01	16	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 198 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF 1650F 1.5E
BOT CHORD	2x4 SPF 1650F 1.5E
WEBS	2x4 HF/SPF Stud/Std
OTHERS	2x4 HF/SPF Stud/Std

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 21-22,16-17.

REACTIONS. All bearings 30-0-0.
(lb) - Max Horz 2=105(LC 33)
Max Uplift All uplift 100 lb or less at joint(s) 19, 27, 11 except 2=-256(LC 35), 8=-256(LC 36), 24=-327(LC 35), 14=-327(LC 36)
Max Grav All reactions 250 lb or less at joint(s) 20, 21, 22, 23, 25, 26, 27, 28, 18, 17, 16, 15, 13, 12, 11, 10 except 2=342(LC 44), 8=355(LC 33), 24=559(LC 47), 19=506(LC 1), 14=559(LC 48)

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

TOP CHORD	2-3=-572/493, 3-5=-411/427, 5-7=-411/427, 7-8=-532/492
BOT CHORD	2-28=-393/463, 27-28=-285/355, 26-27=-227/296, 19-20=-194/263, 11-12=-213/273, 10-11=-266/327, 8-10=-386/446
WEBS	3-24=-587/435, 5-19=-401/104, 7-14=-588/438, 3-19=-281/320, 7-19=-281/321

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; B=45ft; L=30ft; eave=2ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3E) -1-0-11 to 1-11-5, Exterior(2N) 1-11-5 to 15-0-0, Corner(3R) 15-0-0 to 18-0-0, Exterior(2N) 18-0-0 to 31-0-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 3x4 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.
8) * 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.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 27, 11 except (jt=lb) 2=256, 8=256, 24=327, 14=327.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a total drag load of 1200 lb. Lumber DOL=(1.33) Plate grip DOL=(1.33) Connect truss to resist drag loads along bottom chord from 0-0-0 to 30-0-0 for 40.0 plf.

EXPIRES: 12/31/2024
July 1,2022

MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

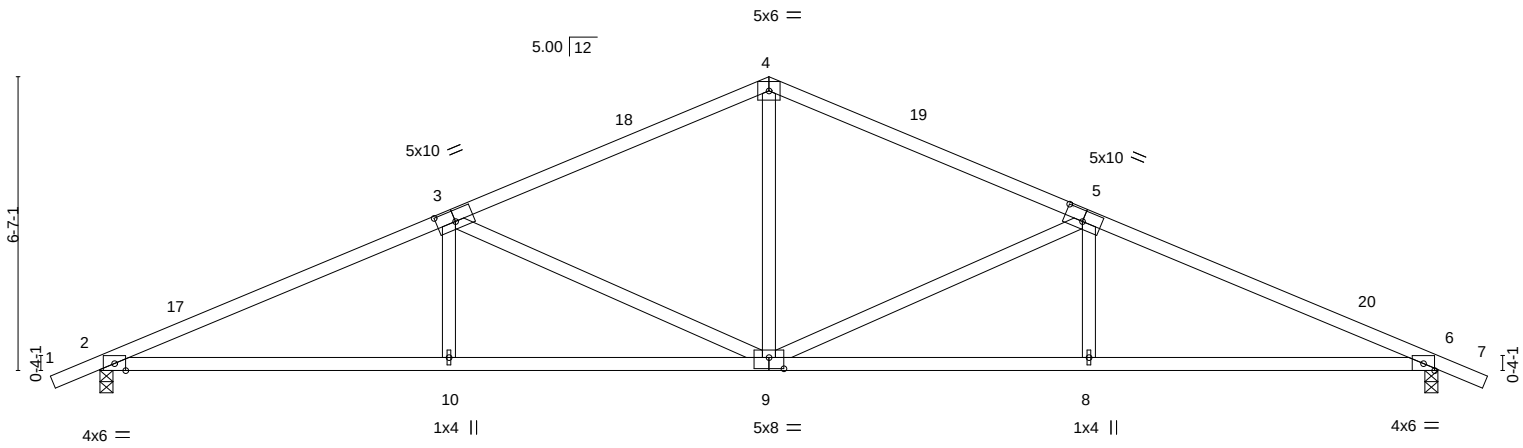
Job	Truss	Truss Type	Qty	Ply	KB Home 2191
2191	A2	COMMON	17	1	R71430116
					Job Reference (optional)

US Components, Tucson, AZ - 85713, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 1 10:43:12 2022 Page 1

ID:8uiY8KuqgA7JVDu1wNQYGJzuWCd-IhtbZrXIHcUE6RBYO0o4yiWPs9p4HXqjprYqZWz0Sjj

1-0-0	7-9-14	15-0-0	22-2-2	30-0-0	31-0-0
1-0-0	7-9-14	7-2-2	7-2-2	7-9-14	1-0-0

Scale = 1:51.7



7-9-14	15-0-0	22-2-2	30-0-0
7-9-14	7-2-2	7-2-2	7-9-14

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	16.0	Plate Grip DOL	1.25	TC	0.50	Vert(LL)	-0.10	8-16	>999	360	MT20	185/144
TCDL	18.0	Lumber DOL	1.25	BC	0.67	Vert(CT)	-0.31	8-16	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.68	Horz(CT)	0.10	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS		Wind(LL)	0.13	8	>999	240	Weight: 105 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 HF/SPF Stud/Std *Except*
5-9,3-9: 2x4 SPF 1650F 1.5E

BRACING-

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

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=-107(LC 32)
Max Uplift 2=-955(LC 35), 6=-955(LC 36)
Max Grav 2=1682(LC 40), 6=1682(LC 39)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4042/2234, 3-4=-2479/1212, 4-5=-2479/1225, 5-6=-4045/2233
BOT CHORD 2-10=-2004/3682, 9-10=-1097/2859, 8-9=-1080/2862, 6-8=-1986/3685
WEBS 4-9=-42/940, 5-9=-931/171, 5-8=0/323, 3-9=-931/186, 3-10=0/323

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; B=45ft; L=30ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-11 to 1-11-5, Interior(1) 1-11-5 to 15-0-0, Exterior(2R) 15-0-0 to 18-0-0, Interior(1) 18-0-0 to 31-0-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) except (jt=lb) 2=955, 6=955.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) This truss has been designed for a total drag load of 3800 lb. Lumber DOL=(1.33) Plate grip DOL=(1.33) Connect truss to resist drag loads along bottom chord from 0-0-0 to 30-0-0 for 126.7 plf.
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.

Registered Professional Engineer (Civil) CERTIFICATE NO. 74609 DUSTIN REINMUTH Date Signed ARIZONA U.S.A.

EXPIRES: 12/31/2024
July 1,2022

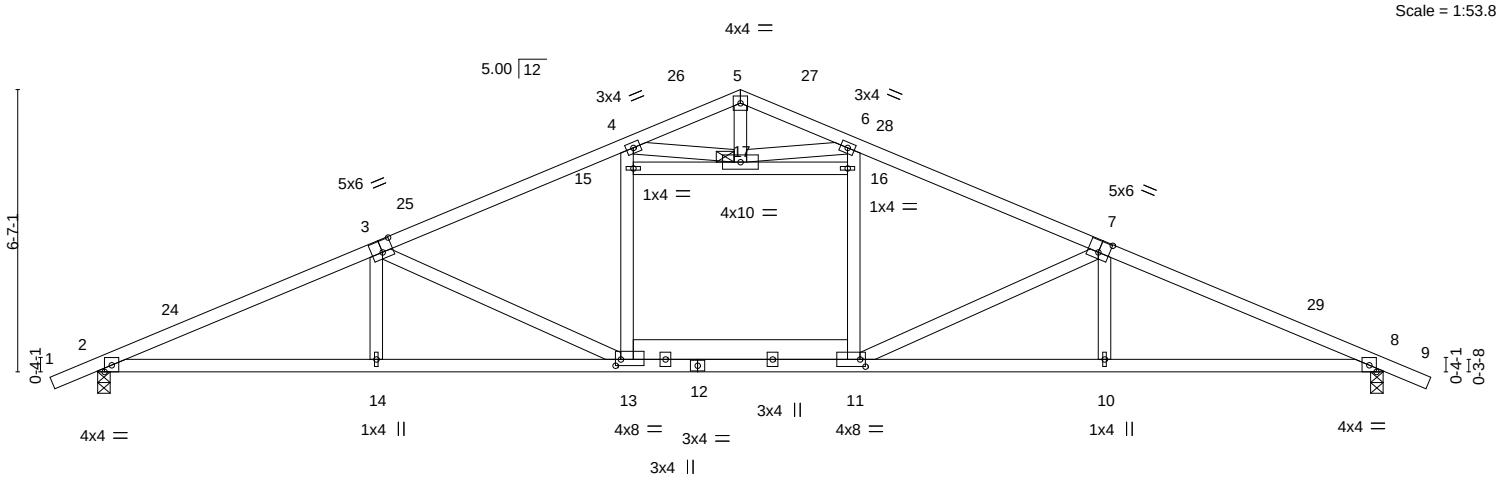
MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	KB Home 2191
2191	A2M	ROOF TRUSS	6	1	R71430117
					Job Reference (optional)

US Components, Tucson, AZ - 85713, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 1 10:43:13 2022 Page 1
ID:8uiY8KuqgA7JVDu1wNQYGJzuWCd-mtQzmBYw2vc5jbmkyjJKVv2daYCo0yct2VHO5yz0Sji

1-0-0	6-6-0	12-4-4	15-0-0	17-7-12	23-6-0	30-0-0	31-0-0
1-0-0	6-6-0	5-10-4	2-7-12	2-7-12	5-10-4	6-6-0	1-0-0

Scale = 1:53.8



6-6-0	12-4-4	17-7-12	23-6-0	30-0-0
6-6-0	5-10-4	5-3-8	5-10-4	6-6-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	16.0	Plate Grip DOL	1.25	TC	0.31	Vert(LL)	-0.16	13-14	>999	360	MT20	185/144
TCDL	18.0	Lumber DOL	1.25	BC	0.51	Vert(CT)	-0.35	13-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.77	Horz(CT)	0.10	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS		Wind(LL)	0.09	11-13	>999	240	Weight: 127 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E *Except*
11-13: 2x6 SPF 1650F 1.5E
WEBS 2x4 HF/SPF Stud/Std

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
JOINTS 1 Brace at Jt(s): 17

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=107(LC 11)
Max Uplift 2=-85(LC 12), 8=-85(LC 12)
Max Grav 2=1467(LC 1), 8=1467(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2982/130, 3-4=-2313/107, 4-5=-709/10, 5-6=-709/10, 6-7=-2313/107, 7-8=-2983/130
BOT CHORD 2-14=-44/2706, 13-14=-46/2701, 11-13=0/2064, 10-11=-52/2702, 8-10=-50/2706
WEBS 11-16=0/487, 6-16=0/487, 7-11=-774/130, 7-10=0/254, 13-15=0/489, 4-15=0/488, 3-13=-773/130, 3-14=0/253, 5-17=-35/309, 4-17=-1441/179, 6-17=-1438/180

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; B=45ft; L=30ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-11 to 1-11-5, Interior(1) 1-11-5 to 15-0-0, Exterior(2R) 15-0-0 to 18-0-0, Interior(1) 18-0-0 to 31-0-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 150.0lb AC unit load placed on the top chord, 15-0-0 from left end, supported at two points, 2-6-0 apart.
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) TBE4 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 8. This connection is for uplift only and does not consider lateral forces.
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.

EXPIRES: 12/31/2024
July 1,2022

MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	KB Home 2191
2191	A2P	Common	8	1	R71430118
					Job Reference (optional)

US Components, Tucson, AZ - 85713, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 1 10:43:14 2022 Page 1

ID:8uiY8KuqgA7JVDu1wNQYGJzuWCd-E4_L_XZYpDkyLlLwVRqZ27bn6yYMlPi0H91xePz0Sjh

1-0-0	4-10-12	9-1-12	15-0-0	20-10-4	25-1-4	30-0-0	31-0-0
1-0-0	4-10-12	4-3-0	5-10-4	5-10-4	4-3-0	4-10-12	1-0-0

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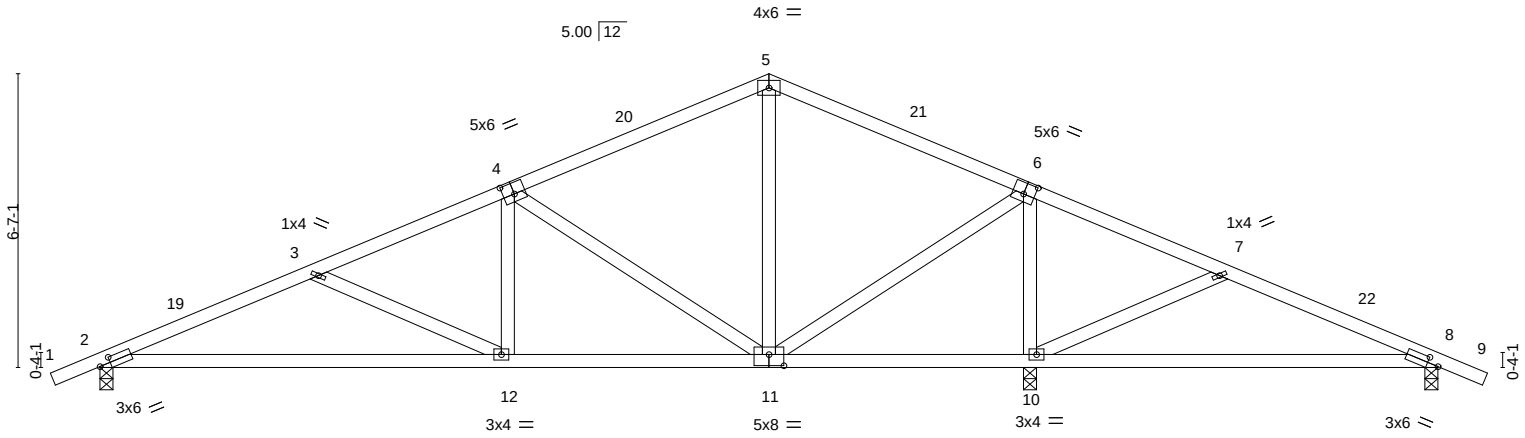


9-1-12	15-0-0	20-10-4	30-0-0
9-1-12	5-10-4	5-10-4	9-1-12

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	16.0	Plate Grip DOL	1.25	TC	0.33	Vert(LL)	-0.13	12-15	>999	360	MT20	185/144
TCDL	18.0	Lumber DOL	1.25	BC	0.49	Vert(CT)	-0.30	12-15	>845	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.02	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS		Wind(LL)	0.04	12-15	>999	240	Weight: 116 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 HF/SPF Stud/Std

BRACING-

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

REACTIONS. (size) 2=0-3-8, 10=0-3-8, 8=0-3-8
Max Horz 2=-107(LC 10)
Max Uplift 2=-115(LC 12), 10=-148(LC 12), 8=-57(LC 12)
Max Grav 2=893(LC 1), 10=1636(LC 1), 8=307(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1579/214, 3-4=-1197/163, 4-5=-514/151, 5-6=-515/155, 6-7=-43/555
BOT CHORD 2-12=-131/1436, 11-12=-37/1046, 10-11=-427/139
WEBS 6-11=-89/1002, 6-10=-1276/230, 7-10=-448/112, 4-11=-782/123, 4-12=0/449, 3-12=-419/109

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; B=45ft; L=30ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-11 to 1-11-5, Interior(1) 1-11-5 to 15-0-0, Exterior(2R) 15-0-0 to 18-0-0, Interior(1) 18-0-0 to 31-0-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) TBE4 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 10, and 8. This connection is for uplift only and does not consider lateral forces.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

EXPIRES: 12/31/2024
July 1,2022

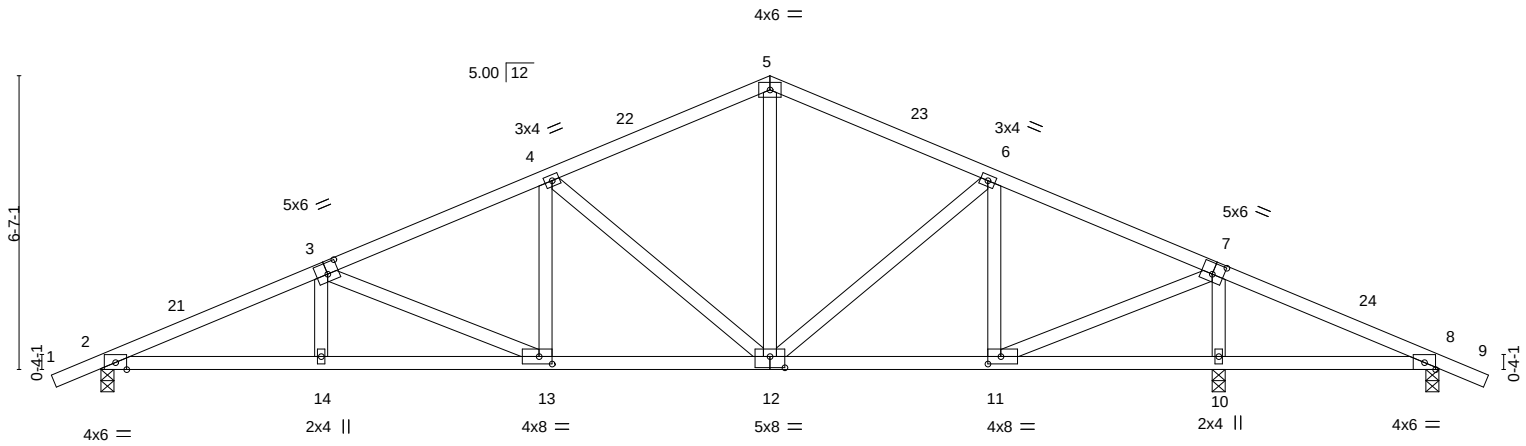
MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	KB Home 2191
2191	A3	COMMON	7	1	R71430119
					Job Reference (optional)

US Components, Tucson, AZ - 85713, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 1 10:43:16 2022 Page 1
ID:8uiY8KuqgA7JVDu1wNQYGJzuWCd-BS66PDapKq_fa2VJdss17Yg6imDBDImJkTW2iHz0Sjf

1-0-0	4-11-4	9-11-10	15-0-0	20-0-6	25-0-12	30-0-0	31-0-0
1-0-0	4-11-4	5-0-6	5-0-6	5-0-6	5-0-6	4-11-4	1-0-0

Scale = 1:51.7



4-11-4	9-11-10	15-0-0	20-0-6	25-0-12	30-0-0
4-11-4	5-0-6	5-0-6	5-0-6	5-0-6	4-11-4

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	16.0	Plate Grip DOL	1.25	TC	0.39	Vert(LL)	-0.05	13-14	>999	360	MT20	185/144
TCDL	18.0	Lumber DOL	1.25	BC	0.53	Vert(CT)	-0.16	13-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.87	Horz(CT)	0.06	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS		Wind(LL)	0.14	13-14	>999	240	Weight: 121 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 HF/SPF Stud/Std

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

REACTIONS. (size) 2=0-3-8, 10=0-3-8, 8=0-3-8
Max Horz 2=-107(LC 31)
Max Uplift 2=-1089(LC 35), 10=-568(LC 36), 8=-565(LC 36)
Max Grav 2=1679(LC 32), 10=1617(LC 1), 8=560(LC 33)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4113/2538, 3-4=-3061/1833, 4-5=-1865/1140, 5-6=-1495/781, 6-7=-1938/1285, 7-8=-1252/1571
BOT CHORD 2-14=-2233/3695, 13-14=-1696/3081, 12-13=-965/2062, 11-12=-372/1018, 10-11=-901/624, 8-10=-1521/1214
WEBS 5-12=-180/568, 6-12=-208/392, 6-11=-580/329, 7-11=-675/1681, 7-10=-1628/655, 4-12=-710/132, 4-13=0/394, 3-13=-557/140

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; B=45ft; L=30ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-11 to 1-11-5, Interior(1) 1-11-5 to 15-0-0, Exterior(2R) 15-0-0 to 18-0-0, Interior(1) 18-0-0 to 31-0-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) except (jt=lb) 2=1089.
6) TBE4 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 10 and 8. This connection is for uplift only and does not consider lateral forces.
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 has been designed for a total drag load of 4200 lb. Lumber DOL=(1.33) Plate grip DOL=(1.33) Connect truss to resist drag loads along bottom chord from 0-0-0 to 30-0-0 for 140.0 plf.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

EXPIRES: 12/31/2024
July 1,2022

MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	KB Home 2191
2191	A4	Hip	1	1	R71430120
					Job Reference (optional)

US Components, Tucson, AZ - 85713, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 1 10:43:17 2022 Page 1

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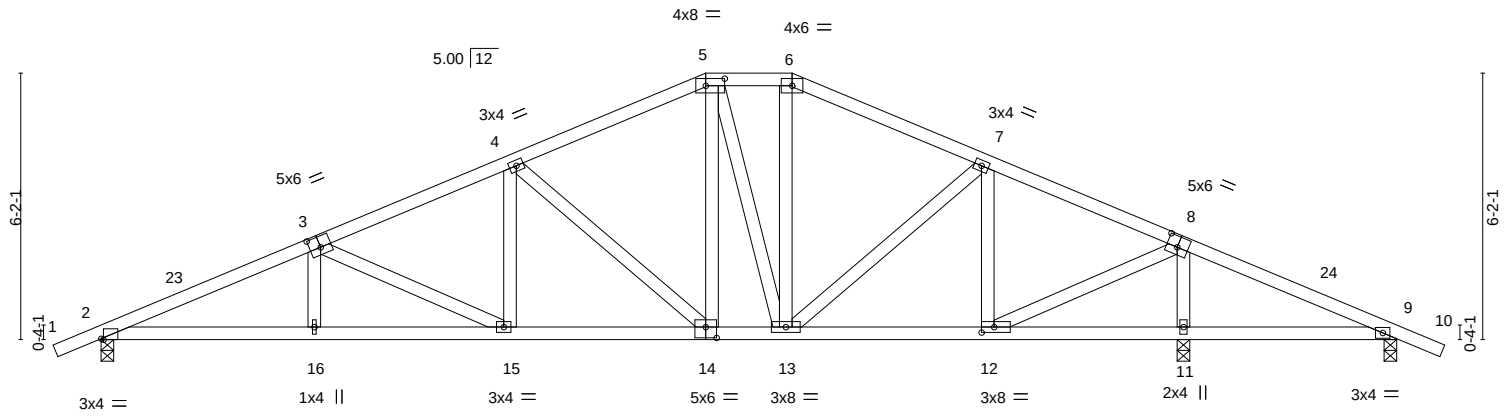
1-0-0	4-11-4	9-5-10	14-0-0	16-0-0	20-6-6	25-0-12	30-0-0	31-0-0
1-0-0	4-11-4	4-6-6	4-6-6	2-0-0	4-6-6	4-6-6	4-11-4	1-0-0

Scale = 1:53.3



4-11-4	9-5-10	14-0-0	16-0-0	20-6-6	25-0-12	30-0-0
4-11-4	4-6-6	4-6-6	2-0-0	4-6-6	4-6-6	4-11-4

Plate Offsets (X,Y)-- [2:0-0-10,Edge], [3:0-3-0,0-3-0], [5:0-5-4,0-2-0], [8:0-3-0,0-3-0], [12:0-3-8,0-1-8], [14:0-3-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	16.0	Plate Grip DOL	1.25	TC	0.26	Vert(LL)	-0.05	15	>999	360	MT20	185/144
TCDL	18.0	Lumber DOL	1.25	BC	0.35	Vert(CT)	-0.15	15-16	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.04	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS		Wind(LL)	0.05	15	>999	240	Weight: 131 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 HF/SPF Stud/Std

BRACING-

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

REACTIONS. (size) 2=0-3-8, 11=0-3-8, 9=0-3-8
Max Horz 2=-101(LC 10)
Max Uplift 2=-138(LC 12), 11=-134(LC 12), 9=-50(LC 23)
Max Grav 2=1125(LC 1), 11=1618(LC 1), 9=97(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2213/262, 3-4=-1729/252, 4-5=-1201/229, 5-6=-970/223, 6-7=-1109/219, 7-8=-924/163, 8-9=-49/605
BOT CHORD 2-16=-174/2006, 15-16=-176/2002, 14-15=-106/1545, 13-14=-15/1047, 12-13=-33/795, 11-12=-430/87, 9-11=-492/96
WEBS 3-15=-510/78, 4-15=0/382, 4-14=-662/121, 5-14=-43/482, 5-13=-323/47, 7-13=0/278, 7-12=-518/113, 8-12=-119/1359, 8-11=-1474/215

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; B=45ft; L=30ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-11 to 1-11-5, Interior(1) 1-11-5 to 14-0-0, Exterior(2E) 14-0-0 to 16-0-0, Exterior(2R) 16-0-0 to 20-6-6, Interior(1) 20-6-6 to 31-0-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) TBE4 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 11, and 9. This connection is for uplift only and does not consider lateral forces.
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.

EXPIRES: 12/31/2024
July 1,2022

MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	KB Home 2191
2191	A5	Hip	1	1	R71430121
					Job Reference (optional)

US Components, Tucson, AZ - 85713, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 1 10:43:18 2022 Page 1

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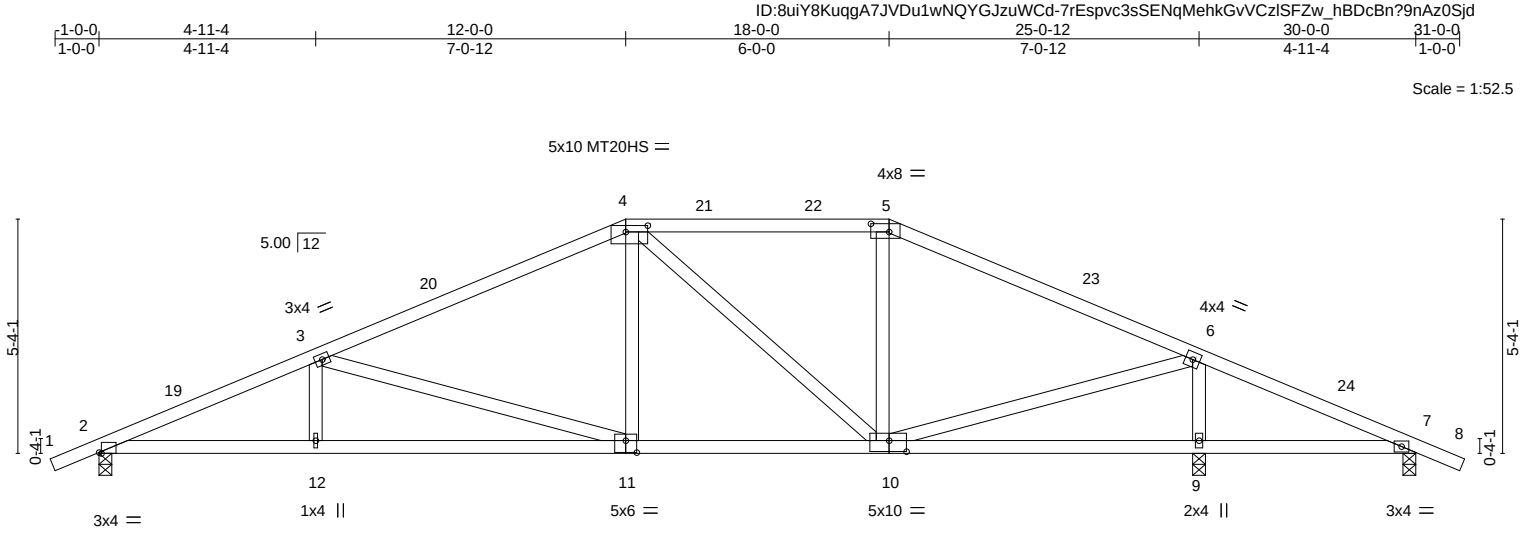

Plate Offsets (X,Y)-- [2:0-0-10,Edge], [4:0-6-0,0-1-12], [5:0-5-0,0-2-4], [10:0-4-12,0-3-0], [11:0-3-0,0-3-4]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	16.0	Plate Grip DOL	1.25	TC	0.38	Vert(LL)	-0.08	11-12	>999	360	MT20	185/144
TCDL	18.0	Lumber DOL	1.25	BC	0.44	Vert(CT)	-0.23	11-12	>999	240	MT20HS	139/108
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.94	Horz(CT)	0.05	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS		Wind(LL)	0.06	11-12	>999	240	Weight: 114 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 HF/SPF Stud/Std

BRACING-

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

REACTIONS. (size) 2=0-3-8, 9=0-3-8, 7=0-3-8
Max Horz 2=87(LC 11)
Max Uplift 2=-138(LC 12), 9=-133(LC 12), 7=-49(LC 12)
Max Grav 2=1140(LC 1), 9=1527(LC 1), 7=151(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2314/293, 3-4=-1538/241, 4-5=-1024/219, 5-6=-1209/202, 6-7=-30/345
BOT CHORD 2-12=-210/2111, 11-12=-210/2111, 10-11=-67/1332, 9-10=-255/75, 7-9=-255/75
WEBS 3-11=-813/149, 4-11=0/469, 4-10=-460/59, 6-10=-101/1321, 6-9=-1375/254

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=30ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-11 to 1-11-5, Interior(1) 1-11-5 to 12-0-0, Exterior(2R) 12-0-0 to 16-2-15, Interior(1) 16-2-15 to 18-0-0, Exterior(2R) 18-0-0 to 22-2-15, Interior(1) 22-2-15 to 31-0-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * 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) TBE4 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 9, and 7. This connection is for uplift only and does not consider lateral forces.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

EXPIRES: 12/31/2024
July 1,2022

MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	KB Home 2191
2191	A6	Hip	1	1	R71430122
					Job Reference (optional)

US Components, Tucson, AZ - 85713, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 1 10:43:19 2022 Page 1
ID:8uiY8KuqgA7JVDu1wNQYGJzuWCd-b1oE1FchdlMERWDuI_QklAlfKzGOQnjlQRkiJcz0Sjc

1-0-0	5-2-2	10-0-0	15-0-0	20-0-0	24-8-2	30-0-0	31-0-0
1-0-0	5-2-2	4-9-14	5-0-0	5-0-0	4-8-2	5-3-14	1-0-0

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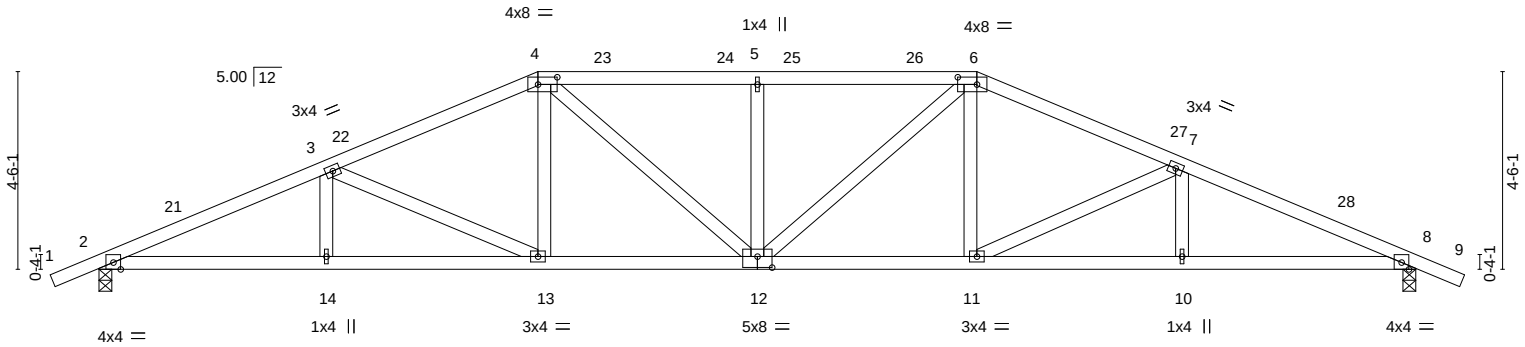

5-2-2	10-0-0	15-0-0	20-0-0	24-8-2	30-0-0
5-2-2	4-9-14	5-0-0	5-0-0	4-8-2	5-3-14

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	16.0	Plate Grip DOL	1.25	TC	0.23	Vert(LL)	-0.11	12	>999	360	MT20	185/144
TCDL	18.0	Lumber DOL	1.25	BC	0.43	Vert(CT)	-0.30	11-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.11	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS		Wind(LL)	0.11	12	>999	240	Weight: 117 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 HF/SPF Stud/Std

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

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=74(LC 11)
Max Uplift 2=-160(LC 12), 8=-160(LC 12)
Max Grav 2=1392(LC 1), 8=1392(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2891/355, 3-4=-2346/322, 4-5=-2381/353, 5-6=-2381/353, 6-7=-2342/323, 7-8=-2880/354
BOT CHORD 2-14=-259/2621, 13-14=-259/2621, 12-13=-159/2116, 11-12=-167/2114, 10-11=-268/2608, 8-10=-268/2608
WEBS 3-13=-568/113, 4-13=0/402, 4-12=-49/437, 5-12=-365/116, 6-12=-50/439, 6-11=0/405, 7-11=-561/111

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; B=45ft; L=30ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-11 to 1-11-5, Interior(1) 1-11-5 to 10-0-0, Exterior(2R) 10-0-0 to 14-2-15, Interior(1) 14-2-15 to 20-0-0, Exterior(2R) 20-0-0 to 24-2-15, Interior(1) 24-2-15 to 31-0-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) TBE4 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 8. This connection is for uplift only and does not consider lateral forces.
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.

EXPIRES: 12/31/2024
July 1,2022

MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	KB Home 2191
2191	A7G	HIP GIRDER	1	1	R71430123
					Job Reference (optional)

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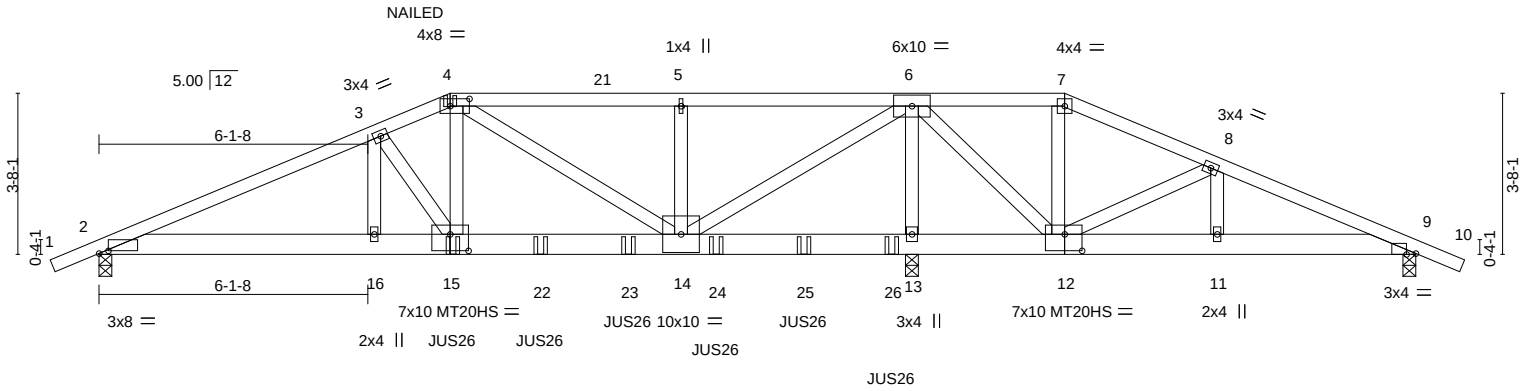
ID:8uiY8KuqgA7JVDu1wNQYGJzuWCd-qmqewKjKWWVy0uPcKN4rc4AAabLy1ll4VKQh7bz0SjT

1-0-0	6-1-8	8-0-0	13-3-2	18-6-4	22-0-0	25-5-11	30-0-0	31-0-0
1-0-0	6-1-8	1-10-8	5-3-2	5-3-2	3-5-12	3-5-11	4-6-5	1-0-0

Scale = 1:52.5



6-1-8	8-0-0	13-3-2	18-6-4	22-0-0	25-5-11	30-0-0
6-1-8	1-10-8	5-3-2	5-3-2	3-5-12	3-5-11	4-6-5

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	16.0	Plate Grip DOL	1.25	TC	0.33	Vert(LL)	-0.06	14-15	>999	360	MT20	185/144
TCDL	18.0	Lumber DOL	1.25	BC	0.40	Vert(CT)	-0.16	14-15	>999	240	MT20HS	139/108
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.71	Horz(CT)	0.02	13	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS		Wind(LL)	0.07	14-15	>999	240	Weight: 136 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x6 SPF 1650F 1.5E
WEBS 2x4 HF/SPF Stud/Std *Except*
6-14: 2x4 SPF 1650F 1.5E

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-7-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 13=(0-3-8 + TBE4 Simpson Strong-Tie) (req. 0-5-1), 9=0-3-8
Max Horz 2=-61(LC 32)
Max Uplift 2=-355(LC 8), 13=-628(LC 8), 9=-226(LC 34)
Max Grav 2=1107(LC 38), 13=3234(LC 1), 9=412(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2191/776, 3-4=-1983/647, 4-5=-1402/350, 5-6=-1402/350, 6-7=-159/653, 7-8=-197/729, 8-9=-502/440
BOT CHORD 2-16=-635/2010, 15-16=-635/2010, 14-15=-471/1823, 13-14=-1173/357, 12-13=-1173/357, 11-12=-342/437, 9-11=-342/437
WEBS 4-15=-356/911, 4-14=-633/294, 5-14=-383/125, 6-14=-683/2974, 6-13=-2445/539, 6-12=-116/772, 7-12=-434/123, 8-12=-556/88, 3-16=-276/100, 3-15=-334/293

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; B=45ft; L=30ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * 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) TBE4 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 13, 2, and 9. This connection is for uplift only and does not consider lateral forces.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Use USP JUS26 (With 4-10d nails into Girder & 4-10d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 8-0-12 from the left end to 18-0-12 to connect truss(es) to front face of bottom chord.
10) Fill all nail holes where hanger is in contact with lumber.
11) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 45 lb down and 358 lb up at 6-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

EXPIRES: 12/31/2024
July 1,2022

LOAD CASE(S) Standard

Continued on page 2

MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-4=-68, 4-7=-68, 7-10=-68, 2-9=-20
   Concentrated Loads (lb)
   Vert: 4=-11(F) 15=-321(F) 16=231 22=-321(F) 23=-321(F) 24=-321(F) 25=-321(F) 26=-326(F)

Job	Truss	Truss Type	Qty	Ply	KB Home 2191
2191	CG1	DIAGONAL HIP GIRDER	1	1	R71430124

Job Reference (optional)

US Components, Tucson, AZ - 85713, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 1 10:43:29 2022 Page 1

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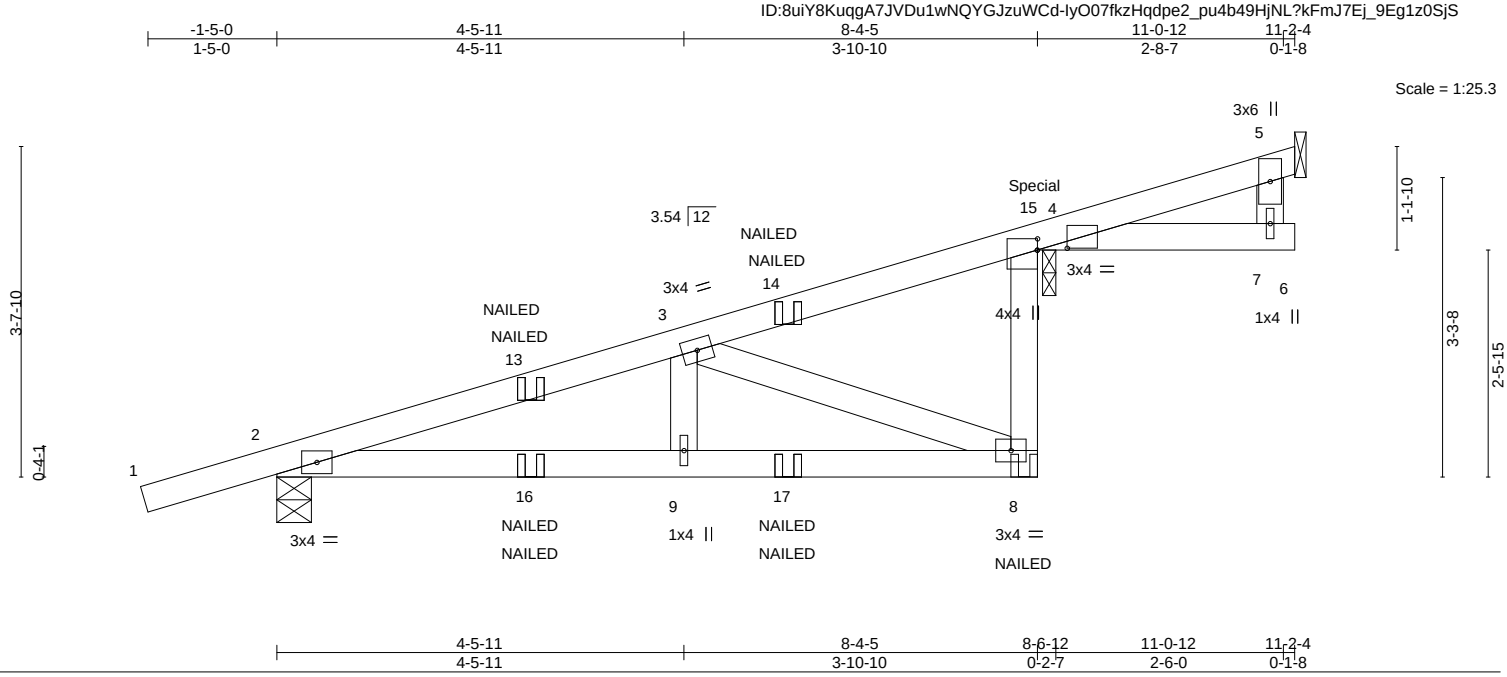

Plate Offsets (X,Y)-- [4:0-3-15,0-0-4], [4:0-1-8,0-0-1]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.20	Vert(LL)	-0.01	9-12	>999	360	MT20	185/144
TCDL	18.0	Lumber DOL	1.25	BC	0.21	Vert(CT)	-0.04	9-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.29	Horz(CT)	-0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP		Wind(LL)	0.01	9	>999	240	Weight: 37 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 HF/SPF Stud/Std

BRACING-

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

REACTIONS. (size) 2=0-4-9, 5=Mechanical, 4=0-1-12
Max Horz 2=124(LC 8)
Max Uplift 2=-70(LC 8), 5=-21(LC 23), 4=-95(LC 8)
Max Grav 2=562(LC 1), 5=67(LC 13), 4=741(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-881/0
BOT CHORD 2-9=-57/823, 8-9=-57/823
WEBS 3-8=-789/64, 4-8=0/369

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) 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 at joint(s) 4.
6) Solid blocking is required on both sides of the truss at joint(s), 4.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 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) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
10) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 107 lb down and 93 lb up at 8-5-6 on top chord. The design/selection of such connection device(s) is the responsibility of others.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-5=-76, 8-10=-20, 4-6=-20
Concentrated Loads (lb)
Vert: 8=-49(B) 14=-21(F=-11, B=-11) 15=-69(B) 16=-6(F=-3, B=-3) 17=-48(F=-24, B=-24)

EXPIRES: 12/31/2024
July 1,2022

MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	KB Home 2191
2191	CG2	DIAGONAL HIP GIRDER	2	1	R71430125

Job Reference (optional)

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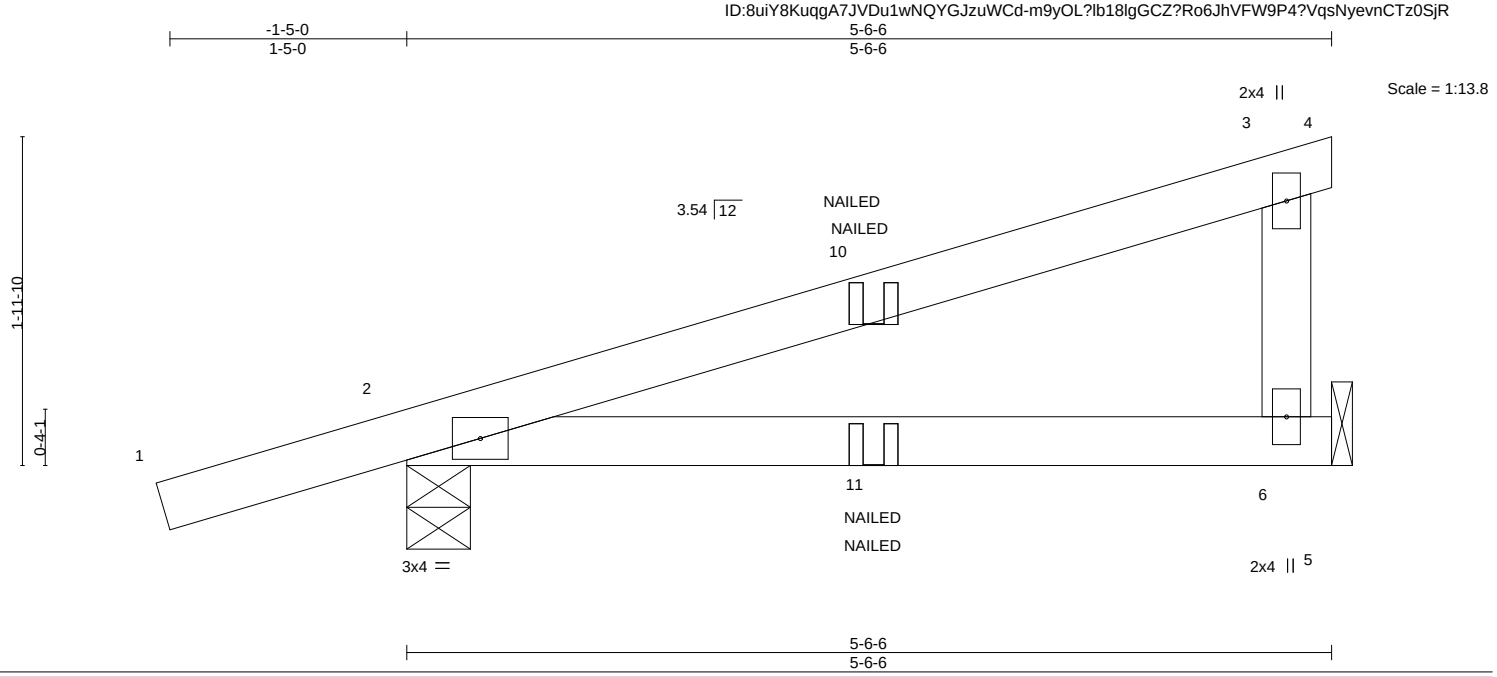

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.32	Vert(LL)	-0.03	6-9	>999	360	MT20	185/144
TCDL	18.0	Lumber DOL	1.25	BC	0.24	Vert(CT)	-0.08	6-9	>788	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP		Wind(LL)	0.02	6-9	>999	240	Weight: 16 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF 1650F 1.5E
BOT CHORD	2x4 SPF 1650F 1.5E
WEBS	2x4 HF/SPF Stud/Std

BRACING-

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

REACTIONS. (size) 6=Mechanical, 2=0-4-9
Max Horz 2=70(LC 22)
Max Uplift 6=-16(LC 8), 2=-80(LC 8)
Max Grav 6=256(LC 1), 2=381(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; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) 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) 6, 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) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
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=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-3=-76, 3-4=-36, 5-7=-20
   Concentrated Loads (lb)
   Vert: 11=-6(F=-3, B=-3)

EXPIRES: 12/31/2024
July 1,2022

MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	KB Home 2191
2191	CJ1	Jack-Open	2	1	R71430126
					Job Reference (optional)

US Components, Tucson, AZ - 85713, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 1 10:43:30 2022 Page 1
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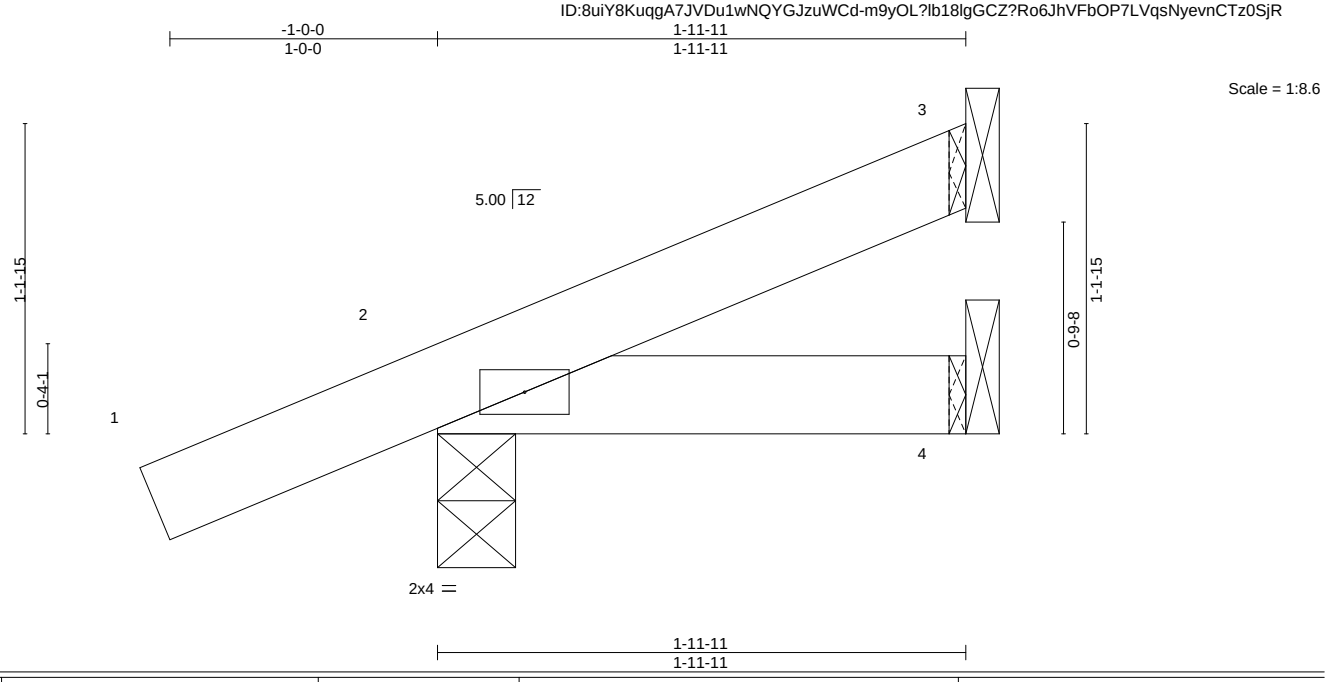

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	16.0	Plate Grip DOL	1.25	TC	0.05	Vert(LL)	-0.00	7	>999	360	MT20	197/144
TCDL	18.0	Lumber DOL	1.25	BC	0.02	Vert(CT)	-0.00	7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP		Wind(LL)	-0.00	7	>999	240	Weight: 6 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-11-11 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=48(LC 12)
Max Uplift 3=-11(LC 12), 2=-53(LC 12)
Max Grav 3=46(LC 1), 2=177(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; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) 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.
6) TBE4 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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.

EXPIRES: 12/31/2024
July 1,2022

MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	KB Home 2191
2191	CJ2	Jack-Open	2	1	R71430127
					Job Reference (optional)

US Components, Tucson, AZ - 85713, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 1 10:43:31 2022 Page 1
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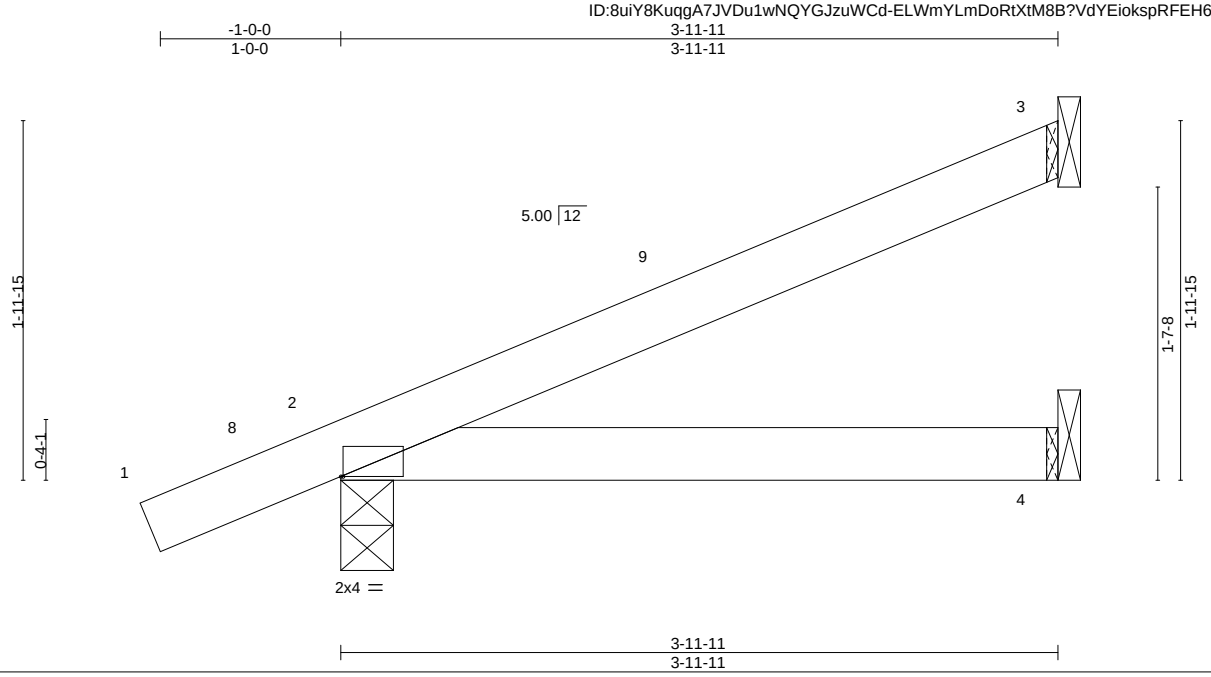

Plate Offsets (X,Y)-- [2:0-0-2,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	16.0	Plate Grip DOL	1.25	TC	0.13	Vert(LL)	-0.01	4-7	>999	360	MT20	197/144
TCDL	18.0	Lumber DOL	1.25	BC	0.11	Vert(CT)	-0.02	4-7	>999	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-MP		Wind(LL)	0.01	4-7	>999	240	Weight: 11 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-11 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=74(LC 12)
Max Uplift 3=-34(LC 12), 2=-49(LC 12)
Max Grav 3=110(LC 1), 2=254(LC 1), 4=75(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; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-11 to 1-11-5, Interior(1) 1-11-5 to 3-10-15 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) 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.
6) TBE4 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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.

EXPIRES: 12/31/2024
July 1,2022

MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	KB Home 2191
2191	CJ3	Jack-Open	1	1	R71430128
					Job Reference (optional)

US Components, Tucson, AZ - 85713, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 1 10:43:32 2022 Page 1
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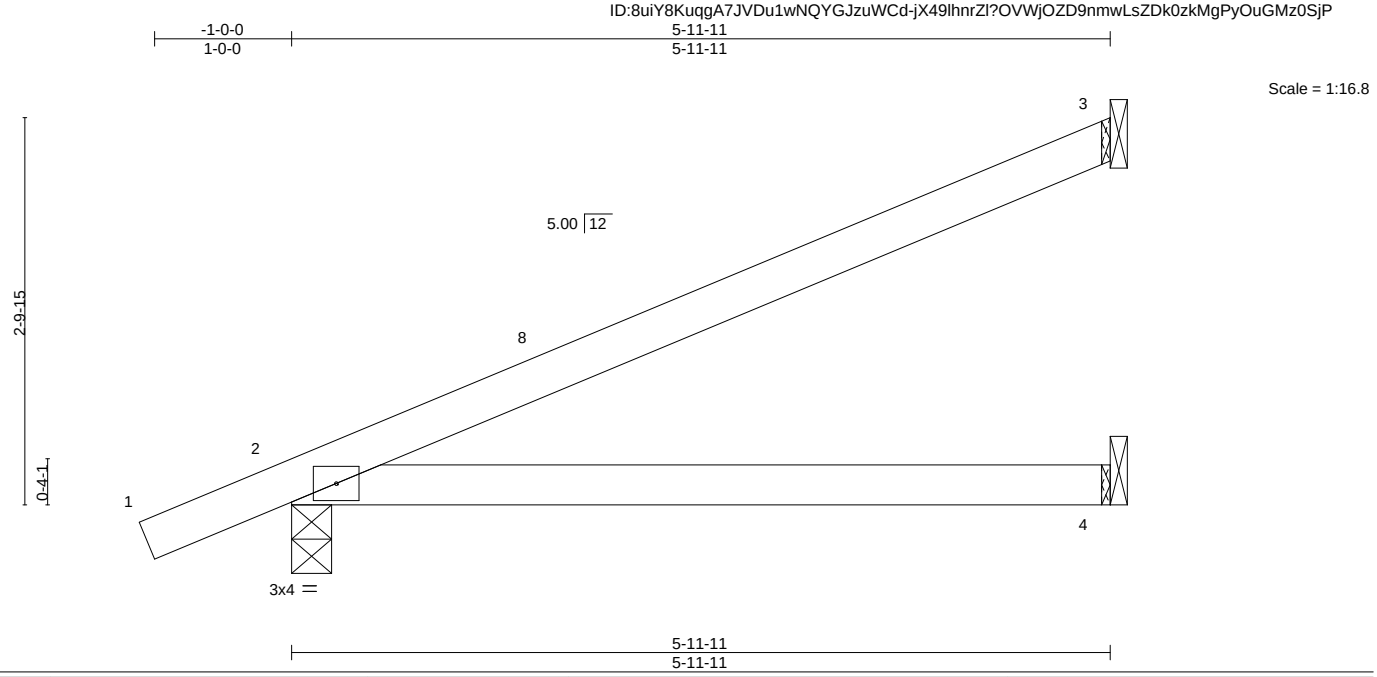

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	16.0	Plate Grip DOL	1.25	TC	0.33	Vert(LL)	-0.04	4-7	>999	360	MT20	197/144
TCDL	18.0	Lumber DOL	1.25	BC	0.27	Vert(CT)	-0.12	4-7	>581	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS		Wind(LL)	0.06	4-7	>999	240	Weight: 16 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=100(LC 12)
Max Uplift 3=-56(LC 12), 2=-50(LC 12)
Max Grav 3=177(LC 1), 2=338(LC 1), 4=113(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; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-11 to 1-11-5, Interior(1) 1-11-5 to 5-10-15 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) 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.
6) TBE4 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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.

EXPIRES: 12/31/2024
July 1,2022

MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	KB Home 2191
2191	D1E	GABLE	1	1	R71430129
					Job Reference (optional)

US Components, Tucson, AZ - 85713, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 1 10:43:33 2022 Page 1
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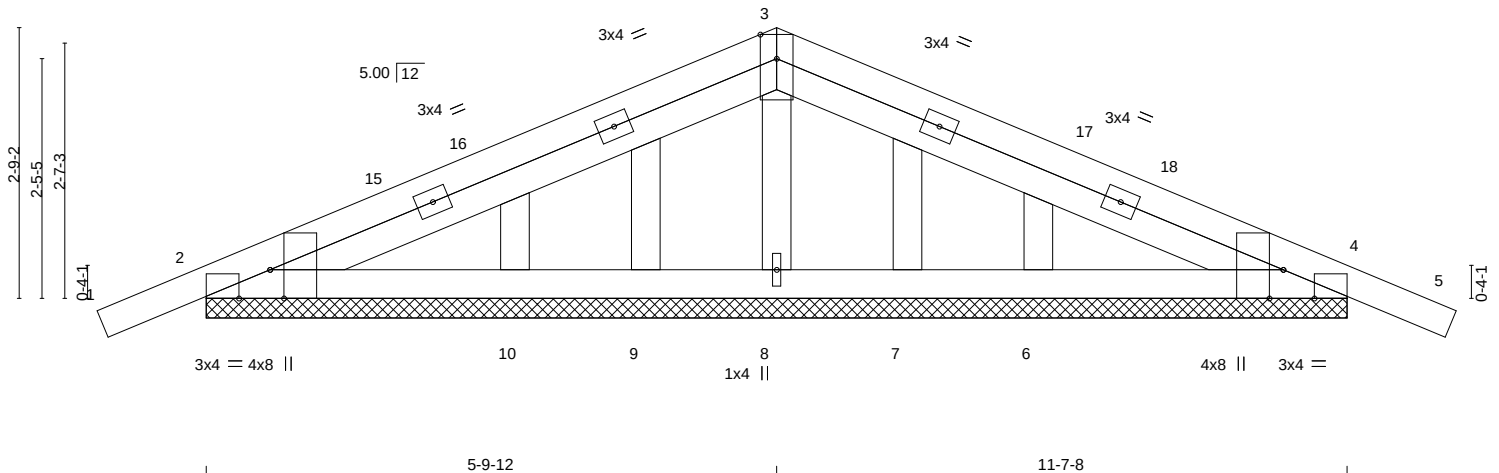
-1-0-0 5-9-12 11-7-8 12-7-8
1-0-0 5-9-12 5-9-12 1-0-0

Scale = 1:23.5

MT 1.5x3 ON EACH FACE OF BOTH ENDS OF UN-PLATED MEMBERS OR EQUIVALENT CONNECTION BY OTHERS.



5-9-12 11-7-8
5-9-12 5-9-12

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [2:0-3-13,Edge], [4:0-3-8,Edge], [4:0-3-13,Edge]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	16.0	Plate Grip DOL	1.25	TC	0.12	Vert(LL)	0.01	5	n/r	120	MT20	185/144
TCDL	18.0	Lumber DOL	1.25	BC	0.15	Vert(CT)	0.01	5	n/r	120		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.10	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 50 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 HF/SPF Stud/Std
OTHERS 2x4 HF/SPF Stud/Std

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings 11-7-8.
(lb) - Max Horz 2=39(LC 33)
Max Uplift All uplift 100 lb or less at joint(s) 8, 9, 7 except 2=-367(LC 35), 4=-367(LC 36)
Max Grav All reactions 250 lb or less at joint(s) 9, 10, 7, 6 except 2=442(LC 44), 4=448(LC 33), 8=427(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-841/812, 3-4=-816/826
BOT CHORD 2-10=-693/712, 9-10=-314/356, 6-7=-314/356, 4-6=-693/712
WEBS 3-8=-383/200

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; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-11 to 1-11-5, Interior(1) 1-11-5 to 5-9-12, Exterior(2R) 5-9-12 to 8-9-12, Interior(1) 8-9-12 to 12-8-3 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 1-4-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 9, 7 except (jt=lb) 2=367, 4=367.
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 has been designed for a total drag load of 1400 lb. Lumber DOL=(1.33) Plate grip DOL=(1.33) Connect truss to resist drag loads along bottom chord from 0-0-0 to 11-7-8 for 120.4 plf.

EXPIRES: 12/31/2024
July 1,2022

MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	KB Home 2191
2191	D1G	Hip Girder	1	1	R71430130
					Job Reference (optional)

US Components, Tucson, AZ - 85713, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 1 10:43:34 2022 Page 1
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-1-0-0	4-0-0	7-7-8	11-7-8	12-7-8
1-0-0	4-0-0	3-7-8	4-0-0	1-0-0

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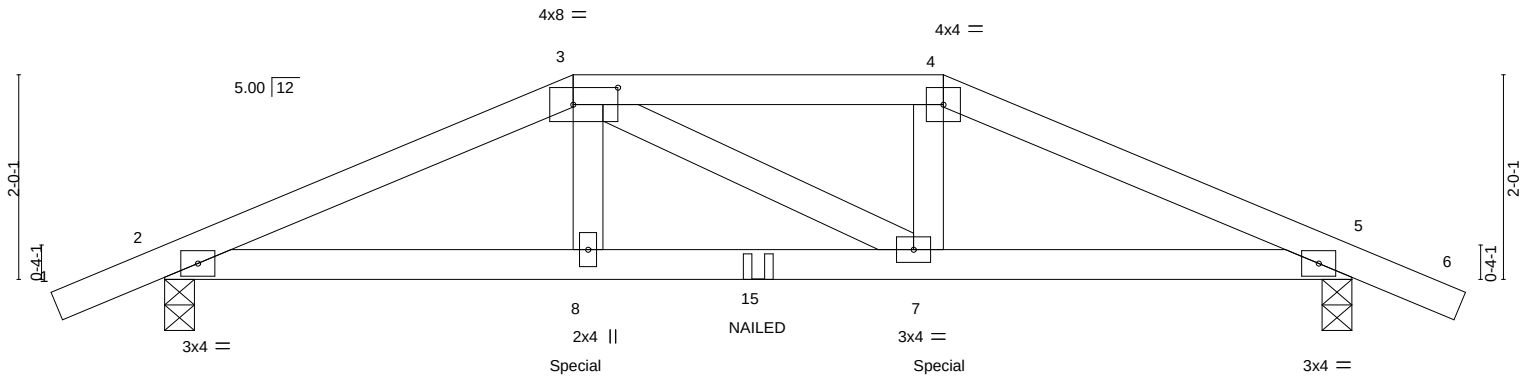

4-0-0	7-7-8	11-7-8
4-0-0	3-7-8	4-0-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	16.0	Plate Grip DOL	1.25	TC	0.19	Vert(LL)	-0.04	7-8	>999	360	MT20	185/144
TCDL	18.0	Lumber DOL	1.25	BC	0.46	Vert(CT)	-0.10	7-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.30	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS		Wind(LL)	0.04	7-8	>999	240	Weight: 37 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 HF/SPF Stud/Std

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

REACTIONS. (size) 2=0-3-8, 5=0-3-8
Max Horz 2=-30(LC 25)
Max Uplift 2=-167(LC 8), 5=-167(LC 8)
Max Grav 2=1020(LC 1), 5=1020(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2017/293, 3-4=-1866/284, 4-5=-2019/293
BOT CHORD 2-8=-229/1819, 7-8=-232/1864, 5-7=-233/1821
WEBS 3-8=-43/530, 4-7=-43/542

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) TBE4 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 5. This connection is for uplift only and does not consider lateral forces.
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) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 367 lb down and 85 lb up at 4-0-0, and 367 lb down and 85 lb up at 7-6-12 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=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-3=-68, 3-4=-68, 4-6=-68, 9-12=-20
Concentrated Loads (lb)
Vert: 8=-367(F) 7=-367(F) 15=-140(F)

EXPIRES: 12/31/2024
July 1,2022

MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	KB Home 2191
2191	D2	Common	4	1	R71430131
					Job Reference (optional)

US Components, Tucson, AZ - 85713, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 1 10:43:35 2022 Page 1
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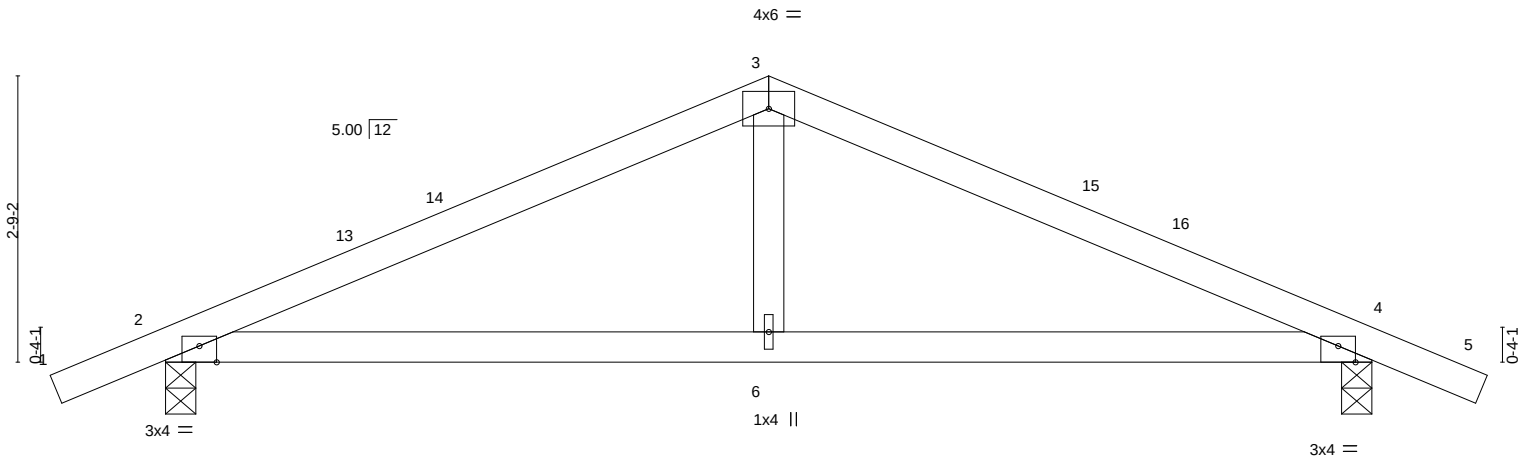
-1-0-0 / 1-0-0 | 5-9-12 / 5-9-12 | 11-7-8 / 5-9-12 | 12-7-8 / 1-0-0

Scale = 1:22.2



5-9-12 / 5-9-12 | 11-7-8 / 5-9-12

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	16.0	Plate Grip DOL	1.25	TC	0.23	Vert(LL)	-0.03	6-9	>999	360	MT20	185/144
TCDL	18.0	Lumber DOL	1.25	BC	0.27	Vert(CT)	-0.07	6-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS		Wind(LL)	0.03	6-9	>999	240	Weight: 33 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 HF/SPF Stud/Std

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

REACTIONS. (size) 2=0-3-8, 4=0-3-8
Max Horz 2=-41(LC 10)
Max Uplift 2=-85(LC 12), 4=-85(LC 12)
Max Grav 2=583(LC 1), 4=583(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-801/285, 3-4=-801/285
BOT CHORD 2-6=-153/699, 4-6=-153/699
WEBS 3-6=0/276

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; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-11 to 1-11-5, Interior(1) 1-11-5 to 5-9-12, Exterior(2R) 5-9-12 to 8-9-12, Interior(1) 8-9-12 to 12-8-3 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) TBE4 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

EXPIRES: 12/31/2024
July 1,2022

MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	KB Home 2191
2191	D3	Common	1	1	R71430132
					Job Reference (optional)

US Components, Tucson, AZ - 85713, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 1 10:43:36 2022 Page 1
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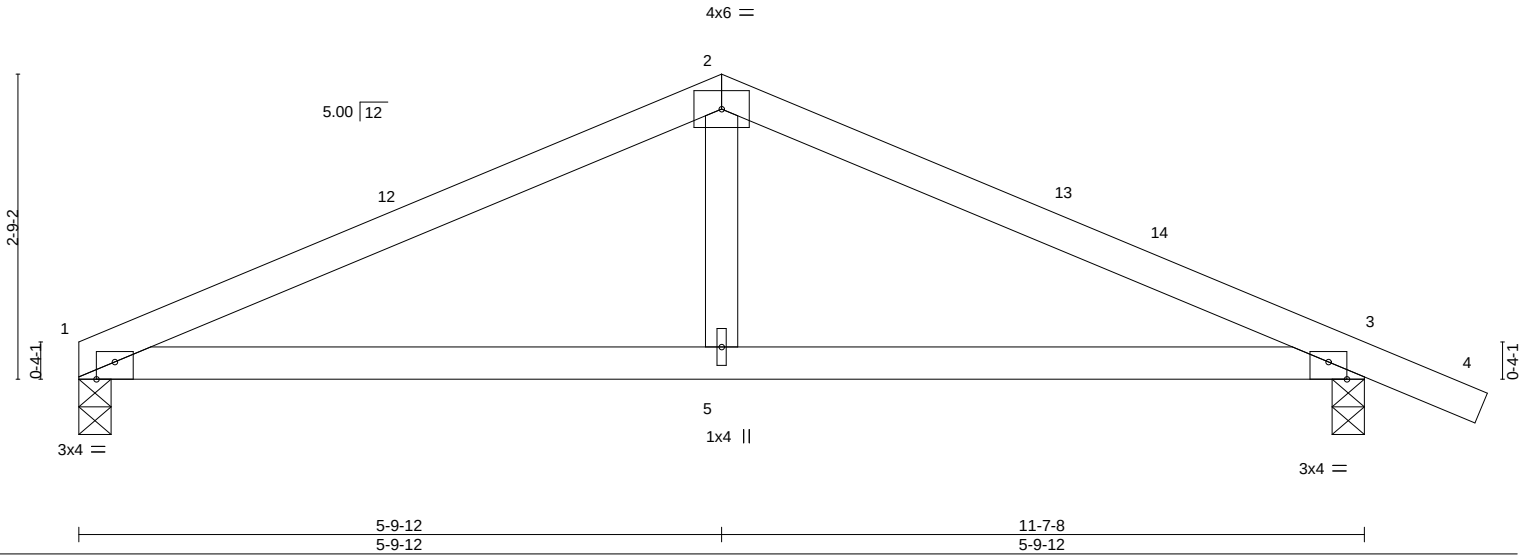
5-9-12 11-7-8 12-7-8
5-9-12 5-9-12 1-0-0

Scale = 1:20.8



5-9-12 11-7-8
5-9-12 5-9-12

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	16.0	Plate Grip DOL	1.25	TC	0.24	Vert(LL)	-0.03	5-8	>999	360	MT20	185/144
TCDL	18.0	Lumber DOL	1.25	BC	0.28	Vert(CT)	-0.08	5-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS		Wind(LL)	0.03	5-8	>999	240	Weight: 32 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 HF/SPF Stud/Std

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

REACTIONS. (size) 1=0-3-8, 3=0-3-8
Max Horz 1=-42(LC 10)
Max Uplift 1=-45(LC 12), 3=-88(LC 12)
Max Grav 1=508(LC 1), 3=587(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-812/301, 2-3=-813/289
BOT CHORD 1-5=-169/709, 3-5=-169/709
WEBS 2-5=0/279

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; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 5-9-12, Exterior(2R) 5-9-12 to 8-9-12, Interior(1) 8-9-12 to 12-8-3 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) TBE4 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 3. This connection is for uplift only and does not consider lateral forces.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

EXPIRES: 12/31/2024
July 1,2022

MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	KB Home 2191
2191	D4	ROOF SPECIAL	1	1	R71430133

Job Reference (optional)

US Components, Tucson, AZ - 85713, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 1 10:43:36 2022 Page 1

ID:8uiY8KuqgA7JVDu1wNQYGJzuWCd-bJJfb3qMd_Vq_709o2DjxmVZ_q63vVeFKaM6P7z0SjL

3-0-0 5-9-12 11-7-8 12-7-8

3-0-0 2-9-12 5-9-12 1-0-0

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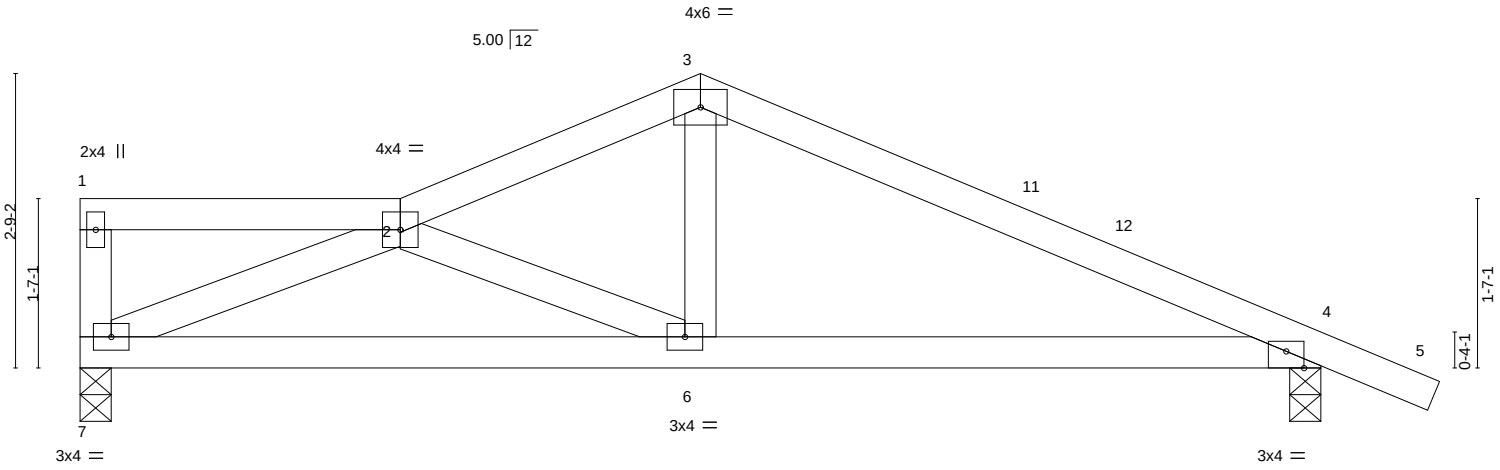

5-9-12 11-7-8

5-9-12 5-9-12

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	16.0	Plate Grip DOL	1.25	TC	0.24	Vert(LL)	-0.03	6-10	>999	360	MT20	185/144
TCDL	18.0	Lumber DOL	1.25	BC	0.26	Vert(CT)	-0.08	6-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS		Wind(LL)	0.04	6-10	>999	240	Weight: 39 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 HF/SPF Stud/Std

BRACING-

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

REACTIONS. (size) 4=0-3-8, 7=0-3-8
Max Horz 7=-74(LC 10)
Max Uplift 4=-86(LC 12), 7=-45(LC 12)
Max Grav 4=580(LC 1), 7=502(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-732/275, 3-4=-767/258
BOT CHORD 6-7=-254/809, 4-6=-132/664
WEBS 2-7=-828/358, 3-6=-4/296

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-0-0, Interior(1) 3-0-0 to 5-9-12, Exterior(2R) 5-9-12 to 8-9-12, Interior(1) 8-9-12 to 12-8-3 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) Roof live (Construction) load check assumes a transverse pitch of 5.00 / 12 on flat section(s).
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) TBE4 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 4 and 7. This connection is for uplift only and does not consider lateral forces.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

Registered Professional Engineer (Civil) CERTIFICATE NO. 74609 DUSTIN REINMUTH Date Signed ARIZONA U.S.A.

EXPIRES: 12/31/2024

July 1,2022

MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	KB Home 2191
2191	D5	ROOF SPECIAL	1	1	R71430134
					Job Reference (optional)

US Components, Tucson, AZ - 85713, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 1 10:43:37 2022 Page 1
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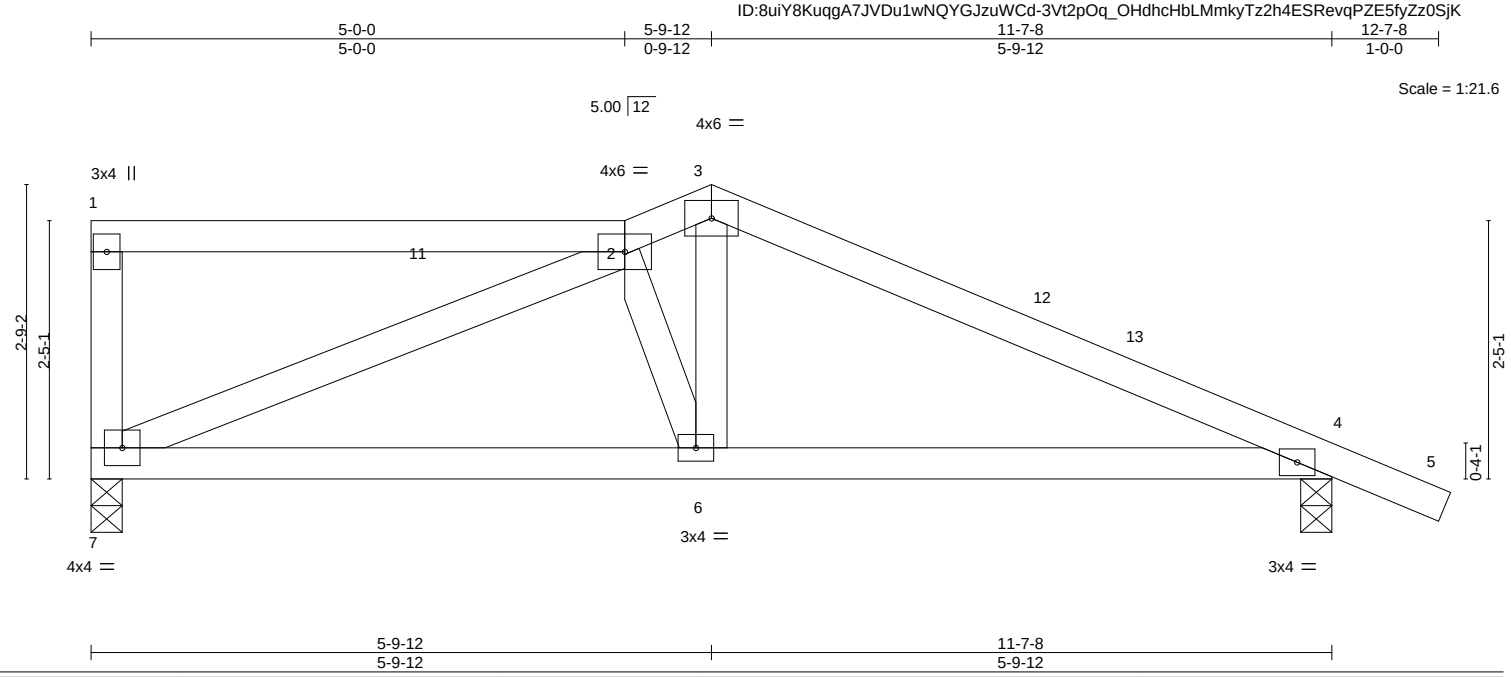

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	16.0	Plate Grip DOL	1.25	TC	0.41	Vert(LL)	-0.03	6-10	>999	360	MT20	185/144
TCDL	18.0	Lumber DOL	1.25	BC	0.25	Vert(CT)	-0.08	6-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS		Wind(LL)	0.04	6-10	>999	240	Weight: 41 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 HF/SPF Stud/Std

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

REACTIONS. (size) 4=0-3-8, 7=0-3-8
Max Horz 7=-94(LC 10)
Max Uplift 4=-86(LC 12), 7=-73(LC 8)
Max Grav 4=580(LC 1), 7=502(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-701/261, 3-4=-771/231
BOT CHORD 6-7=-128/706, 4-6=-116/670
WEBS 2-7=-710/302, 3-6=-31/302

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; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 5-9-12, Exterior(2R) 5-9-12 to 8-9-12, Interior(1) 8-9-12 to 12-8-3 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) Roof live (Construction) load check assumes a transverse pitch of 5.00 / 12 on flat section(s).
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) TBE4 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 4 and 7. This connection is for uplift only and does not consider lateral forces.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

EXPIRES: 12/31/2024
July 1,2022

MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	KB Home 2191
2191	D6	ROOF SPECIAL	1	1	R71430135
					Job Reference (optional)

US Components, Tucson, AZ - 85713, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 1 10:43:38 2022 Page 1
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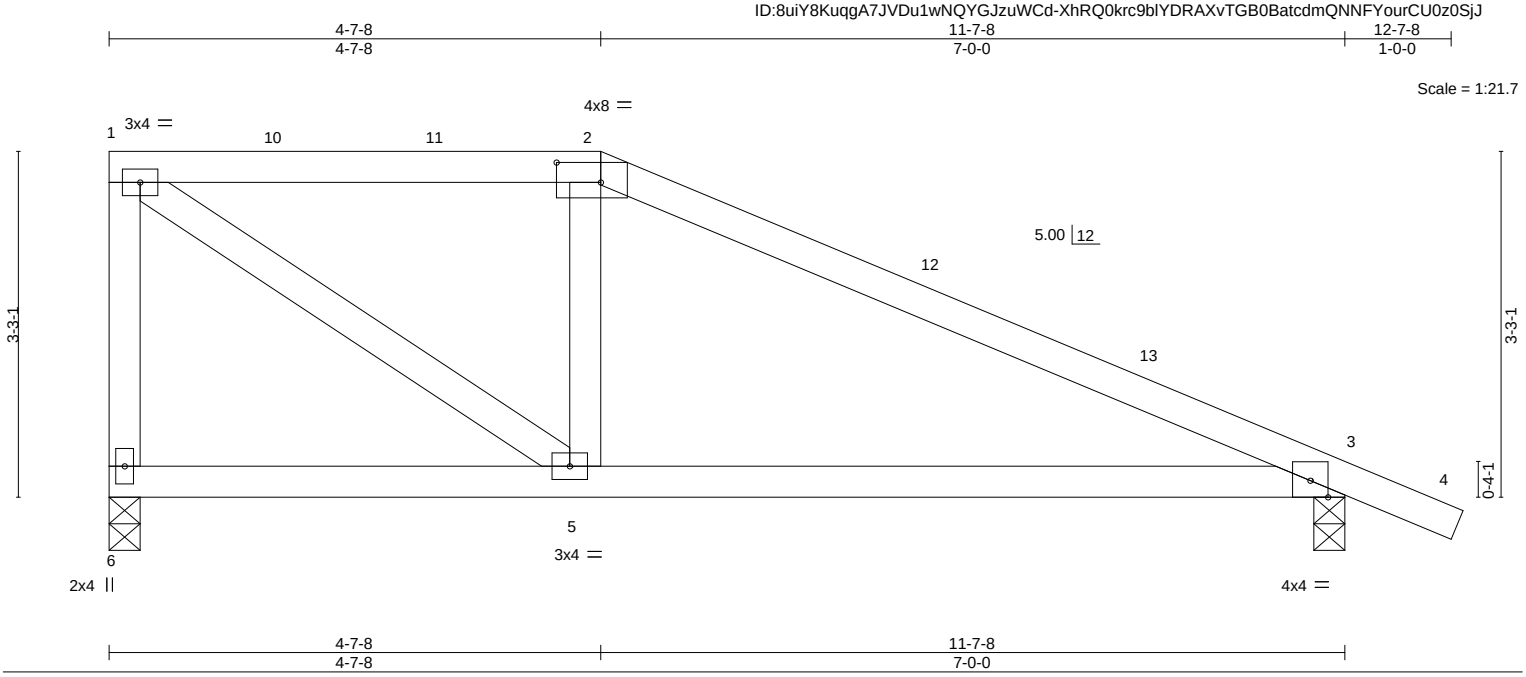

Plate Offsets (X,Y)-- [2:0-5-0,0-2-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	16.0	Plate Grip DOL	1.25	TC	0.36	Vert(LL)	-0.05	5-9	>999	360	MT20	185/144
TCDL	18.0	Lumber DOL	1.25	BC	0.33	Vert(CT)	-0.16	5-9	>872	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS		Wind(LL)	0.07	5-9	>999	240	Weight: 40 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 HF/SPF Stud/Std

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

REACTIONS. (size) 6=0-3-8, 3=0-3-8
Max Horz 6=-122(LC 10)
Max Uplift 6=-76(LC 8), 3=-84(LC 12)
Max Grav 6=502(LC 1), 3=580(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-6=-485/231, 1-2=-549/241, 2-3=-663/214
BOT CHORD 3-5=-71/559
WEBS 1-5=-289/649

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 4-7-8, Exterior(2R) 4-7-8 to 7-7-8, Interior(1) 7-7-8 to 12-8-3 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) Roof live (Construction) load check assumes a transverse pitch of 5.00 / 12 on flat section(s).
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) TBE4 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6 and 3. This connection is for uplift only and does not consider lateral forces.
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.

EXPIRES: 12/31/2024
July 1,2022

MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	KB Home 2191
2191	HJ4	Jack-Closed	3	1	R71430136
					Job Reference (optional)

US Components, Tucson, AZ - 85713, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 1 10:43:38 2022 Page 1
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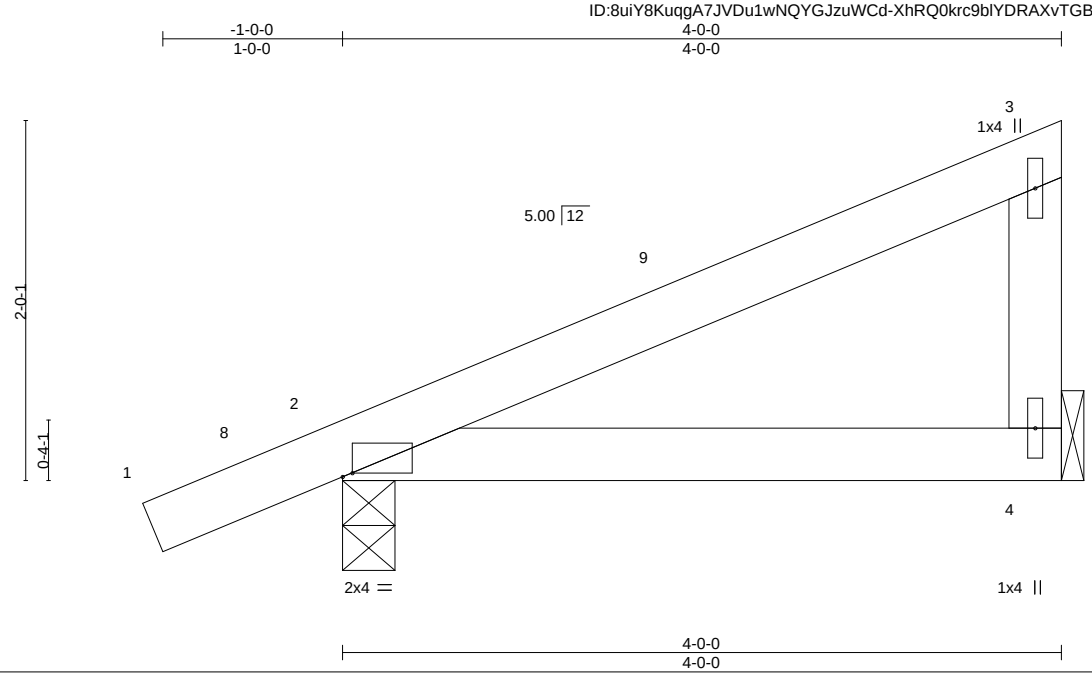

Plate Offsets (X,Y)-- [2:0-0-10,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	16.0	Plate Grip DOL	1.25	TC	0.12	Vert(LL)	-0.01	4-7	>999	360	MT20	185/144
TCDL	18.0	Lumber DOL	1.25	BC	0.10	Vert(CT)	-0.02	4-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS		Wind(LL)	0.01	4-7	>999	240	Weight: 13 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 HF/SPF Stud/Std

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

REACTIONS. (size) 2=0-3-8, 4=Mechanical
Max Horz 2=73(LC 12)
Max Uplift 2=-49(LC 12), 4=-20(LC 12)
Max Grav 2=251(LC 1), 4=160(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; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-11 to 1-11-5, Interior(1) 1-11-5 to 3-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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.
6) TBE4 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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.

EXPIRES: 12/31/2024
July 1,2022

MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	KB Home 2191
2191	HJ8	Jack-Closed	5	1	R71430137
					Job Reference (optional)

US Components, Tucson, AZ - 85713, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 1 10:43:39 2022 Page 1
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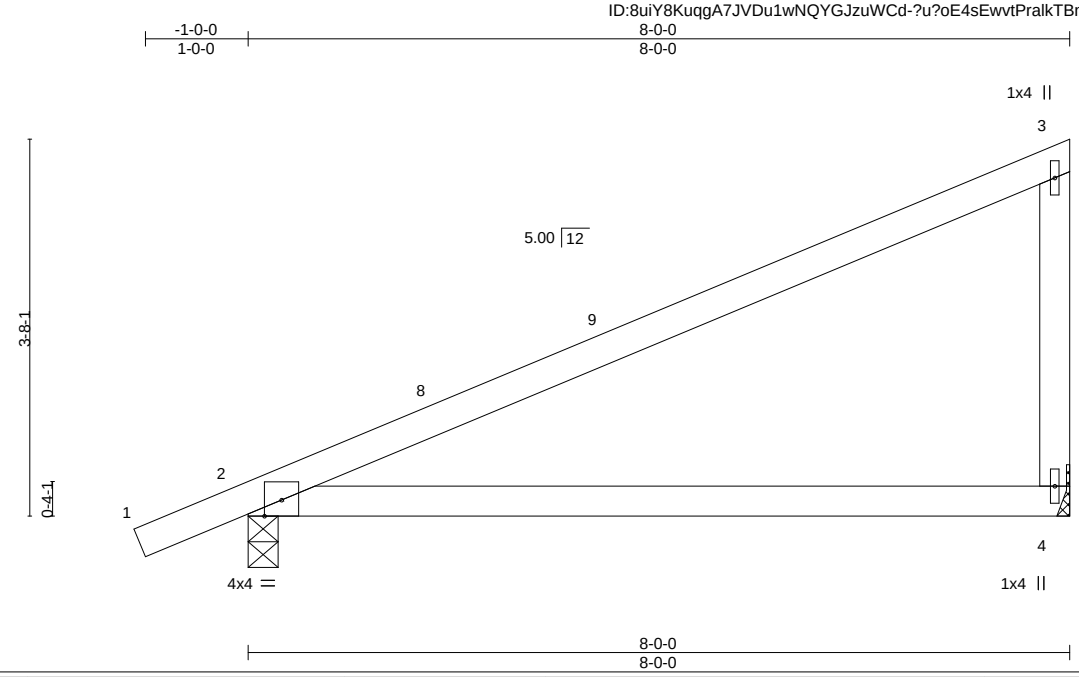

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	16.0	Plate Grip DOL	1.25	TC	0.60	Vert(LL)	-0.13	4-7	>726	360	MT20	185/144
TCDL	18.0	Lumber DOL	1.25	BC	0.49	Vert(CT)	-0.37	4-7	>252	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS		Wind(LL)	0.15	4-7	>620	240	Weight: 24 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 HF/SPF Stud/Std

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

REACTIONS. (size) 2=0-3-8, 4=Mechanical
Max Horz 2=126(LC 12)
Max Uplift 2=-51(LC 12), 4=-51(LC 12)
Max Grav 2=422(LC 1), 4=341(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; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-11 to 1-11-5, Interior(1) 1-11-5 to 7-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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.
6) TBE4 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
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.

EXPIRES: 12/31/2024
July 1,2022

MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	KB Home 2191
2191	HJ8A	Jack-Closed	1	1	R71430138
					Job Reference (optional)

US Components, Tucson, AZ - 85713, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 1 10:43:40 2022 Page 1
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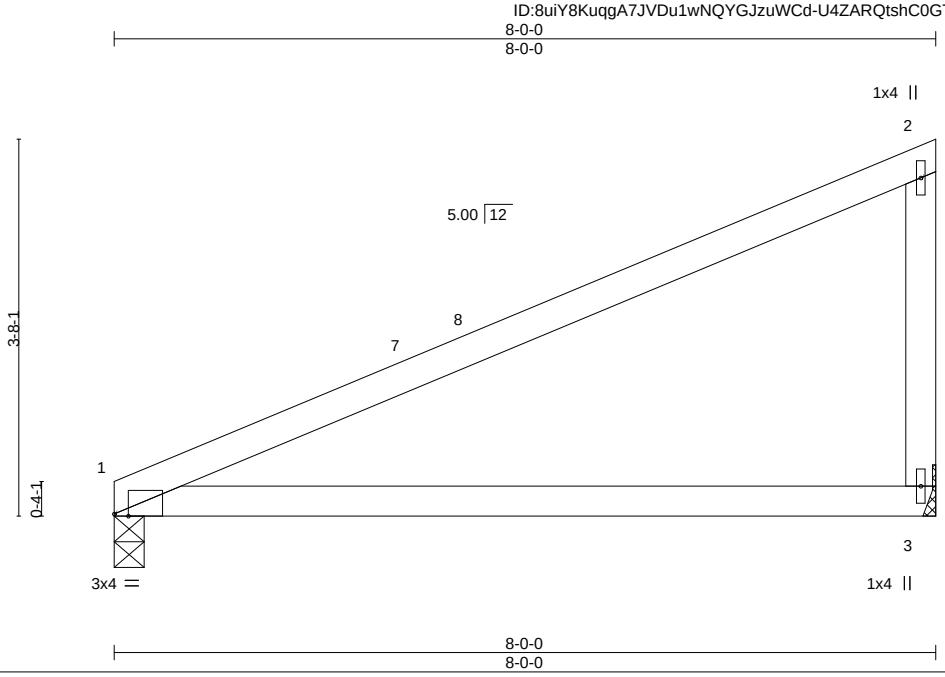

Scale = 1:22.4

Plate Offsets (X,Y)-- [1:0-1-10,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	16.0	Plate Grip DOL	1.25	TC	0.61	Vert(LL)	-0.13	3-6	>726	360	MT20	185/144
TCDL	18.0	Lumber DOL	1.25	BC	0.50	Vert(CT)	-0.38	3-6	>247	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.01	1	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS		Wind(LL)	0.16	3-6	>594	240	Weight: 23 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 HF/SPF Stud/Std

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

REACTIONS. (size) 1=0-3-8, 3=Mechanical
Max Horz 1=105(LC 12)
Max Uplift 1=-9(LC 12), 3=-54(LC 12)
Max Grav 1=346(LC 1), 3=346(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; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 7-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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.
6) TBE4 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1. This connection is for uplift only and does not consider lateral forces.
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.

EXPIRES: 12/31/2024
July 1,2022

MiTek USA, Inc.
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Job	Truss	Truss Type	Qty	Ply	KB Home 2191
2191	JG1	JACK-CLOSED GIRDER	1	1	R71430139
					Job Reference (optional)

US Components, Tucson, AZ - 85713,

8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Jul 1 12:27:54 2022 Page 1
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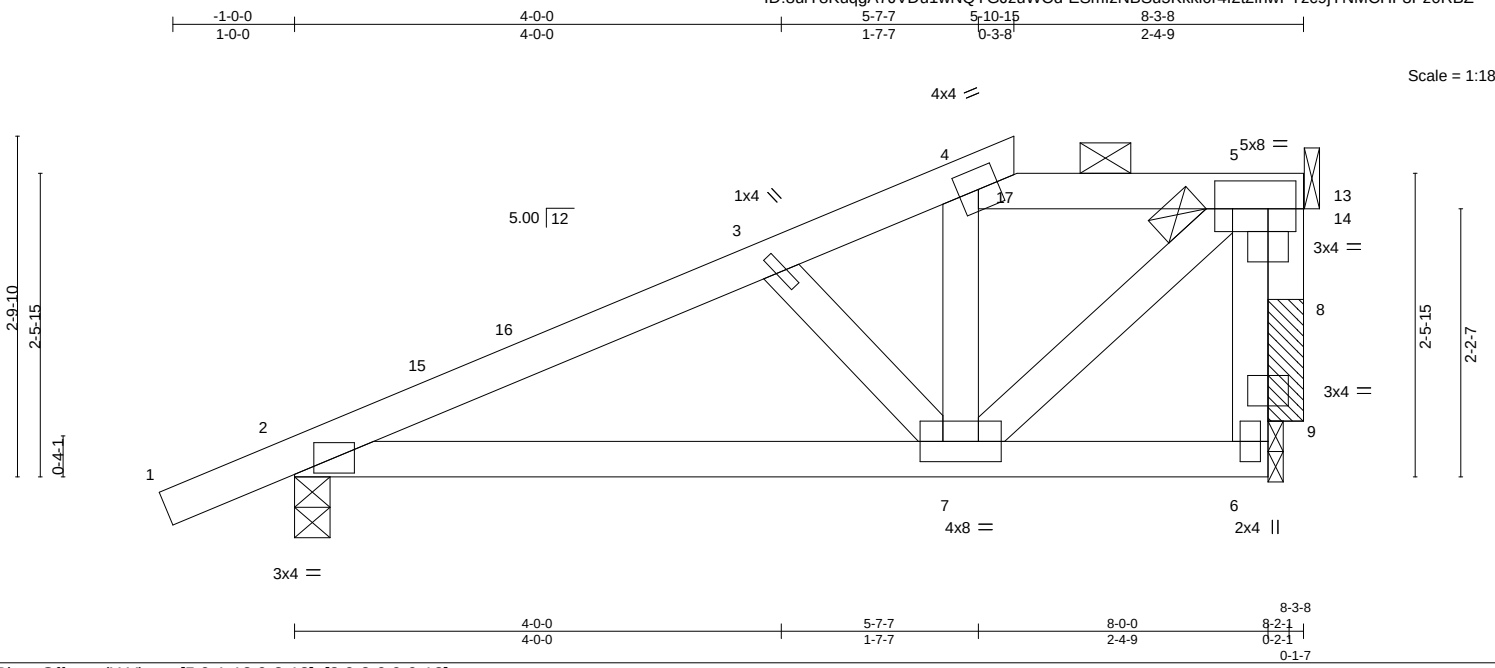

Plate Offsets (X,Y)-- [5:0-1-12,0-2-12], [8:0-2-0,0-0-12]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	16.0	Plate Grip DOL	1.25	TC	0.64	Vert(LL)	-0.02	7-12	>999	360	MT20	185/144
TCDL	18.0	Lumber DOL	1.25	BC	0.23	Vert(CT)	-0.05	7-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.51	Horz(CT)	0.01	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS		Wind(LL)	0.02	7-12	>999	240	Weight: 34 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF 1650F 1.5E *Except* 4-5: 2x4 SPF 2100F 1.8E
BOT CHORD	2x4 SPF 1650F 1.5E
WEBS	2x4 HF/SPF Stud/Std
OTHERS	2x4 HF/SPF Stud/Std

BRACING-

TOP CHORD	Sheathed, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS. (lb/size) 2=602/0-3-8, 9=903/(0-1-8 + bearing block) (req. 0-1-9), 13=-11/Mechanical
Max Horz 2=94(LC 11)
Max Uplift 2=-88(LC 12), 9=-161(LC 9), 13=-13(LC 19)
Max Grav 2=602(LC 1), 9=950(LC 19), 13=7(LC 11)

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/28, 2-15=-939/339, 15-16=-918/343, 3-16=-917/352, 3-4=-798/317, 4-17=-675/284, 5-17=-718/299, 6-9=0/19, 8-9=-928/391, 8-14=-919/385, 5-14=-939/398
BOT CHORD	2-7=-440/895, 6-7=-39/41
WEBS	4-7=-427/194, 3-7=-227/174, 5-7=-401/983, 5-13=-42/55

NOTES-

1) 2x4 HF/SPF Stud/Std bearing block 12" long at jt. 9 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. User Defined Bearing crushing capacity= 425psi.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-11 to 1-11-5, Interior(1) 1-11-5 to 5-5-11, Exterior(2E) 5-5-11 to 7-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) Roof live (Construction) load check assumes a transverse pitch of 5.00 / 12 on flat section(s).
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) Refer to girder(s) for truss to truss connections.
9) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 13 lb uplift at joint 13.
11) One RT4 USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
12) One RT3A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 9. This connection is for uplift only and does not consider lateral forces.
13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
14) 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.

Continued on page 2

EXPIRES: 12/31/2024
July 1,2022

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400 Sunrise Avenue, Suite 270
Roseville, CA 95661

NOTES-

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

16) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 823 lb down and 317 lb up at 5-11-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-4=-68, 4-5=-68, 6-10=-20

Concentrated Loads (lb)

Vert: 17=-732

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Roseville, CA 95661

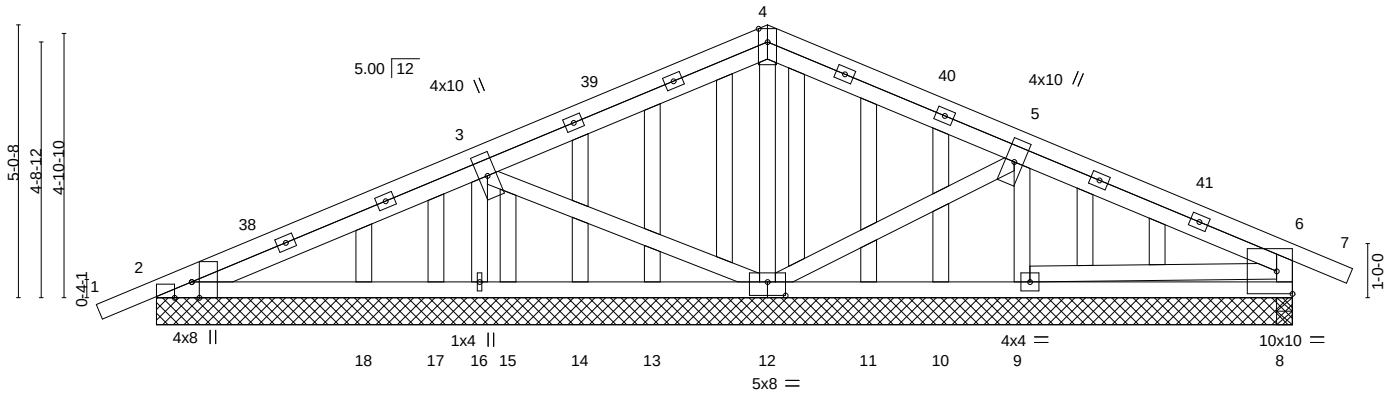
Job	Truss	Truss Type	Qty	Ply	KB Home 2191
2191	R1E	GABLE	1	1	R71430140
					Job Reference (optional)

US Components, Tucson, AZ - 85713, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 1 10:43:42 2022 Page 1
ID:8uiY8KuqgA7JVDu1wNQYGJzuWCd-QThxs6u6DqGzi2UJ8JK7A1lZUFBUJDz8jWpQdnz0SjF

-1-0-0 5-11-11 11-3-9 16-0-0 21-0-0 22-0-0
1-0-0 5-11-11 5-3-14 4-8-8 5-0-0 1-0-0

Scale = 1:42.6

MT 1.5x3 ON EACH FACE OF BOTH ENDS OF UN-PLATED MEMBERS OR EQUIVALENT CONNECTION BY OTHERS.



5-11-11 11-3-9 16-0-0 21-0-0
5-11-11 5-3-14 4-8-8 5-0-0

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [2:0-3-13,Edge], [12:0-4-0,0-3-0]

LOADING (psf)		SPACING- 2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	16.0	Plate Grip DOL 1.25	TC	0.36	Vert(LL)	-0.01	8-9	>999	360	MT20	185/144
TCDL	18.0	Lumber DOL 1.25	BC	0.13	Vert(CT)	-0.03	8-9	>999	240		
BCLL	0.0 *	Rep Stress Incr NO	WB	0.18	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S		Wind(LL)	-0.00	8-9	>999	240	Weight: 135 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 HF/SPF Stud/Std
OTHERS 2x4 HF/SPF Stud/Std

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

REACTIONS. All bearings 21-0-0.
(lb) - Max Horz 2=88(LC 34)
Max Uplift All uplift 100 lb or less at joint(s) 12, 17, 10 except 2=-251(LC 35), 16=-288(LC 35), 9=-175(LC 36), 8=-268(LC 36)
Max Grav All reactions 250 lb or less at joint(s) 13, 14, 15, 18, 11 except 2=340(LC 44), 16=461(LC 32), 12=369(LC 1), 9=417(LC 33), 8=380(LC 33), 8=299(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-530/484, 3-4=-397/375, 4-5=-362/357, 5-6=-472/412, 6-8=-341/330
BOT CHORD 2-18=-425/462, 17-18=-214/265, 12-13=-212/263, 8-9=-202/290
WEBS 3-16=-505/352, 3-12=-269/285, 4-12=-280/76, 5-12=-294/279, 5-9=-418/306, 6-9=-317/299

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; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-11 to 1-11-5, Interior(1) 1-11-5 to 11-3-9, Exterior(2R) 11-3-9 to 14-3-9, Interior(1) 14-3-9 to 22-0-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 3x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 1-4-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 17, 10 except (jt=lb) 2=251, 16=288, 9=175, 8=268.
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 has been designed for a total drag load of 1200 lb. Lumber DOL=(1.33) Plate grip DOL=(1.33) Connect truss to resist drag loads along bottom chord from 0-0-0 to 21-0-0 for 57.1 plf.

EXPIRES: 12/31/2024
July 1,2022

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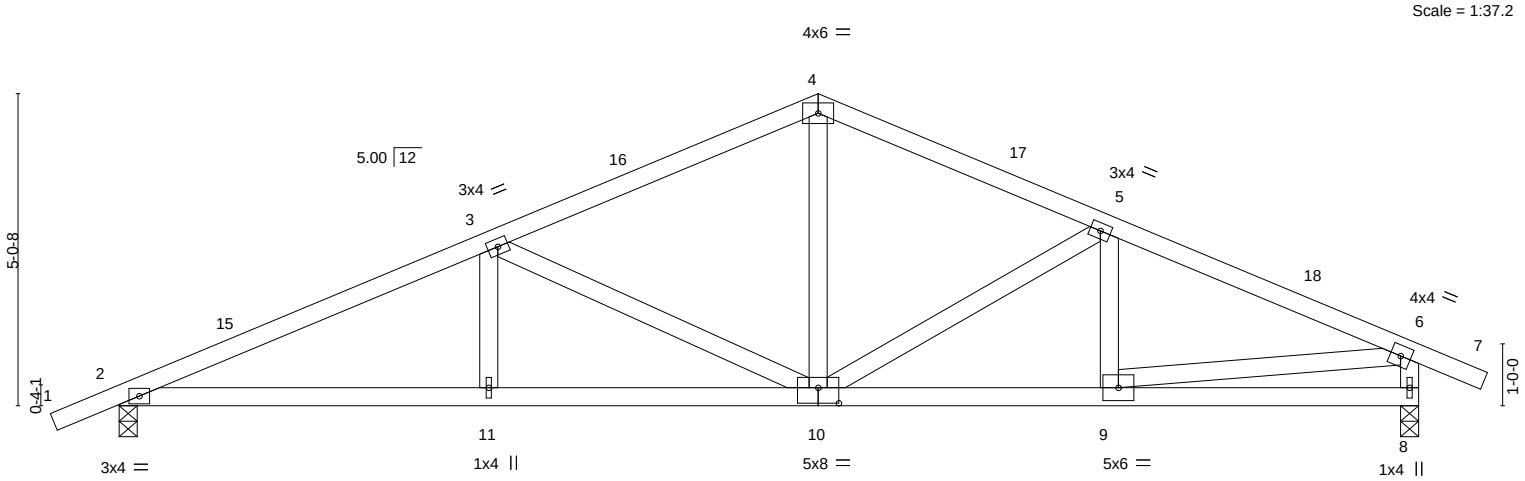
Job	Truss	Truss Type	Qty	Ply	KB Home 2191
2191	R2	Common	7	1	R71430141
					Job Reference (optional)

US Components, Tucson, AZ - 85713, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Jul 1 10:43:43 2022 Page 1
ID:8uiY8KuqgA7JVDu1wNQYGJzuWCd-ufEJ3Svl_7OqKC3Vi0rMjEImEeUK2X_HxAYz9Dz0SjE

-1-0-0	5-11-11	11-3-9	16-0-0	21-0-0	22-0-0
1-0-0	5-11-11	5-3-14	4-8-8	5-0-0	1-0-0

Scale = 1:37.2



5-11-11	11-3-9	16-0-0	21-0-0
5-11-11	5-3-14	4-8-8	5-0-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	16.0	Plate Grip DOL	1.25	TC	0.24	Vert(LL)	-0.04	11-14	>999	360	MT20	185/144
TCDL	18.0	Lumber DOL	1.25	BC	0.35	Vert(CT)	-0.13	11-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.04	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS		Wind(LL)	0.04	11-14	>999	240	Weight: 82 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 HF/SPF Stud/Std

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

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=71(LC 11)
Max Uplift 2=-123(LC 12), 8=-128(LC 12)
Max Grav 2=989(LC 1), 8=1000(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1811/330, 3-4=-1183/268, 4-5=-1172/271, 5-6=-1434/267
BOT CHORD 2-11=-244/1632, 10-11=-244/1632, 9-10=-186/1272
WEBS 3-10=-685/173, 4-10=-61/571, 5-10=-331/101, 6-8=-957/254, 6-9=-188/1287

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; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-0-11 to 1-11-5, Interior(1) 1-11-5 to 11-3-9, Exterior(2R) 11-3-9 to 14-3-9, Interior(1) 14-3-9 to 22-0-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) TBE4 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 8. This connection is for uplift only and does not consider lateral forces.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

Registered Professional Engineer (Civil) CERTIFICATE NO. 74609 DUSTIN REINMUTH Date Signed ARIZONA U.S.A.

EXPIRES: 12/31/2024
July 1,2022

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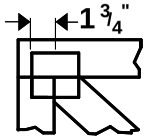
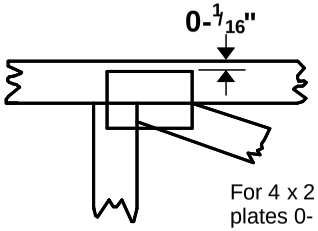
400 Sunrise Avenue, Suite 270
Roseville, CA 95661

Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

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

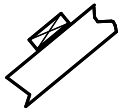
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

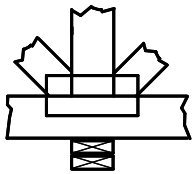
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

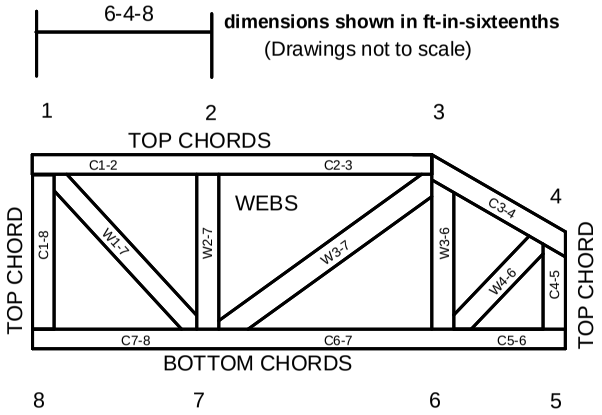


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.

21.The design does not take into account any dynamic or other loads other than those expressly stated.