RE: 2820534
Summit/Juneau Townhome

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

Site Information:

Customer: Project Name: 2820534
Lot/Block: Model:
Address: Subdivision:
City: State:

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

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.4
Wind Code: ASCE 7-16 Wind Speed: 115 mph
Roof Load: 45.0 psf Floor Load: N/A psf

This package includes 36 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I57272379	A1	3/21/2023	21	I57272399	B2A	3/21/2023
2	I57272380	A3	3/21/2023	22	I57272400	B4	3/21/2023
3	I57272381	A4	3/21/2023	23	I57272401	CJ2	3/21/2023
4	I57272382	A5	3/21/2023	24	I57272402	J7	3/21/2023
5	I57272383	A6	3/21/2023	25	I57272403	LG2	3/21/2023
6	I57272384	A7	3/21/2023	26	I57272404	M1	3/21/2023
7	I57272385	A8	3/21/2023	27	I57272405	M2	3/21/2023
8	I57272386	A9	3/21/2023	28	I57272406	M5	3/21/2023
9	I57272387	A10	3/21/2023	29	I57272407	M6	3/21/2023
10	I57272388	A11	3/21/2023	30	I57272408	V1	3/21/2023
11	I57272389	A14	3/21/2023	31	I57272409	V2	3/21/2023
12	I57272390	A18	3/21/2023	32	I57272410	V3	3/21/2023
13	I57272391	A19	3/21/2023	33	I57272411	V4	3/21/2023
14	I57272392	A20	3/21/2023	34	I57272412	V5	3/21/2023
15	I57272393	A22	3/21/2023	35	I57272413	V6	3/21/2023
16	I57272394	A24	3/21/2023	36	I57272414	V7	3/21/2023
17	I57272395	A25	3/21/2023				
18	I57272396	A26	3/21/2023				
19	I57272397	A27	3/21/2023				
20	I57272398	A28	3/21/2023				

The truss drawing(s) referenced above have been prepared by MiTek USA, Inc under my direct supervision based on the parameters provided by Builders FirstSource (Valley Center).

Truss Design Engineer's Name: Sevier, Scott

My license renewal date for the state of Missouri is December 31, 2023.

Missouri COA: 001193

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

March 21, 2023

Sevier, Scott

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome	
2820534	A1	GABLE	2	1	Job Reference (optional)	I57272379

Builders First Source, Valley Center, KS 67147

8.530 s May 26 2022 MiTek Industries, Inc. Tue Mar 21 08:46:30 2023 Page 1

ID:SlsJxd784vT_GMBLZatvrSzbhoN-Nb4iRw1OAu3X?uG?XqUXTx5jTg6dFdkLKLx9JzYwk7

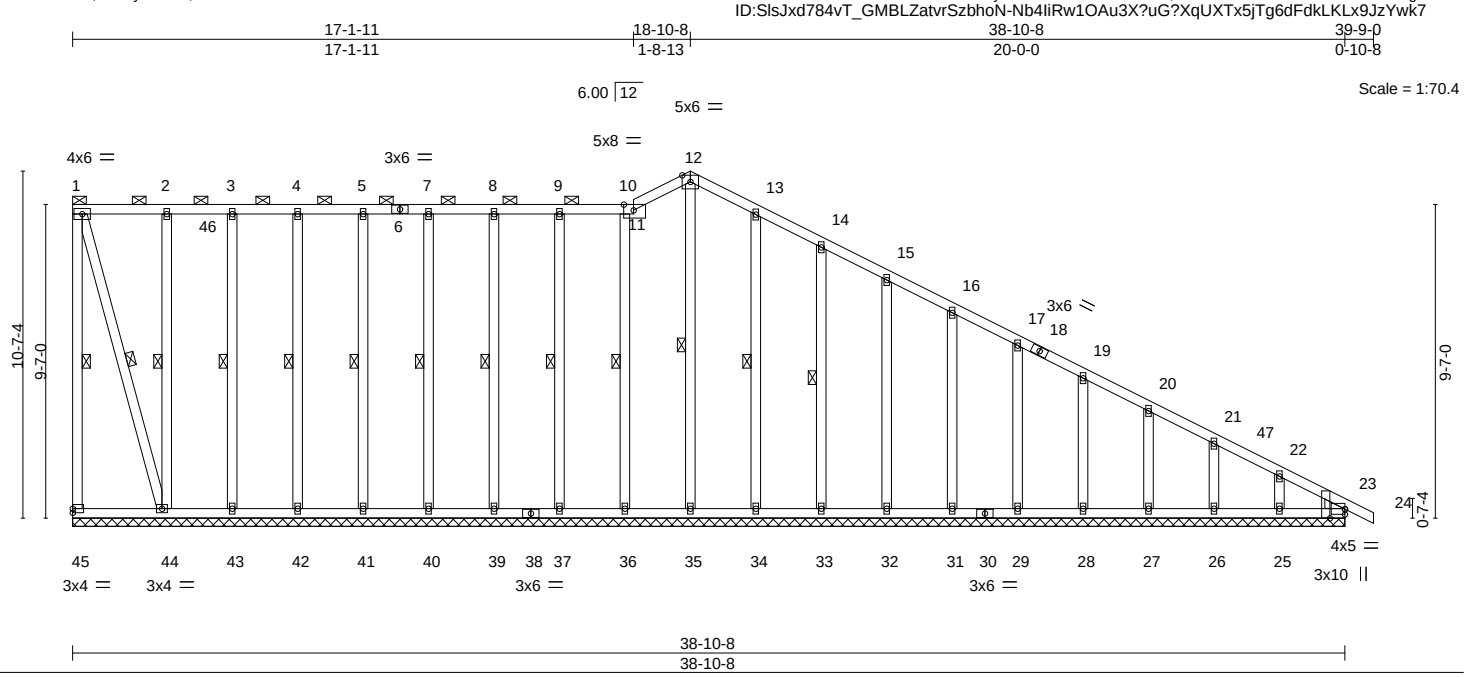

Plate Offsets (X,Y)-- [11:0-3-10,Edge], [23:0-0-0,0-1-15], [23:0-3-5,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	-0.00	23	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.00	23	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.02	23	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 260 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-11.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 44-45.
WEBS	1 Row at midpt 1-45, 12-35, 10-36, 9-37, 8-39, 7-40, 5-41, 4-42, 3-43, 2-44, 13-34, 14-33, 1-44

REACTIONS. All bearings 38-10-8.
(lb) - Max Horz 45=-401(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 35, 36, 37, 39, 40, 41, 42, 43, 44, 34, 33, 32, 31, 29, 28, 27, 26 except 45=-228(LC 8), 25=-103(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 45, 35, 36, 37, 39, 40, 41, 42, 43, 34, 33, 32, 31, 29, 28, 27, 26, 25, 23 except 44=331(LC 19)

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

TOP CHORD	1-45=-173/313, 19-20=-277/154, 20-21=-327/171, 21-22=-377/189, 22-23=-464/225
BOT CHORD	44-45=-240/502, 43-44=-191/419, 42-43=-191/419, 41-42=-191/419, 40-41=-191/419, 39-40=-191/419, 37-39=-191/419, 36-37=-191/419, 35-36=-191/419, 34-35=-191/419, 33-34=-191/419, 32-33=-191/419, 31-32=-191/419, 29-31=-191/419, 28-29=-191/419, 27-28=-191/419, 26-27=-191/419, 25-26=-191/419, 23-25=-191/419
WEBS	1-44=-294/176

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-1-12 to 4-0-6, Exterior(2N) 4-0-6 to 18-10-8, Corner(3R) 18-10-8 to 22-10-8, Exterior(2N) 22-10-8 to 39-9-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 35, 36, 37, 39, 40, 41, 42, 43, 44, 34, 33, 32, 31, 29, 28, 27, 26 except (jt=lb) 45=228, 25=103.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome	I57272380
2820534	A3	Roof Special	1	1	Job Reference (optional)	

Builders First Source, Valley Center, KS 67147 — 8.530 s May 26 2022 MiTek Industries, Inc. Tue Mar 21 08:47:04 2023 Page 1

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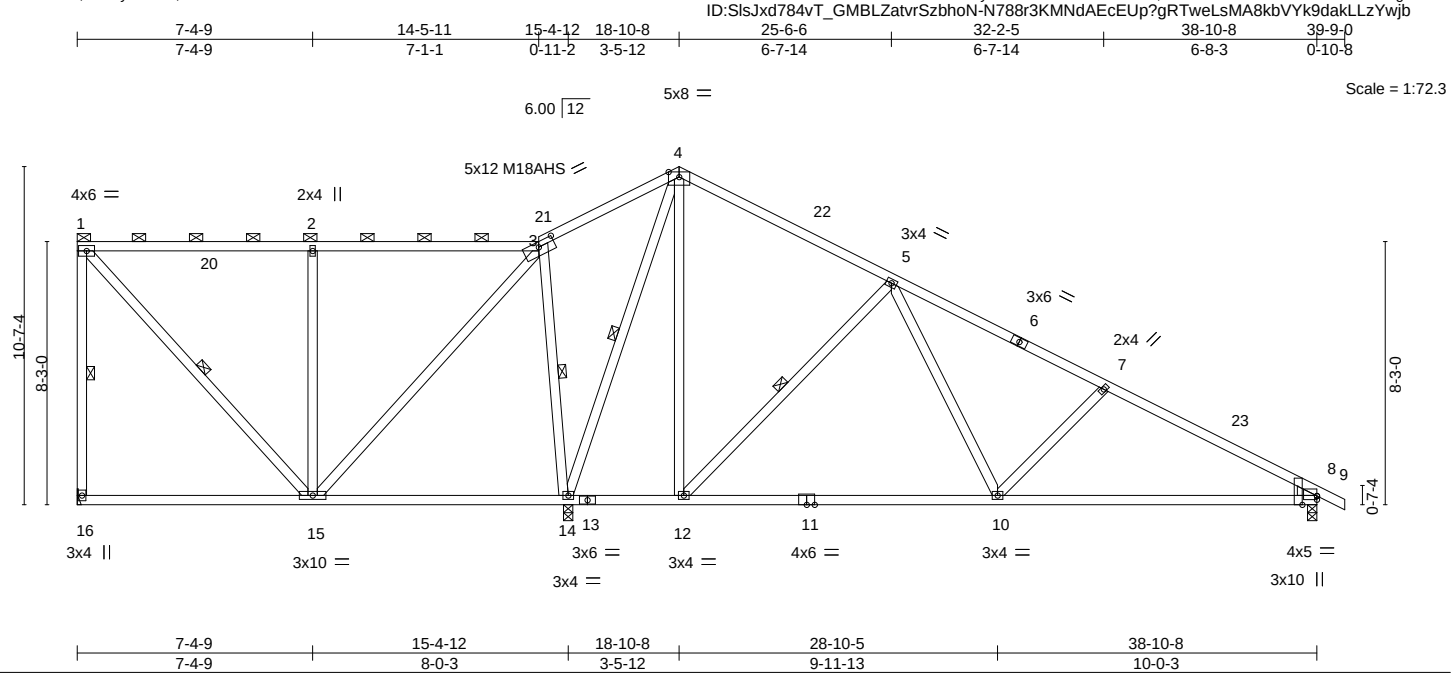

Plate Offsets (X,Y)-- [3:0-6-0,0-1-14], [8:0-0-0,0-1-7], [8:0-3-5,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.19	10-12	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.39	10-12	>727	180	M18AHS	142/136
BCLL	0.0	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 192 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-3.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 1-16, 1-15, 3-14, 5-12, 4-14

REACTIONS. (size) 16=Mechanical, 14=0-3-8, 8=0-3-8
Max Horz 16=-364(LC 10)
Max Uplift 16=-202(LC 8), 14=-261(LC 13), 8=-207(LC 13)
Max Grav 16=553(LC 25), 14=2133(LC 1), 8=981(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-16=-488/217, 1-2=-267/128, 2-3=-270/130, 3-4=0/532, 5-7=-1098/282, 7-8=-1412/315
BOT CHORD 15-16=-193/345, 14-15=-340/302, 10-12=0/641, 8-10=-182/1189
WEBS 1-15=-185/368, 2-15=-572/250, 3-15=-119/764, 3-14=-747/260, 4-12=-172/749, 5-12=-847/326, 5-10=-95/587, 7-10=-432/235, 4-14=-1370/199

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-0-6, Interior(1) 4-0-6 to 18-10-8, Exterior(2R) 18-10-8 to 22-9-2 , Interior(1) 22-9-2 to 39-9-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=202, 14=261, 8=207.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	A4	Roof Special	1	1	I57272381
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Mar 9 2023 MiTek Industries, Inc. Mon Mar 20 11:27:40 2023 Page 1
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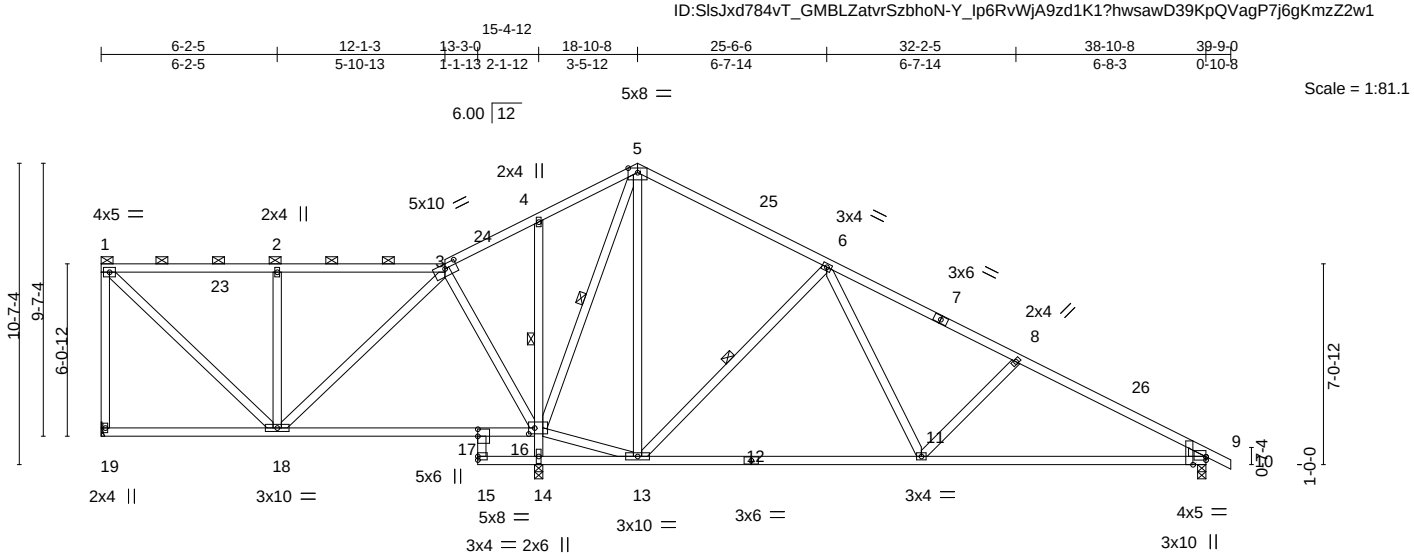

Plate Offsets (X,Y)-- [3:0-5-0,0-1-14], [9:0-3-5,Edge], [9:0-0-0,0-1-7], [16:0-2-8,0-2-8], [17:0-3-0,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.48	Vert(LL)	-0.18	11-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.38	11-13	>750	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.01	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 195 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-3.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-14, 6-13, 5-16

REACTIONS. (size) 19=Mechanical, 14=0-3-8, 9=0-3-8
Max Horz 19=-310(LC 8)
Max Uplift 19=-179(LC 8), 14=-268(LC 12), 9=-224(LC 13)
Max Grav 19=539(LC 25), 14=2129(LC 1), 9=985(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-19=-486/191, 1-2=-339/131, 2-3=-341/132, 3-4=-38/524, 4-5=0/530, 6-8=-1107/318, 8-9=-1422/351
BOT CHORD 18-19=-170/315, 17-18=-240/262, 16-17=-45/342, 14-15=-364/0, 13-14=-539/0, 11-13=-11/650, 9-11=-213/1197
WEBS 1-18=-177/440, 2-18=-478/205, 3-18=-87/571, 3-16=-556/178, 14-16=-2042/373, 5-13=-234/625, 6-13=-845/325, 6-11=-94/588, 8-11=-433/234, 13-16=0/611, 5-16=-1232/247

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-0-6, Interior(1) 4-0-6 to 18-10-8, Exterior(2R) 18-10-8 to 22-9-2 , Interior(1) 22-9-2 to 39-9-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 19=179, 14=268, 9=224.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	A5	Roof Special	1	1	I57272382
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Mar 9 2023 MiTek Industries, Inc. Mon Mar 20 11:27:42 2023 Page 1
ID:SlsJxd784vT_GMBLZatvrSzbhoN-VNPaX6xmFoPhsLUP66yKfLJQE7UxzSPia1bnOezZ2w?

4-8-9	9-5-3	13-3-0	15-4-12	18-10-8	25-6-6	32-2-5	38-10-8	39-9-0
4-8-9	4-8-9	3-9-13	2-1-12	3-5-12	6-7-14	6-7-14	6-8-3	0-10-8

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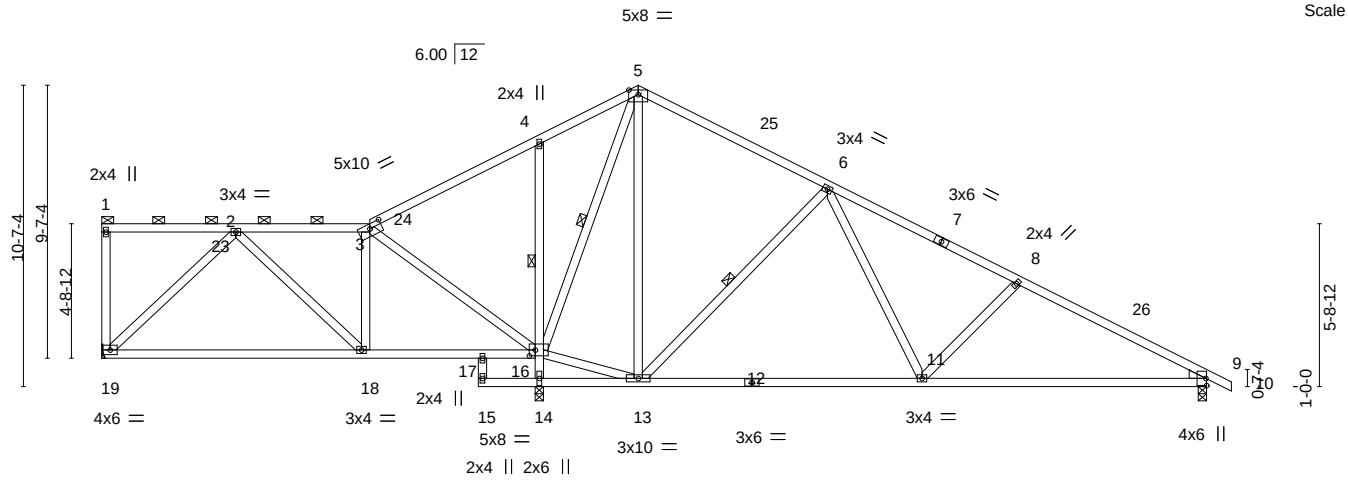


9-5-3	13-3-0	15-4-12	18-10-8	28-10-5	38-10-8
9-5-3	3-9-13	2-1-12	3-5-12	9-11-13	10-0-3

Plate Offsets (X,Y)-- [3:0-5-0,0-1-14], [16:0-2-8,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	-0.17	11-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.37	11-13	>769	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.01	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 189 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-3.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 6-13, 4-14, 5-16

REACTIONS. (size) 19=Mechanical, 9=0-3-8, 14=0-3-8
Max Horz 19=-272(LC 8)
Max Uplift 19=-146(LC 8), 9=-221(LC 13), 14=-304(LC 12)
Max Grav 19=534(LC 25), 9=991(LC 26), 14=2134(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-303/77, 3-4=-72/591, 4-5=0/526, 6-8=-1118/311, 8-9=-1432/344
BOT CHORD 18-19=-39/358, 17-18=-85/294, 16-17=-38/324, 13-14=-363/59, 11-13=-5/661, 9-11=-208/1206
WEBS 2-19=-436/186, 3-18=0/331, 3-16=-711/156, 5-13=-209/674, 6-13=-846/326, 6-11=-95/585, 8-11=-432/234, 14-16=-2107/353, 4-16=-392/214, 13-16=0/403, 5-16=-1254/210

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-0-6, Interior(1) 4-0-6 to 18-10-8, Exterior(2R) 18-10-8 to 22-9-2 , Interior(1) 22-9-2 to 39-9-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 19=146, 9=221, 14=304.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 21,2023

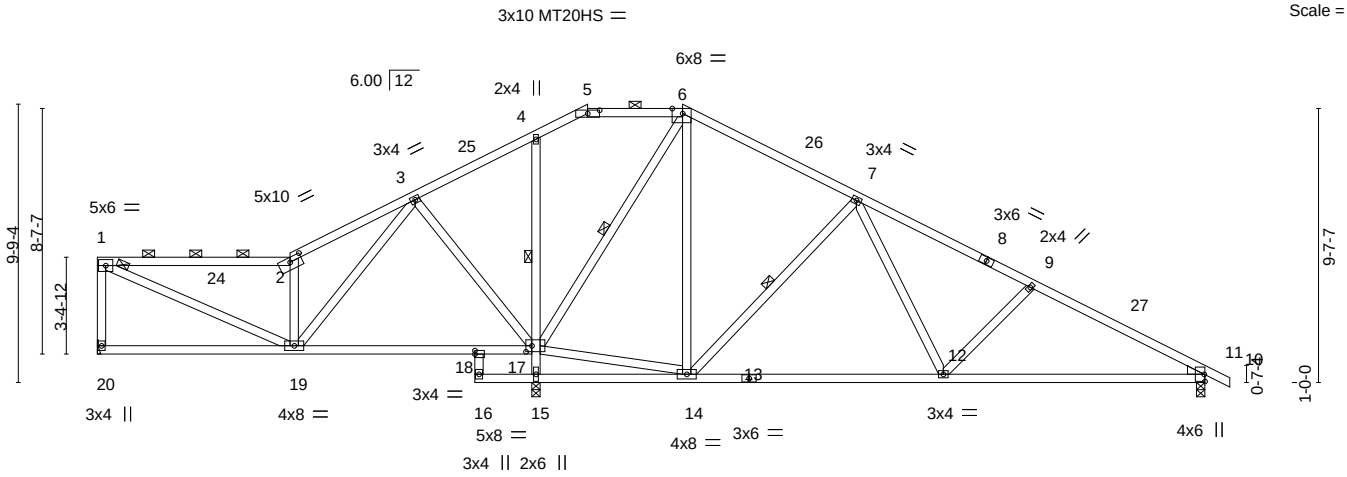
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	A6	Roof Special	1	1	I57272383
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Mar 9 2023 MiTek Industries, Inc. Mon Mar 20 11:27:44 2023 Page 1
ID:SlsJxd784vT_GMBLZatvrSzbhoN-RlXKyoy0nPfP5feoEX_okmOibxCMRPq?2L4uSXzZ2vz

6-9-3	11-1-13	13-3-0	15-4-12	17-2-8	20-6-8	26-7-12	32-8-15	38-10-8	39-9-0
6-9-3	4-4-11	2-1-3	2-1-12	1-9-12	3-4-0	6-1-4	6-1-4	6-1-9	0-10-8

Scale = 1:80.9



6-9-3	13-3-0	15-4-12	17-2-8	20-6-8	29-8-5	38-10-8
6-9-3	6-5-13	2-1-12	1-9-12	3-4-0	9-1-13	9-2-3

Plate Offsets (X,Y)-- [2:0-5-0,0-1-14], [5:0-5-0,0-1-7], [6:0-4-6,Edge], [17:0-2-8,0-2-8], [18:0-0-0,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.12	12-14	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.25	12-14	>999	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.02	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 186 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-7-1 max.): 1-2, 5-6.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 7-14, 4-15, 6-17

REACTIONS. (size) 20=Mechanical, 10=0-3-8, 15=0-3-8
Max Horz 20=-222(LC 8)
Max Uplift 20=-103(LC 8), 10=-204(LC 13), 15=-299(LC 12)
Max Grav 20=576(LC 25), 10=1037(LC 26), 15=2042(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-20=-510/124, 1-2=-669/85, 2-3=-793/141, 3-4=-55/419, 4-5=0/259, 5-6=0/290, 6-7=-472/183, 7-9=-1272/285, 9-10=-1553/314
BOT CHORD 18-19=-103/297, 17-18=-19/358, 15-16=-263/0, 14-15=-426/19, 12-14=-7/835, 10-12=-188/1317
WEBS 1-19=-67/652, 2-19=-728/212, 6-14=-191/574, 7-14=-742/295, 7-12=-86/525, 9-12=-385/213, 15-17=-1925/422, 4-17=-484/158, 3-19=-148/751, 3-17=-544/218, 14-17=0/685, 6-17=-1011/275

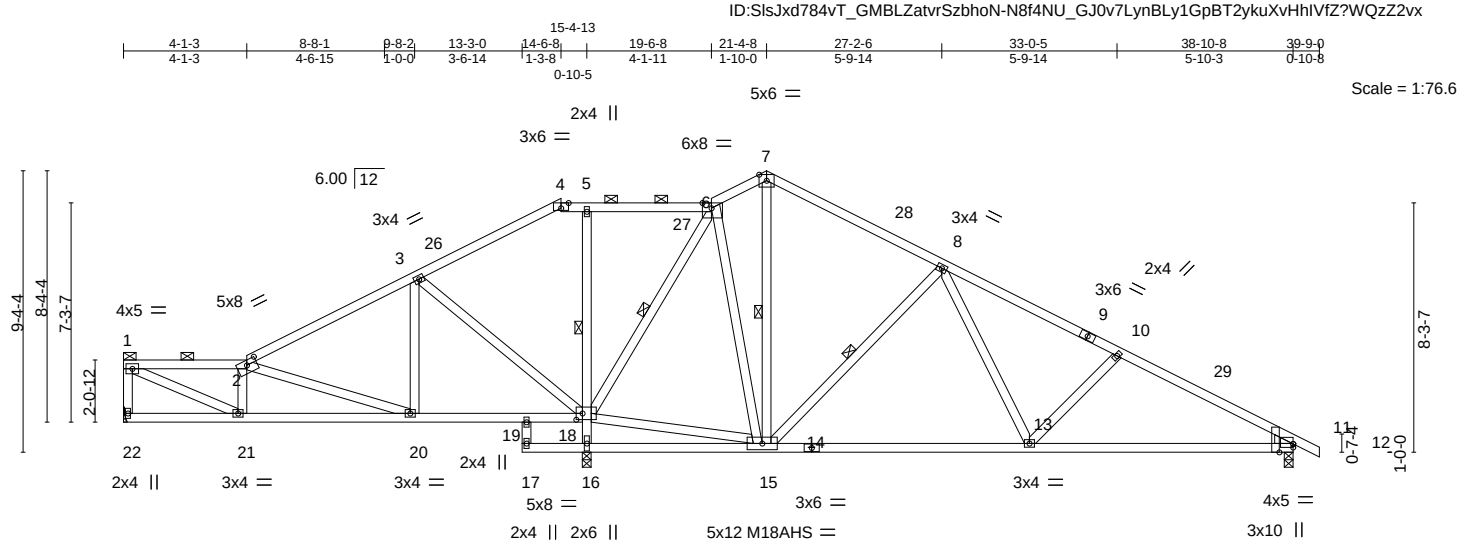
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-0-6, Interior(1) 4-0-6 to 17-2-8, Exterior(2E) 17-2-8 to 20-6-8, Exterior(2R) 20-6-8 to 24-5-2, Interior(1) 24-5-2 to 39-9-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 20=103, 10=204, 15=299.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	A7	Roof Special	1	1	I57272384
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Mar 9 2023 MiTek Industries, Inc. Mon Mar 20 11:27:46 2023 Page 1
ID:SlsJxd784vT_GMBLZatvrSzbhoN-N8f4NU_GJ0v7LynBLy1GpBT2ykuXvHhlVfZ?WQzZ2vx



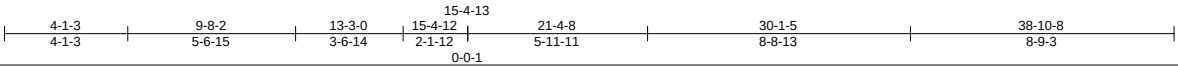


Plate Offsets (X,Y)-- [2:0-4-0,0-1-14], [4:0-3-0,Edge], [6:0-3-10,Edge], [11:0-3-5,Edge], [11:0-0-0,0-1-7], [18:0-2-8,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.59	Vert(LL)	-0.11	13-15	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.24	13-15	>999	180	M18AHS	142/136
BCLL	0.0	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.03	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 190 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-2, 4-6.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-16, 7-15, 8-15, 6-18

REACTIONS. (size) 22=Mechanical, 16=0-3-8, 11=0-3-8
Max Horz 22=-192(LC 13)
Max Uplift 22=-99(LC 12), 16=-352(LC 12), 11=-212(LC 13)
Max Grav 22=513(LC 25), 16=2138(LC 1), 11=966(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-22=-475/108, 1-2=-764/126, 2-3=-338/140, 3-4=-34/543, 4-5=0/436, 5-6=0/449, 6-7=-272/216, 7-8=-371/189, 8-10=-1154/304, 10-11=-1420/331
BOT CHORD 20-21=-179/781, 19-20=-98/255, 18-19=-48/279, 15-16=-342/59, 13-15=-33/747, 11-13=-206/1202
WEBS 1-21=-140/790, 16-18=-2045/423, 5-18=-593/160, 6-15=-94/673, 8-15=-730/283, 8-13=-79/499, 10-13=-359/201, 3-20=-1/341, 2-20=-578/158, 3-18=-728/233, 15-18=0/438, 6-18=-1036/229

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-1-3, Interior(1) 4-1-3 to 14-6-8, Exterior(2R) 14-6-8 to 18-5-2, Interior(1) 18-5-2 to 21-4-8, Exterior(2R) 21-4-8 to 25-3-2, Interior(1) 25-3-2 to 39-9-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 22 except (jt=lb) 16=352, 11=212.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 21,2023

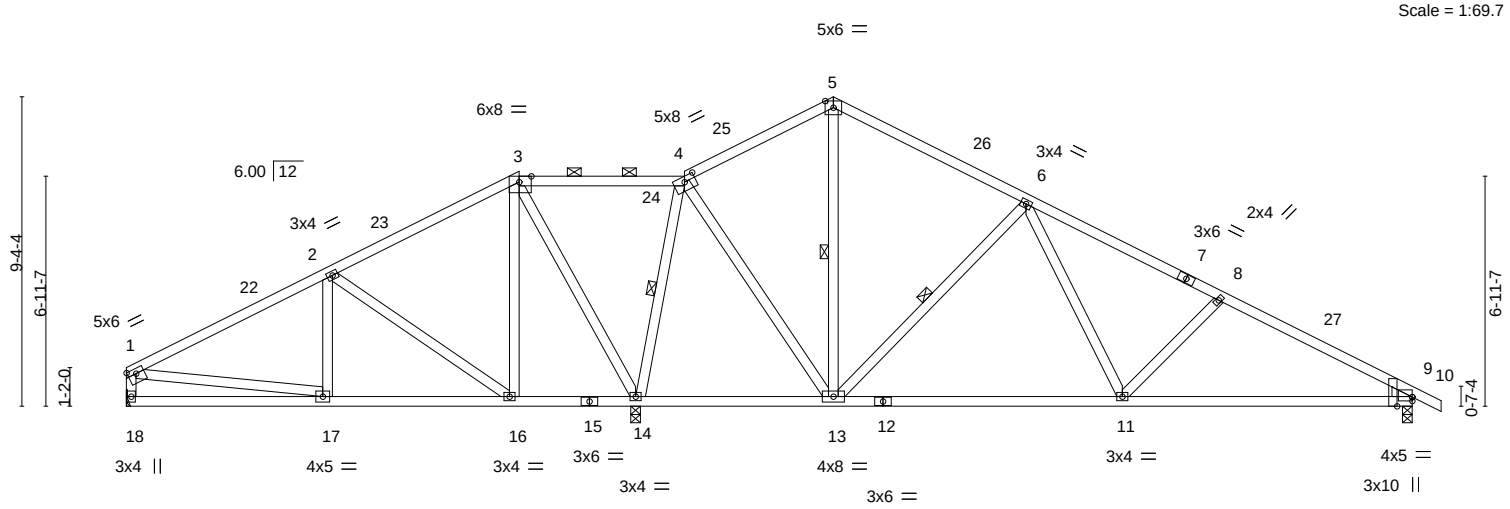
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	A8	Roof Special	1	1	I57272385
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Mar 9 2023 MiTek Industries, Inc. Mon Mar 20 11:27:47 2023 Page 1
ID:SlsJxd784vT_GMBLZatvrSzbhoN-rKDTaq_v3K1_z6MNvfYVMP0H58EvefIRkJIY2szZ2vw

6-1-0	11-10-8	16-10-8	21-4-8	27-2-6	33-0-5	38-10-8	39-9-0
6-1-0	5-9-8	5-0-0	4-6-0	5-9-14	5-9-14	5-10-3	0-10-8

Scale = 1:69.7



6-1-0	11-10-8	15-4-12	21-4-8	30-1-5	38-10-8
6-1-0	5-9-8	3-6-4	5-11-12	8-8-13	8-9-3

Plate Offsets (X,Y)-- [1:Edge,0-1-12], [3:0-4-6,Edge], [4:0-4-0,0-1-14], [9:Edge,0-1-7], [9:0-3-5,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.10	11-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.22	11-13	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.02	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 178 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-14, 5-13, 6-13

REACTIONS. (size) 18=Mechanical, 14=0-3-8, 9=0-3-8
Max Horz 18=-169(LC 17)
Max Uplift 18=-88(LC 12), 14=-363(LC 12), 9=-202(LC 13)
Max Grav 18=516(LC 25), 14=2208(LC 1), 9=929(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-591/102, 2-3=-108/307, 3-4=-26/646, 4-5=-271/192, 5-6=-297/168, 6-8=-1079/283, 8-9=-1346/310, 1-18=-459/111
BOT CHORD 17-18=-165/258, 16-17=-142/453, 14-16=-260/266, 13-14=-387/245, 11-13=-13/677, 9-11=-187/1137
WEBS 2-16=-567/207, 3-16=-78/407, 3-14=-973/236, 4-14=-1287/271, 4-13=-113/1013, 6-13=-732/284, 6-11=-81/498, 8-11=-364/202, 1-17=-99/274

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-0-6, Interior(1) 4-0-6 to 11-10-8, Exterior(2R) 11-10-8 to 15-9-2 , Interior(1) 15-9-2 to 21-4-8, Exterior(2R) 21-4-8 to 25-3-2, Interior(1) 25-3-2 to 39-9-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18 except (jt=lb) 14=363, 9=202.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 21,2023

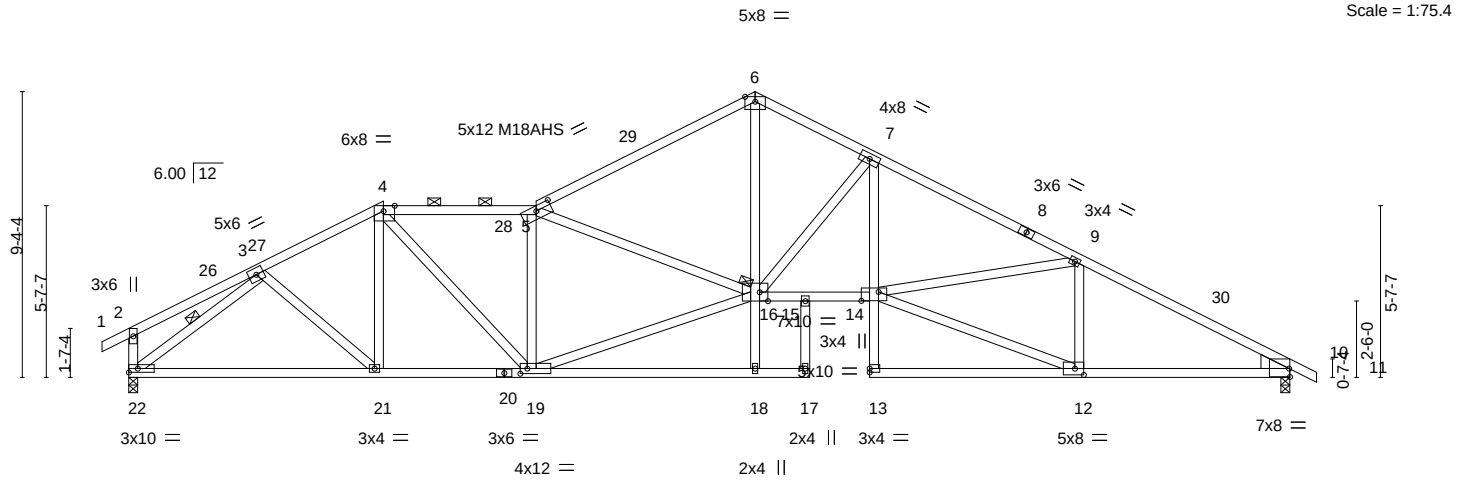
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	A9	Roof Special	2	1	I57272386
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Mar 9 2023 MiTek Industries, Inc. Mon Mar 20 11:27:50 2023 Page 1
ID:SlsJxd784vT_GMBLZatvrSzbhoN-GvubDr1nMFQYqa5yan5C_1ehsMAdr2HtQHXCfBzZ2vt

-0-10-8	4-3-12	8-4-0	13-4-0	20-6-0	22-3-7	24-2-15	31-1-5	38-0-0	38-10-8
0-10-8	4-3-12	4-0-4	5-0-0	7-2-0	1-9-7	1-11-8	6-10-6	6-10-11	0-10-8

Scale = 1:75.4



8-4-0	13-4-0	20-6-0	22-3-7	24-2-15	31-1-5	38-0-0
8-4-0	5-0-0	7-2-0	1-9-7	1-11-8	6-10-6	6-10-11

Plate Offsets (X,Y)-- [4:0-4-6,Edge], [5:0-6-0,0-1-14], [10:Edge,0-3-4], [12:0-3-8,0-2-8], [14:0-6-12,0-3-8], [16:0-3-4,Edge], [19:0-2-12,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.29	14-15	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.53	18-19	>864	180	M18AHS	142/136
BCLL	0.0	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.25	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 193 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
5-6: 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
WEDGE
Right: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-3-7 max.): 4-5.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 3-22
JOINTS 1 Brace at Jt(s): 16

REACTIONS. (size) 10=0-3-8, 22=0-3-8
Max Horz 22=-162(LC 17)
Max Uplift 10=-291(LC 13), 22=-320(LC 12)
Max Grav 10=1764(LC 1), 22=1775(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-2336/465, 4-5=-2734/565, 5-6=-2845/526, 6-7=-2830/545, 7-9=-3773/629, 9-10=-3029/504, 2-22=-303/131
BOT CHORD 21-22=-408/1804, 19-21=-365/2052, 15-16=-354/3211, 14-15=-365/3267, 7-14=-116/1004, 10-12=-353/2610
WEBS 3-21=-19/324, 4-19=-183/1018, 5-19=-1549/308, 16-18=0/273, 6-16=-328/2079, 7-16=-1238/295, 9-12=-881/198, 3-22=-2165/399, 16-19=-471/2848, 5-16=-504/238, 12-14=-380/2718, 9-14=-73/681

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-11-2, Interior(1) 2-11-2 to 8-4-0, Exterior(2R) 8-4-0 to 12-1-10, Interior(1) 12-1-10 to 20-6-0, Exterior(2R) 20-6-0 to 24-4-11, Interior(1) 24-4-11 to 38-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=291, 22=320.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 21,2023

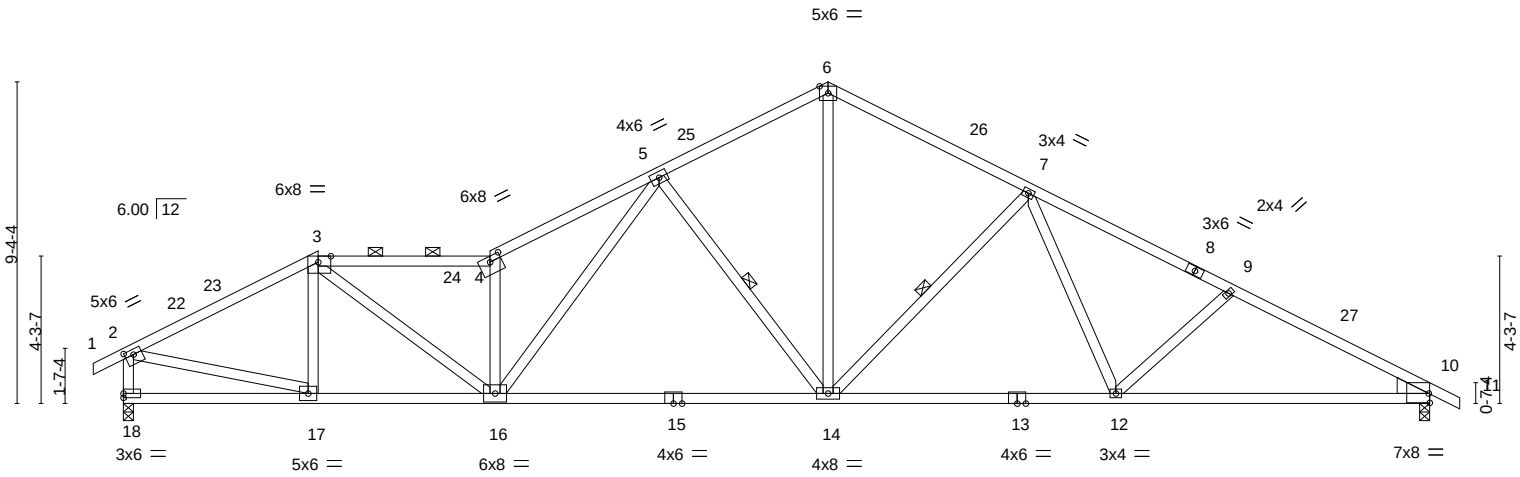
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	A10	Roof Special	2	1	I57272387
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Mar 9 2023 MiTek Industries, Inc. Mon Mar 20 11:27:14 2023 Page 1
ID:SlsJxd784vT_GMBLZatvrSzbhoN-J_j_fYbCrBtfV2L1TDSmWR8aPruZPpna8gpIPGzZ2wR

-0-10-8 5-8-0 10-8-0 15-7-0 20-6-0 26-3-14 32-1-13 38-0-0 38-10-8
0-10-8 5-8-0 5-0-0 4-11-0 4-11-0 5-9-14 5-9-14 5-10-3 0-10-8

Scale = 1:67.0



5-8-0 10-8-0 20-6-0 28-10-7 38-0-0
5-8-0 5-0-0 9-10-0 8-4-7 9-1-9

Plate Offsets (X,Y)-- [2:0-3-0,0-1-12], [3:0-4-6,Edge], [4:0-4-0,0-1-14], [10:Edge,0-3-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.63	Vert(LL)	-0.26	14-16	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.60	14-16	>752	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.13	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 168 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-8-14 max.): 3-4.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-14, 7-14

REACTIONS. (size) 18=0-3-8, 10=0-3-8
Max Horz 18=-162(LC 17)
Max Uplift 18=-320(LC 12), 10=-291(LC 13)
Max Grav 18=1775(LC 1), 10=1764(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2307/428, 3-4=-3257/610, 4-5=-3656/725, 5-6=-2093/472, 6-7=-2113/463, 7-9=-2771/498, 9-10=-3034/514, 2-18=-1713/378
BOT CHORD 16-17=-405/2008, 14-16=-365/2367, 12-14=-271/2266, 10-12=-367/2620
WEBS 3-17=-383/110, 3-16=-242/1590, 4-16=-1962/438, 5-16=-303/1398, 5-14=-947/329, 6-14=-267/1451, 7-14=-699/280, 7-12=-65/406, 9-12=-319/195, 2-17=-287/1895

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-11-2, Interior(1) 2-11-2 to 5-8-0, Exterior(2R) 5-8-0 to 9-5-10, Interior(1) 9-5-10 to 20-6-0, Exterior(2R) 20-6-0 to 24-3-10, Interior(1) 24-3-10 to 38-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 18=320, 10=291.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 21,2023

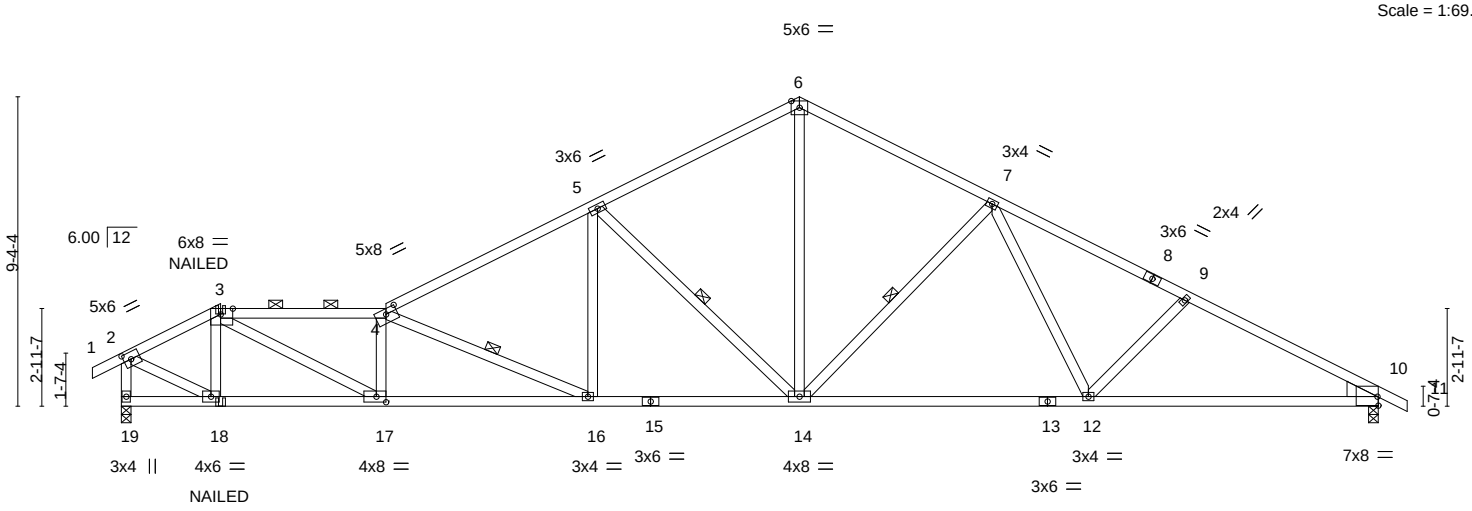
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	A11	Roof Special Girder	2	1	I57272388
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Mar 9 2023 MiTek Industries, Inc. Mon Mar 20 11:27:16 2023 Page 1
ID:SlsJxd784vT_GMBLZatvrSzbhoN-FNrl4DcSNo7NlLVQbeUEbsEsdea4tjStc_IPT9zZ2wP

-0-10-8	3-0-0	8-0-0	14-3-0	20-6-0	26-3-14	32-1-13	38-0-0	38-10-8
0-10-8	3-0-0	5-0-0	6-3-0	6-3-0	5-9-14	5-9-14	5-10-3	0-10-8

Scale = 1:69.7



3-0-0	8-0-0	14-3-0	20-6-0	29-2-13	38-0-0
3-0-0	5-0-0	6-3-0	6-3-0	8-8-13	8-9-3

Plate Offsets (X,Y)-- [2:0-2-11,0-2-8], [3:0-4-6,Edge], [4:0-4-0,0-1-14], [10:Edge,0-3-4], [17:0-3-8,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.84	Vert(LL)	-0.25	16-17	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.54	12-14	>847	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.61	Horz(CT)	0.15	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 166 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except* 3-4,4-6: 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF 1650F 1.5E *Except* 13-15: 2x4 SPF No.2
WEBS 2x4 SPF No.2
WEDGE
Right: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-5-10 oc purlins, except end verticals, and 2-0-0 oc purlins (3-1-7 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 8-2-0 oc bracing.
WEBS 1 Row at midpt 4-16, 5-14, 7-14

REACTIONS. (size) 19=0-3-8, 10=0-3-8
Max Horz 19=-162(LC 34)
Max Uplift 19=-394(LC 8), 10=-298(LC 9)
Max Grav 19=1780(LC 1), 10=1765(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1856/412, 3-4=-3862/722, 4-5=-3004/524, 5-6=-2117/399, 6-7=-2108/417, 7-9=-2799/482, 9-10=-3045/507, 2-19=-1758/399
BOT CHORD 17-18=-448/1680, 16-17=-782/3922, 14-16=-441/2598, 12-14=-237/2263, 10-12=-360/2631
WEBS 3-18=-725/137, 3-17=-401/2501, 4-17=-1120/251, 4-16=-1443/372, 5-16=-99/698, 5-14=-1107/358, 6-14=-242/1421, 7-14=-705/281, 7-12=-70/435, 9-12=-312/194, 2-18=-362/1808

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 19=394, 10=298.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
8) "NAILED" indicates 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

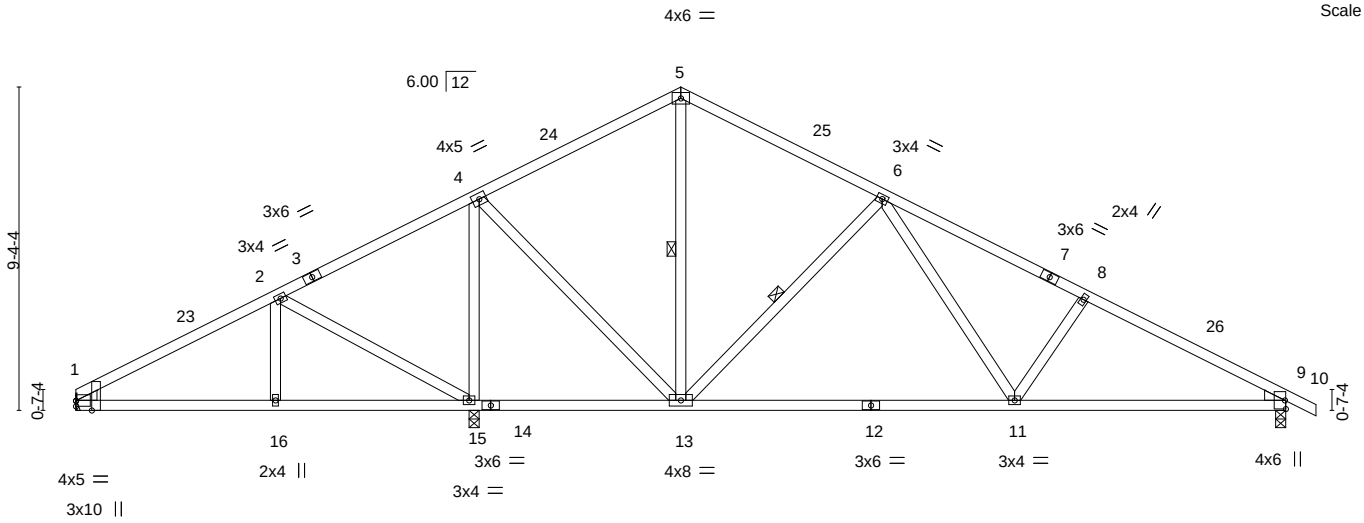
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-6=-70, 6-11=-70, 19-20=-20
   Concentrated Loads (lb)
   Vert: 18=-6(B)

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	A14	Common	2	1	I57272389
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Mar 9 2023 MiTek Industries, Inc. Mon Mar 20 11:27:18 2023 Page 1
ID:SlsJxd784vT_GMBLZatvrSzbhoN-ClzVVveivQO5_feoi3XihHJJeSKYLYbA3InWY1zZ2wN

5-9-5	11-6-4	17-6-0	23-3-14	29-1-13	35-0-0	35-10-8
5-9-5	5-8-15	5-11-12	5-9-14	5-9-14	5-10-3	0-10-8

Scale = 1:66.7



5-9-5	11-6-4	17-6-0	27-1-14	35-0-0
5-9-5	5-8-15	5-11-12	9-7-14	7-10-2

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	-0.18	11-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.38	11-13	>737	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.96	Horz(CT)	0.03	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 145 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-13, 6-13

REACTIONS. (size) 1=Mechanical, 15=0-3-8, 9=0-3-8
Max Horz 1=-170(LC 13)
Max Uplift 1=-70(LC 12), 15=-282(LC 12), 9=-219(LC 13)
Max Grav 1=400(LC 25), 15=1878(LC 1), 9=1019(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-449/110, 2-4=-26/477, 4-5=-497/226, 5-6=-495/215, 6-8=-1343/347, 8-9=-1543/337
BOT CHORD 1-16=-145/342, 15-16=-145/342, 13-15=-345/216, 11-13=-54/839, 9-11=-212/1306
WEBS 2-16=0/252, 2-15=-614/209, 4-15=-1485/247, 4-13=-95/997, 6-13=-715/288, 6-11=-106/538, 8-11=-335/197

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-6-0, Interior(1) 3-6-0 to 17-6-0, Exterior(2R) 17-6-0 to 21-0-0, Interior(1) 21-0-0 to 35-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) 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) 1 except (jt=lb) 15=282, 9=219.
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.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	A18	Roof Special	2	1	I57272390
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Mar 9 2023 MiTek Industries, Inc. Mon Mar 20 11:27:20 2023 Page 1
ID:SlsJxd784vT_GMBLZatvrSzbhoN-884FwbgzQ1epDzoBqUZAmiOeMG?PpS3TXcGdcwzZ2wL

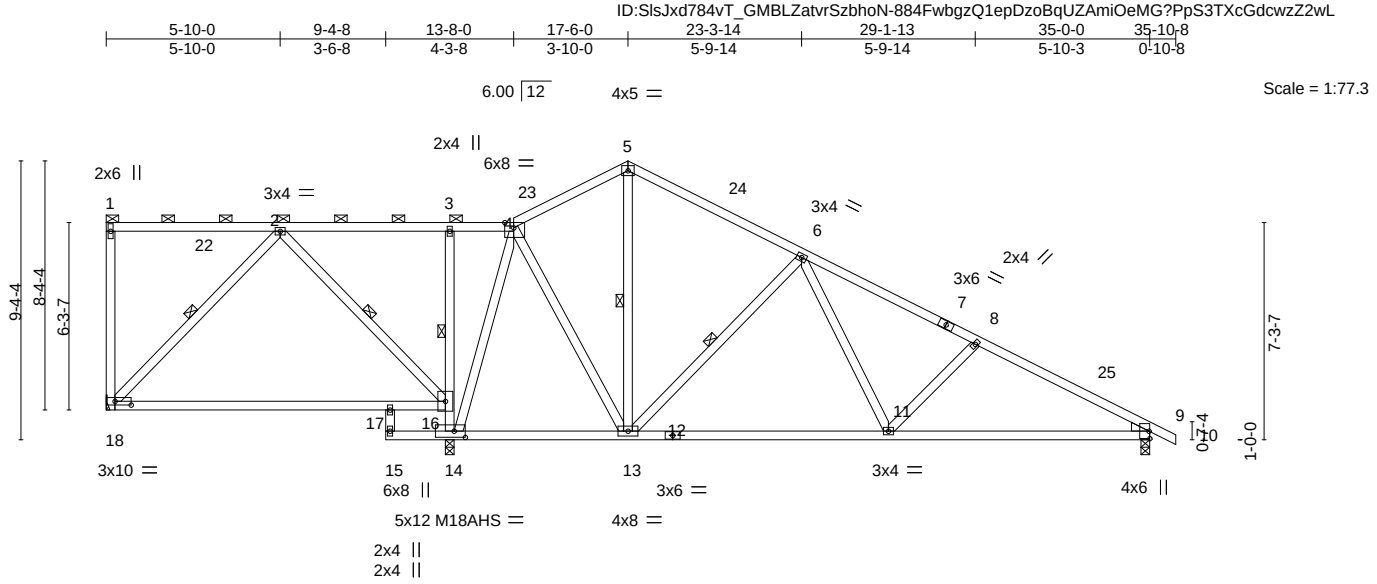


Plate Offsets (X,Y)-- [4:0-3-10,Edge], [14:0-4-8,0-2-8], [18:0-6-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	-0.29	17-18	>465	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.57	17-18	>239	180	M18AHS	142/136
BCLL	0.0	Rep Stress Incr	YES	WB	0.96	Horz(CT)	0.03	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 168 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (6-0-0 max.): 1-4.
BOT CHORD Rigid ceiling directly applied. Except: 6-0-0 oc bracing: 3-14
WEBS 1 Row at midpt 2-18, 2-16, 5-13, 6-13

REACTIONS. (size) 14=0-3-8, 9=0-3-8, 18=Mechanical
Max Horz 18=-300(LC 8)
Max Uplift 14=-92(LC 12), 9=-281(LC 13), 18=-266(LC 8)
Max Grav 14=1872(LC 1), 9=1019(LC 1), 18=355(LC 25)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=0/406, 3-4=0/418, 4-5=-447/366, 5-6=-493/341, 6-8=-1264/445, 8-9=-1529/470
BOT CHORD 14-16=-716/99, 3-16=-305/139, 11-13=-164/848, 9-11=-328/1297
WEBS 2-18=-118/351, 2-16=-547/11, 6-13=-728/278, 6-11=-69/502, 8-11=-357/195, 4-14=-1031/120, 4-13=0/753

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 17-6-0, Exterior(2R) 17-6-0 to 20-6-0 , Interior(1) 20-6-0 to 35-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) 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) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14 except (jt=lb) 9=281, 18=266.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 21,2023

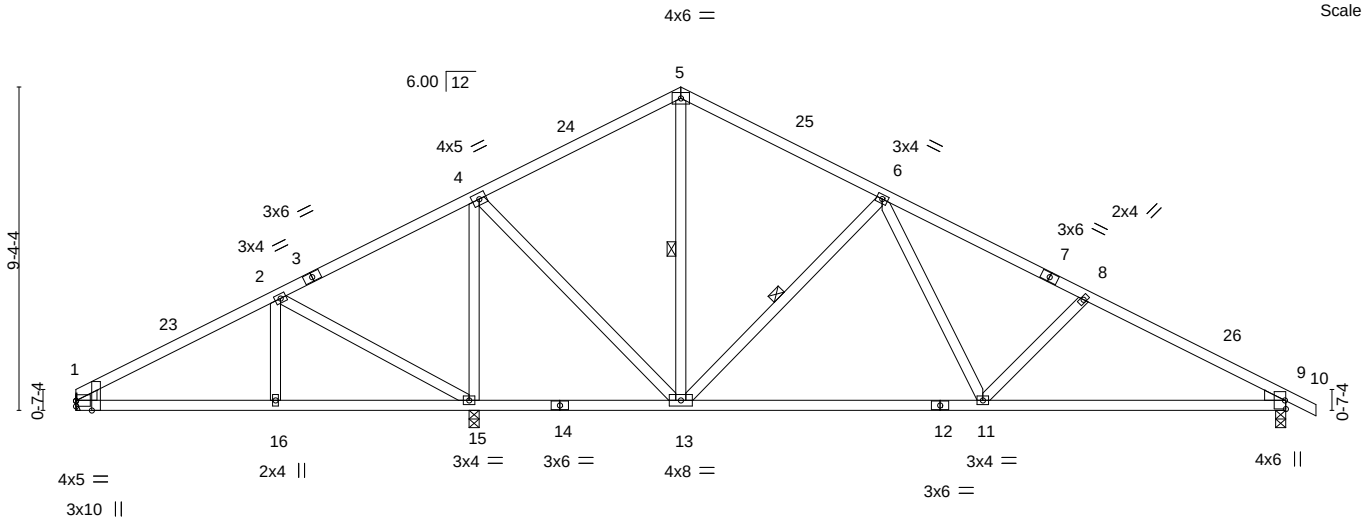
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	A19	Common	2	1	I57272391
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Mar 9 2023 MiTek Industries, Inc. Mon Mar 20 11:27:22 2023 Page 1
ID:SlsJxd784vT_GMBLZatvrSzbhoN-4WC0LHhDyeuXTGyZxvber7U?g3hrHMkm_wljhpzZ2wJ

5-9-5	11-6-4	17-6-0	23-3-14	29-1-13	35-0-0	35-10-8
5-9-5	5-8-15	5-11-12	5-9-14	5-9-14	5-10-3	0-10-8

Scale = 1:66.7



5-9-5	11-6-4	17-6-0	26-2-13	35-0-0
5-9-5	5-8-15	5-11-12	8-8-13	8-9-3

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	-0.11	11-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.24	11-13	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.03	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 145 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-13, 6-13

REACTIONS. (size) 1=Mechanical, 15=0-3-8, 9=0-3-8
Max Horz 1=-170(LC 13)
Max Uplift 1=-67(LC 12), 15=-287(LC 12), 9=-217(LC 13)
Max Grav 1=407(LC 25), 15=1869(LC 1), 9=1022(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-462/97, 2-4=-33/461, 4-5=-500/224, 5-6=-498/209, 6-8=-1269/315, 8-9=-1534/342
BOT CHORD 1-16=-139/354, 15-16=-139/354, 13-15=-332/223, 11-13=-44/851, 9-11=-215/1302
WEBS 2-15=-611/210, 4-15=-1469/248, 4-13=-102/982, 6-13=-728/282, 6-11=-79/493, 8-11=-357/201

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 17-6-0, Exterior(2R) 17-6-0 to 20-6-0, Interior(1) 20-6-0 to 35-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) 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) 1 except (jt=lb) 15=287, 9=217.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	A20	Hip	2	1	I57272392
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Mar 9 2023 MiTek Industries, Inc. Mon Mar 20 11:27:24 2023 Page 1
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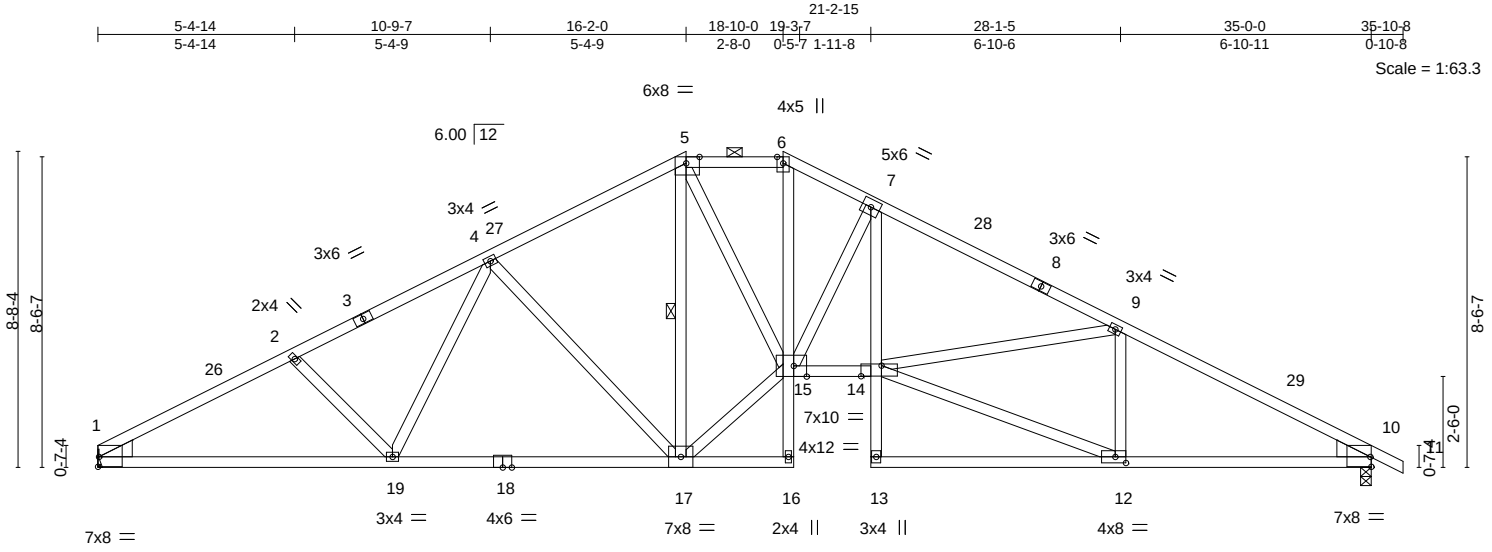


Plate Offsets (X,Y)-- [1:Edge,0-3-4], [5:0-4-6,Edge], [10:Edge,0-3-4], [12:0-3-8,0-2-0], [14:0-6-12,0-3-8], [15:0-4-4,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.24	14-15	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.44	17-19	>951	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.22	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 171 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (3-8-11 max.): 5-6.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-17

REACTIONS. (size) 1=Mechanical, 10=0-3-8
Max Horz 1=-157(LC 13)
Max Uplift 1=-250(LC 12), 10=-271(LC 13)
Max Grav 1=1574(LC 1), 10=1637(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2794/460, 2-4=-2574/451, 4-5=-1962/414, 5-6=-2348/451, 6-7=-2696/496, 7-9=-3350/534, 9-10=-2770/435
BOT CHORD 1-19=-467/2411, 17-19=-317/2090, 6-15=-180/1036, 14-15=-277/2890, 7-14=-97/915, 10-12=-304/2381
WEBS 2-19=-272/177, 4-19=-64/388, 4-17=-619/252, 5-17=-826/29, 7-15=-1093/261, 9-12=-785/178, 15-17=-186/2199, 5-15=-119/1495, 12-14=-329/2474, 9-14=-33/529

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-6-0, Interior(1) 3-6-0 to 16-2-0, Exterior(2E) 16-2-0 to 18-10-0, Exterior(2R) 18-10-0 to 23-9-6, Interior(1) 23-9-6 to 35-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=250, 10=271.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 21,2023

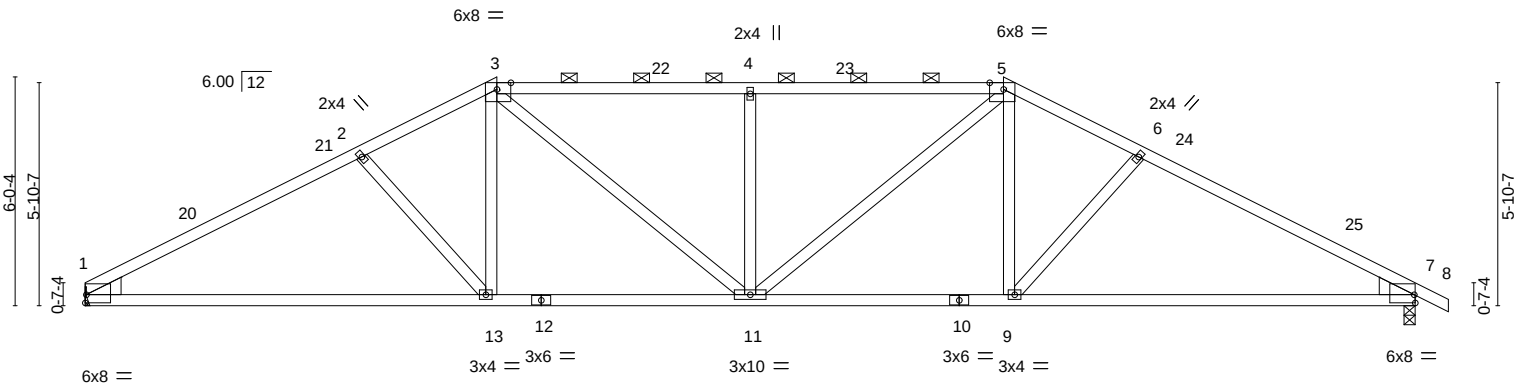
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	A22	Hip	2	1	I57272393
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Mar 9 2023 MiTek Industries, Inc. Mon Mar 20 11:27:25 2023 Page 1
ID:SlsJxd784vT_GMBLZatvrSzbhoN-U5u8zIj5FZG5Kkh8d19LTm6TRHfcUtOCguzOI7zZ2wG

7-3-6	10-10-0	17-6-0	24-2-0	27-8-10	35-0-0	35-10-8
7-3-6	3-6-10	6-8-0	6-8-0	3-6-10	7-3-6	0-10-8

Scale = 1:60.6



10-10-0	17-6-0	24-2-0	35-0-0
10-10-0	6-8-0	6-8-0	10-10-0

Plate Offsets (X,Y)-- [1:Edge,0-2-9], [3:0-4-6,Edge], [5:0-4-6,Edge], [7:Edge,0-2-9]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.22	13-16	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.48	13-16	>872	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.12	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 136 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (2-11-1 max.): 3-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 1=Mechanical, 7=0-3-8
Max Horz 1=-108(LC 13)
Max Uplift 1=-272(LC 12), 7=-292(LC 13)
Max Grav 1=1574(LC 1), 7=1637(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2711/481, 2-3=-2431/450, 3-4=-2534/485, 4-5=-2534/485, 5-6=-2427/449, 6-7=-2707/479
BOT CHORD 1-13=-418/2325, 11-13=-295/2131, 9-11=-218/2128, 7-9=-316/2319
WEBS 2-13=-287/182, 3-13=-63/431, 3-11=-183/655, 4-11=-567/223, 5-11=-183/657, 5-9=-62/430, 6-9=-282/181

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 10-10-0, Exterior(2R) 10-10-0 to 15-0-15 , Interior(1) 15-0-15 to 24-2-0, Exterior(2R) 24-2-0 to 28-4-15, Interior(1) 28-4-15 to 35-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=272, 7=292.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	A24	Common	1	1	I57272394
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Mar 9 2023 MiTek Industries, Inc. Mon Mar 20 11:27:27 2023 Page 1
ID:SlsJxd784vT_GMBLZatvrSzbhoN-RU?vO_IMnBWpZ1qXkSBpYBBpT4NLyj2V8CSUM0zZ2wE

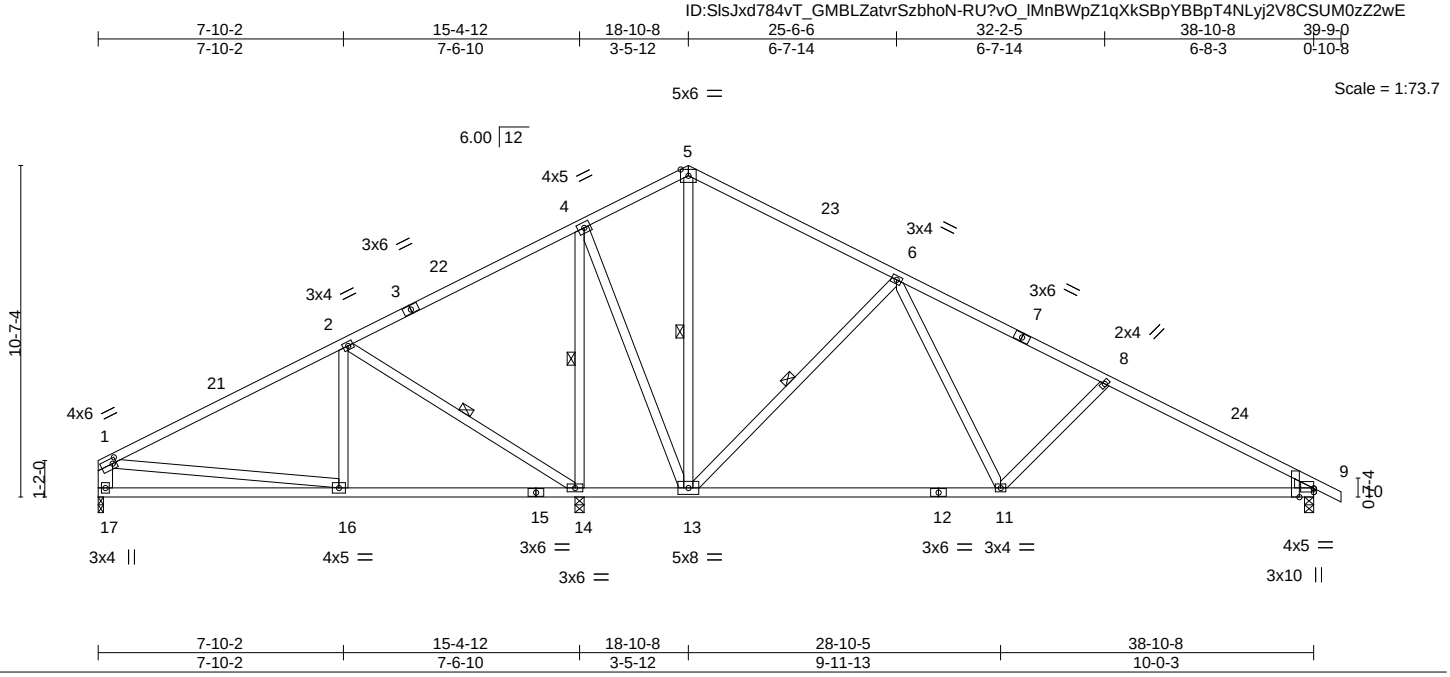


Plate Offsets (X,Y)-- [1:0-1-8,0-2-0], [9:0-0-0,0-1-7], [9:0-3-5,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.18	11-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.38	11-13	>744	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.56	Horz(CT)	0.02	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 176 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except*
1-17: 2x6 SPF No.2
WEDGE
Right: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 2-14, 4-14, 5-13, 6-13

REACTIONS. (size) 17=0-2-0, 14=0-3-8, 9=0-3-8
Max Horz 17=-191(LC 17)
Max Uplift 17=-80(LC 12), 14=-328(LC 12), 9=-211(LC 13)
Max Grav 17=553(LC 25), 14=2095(LC 1), 9=992(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-599/81, 2-4=-43/499, 6-8=-1121/290, 8-9=-1434/324, 1-17=-482/110
BOT CHORD 16-17=-217/351, 14-16=-118/439, 13-14=-350/294, 11-13=0/663, 9-11=-190/1208
WEBS 2-16=0/326, 2-14=-770/277, 4-14=-1587/268, 4-13=-145/1068, 6-13=-848/327, 6-11=-95/586, 8-11=-430/235

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-2-12 to 4-1-6, Interior(1) 4-1-6 to 18-10-8, Exterior(2R) 18-10-8 to 22-9-2 , Interior(1) 22-9-2 to 39-9-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 17.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17 except (jt=lb) 14=328, 9=211.
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.

March 21,2023

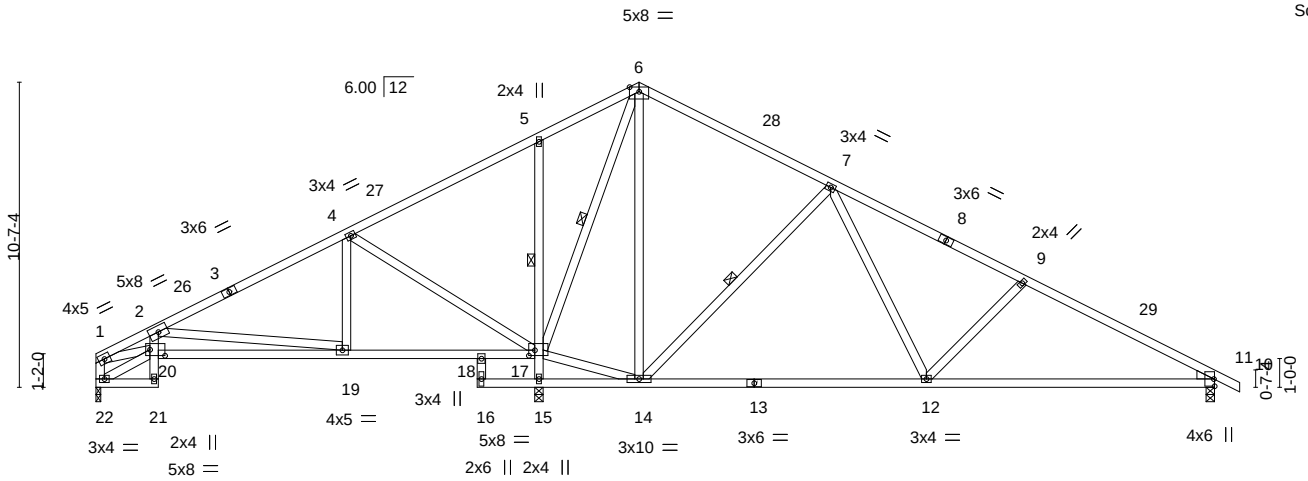
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	A25	Roof Special	2	1	I57272395
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Mar 9 2023 MiTek Industries, Inc. Mon Mar 20 11:27:29 2023 Page 1
ID:SlsJxd784vT_GMBLZatvrSzbhoN-Nt7fpgncJomXoL_vstDHdcG9nu2EQYDnbWxbRvzZ2wC

2-2-0	8-8-8	13-3-0	15-4-12	18-10-8	25-6-6	32-2-5	38-10-8	39-9-0
2-2-0	6-6-8	4-6-8	2-1-12	3-5-12	6-7-14	6-7-14	6-8-3	0-10-8

Scale = 1:80.1



2-2-0	8-8-8	13-3-0	15-4-12	18-10-8	28-10-5	38-10-8
2-2-0	6-6-8	4-6-8	2-1-12	3-5-12	9-11-13	10-0-3

Plate Offsets (X,Y)-- [17:0-2-8,0-2-4], [20:0-6-4,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	-0.15	12-14	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.32	12-14	>871	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.04	15	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 190 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
13-16: 2x4 SP 2400F 2.0E
WEBS 2x4 SPF No.2
WEDGE
Right: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-15, 7-14, 6-17

REACTIONS. (size) 15=0-3-8, 10=0-3-8, 22=0-2-0
Max Horz 22=-191(LC 17)
Max Uplift 15=-414(LC 12), 10=-235(LC 13), 22=-51(LC 13)
Max Grav 15=2290(LC 1), 10=969(LC 26), 22=425(LC 25)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-874/217, 2-4=-287/165, 4-5=-168/788, 5-6=-34/727, 6-7=-157/268, 7-9=-1073/341, 9-10=-1388/374, 1-22=-378/90
BOT CHORD 19-20=-406/1032, 17-18=-9/275, 14-15=-446/41, 12-14=-32/620, 10-12=-234/1167
WEBS 2-19=-866/407, 4-19=0/331, 4-17=-770/286, 15-17=-2234/435, 5-17=-388/210, 6-14=-211/665, 7-14=-848/326, 7-12=-94/587, 9-12=-438/232, 14-17=0/382, 6-17=-1420/202, 1-20=-190/733

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-0-6, Interior(1) 4-0-6 to 18-10-8, Exterior(2R) 18-10-8 to 22-9-2 , Interior(1) 22-9-2 to 39-9-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 22.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 22 except (jt=lb) 15=414, 10=235.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) 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.

March 21,2023

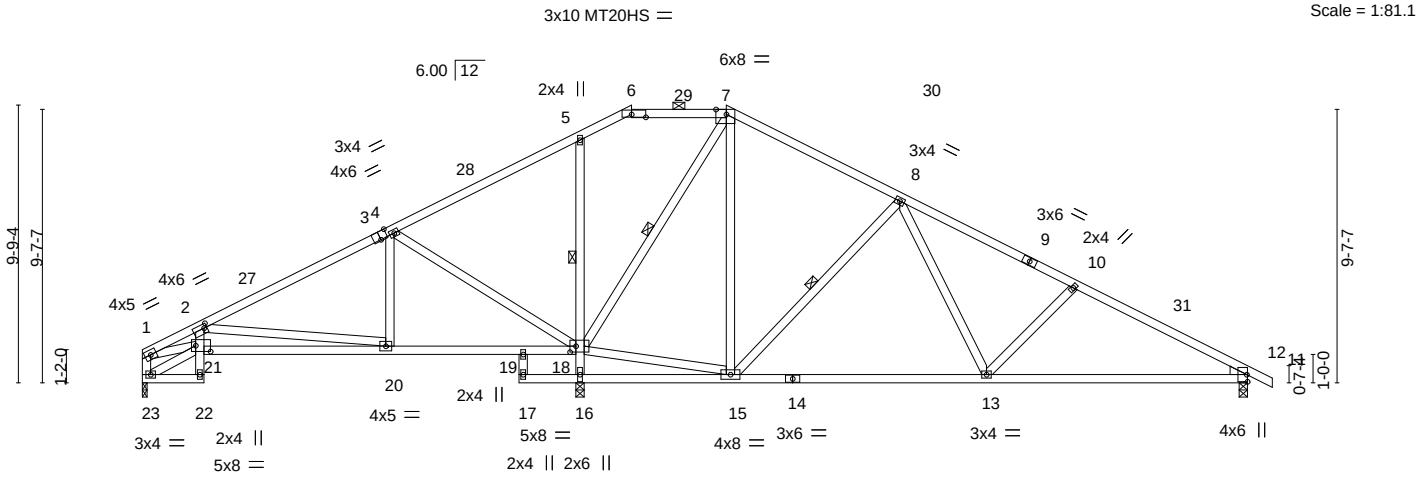
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	A26	Hip	1	1	I57272396
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Mar 9 2023 MiTek Industries, Inc. Mon Mar 20 11:27:31 2023 Page 1
ID:SlsJxd784vT_GMBLZatvrSzbhoN-JFFPEMosrP0F2f8IzIGli1MU8hmOuS143qQiVnzZ2wA

2-2-0	8-8-8	13-3-0	15-4-12	17-2-8	20-6-8	26-7-12	32-8-15	38-10-8	39-9-0
2-2-0	6-6-8	4-6-8	2-1-12	1-9-12	3-4-0	6-1-4	6-1-4	6-1-9	0-10-8

Scale = 1:81.1



2-2-0	8-8-8	13-3-0	15-4-12	17-2-8	20-6-8	29-8-5	38-10-8
2-2-0	6-6-8	4-6-8	2-1-12	1-9-12	3-4-0	9-1-13	9-2-3

Plate Offsets (X,Y)-- [2:0-1-4,0-1-12], [3:0-3-0,Edge], [6:0-6-0,0-1-3], [7:0-4-6,Edge], [18:0-2-8,0-2-8], [21:0-6-4,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.63	Vert(LL)	-0.11	13-15	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.25	13-15	>999	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	YES	WB	0.81	Horz(CT)	0.07	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 185 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 6-7.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-16, 8-15, 7-18

REACTIONS. (size) 16=0-3-8, 11=0-3-8, 23=0-2-0
Max Horz 23=-175(LC 17)
Max Uplift 16=-399(LC 12), 11=-215(LC 13), 23=-43(LC 12)
Max Grav 16=2125(LC 1), 11=1029(LC 26), 23=526(LC 25)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1105/228, 2-4=-513/23, 4-5=-140/557, 5-6=-3/353, 6-7=-6/391, 7-8=-456/190, 8-10=-1255/307, 10-11=-1537/336, 1-23=-471/95
BOT CHORD 20-21=-402/1266, 19-20=-31/372, 18-19=-7/437, 15-16=-368/47, 13-15=-24/820, 11-13=-207/1303
WEBS 2-20=-901/396, 4-20=0/336, 4-18=-752/283, 16-18=-2034/441, 5-18=-585/224, 7-15=-180/593, 8-15=-743/295, 8-13=-85/525, 10-13=-389/212, 15-18=0/588, 7-18=-1082/271, 1-21=-199/930

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-0-6, Interior(1) 4-0-6 to 17-2-8, Exterior(2E) 17-2-8 to 20-6-8, Exterior(2R) 20-6-8 to 26-0-8, Interior(1) 26-0-8 to 39-9-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 23.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 23 except (jt=lb) 16=399, 11=215.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	A27	Roof Special	1	1	I57272397
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Mar 9 2023 MiTek Industries, Inc. Mon Mar 20 11:27:34 2023 Page 1
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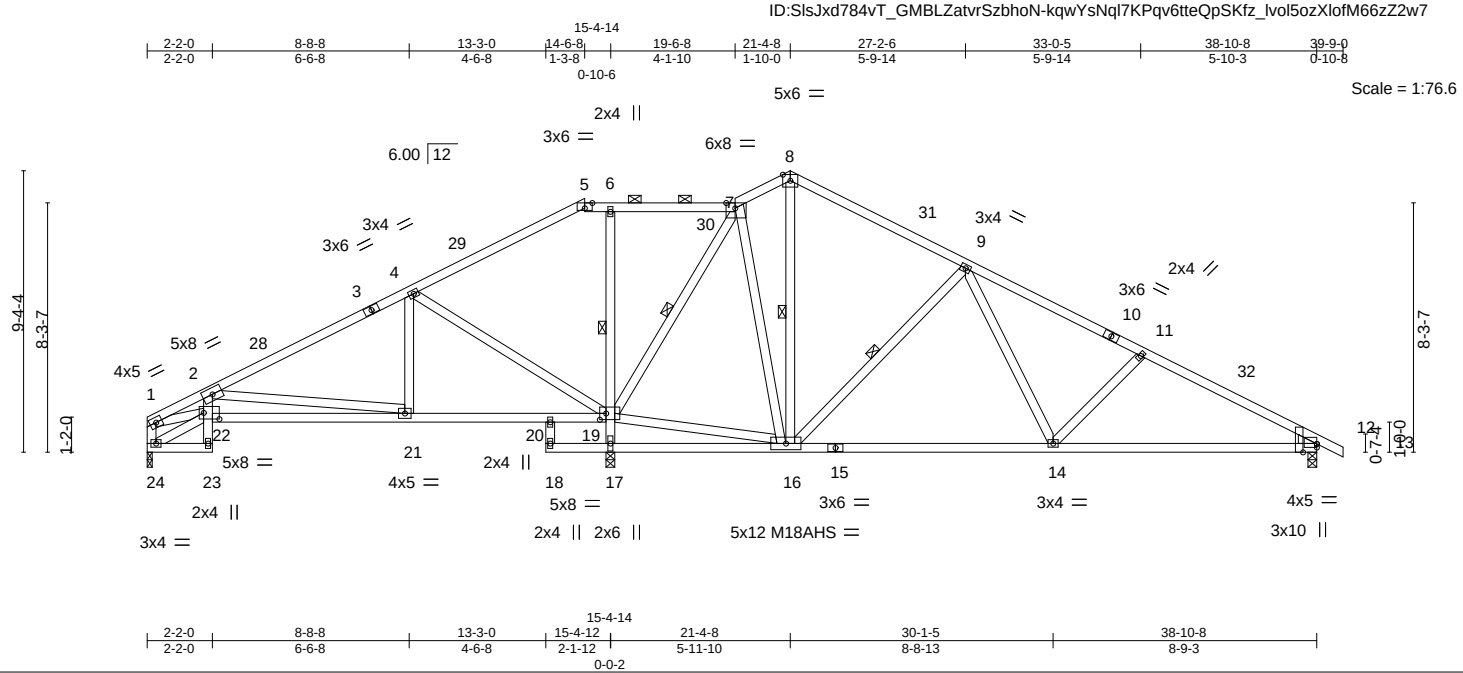

Plate Offsets (X,Y)-- [5:0-3-0,Edge], [7:0-3-10,Edge], [12:0-3-5,Edge], [12:0-0-0,0-1-7], [19:0-2-8,0-2-8], [22:0-6-4,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.11	14-16	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.24	14-16	>999	180	M18AHS	142/136
BCLL	0.0	Rep Stress Incr	YES	WB	0.87	Horz(CT)	0.07	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 190 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 5-7.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 6-17, 8-16, 9-16, 7-19

REACTIONS. (size) 17=0-3-8, 12=0-3-8, 24=0-2-0
Max Horz 24=-169(LC 17)
Max Uplift 17=-378(LC 12), 12=-225(LC 13), 24=-78(LC 12)
Max Grav 17=2142(LC 1), 12=965(LC 26), 24=508(LC 25)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1061/301, 2-4=-479/100, 4-5=-63/552, 5-6=0/431, 6-7=0/445, 7-8=-263/245, 8-9=-368/217, 9-11=-1152/330, 11-12=-1418/357, 1-24=-457/125
BOT CHORD 21-22=-467/1203, 20-21=-74/345, 19-20=-55/405, 16-17=-354/47, 14-16=-57/745, 12-14=-229/1200
WEBS 2-21=-865/396, 4-21=0/331, 4-19=-799/284, 17-19=-2044/424, 6-19=-639/190, 7-16=-66/680, 9-16=-730/282, 9-14=-78/500, 11-14=-360/200, 1-22=-261/889, 16-19=0/445, 7-19=-1020/222

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-0-6, Interior(1) 4-0-6 to 14-6-8, Exterior(2R) 14-6-8 to 18-5-2, Interior(1) 18-5-2 to 21-4-8, Exterior(2R) 21-4-8 to 25-3-2, Interior(1) 25-3-2 to 39-9-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 24.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24 except (jt=lb) 17=378, 12=225.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	A28	Roof Special	1	1	I57272398
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Mar 9 2023 MiTek Industries, Inc. Mon Mar 20 11:27:36 2023 Page 1
ID:SlsJxd784vT_GMBLZatvrSzbhoN-gD2IH3s?fyfX8Q0GmrrwP43PoiTFZh4pC58TA?zZ2w5

6-1-0	11-10-8	16-10-8	21-4-8	27-2-6	33-0-5	38-10-8	39-9-0
6-1-0	5-9-8	5-0-0	4-6-0	5-9-14	5-9-14	5-10-3	0-10-8

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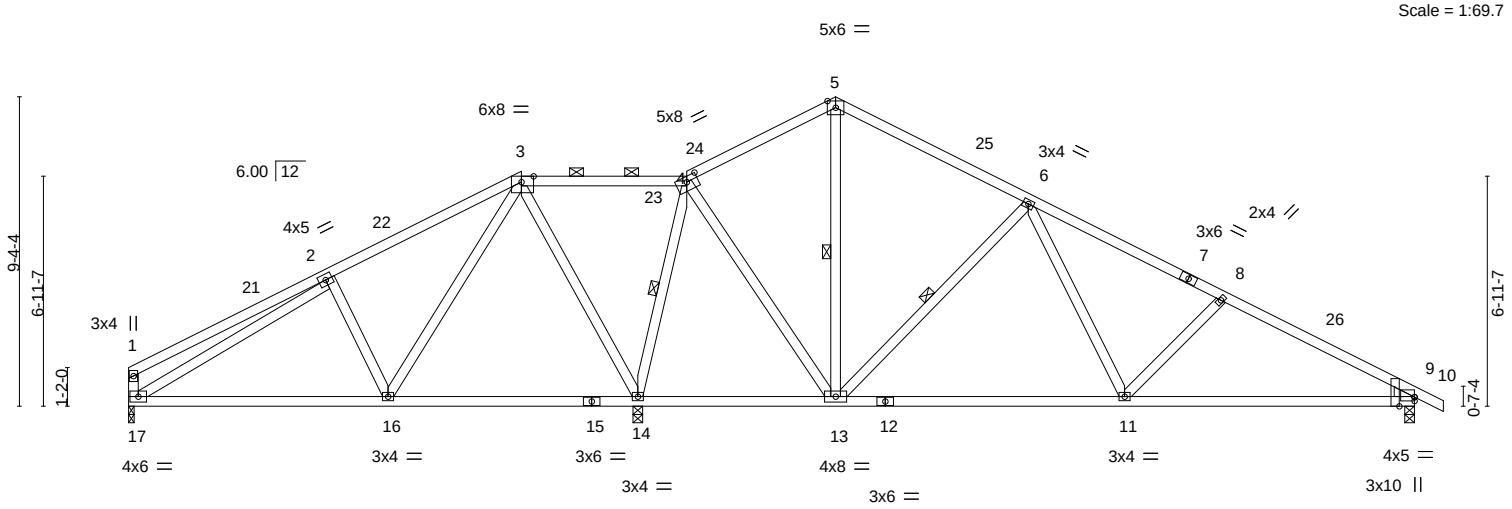

7-10-2	15-4-12	21-4-8	30-1-5	38-10-8
7-10-2	7-6-10	5-11-12	8-8-13	8-9-3

Plate Offsets (X,Y)-- [3:0-4-6,Edge], [4:0-4-0,0-1-14], [9:0-0-0,0-1-7], [9:0-3-5,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.11	11-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.23	11-13	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.02	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 173 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-14, 5-13, 6-13

REACTIONS. (size) 14=0-3-8, 17=0-2-0, 9=0-3-8
Max Horz 17=-169(LC 17)
Max Uplift 14=-366(LC 12), 17=-86(LC 12), 9=-208(LC 13)
Max Grav 14=2213(LC 1), 17=508(LC 25), 9=933(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-308/108, 2-3=-398/143, 3-4=-32/647, 4-5=-278/206, 5-6=-305/181, 6-8=-1087/295, 8-9=-1354/323, 1-17=-285/115
BOT CHORD 16-17=-150/430, 14-16=-280/246, 13-14=-372/227, 11-13=-25/684, 9-11=-198/1144
WEBS 2-16=-389/225, 3-16=-154/596, 3-14=-942/256, 4-14=-1280/271, 4-13=-102/998, 6-13=-733/283, 6-11=-79/500, 8-11=-363/201, 2-17=-273/170

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-0-6, Interior(1) 4-0-6 to 11-10-8, Exterior(2R) 11-10-8 to 15-9-2 , Interior(1) 15-9-2 to 21-4-8, Exterior(2R) 21-4-8 to 25-3-2, Interior(1) 25-3-2 to 39-9-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 17.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17 except (jt=lb) 14=366, 9=208.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	B2A	Roof Special	2	1	I57272399
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Mar 9 2023 MiTek Industries, Inc. Mon Mar 20 11:27:51 2023 Page 1
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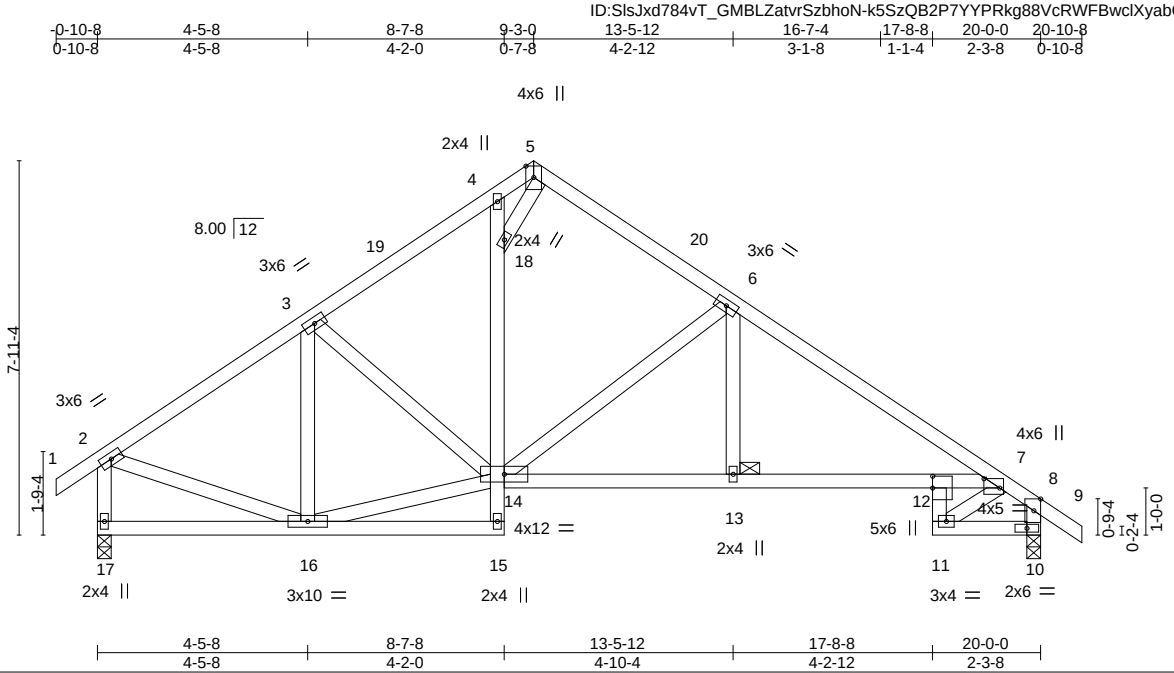

Plate Offsets (X,Y)-- [7:0-4-0,0-2-6], [8:0-3-0,Edge], [12:0-3-0,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	-0.14	12-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.27	12-13	>881	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.14	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 99 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
7-14: 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied. Except:
10-0-0 oc bracing: 13-14, 12-13
JOINTS 1 Brace at Jt(s): 13

REACTIONS. (size) 17=0-3-8, 10=0-3-8
Max Horz 17=-237(LC 10)
Max Uplift 17=-151(LC 12), 10=-163(LC 13)
Max Grav 17=958(LC 1), 10=958(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-924/172, 3-4=-931/206, 4-5=-905/268, 5-6=-836/208, 6-7=-1380/213, 7-8=-843/171, 2-17=-913/186, 8-10=-912/171
BOT CHORD 14-18=-120/600, 13-14=-67/1096, 12-13=-67/1096, 7-12=-36/876, 10-11=-92/453
WEBS 3-16=-332/86, 14-16=-137/785, 6-14=-601/214, 6-13=0/332, 2-16=-65/699, 5-18=-174/600, 7-11=-292/55

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 9-3-0, Exterior(2R) 9-3-0 to 12-3-0, Interior(1) 12-3-0 to 20-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=151, 10=163.
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.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	B4	GABLE	1	1	I57272400
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Mar 9 2023 MiTek Industries, Inc. Mon Mar 20 11:27:54 2023 Page 1
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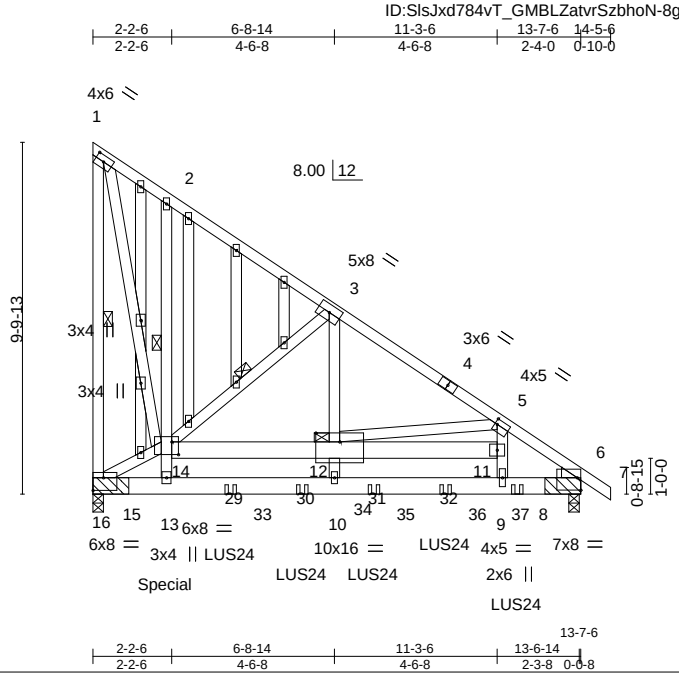

Scale: 3/16"=1'

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	-0.07	11-12	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.11	11-12	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.49	Horz(CT)	-0.03	16	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 135 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF No.2 *Except*
2-13,5-9: 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2
WEDGE
Right: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-3-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-7-3 oc bracing. Except:
6-0-0 oc bracing: 13-14, 2-14
WEBS 1 Row at midpt 1-16, 3-14
JOINTS 1 Brace at Jt(s): 12

REACTIONS. (size) 16=(0-3-8 + bearing block) (req. 0-3-9), 6=(0-3-8 + bearing block) (req. 0-3-10)
Max Horz 6=-377(LC 6)
Max Uplift 16=-659(LC 9), 6=-423(LC 9)
Max Grav 16=2272(LC 1), 6=2297(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-16=-1027/356, 1-2=-373/181, 2-3=-439/207, 3-5=-2143/409, 5-6=-2874/521
BOT CHORD 2-14=-286/127, 12-14=-717/204, 5-11=-67/437, 13-16=-541/2170, 10-13=-592/2432, 9-10=-592/2432, 6-9=-578/2328
WEBS 14-16=-2447/717, 1-14=-416/1188, 3-14=-1871/498, 3-12=-338/1801, 5-12=-919/254

NOTES-
1) 2x6 SPF No.2 bearing block 12" long at jt. 16 attached to front face with 3 rows of 10d (0.131"x3") nails spaced 3" o.c. 12 Total fasteners. Bearing is assumed to be SPF No.2.
2) 2x6 SPF No.2 bearing block 12" long at jt. 6 attached to front face with 3 rows of 10d (0.131"x3") nails spaced 3" o.c. 12 Total fasteners. Bearing is assumed to be SPF No.2.
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
4) 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.
5) All plates are 2x4 MT20 unless otherwise indicated.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=659, 6=423.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 3-10-2 from the left end to 11-10-2 to connect truss(es) to back face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 533 lb down and 222 lb up at 2-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

Continued on page 2

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

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

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-7=-70, 11-14=-20, 13-16=-20, 9-13=-20, 9-26=-20
   Concentrated Loads (lb)
   Vert: 14=-533(B) 29=-519(B) 30=-514(B) 31=-556(B) 32=-493(B) 37=-496(B)

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	CJ2	Jack-Open	2	1	I57272401
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Mar 9 2023 MiTek Industries, Inc. Mon Mar 20 11:27:55 2023 Page 1
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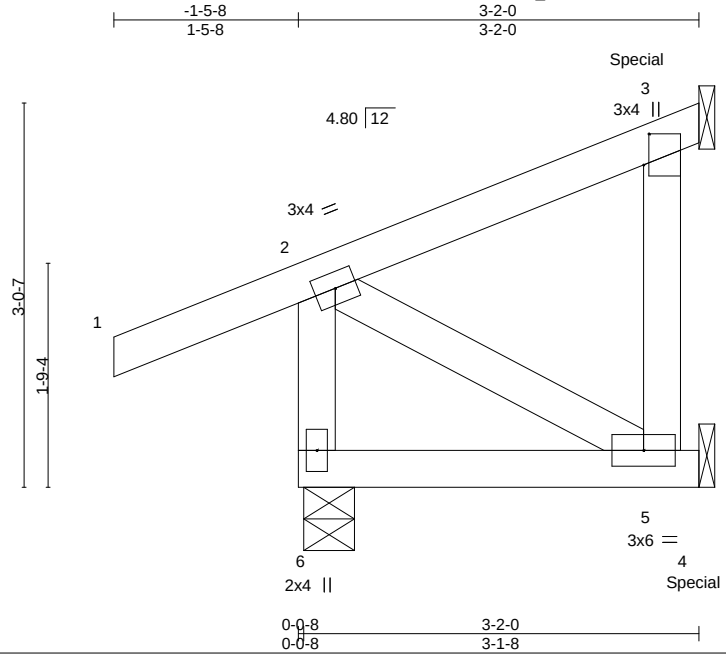

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Plate Offsets (X,Y)-- [3:0-2-15,0-0-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	-0.00	5-6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.01	5-6	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 17 lb	FT = 20%

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

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

REACTIONS. (size) 6=0-4-13, 3=Mechanical, 5=Mechanical
Max Horz 6=77(LC 9)
Max Uplift 6=-55(LC 8), 3=-51(LC 12), 5=-63(LC 9)
Max Grav 6=268(LC 1), 3=72(LC 46), 5=67(LC 3)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 3, 5.
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) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 73 lb down and 58 lb up at 2-10-8 on top chord, and 39 lb down and 43 lb up at 3-2-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	J7	Jack-Open	2	1	I57272402
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Mar 9 2023 MiTek Industries, Inc. Mon Mar 20 11:27:56 2023 Page 1
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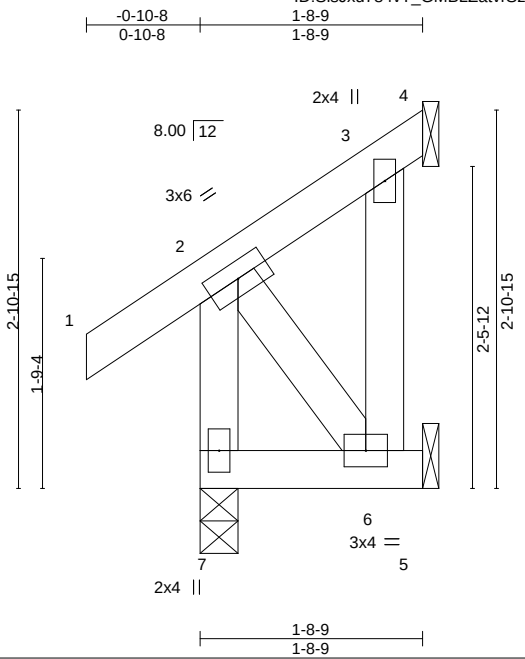

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 12 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-8-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 7=69(LC 9)
Max Uplift 4=-33(LC 12), 5=-39(LC 12)
Max Grav 7=165(LC 1), 4=45(LC 19), 5=41(LC 10)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	LG2	GABLE	1	1	I57272403
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Mar 9 2023 MiTek Industries, Inc. Mon Mar 20 11:27:58 2023 Page 1
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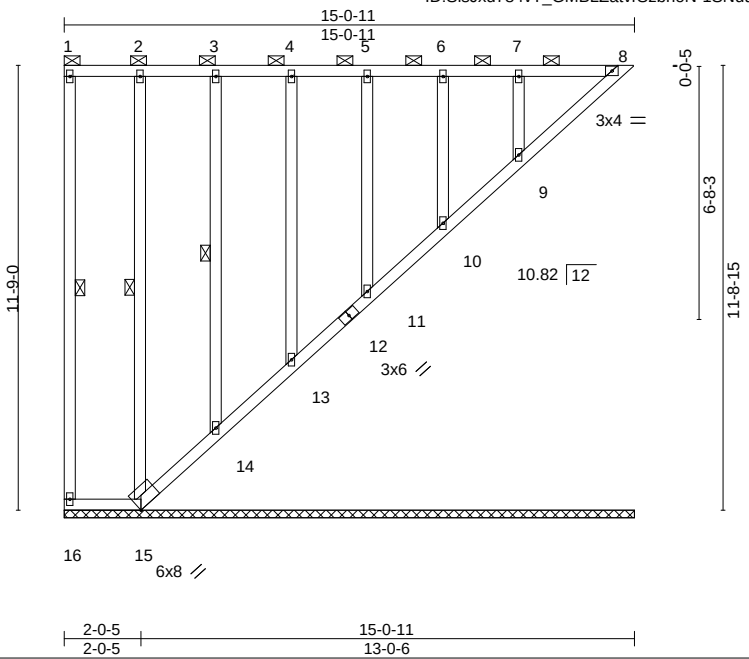

Scale = 1:60.8

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 98 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-8, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 1-16, 2-15, 3-14

REACTIONS. All bearings 15-0-11.
(lb) - Max Uplift All uplift 100 lb or less at joint(s) 16, 8, 15, 14, 13, 11, 10, 9
Max Grav All reactions 250 lb or less at joint(s) 16, 8, 15, 14, 13, 11, 10 except 9=251(LC 1)

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

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone; cantilever left and right exposed ; end vertical right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Bearing at joint(s) 8, 11, 10, 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 8, 15, 14, 13, 11, 10, 9.
8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 8, 14, 13, 11, 10, 9.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	M1	GABLE	1	1	I57272404
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Mar 9 2023 MiTek Industries, Inc. Mon Mar 20 11:27:59 2023 Page 1
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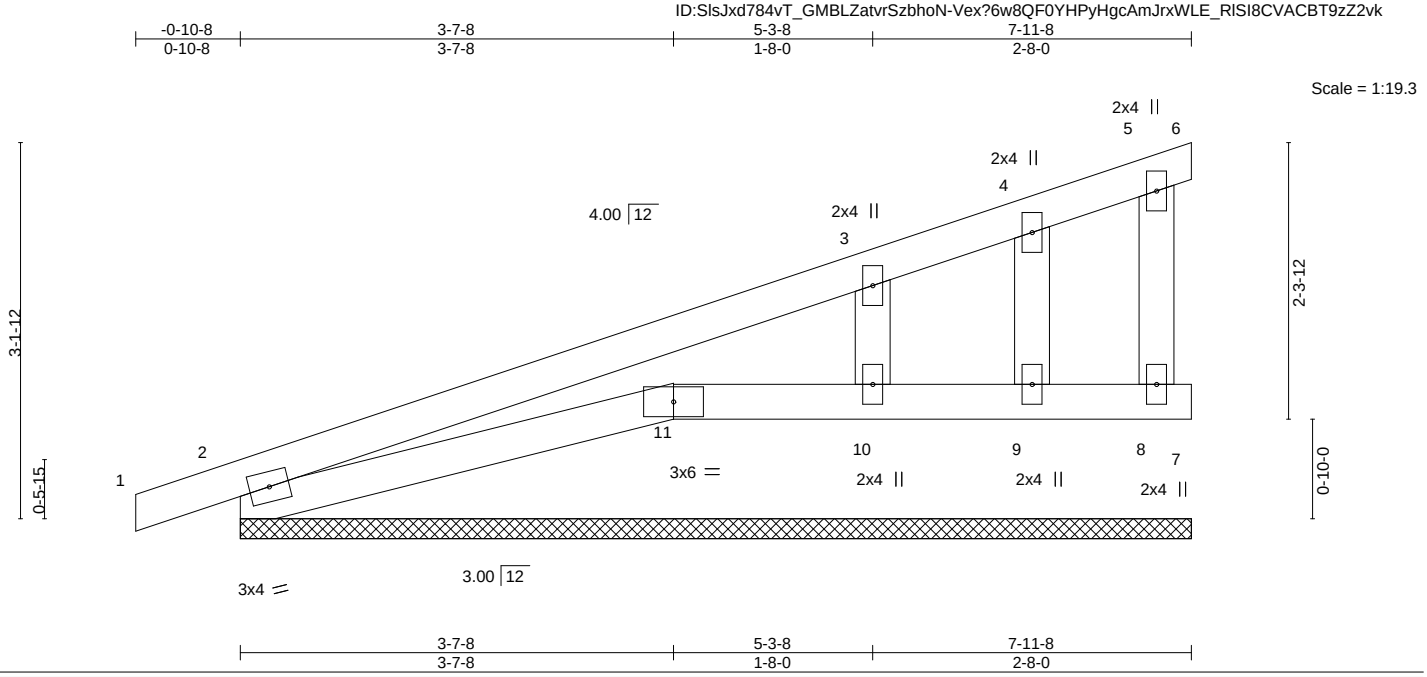

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	-0.01	1	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	0.01	1	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	-0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 24 lb	FT = 20%

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

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

REACTIONS. All bearings 7-11-8.
(lb) - Max Horz 2=121(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 6, 2, 7, 8 except 9=-101(LC 1), 10=-203(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 6, 11, 9, 8 except 2=252(LC 1), 10=467(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-10=-431/558

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 7-11-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 1-4-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2, 7, 8 except (jt=lb) 9=101, 10=203.
7) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 6, 11, 7, 9, 8, 10.
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.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	M2	Monopitch	3	1	I57272405
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Mar 9 2023 MiTek Industries, Inc. Mon Mar 20 11:28:01 2023 Page 1
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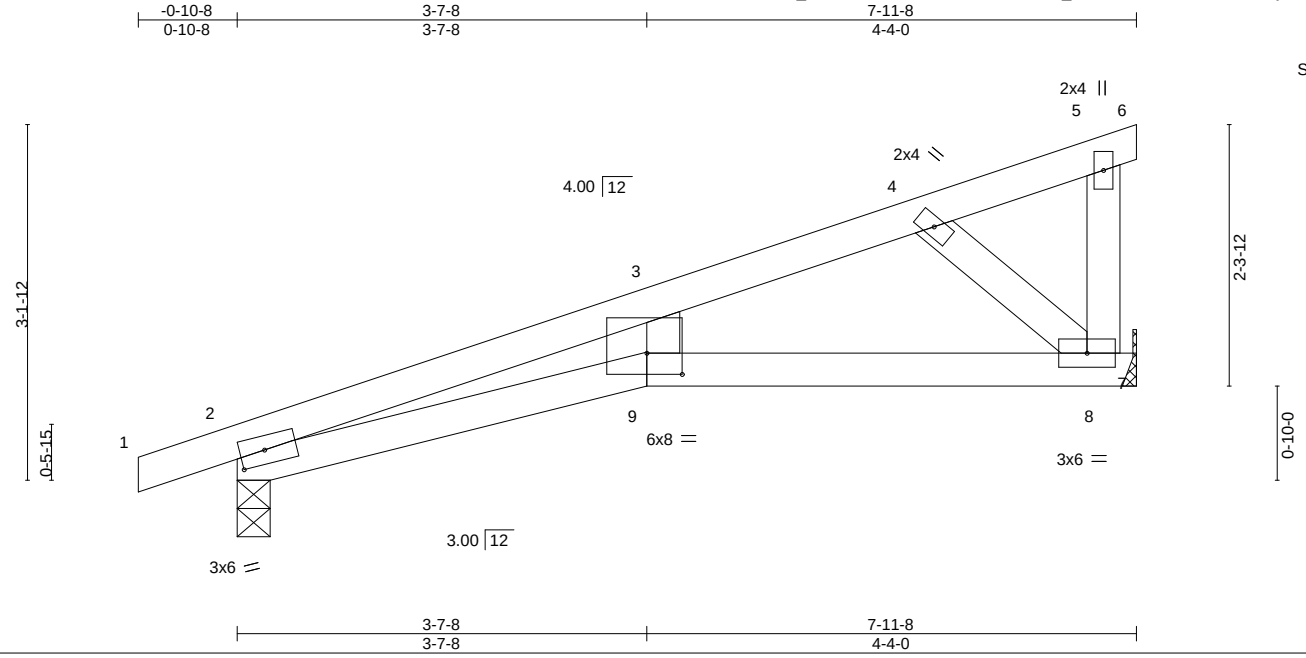

Plate Offsets (X,Y)-- [2:0-2-10,0-1-8], [9:0-3-12,0-2-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.63	Vert(LL)	0.13	9	>733	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.20	9	>461	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.06	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 24 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-3-8, 8=Mechanical
Max Horz 2=124(LC 8)
Max Uplift 2=-95(LC 8), 8=-104(LC 12)
Max Grav 2=410(LC 1), 8=353(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-676/315, 3-4=-474/271
BOT CHORD 2-9=-419/595, 8-9=-373/509
WEBS 3-9=-102/251, 4-8=-665/487

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 7-11-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 8=104.
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.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	M5	GABLE	3	1	I57272406
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Mar 9 2023 MiTek Industries, Inc. Mon Mar 20 11:28:02 2023 Page 1
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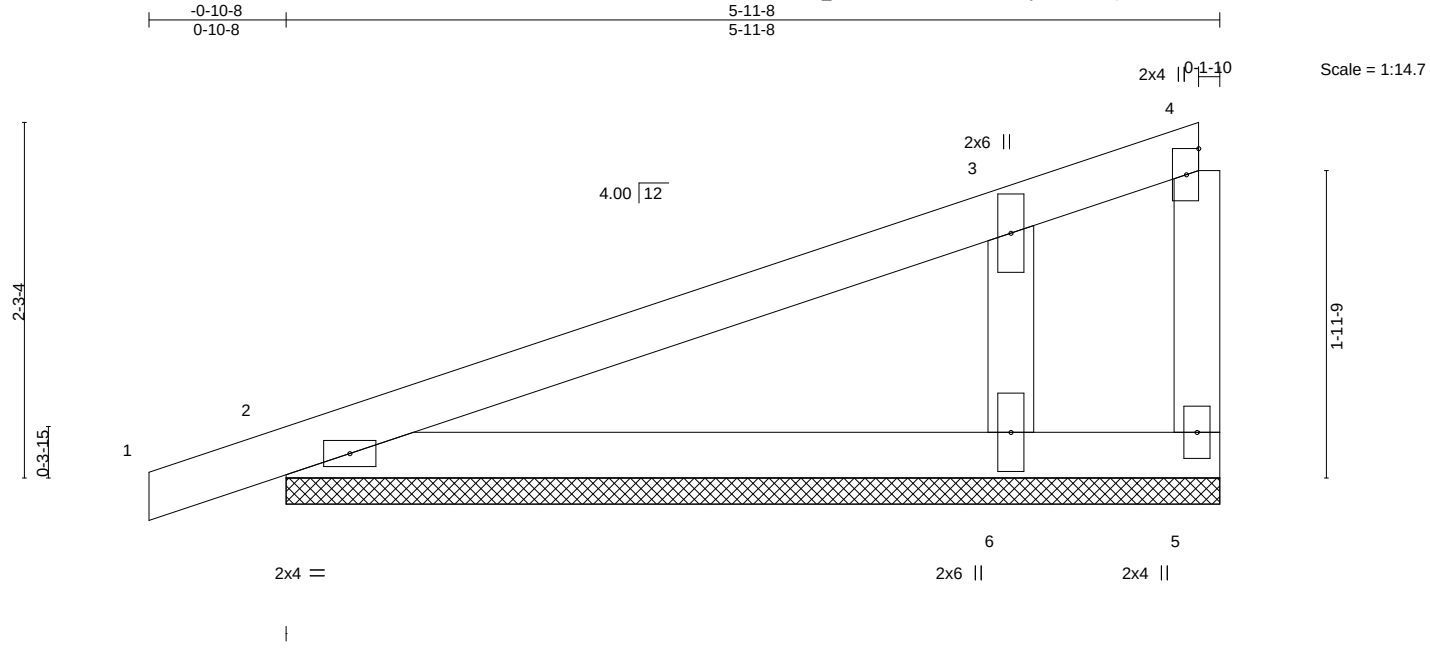

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 18 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 5-11-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 5=5-11-8, 2=5-11-8, 6=5-11-8
Max Horz 2=93(LC 9)
Max Uplift 5=-104(LC 1), 2=-69(LC 8), 6=-124(LC 12)
Max Grav 5=35(LC 12), 2=235(LC 1), 6=451(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-6=-347/497

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 5-9-5 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 1-4-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 5=104, 6=124.
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.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	M6	MONOPITCH	9	1	I57272407
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Mar 9 2023 MiTek Industries, Inc. Mon Mar 20 11:28:03 2023 Page 1
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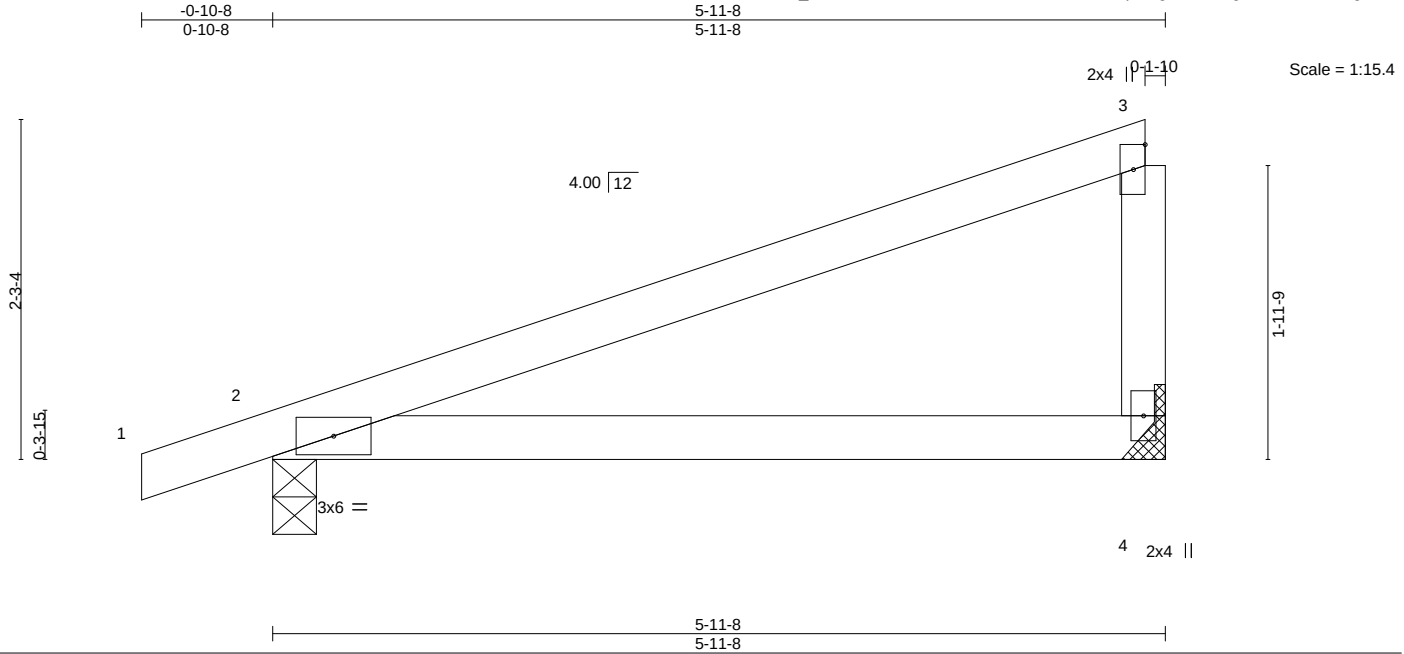

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	0.07	4-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.12	4-7	>568	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 17 lb	FT = 20%

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

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

REACTIONS. (size) 4=Mechanical, 2=0-3-8
Max Horz 2=93(LC 11)
Max Uplift 4=-65(LC 12), 2=-93(LC 8)
Max Grav 4=257(LC 1), 2=327(LC 1)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-9-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	V1	Valley	1	1	I57272408
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Mar 9 2023 MiTek Industries, Inc. Mon Mar 20 11:28:04 2023 Page 1
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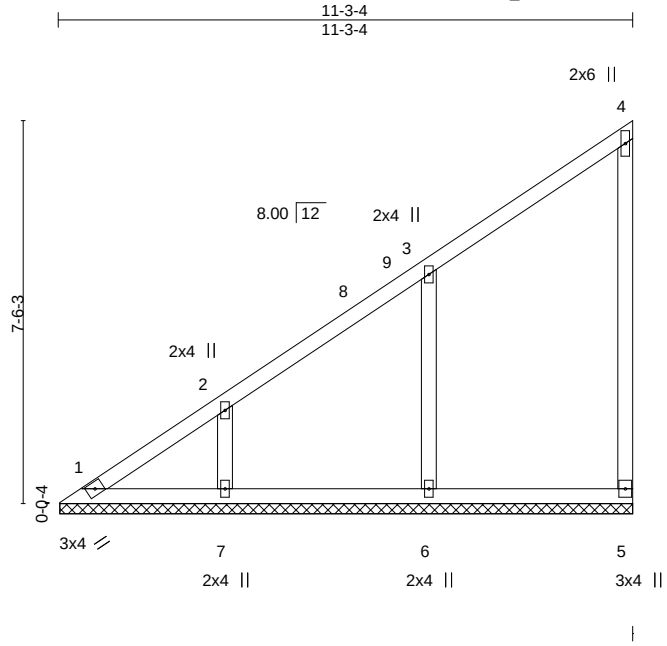

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	-0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 42 lb	FT = 20%

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

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

REACTIONS. All bearings 11-2-14.
(lb) - Max Horz 1=283(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 6=-106(LC 12), 7=-145(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=407(LC 19), 7=344(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-421/290, 2-3=-328/240
WEBS 3-6=-328/235, 2-7=-264/175

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-12 to 3-3-4, Interior(1) 3-3-4 to 11-1-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 6=106, 7=145.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	V2	Valley	1	1	I57272409
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Mar 9 2023 MiTek Industries, Inc. Mon Mar 20 11:28:05 2023 Page 1
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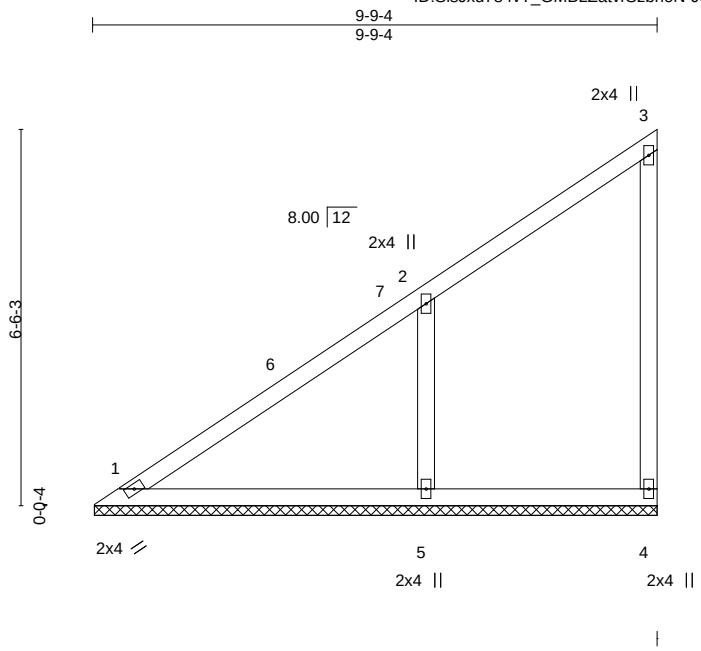

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 34 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 1=9-8-14, 4=9-8-14, 5=9-8-14
Max Horz 1=243(LC 9)
Max Uplift 1=-3(LC 8), 4=-51(LC 9), 5=-185(LC 12)
Max Grav 1=217(LC 20), 4=130(LC 19), 5=539(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-354/259
WEBS 2-5=-414/290

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 9-7-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4 except (jt=lb) 5=185.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	V3	Valley	1	1	I57272410
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Mar 9 2023 MiTek Industries, Inc. Mon Mar 20 11:28:06 2023 Page 1
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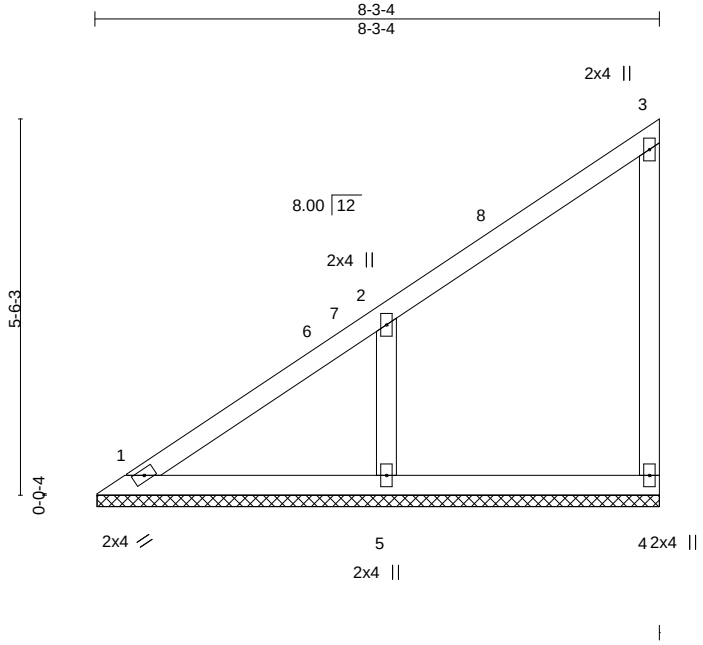


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 28 lb	FT = 20%

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

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

REACTIONS. (size) 1=8-2-14, 4=8-2-14, 5=8-2-14
Max Horz 1=203(LC 9)
Max Uplift 1=-12(LC 8), 4=-47(LC 9), 5=-169(LC 12)
Max Grav 1=157(LC 20), 4=148(LC 19), 5=446(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-330/233
WEBS 2-5=-350/267

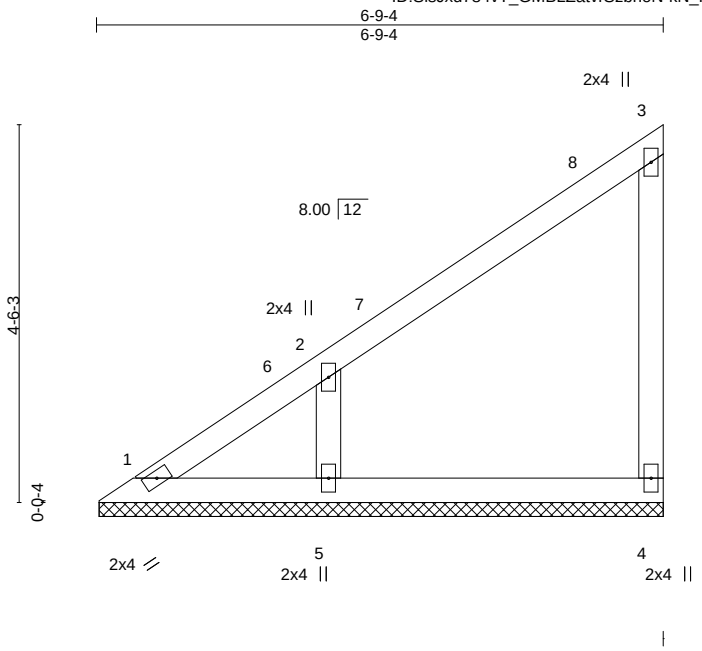
NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 8-1-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4 except (jt=lb) 5=169.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	V4	Valley	1	1	I57272411
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Mar 9 2023 MiTek Industries, Inc. Mon Mar 20 11:28:08 2023 Page 1
ID:SlsJxd784vT_GMBLZatvrSzbhoN-kN_P??F47nh?_LTPeZQQiqOwgcWM3NCXZ4u9I8zZ2vb



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 22 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 1=6-8-14, 4=6-8-14, 5=6-8-14
Max Horz 1=163(LC 9)
Max Uplift 1=-24(LC 8), 4=-43(LC 9), 5=-154(LC 12)
Max Grav 1=87(LC 20), 4=156(LC 19), 5=378(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-305/206
WEBS 2-5=-297/256

NOTES-

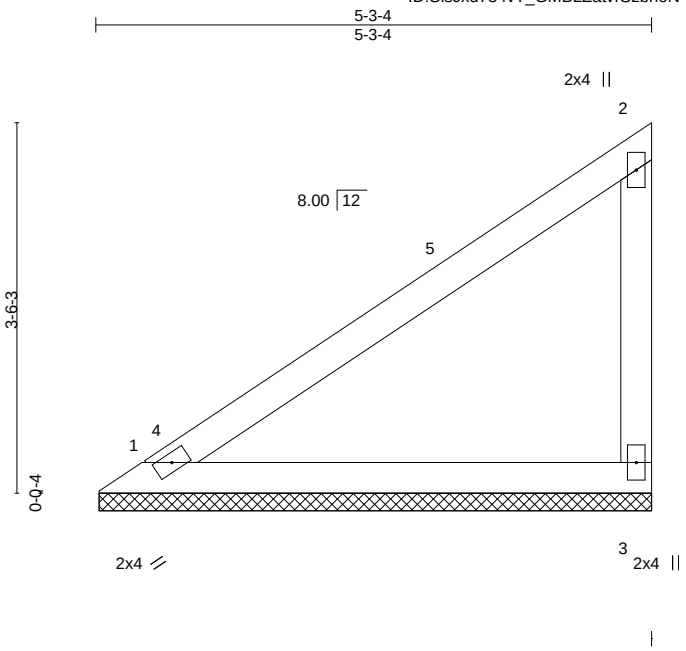
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 6-7-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4 except (jt=lb) 5=154.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	V5	Valley	1	1	I57272412
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Mar 9 2023 MiTek Industries, Inc. Mon Mar 20 11:28:09 2023 Page 1
ID:SlsJxd784vT_GMBLZatvrSzbhoN-CZYnCLGiu4psbV2bBHxfF2w1o0qfoq9gokdjqazZ2va



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 16 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-3-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=5-2-14, 3=5-2-14
Max Horz 1=123(LC 9)
Max Uplift 1=-26(LC 12), 3=-69(LC 12)
Max Grav 1=209(LC 1), 3=225(LC 19)

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

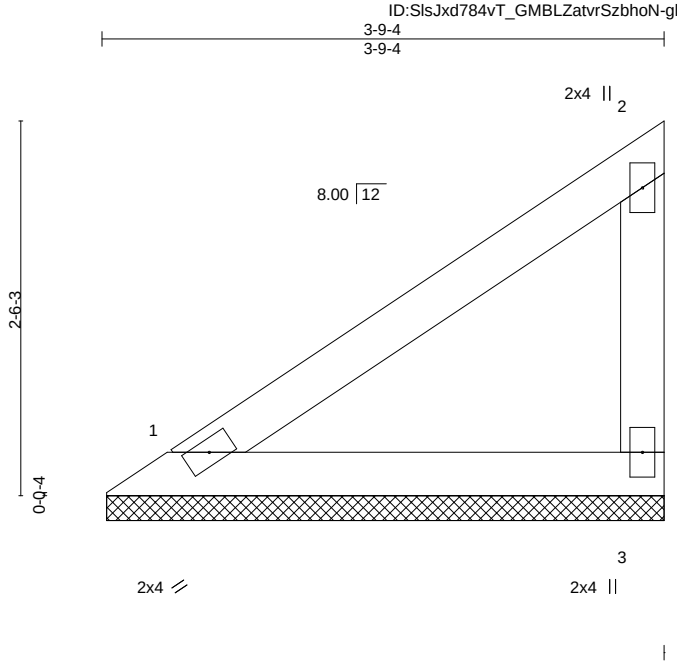
NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 5-1-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	V6	Valley	1	1	I57272413
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Mar 9 2023 MiTek Industries, Inc. Mon Mar 20 11:28:10 2023 Page 1
ID:SlsJxd784vT_GMBLZatvrSzbhoN-gl69PhGKfOxjDedol_SuoFTGGQCtXHOq0ONGM0zZ2vZ



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 11 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-9-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-8-14, 3=3-8-14
Max Horz 1=83(LC 9)
Max Uplift 1=-17(LC 12), 3=-47(LC 12)
Max Grav 1=142(LC 1), 3=152(LC 19)

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

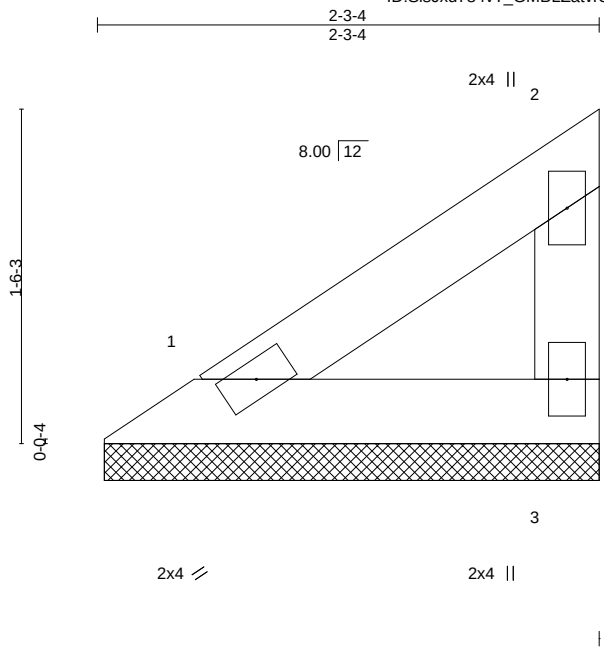
NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	V7	Valley	1	1	I57272414
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.530 s Mar 9 2023 MiTek Industries, Inc. Mon Mar 20 11:28:11 2023 Page 1
ID:SlsJxd784vT_GMBLZatvrSzbhoN-8yfXd1HyQi3aroC_Jiz7KT0T7pZEGkezF26pvTzZ2vY



Scale = 1:10.4

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 6 lb	FT = 20%

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

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

REACTIONS. (size) 1=2-2-14, 3=2-2-14
Max Horz 1=44(LC 9)
Max Uplift 1=-9(LC 12), 3=-24(LC 12)
Max Grav 1=74(LC 1), 3=80(LC 19)

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

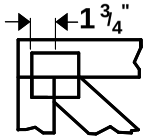
NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 21,2023

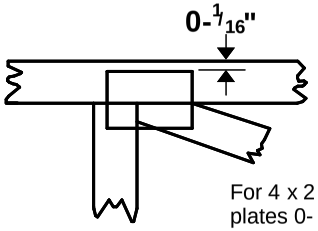
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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.

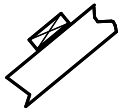
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

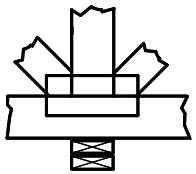
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

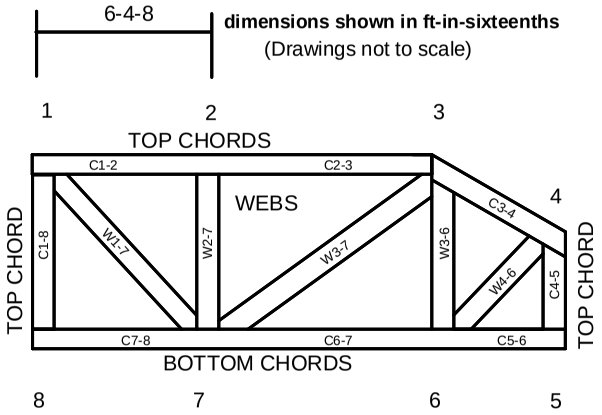


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.

RE: 2820534
Summit/Juneau Townhome

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

Site Information:

Customer: Project Name: 2820534
Lot/Block: Model:
Address: Subdivision:
City: State:

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

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.4
Wind Code: ASCE 7-16 Wind Speed: 115 mph
Roof Load: 45.0 psf Floor Load: N/A psf

This package includes 32 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I57272415	A12	3/21/2023	21	I57272435	M2A	3/21/2023
2	I57272416	A13	3/21/2023	22	I57272436	M2B	3/21/2023
3	I57272417	A15	3/21/2023	23	I57272437	M3	3/21/2023
4	I57272418	A16	3/21/2023	24	I57272438	M4	3/21/2023
5	I57272419	A17	3/21/2023	25	I57272439	V9	3/21/2023
6	I57272420	A21	3/21/2023	26	I57272440	V10	3/21/2023
7	I57272421	A23	3/21/2023	27	I57272441	V11	3/21/2023
8	I57272422	B1	3/21/2023	28	I57272442	V12	3/21/2023
9	I57272423	B2	3/21/2023	29	I57272443	V13	3/21/2023
10	I57272424	B3	3/21/2023	30	I57272444	V15	3/21/2023
11	I57272425	B5	3/21/2023	31	I57272445	V16	3/21/2023
12	I57272426	CJ1	3/21/2023	32	I57272446	V17	3/21/2023
13	I57272427	J1	3/21/2023				
14	I57272428	J2	3/21/2023				
15	I57272429	J3	3/21/2023				
16	I57272430	J4	3/21/2023				
17	I57272431	J5	3/21/2023				
18	I57272432	J6	3/21/2023				
19	I57272433	LG1	3/21/2023				
20	I57272434	LG3	3/21/2023				

The truss drawing(s) referenced above have been prepared by MiTek USA, Inc under my direct supervision based on the parameters provided by Builders FirstSource (Valley Center).

Truss Design Engineer's Name: Sevier, Scott

My license renewal date for the state of Missouri is December 31, 2023.

Missouri COA: 001193

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

March 21, 2023

Sevier, Scott

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	A12	Common	6	1	I57272415
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 20 11:27:10 2023 Page 1
ID:SlsJxd784vT_GMBLZatvrSzbhoN-MNy6Hc99nN?MoLiBRWlFI5_wLEX8T51?D3r5GVzZ2wV

-0-10-8	5-10-3	11-8-2	17-6-0	23-3-14	29-1-13	35-0-0	35-10-8
0-10-8	5-10-3	5-9-14	5-9-14	5-9-14	5-9-14	5-10-3	0-10-8

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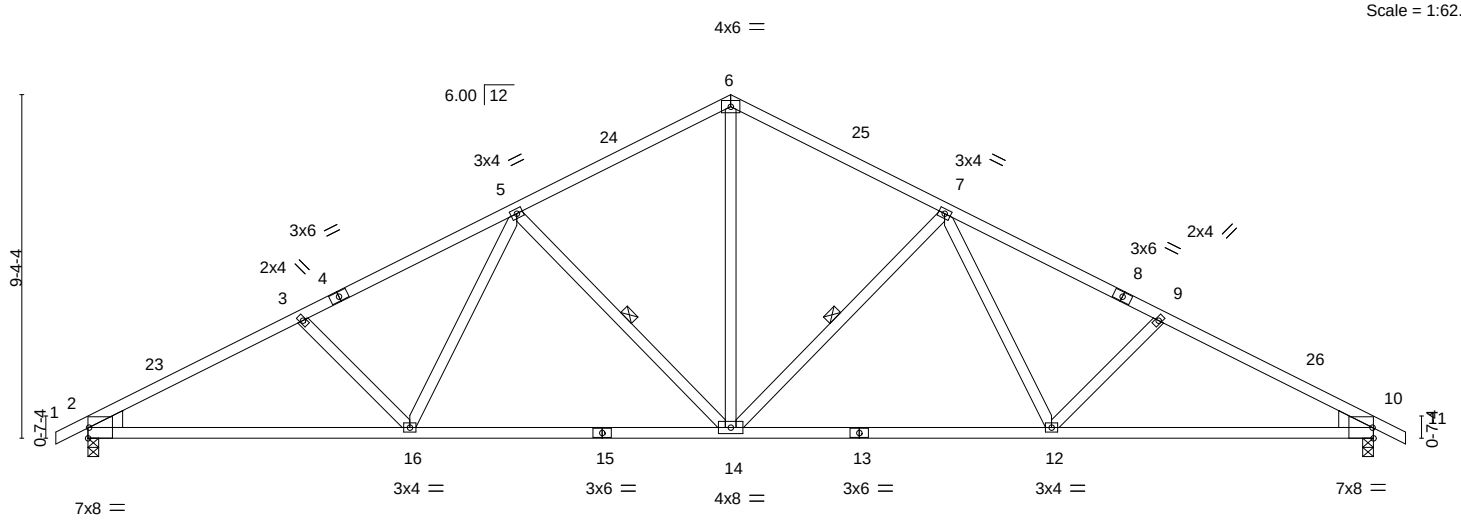


8-9-3	17-6-0	26-2-13	35-0-0
8-9-3	8-8-13	8-8-13	8-9-3

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL	25.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	-0.19	12-14	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.40	12-14	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.13	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 143 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 7-14, 5-14

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=162(LC 12)
Max Uplift 2=-280(LC 12), 10=-280(LC 13)
Max Grav 2=1636(LC 1), 10=1636(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2778/469, 3-5=-2530/444, 5-6=-1834/397, 6-7=-1834/397, 7-9=-2530/444, 9-10=-2778/469
BOT CHORD 2-16=-488/2395, 14-16=-323/2019, 12-14=-208/2019, 10-12=-327/2395
WEBS 6-14=-197/1178, 7-14=-701/281, 7-12=-73/433, 9-12=-316/194, 5-14=-701/280, 5-16=-73/433, 3-16=-316/194

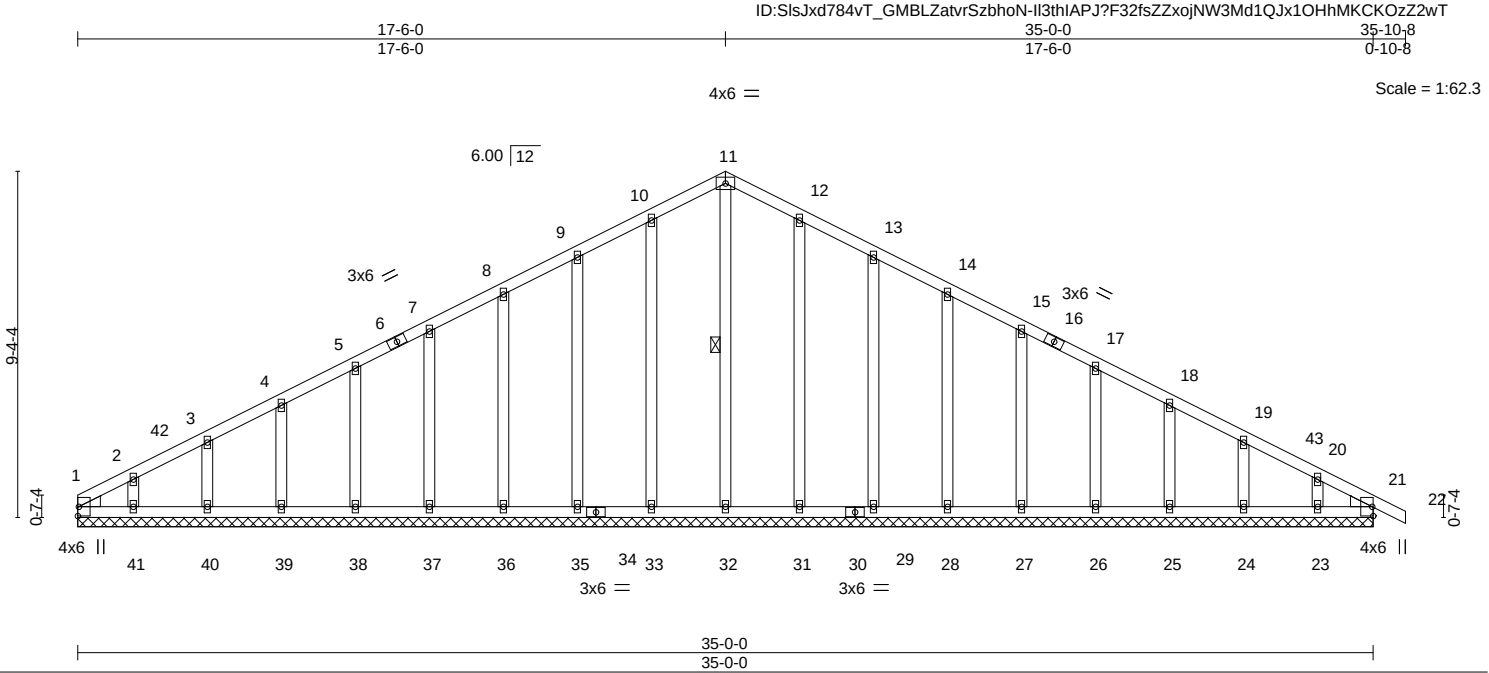
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 17-6-0, Exterior(2R) 17-6-0 to 20-6-0, Interior(1) 20-6-0 to 35-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 280 lb uplift at joint 2 and 280 lb uplift at joint 10.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	A13	GABLE	4	1	I57272416
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 20 11:27:12 2023 Page 1
ID:SlsJxd784vT_GMBLZatvrSzbhoN-Il3thIAPJ?F32fsZZxojNW3Md1QJx1OHhMKCKOzZ2wT



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	22	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	22	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.01	21	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 176 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 11-32

REACTIONS. All bearings 35-0-0.
(lb) - Max Horz 1=-164(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 1, 33, 35, 36, 37, 38, 39, 40, 41, 31, 29, 28, 27, 26, 25, 24, 23, 21
Max Grav All reactions 250 lb or less at joint(s) 1, 32, 33, 35, 36, 37, 38, 39, 40, 41, 31, 29, 28, 27, 26, 25, 24, 23, 21

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 10-11=-111/295, 11-12=-111/295

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-0-0 to 3-0-0, Exterior(2N) 3-0-0 to 17-6-0, Corner(3R) 17-6-0 to 20-6-0, Exterior(2N) 20-6-0 to 35-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 33, 35, 36, 37, 38, 39, 40, 41, 31, 29, 28, 27, 26, 25, 24, 23, 21.
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.

March 21,2023

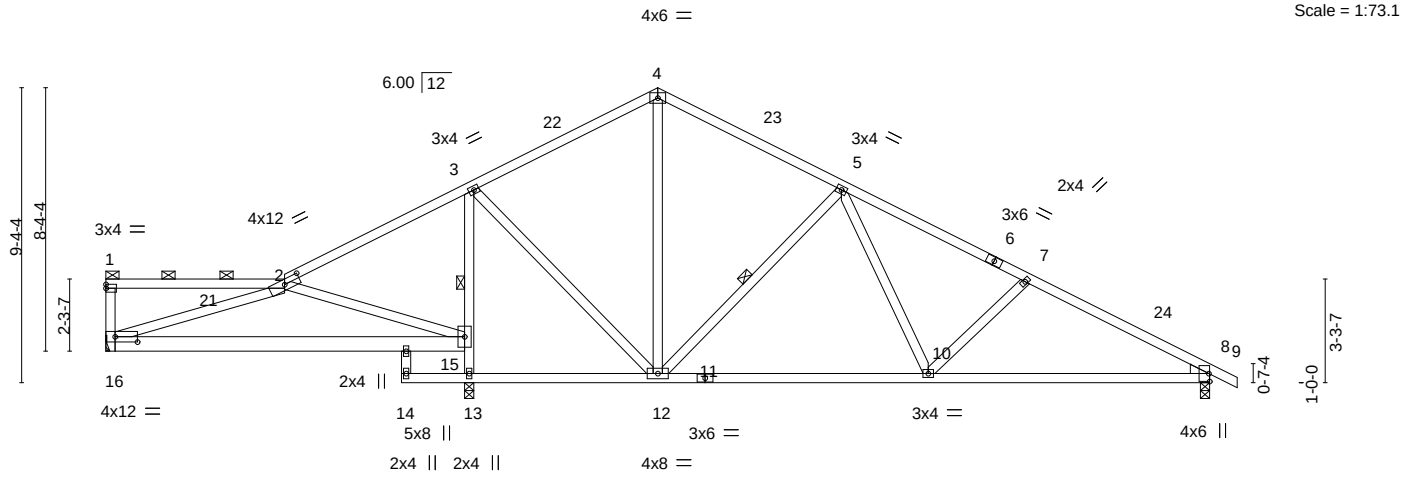
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	A15	Roof Special	2	1	I57272417
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 20 11:27:14 2023 Page 1
ID:SlsJxd784vT_GMBLZatvrSzbhoN-E8Bd6_CgrcVnHz0ygLqBSx8bmrznPsea8gpIPGzZ2wR

5-8-0	9-4-8	11-6-4	13-5-4	17-6-0	23-3-14	26-0-15	29-1-13	35-0-0	35-10-8
5-8-0	3-8-8	2-1-12	1-11-0	4-0-12	5-9-14	2-9-1	3-0-14	5-10-3	0-10-8

Scale = 1:73.1



5-8-0	9-4-8	11-6-4	17-6-0	26-0-15	35-0-0
5-8-0	3-8-8	2-1-12	5-11-12	8-6-15	8-11-1

Plate Offsets (X,Y)-- [2:0-6-0,0-1-14], [16:0-8-8,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	-0.19	15-16	>725	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.38	15-16	>364	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.44	Horz(CT)	-0.03	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 159 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
15-16: 2x6 SPF No.2
WEBS 2x4 SPF No.2
WEDGE
Right: 2x4 SPF No.2

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

REACTIONS. (size) 8=0-3-8, 13=0-3-8, 16=Mechanical
Max Horz 16=-194(LC 13)
Max Uplift 8=-263(LC 13), 13=-231(LC 12), 16=-133(LC 8)
Max Grav 8=1090(LC 1), 13=1696(LC 1), 16=467(LC 25)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-56/301, 3-4=-649/325, 4-5=-644/302, 5-7=-1396/406, 7-8=-1669/437
BOT CHORD 15-16=-224/560, 10-12=-130/981, 8-10=-298/1421
WEBS 2-15=-643/261, 2-16=-433/360, 13-15=-1602/271, 3-15=-1298/230, 3-12=0/788, 5-12=-727/279, 5-10=-69/483, 7-10=-354/197

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 17-6-0, Exterior(2R) 17-6-0 to 20-6-0 , Interior(1) 20-6-0 to 35-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=263, 13=231, 16=133.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	A16	Roof Special	2	1	I57272418
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 20 11:27:15 2023 Page 1
ID:SlsJxd784vT_GMBLZatvrSzbhoN-iKl?KKDIcwdev6b8E3LQ?9hpNFJb8BSkNKYsxjzZ2wQ

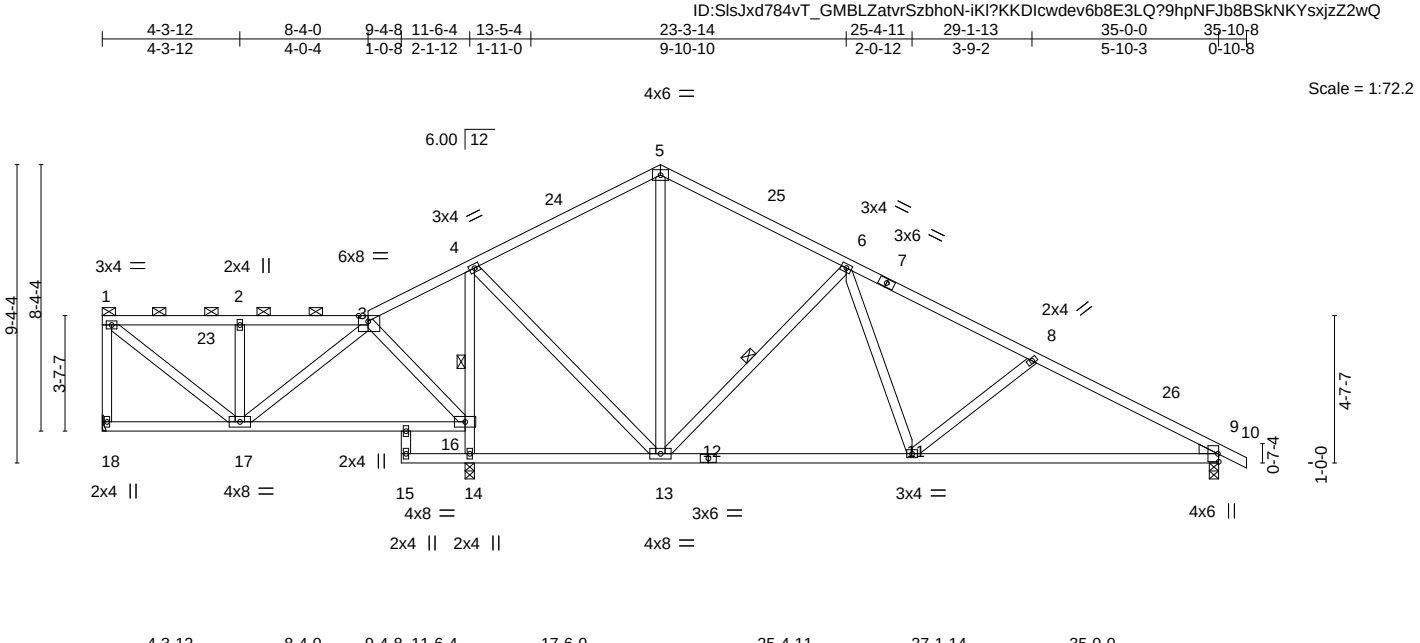


Plate Offsets (X,Y)-- [3:0-3-10,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	-0.13	11-22	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.27	11-22	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.92	Horz(CT)	-0.03	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 159 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-3.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-14, 6-13

REACTIONS. (size) 18=Mechanical, 9=0-3-8, 14=0-3-8
Max Horz 18=-224(LC 8)
Max Uplift 18=-174(LC 8), 9=-265(LC 13), 14=-205(LC 12)
Max Grav 18=476(LC 25), 9=1093(LC 1), 14=1685(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-18=-454/178, 1-2=-425/145, 2-3=-427/147, 3-4=-51/281, 4-5=-649/328, 5-6=-650/306, 6-8=-1353/393, 8-9=-1668/444
BOT CHORD 11-13=-130/993, 9-11=-304/1423
WEBS 14-16=-1588/246, 4-16=-1224/189, 3-16=-419/111, 4-13=0/793, 2-17=-332/140, 1-17=-204/523, 3-17=0/296, 6-13=-738/274, 6-11=-54/470, 8-11=-376/202

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 17-6-0, Exterior(2R) 17-6-0 to 20-6-0 , Interior(1) 20-6-0 to 35-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 18=174, 9=265, 14=205.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	A17	Roof Special	2	1	I57272419
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 20 11:27:17 2023 Page 1
ID:SlsJxd784vT_GMBLZatvrSzbhoN-ejtml?EY8XuM8QkXMUNu4am802_Mc500qe1z?bzZ2wO

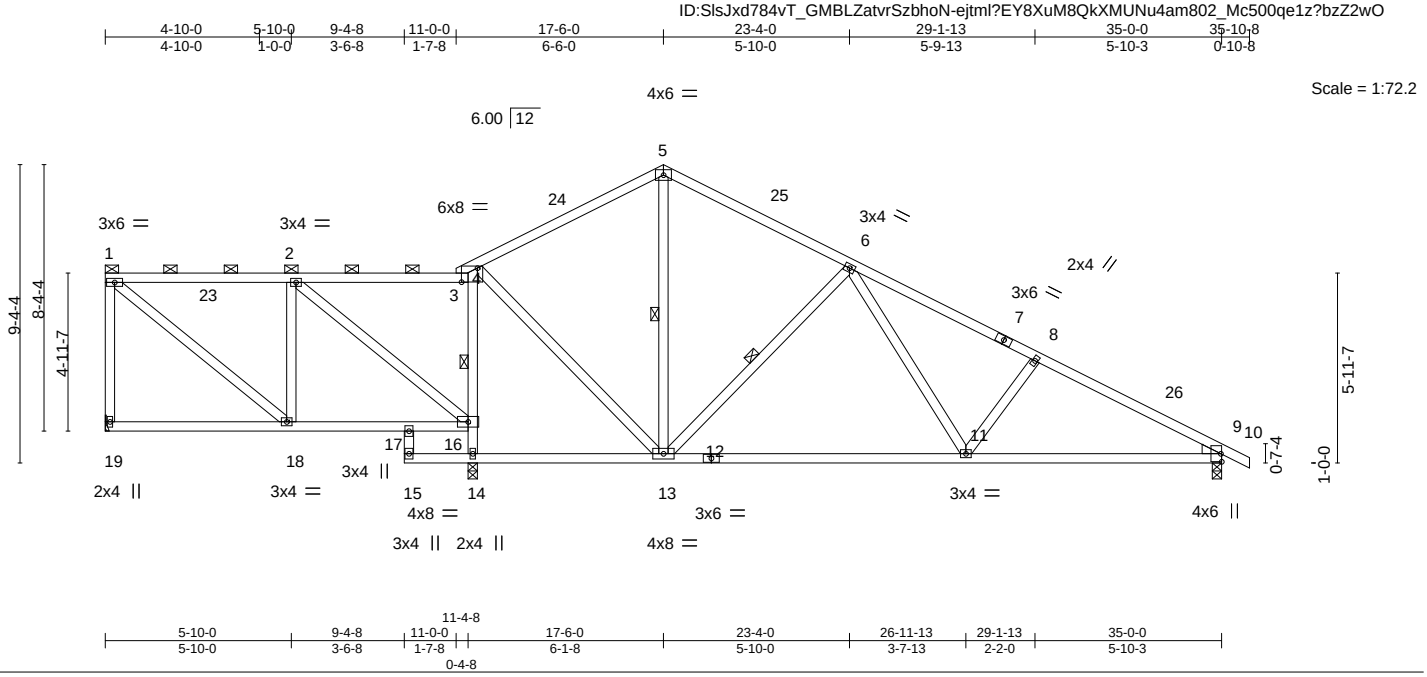


Plate Offsets (X,Y)-- [3:0-6-0,0-5-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	-0.17	11-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.35	11-13	>798	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.02	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 162 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-4.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-13, 4-14, 6-13

REACTIONS. (size) 19=Mechanical, 9=0-3-8, 14=0-3-8
Max Horz 19=-252(LC 8)
Max Uplift 19=-153(LC 8), 9=-242(LC 13), 14=-213(LC 12)
Max Grav 19=430(LC 25), 9=1059(LC 1), 14=1750(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-19=-372/166, 1-2=-264/130, 2-3=0/252, 3-4=-12/291, 4-5=-579/277, 5-6=-583/254, 6-8=-1409/388, 8-9=-1622/386
BOT CHORD 17-18=-24/286, 16-17=-26/374, 11-13=-93/917, 9-11=-255/1377
WEBS 14-16=-1631/246, 4-16=-1272/232, 4-13=-37/904, 6-13=-714/286, 6-11=-97/519, 8-11=-335/194, 1-18=-159/307, 2-16=-542/52

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 17-6-0, Exterior(2R) 17-6-0 to 20-6-0 , Interior(1) 20-6-0 to 35-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 19=153, 9=242, 14=213.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 21,2023

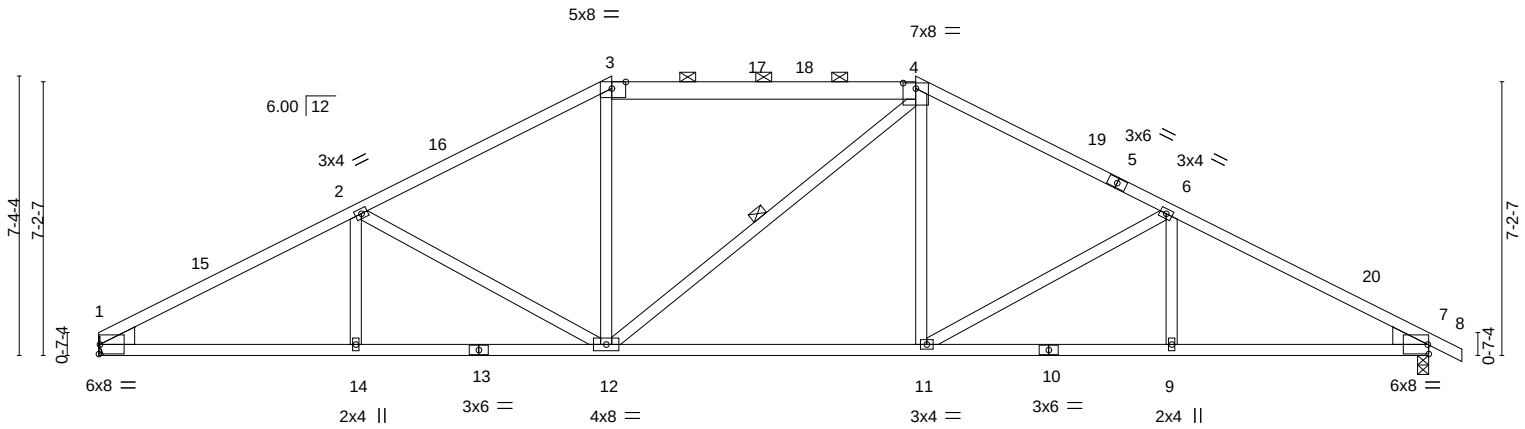
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	A21	HIP	2	1	I57272420
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 20 11:27:18 2023 Page 1
ID:SlsJxd784vT_GMBLZatvrSzbhoN-7vR8yLFAvr0DmaJjvBv7dnJA9SGhLdNA3InWY1zZ2wN

6-9-3	13-6-0	17-6-0	21-6-0	28-2-13	35-0-0	35-10-8
6-9-3	6-8-13	4-0-0	4-0-0	6-8-13	6-9-3	0-10-8

Scale = 1:60.6



6-9-3	13-6-0	21-6-0	28-2-13	35-0-0
6-9-3	6-8-13	8-0-0	6-8-13	6-9-3

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	-0.15	11-12	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.35	11-12	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.59	Horz(CT)	0.13	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 145 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except* 3-4: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
WEDGE
Left: 2x6 SPF No.2 , Right: 2x6 SPF No.2

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

REACTIONS. (size) 1=Mechanical, 7=0-3-8
Max Horz 1=-127(LC 17)
Max Uplift 1=-268(LC 12), 7=-287(LC 13)
Max Grav 1=1565(LC 1), 7=1638(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2818/475, 2-3=-2228/418, 3-4=-1895/414, 4-6=-2221/415, 6-7=-2811/460
BOT CHORD 1-14=-453/2408, 12-14=-453/2408, 11-12=-176/1888, 9-11=-313/2371, 7-9=-313/2371
WEBS 2-14=0/278, 2-12=-594/245, 3-12=-42/479, 4-11=-51/474, 6-11=-562/239, 6-9=0/274

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-12 to 3-0-12, Interior(1) 3-0-12 to 13-6-0, Exterior(2R) 13-6-0 to 17-8-15, Interior(1) 17-8-15 to 21-6-0, Exterior(2R) 21-6-0 to 25-8-15, Interior(1) 25-8-15 to 35-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=268, 7=287.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	A23	Hip Girder	2	1	I57272421
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 20 11:27:21 2023 Page 1
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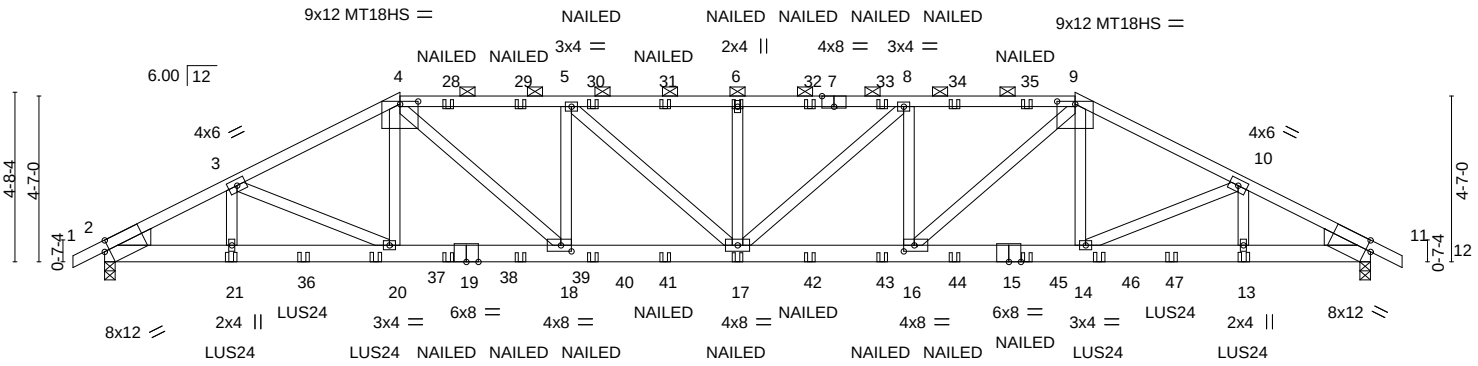
-0-10-8	3-7-15	4-1-3	8-2-0	12-9-2	17-6-0	22-2-14	26-10-0	30-10-13	35-0-0	35-10-8
0-10-8	3-7-15	0-5-4	4-0-13	4-7-2	4-8-14	4-8-14	4-7-2	4-0-13	4-1-3	0-10-8

Scale: 3/16"=1'



3-7-15	4-1-3	8-2-0	12-9-2	17-6-0	22-2-14	26-10-0	30-10-13	35-0-0
3-7-15	0-5-4	4-0-13	4-7-2	4-8-14	4-8-14	4-7-2	4-0-13	4-1-3

Plate Offsets (X,Y)-- [2:0-1-11,0-3-7], [4:0-6-0,0-0-15], [7:0-4-0,Edge], [9:0-6-0,0-0-15], [10:0-0-0,0-0-0], [11:0-1-11,0-3-7], [16:0-3-8,0-2-0], [18:0-3-8,0-2-0]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL	25.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	0.40	17	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.68	17	>615	180	MT18HS	197/144
BCLL	0.0	Rep Stress Incr	NO	WB	0.52	Horz(CT)	0.13	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 185 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x6 SP 2400F 2.0E *Except*
15-19: 2x6 SPF 2100F 1.8E
WEBS 2x4 SPF No.2
WEDGE
Left: 2x6 SP No.2 , Right: 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-5-1 oc purlins, except 2-0-0 oc purlins (2-2-10 max.): 4-9.
BOT CHORD Rigid ceiling directly applied or 6-8-8 oc bracing.

REACTIONS. (size) 2=0-3-8, 11=0-3-8
Max Horz 2=-78(LC 34)
Max Uplift 2=-1067(LC 8), 11=-1067(LC 9)
Max Grav 2=3132(LC 1), 11=3132(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-5656/1960, 3-4=-5364/1939, 4-5=-6056/2275, 5-6=-6493/2396, 6-8=-6493/2396, 8-9=-6056/2275, 9-10=-5364/1939, 10-11=-5656/1961
BOT CHORD 2-21=-1764/4995, 20-21=-1764/4995, 18-20=-1671/4748, 17-18=-2174/6054, 16-17=-2133/6054, 14-16=-1592/4748, 13-14=-1687/4995, 11-13=-1687/4995
WEBS 3-20=-253/190, 4-20=-216/779, 4-18=-792/1859, 5-18=-1030/497, 5-17=-293/654, 6-17=-505/273, 8-17=-294/654, 8-16=-1030/497, 9-16=-792/1859, 9-14=-215/779, 10-14=-253/191

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=1067, 11=1067.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 20-0-0 oc max. starting at 3-6-0 from the left end to 31-6-0 to connect truss(es) to front face of bottom chord.
10) Fill all nail holes where hanger is in contact with lumber.
11) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

March 21,2023

LOAD CASE(S) Standard

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-70, 4-9=-70, 9-12=-70, 22-25=-20
   Concentrated Loads (lb)
   Vert: 17=-79(F) 6=-79(F) 13=-316(F) 21=-316(F) 28=-79(F) 29=-79(F) 30=-79(F) 31=-79(F) 32=-79(F) 33=-79(F) 34=-79(F) 35=-79(F) 36=-233(F) 37=-233(F) 38=-79(F) 39=-79(F) 40=-79(F) 41=-79(F) 42=-79(F) 43=-79(F) 44=-79(F) 45=-79(F) 46=-233(F) 47=-233(F)

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	B1	GABLE	2	1	I57272422
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 20 11:27:23 2023 Page 1
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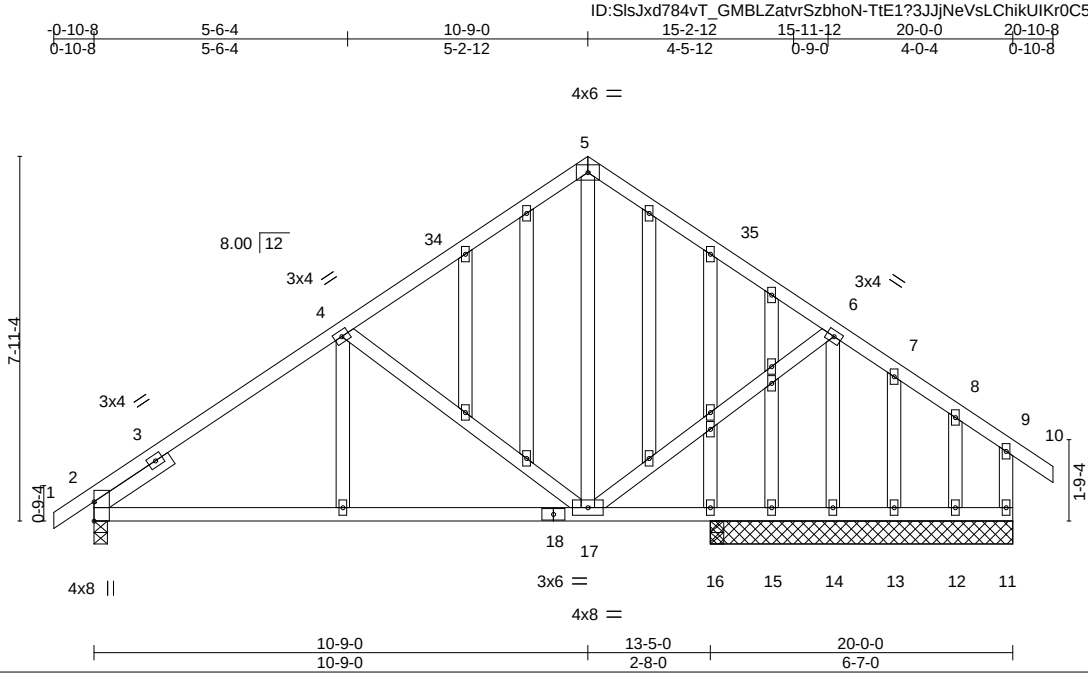

Plate Offsets (X,Y)-- [2:Edge,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.22	17-32	>732	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.45	17-32	>361	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.03	2	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 122 lb	FT = 20%

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

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

REACTIONS. All bearings 6-7-0 except (jt=length) 2=0-3-8, 16=0-3-8, 16=0-3-8.
(lb) - Max Horz 2=231(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 11, 13, 12, 16 except 2=-140(LC 12), 14=-131(LC 13), 16=-155(LC 3)
Max Grav All reactions 250 lb or less at joint(s) 11, 15, 13, 12 except 2=780(LC 1), 14=891(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-915/185, 4-5=-549/170, 5-6=-545/168
BOT CHORD 2-17=-168/708
WEBS 4-17=-385/230, 5-17=-48/299, 6-17=-20/489, 6-14=-871/142

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-9-0, Exterior(2R) 10-9-0 to 13-9-0, Interior(1) 13-9-0 to 20-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 1-4-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 13, 12 except (jt=lb) 2=140, 14=131, 16=155.
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.

March 21,2023

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	B2	ROOF SPECIAL GIRDER	2	2	I57272423
					Job Reference (optional)

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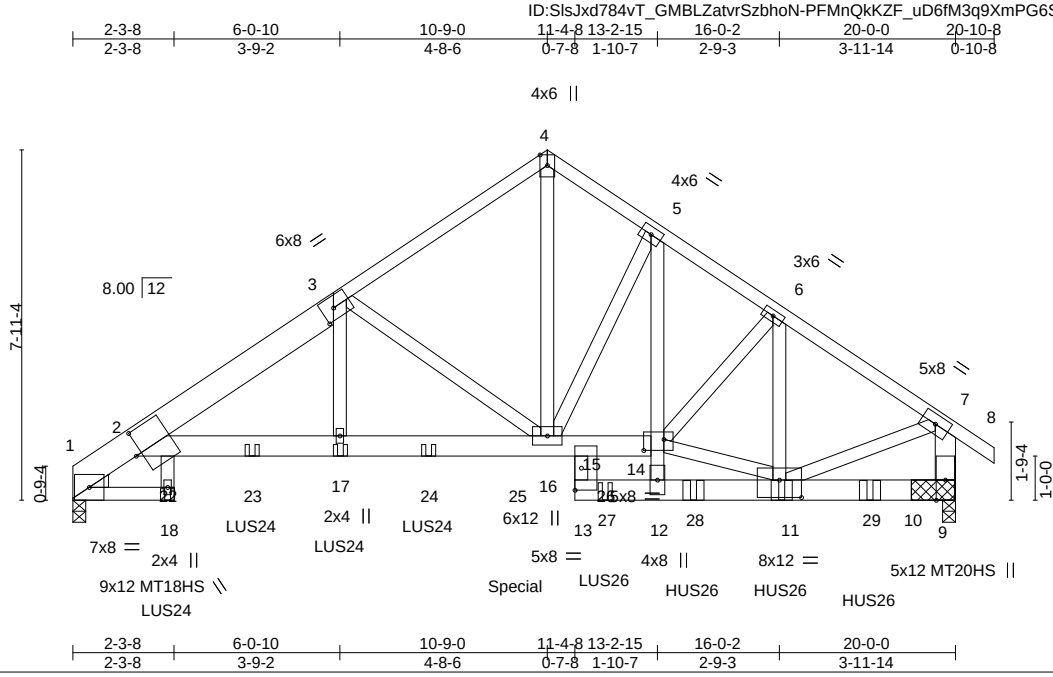

Plate Offsets (X,Y)-- [2:0-6-5,0-1-11], [3:0-3-4,0-3-0], [11:0-6-0,0-4-12], [14:0-5-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.14	2-17	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.24	2-17	>999	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	NO	WB	0.52	Horz(CT)	0.19	9	n/a	n/a	MT18HS	197/144
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 270 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
1-3: 2x8 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2 *Except*
2-14: 2x6 SPF 2100F 1.8E, 9-13: 2x6 SPF No.2
WEBS 2x4 SPF No.2 *Except*
7-9: 2x6 SPF No.2
WEDGE
Left: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-4-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 1-18.

REACTIONS. (size) 9=(0-3-8 + bearing block) (req. 0-4-6), 1=0-3-8
Max Horz 1=222(LC 28)
Max Uplift 9=-1172(LC 9), 1=-847(LC 8)
Max Grav 9=5602(LC 1), 1=3264(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-20=-1791/534, 2-3=-5646/1557, 3-4=-3966/1069, 4-5=-3875/1095, 5-6=-4990/1214, 6-7=-5245/1136, 7-9=-4778/1039
BOT CHORD 2-18=-149/626, 2-17=-1396/4974, 16-17=-1419/5041, 15-16=-881/4124, 14-15=-730/3358, 12-13=-157/767, 11-12=-169/821, 9-11=-95/373
WEBS 4-16=-1105/4017, 3-16=-2219/811, 12-14=-109/830, 5-14=-360/2269, 5-16=-2042/395, 6-11=-281/269, 7-11=-871/4256, 11-14=-749/3664, 6-14=-323/98, 3-17=-438/1353

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-7-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-6-0 oc, 2x6 - 2 rows staggered at 0-5-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) 2x6 SPF No.2 bearing block 12" long at jt. 9 attached to each face with 3 rows of 10d (0.131"x3") nails spaced 3" o.c. 12 Total fasteners per block. Bearing is assumed to be SPF No.2.
4) Unbalanced roof live loads have been considered for this design.
5) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=1172, 1=847.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and Continued on page 2 ard ANSI/TPI 1.

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Chesterfield, MO 63017

NOTES-

10) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 2-1-12 from the left end to 8-0-12 to connect truss(es) to back face of bottom chord.
11) Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss, Single Ply Girder) or equivalent at 12-0-12 from the left end to connect truss(es) to back face of bottom chord.
12) Use Simpson Strong-Tie HUS26 (14-10d Girder, 6-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 14-0-12 from the left end to 18-0-12 to connect truss(es) to back face of bottom chord.
13) Fill all nail holes where hanger is in contact with lumber.
14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 335 lb down and 286 lb up at 10-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-70, 2-4=-70, 4-7=-70, 7-8=-70, 18-19=-20, 2-15=-20, 9-13=-20
   Concentrated Loads (lb)
   Vert: 18=-311(B) 11=-1545(B) 17=-456(B) 23=-447(B) 24=-410(B) 25=-335(B) 26=-387(B) 28=-1554(B) 29=-1554(B)

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	B3	COMMON SUPPORTED GAB	3	1	I57272424
					Job Reference (optional)

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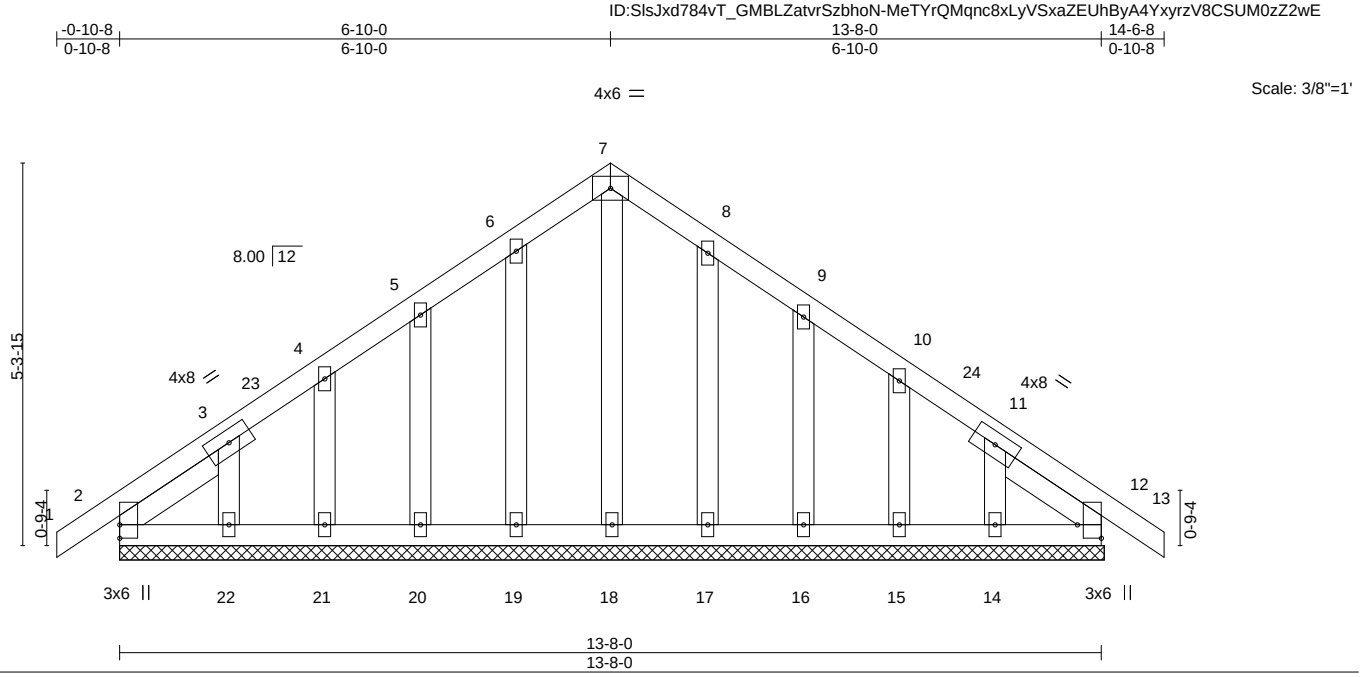

Plate Offsets (X,Y)-- [12:Edge,0-4-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	-0.00	12	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	13	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 70 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 1-8-11, Right 2x4 SPF No.2 1-8-1

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

REACTIONS. All bearings 13-8-8.
(lb) - Max Horz 2=-134(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 12, 19, 20, 21, 22, 17, 16, 15, 14
Max Grav All reactions 250 lb or less at joint(s) 2, 12, 18, 19, 20, 21, 22, 17, 16, 15, 14

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 6-10-0, Corner(3R) 6-10-0 to 9-10-0, Exterior(2N) 9-10-0 to 14-6-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12, 19, 20, 21, 22, 17, 16, 15, 14.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	B5	GABLE	1	1	I57272425
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 20 11:27:28 2023 Page 1
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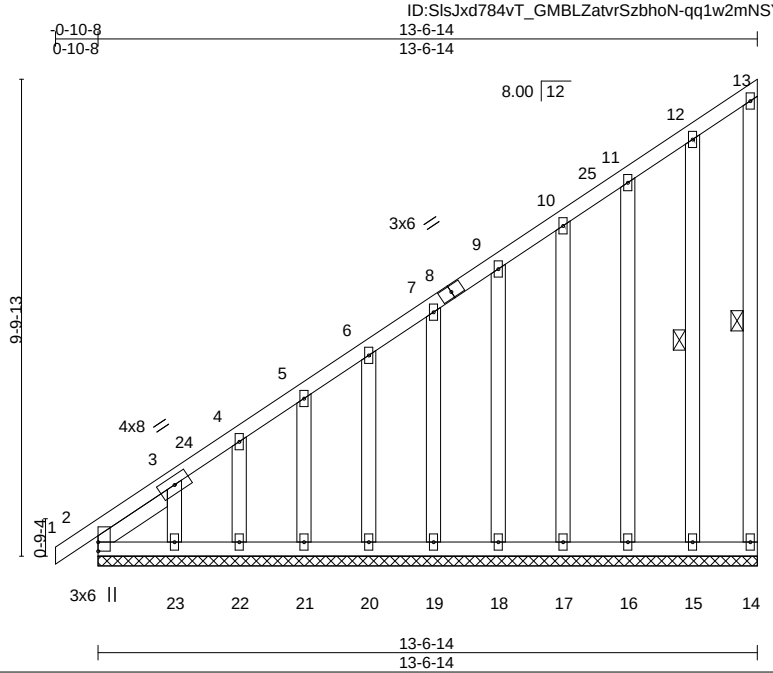

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	0.00	1	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	-0.00	1	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	-0.00	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 98 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
OTHERS	2x4 SPF No.2
SLIDER	Left 2x4 SPF No.2 1-9-7

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 13-14, 12-15

REACTIONS. All bearings 13-6-14.
(lb) - Max Horz 2=388(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 14, 2, 15, 16, 17, 18, 19, 20, 21, 22 except 23=-160(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 14, 15, 16, 17, 18, 19, 20, 21, 22, 23 except 2=297(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-642/311, 3-4=-490/231, 4-5=-433/204, 5-6=-379/178, 6-7=-324/151, 7-9=-269/124

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 13-5-2 zone; cantilever left and right exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 1-4-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 2, 15, 16, 17, 18, 19, 20, 21, 22 except (jt=lb) 23=160.
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.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	CJ1	Jack-Closed Girder	4	1	I57272426
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 20 11:27:29 2023 Page 1
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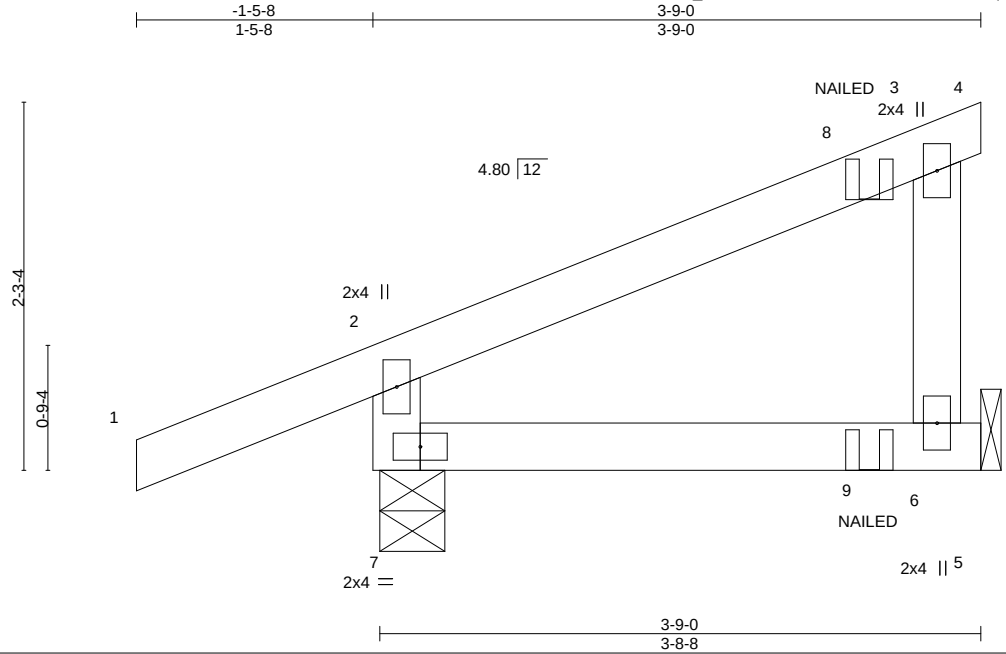

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	-0.00	6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.01	6-7	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 13 lb	FT = 20%

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

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

REACTIONS. (size) 7=0-4-13, 6=Mechanical
Max Horz 7=95(LC 5)
Max Uplift 7=-86(LC 4), 6=-65(LC 5)
Max Grav 7=291(LC 1), 6=146(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-256/99

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 6.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) "NAILED" indicates 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=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 3-4=-20, 5-7=-20
Concentrated Loads (lb)
Vert: 8=-1(B) 9=-13(B)

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	J1	Jack-Open	18	1	I57272427
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 20 11:27:30 2023 Page 1
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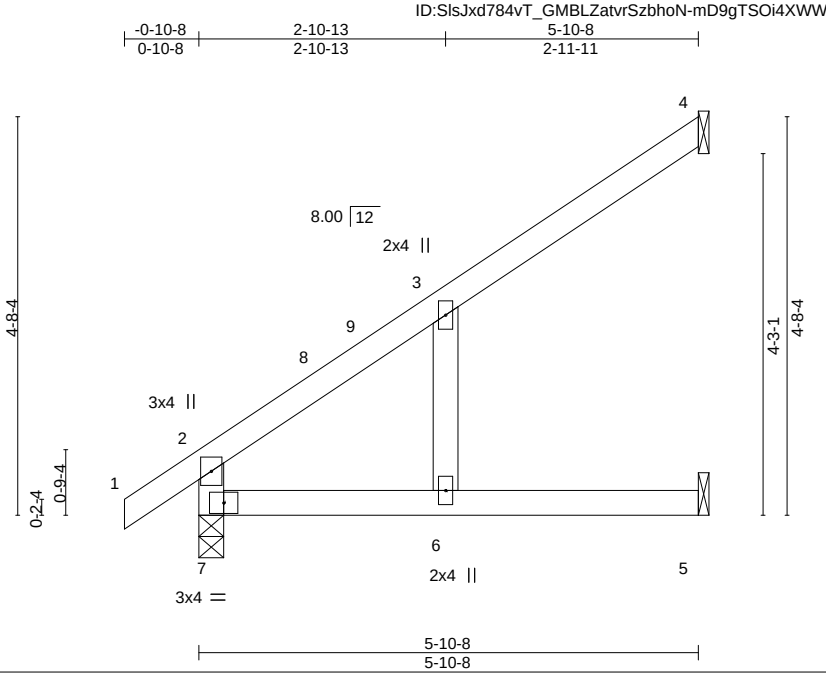

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	0.11	6	>603	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.14	6	>494	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.04	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 19 lb	FT = 20%

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

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

REACTIONS. (size) 4=Mechanical, 5=Mechanical, 7=0-3-8
Max Horz 7=170(LC 12)
Max Uplift 4=-91(LC 12), 5=-31(LC 12), 7=-17(LC 12)
Max Grav 4=158(LC 19), 5=105(LC 19), 7=333(LC 1)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-9-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5, 7.
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.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	J2	Half Hip	4	1	I57272428
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 20 11:27:31 2023 Page 1
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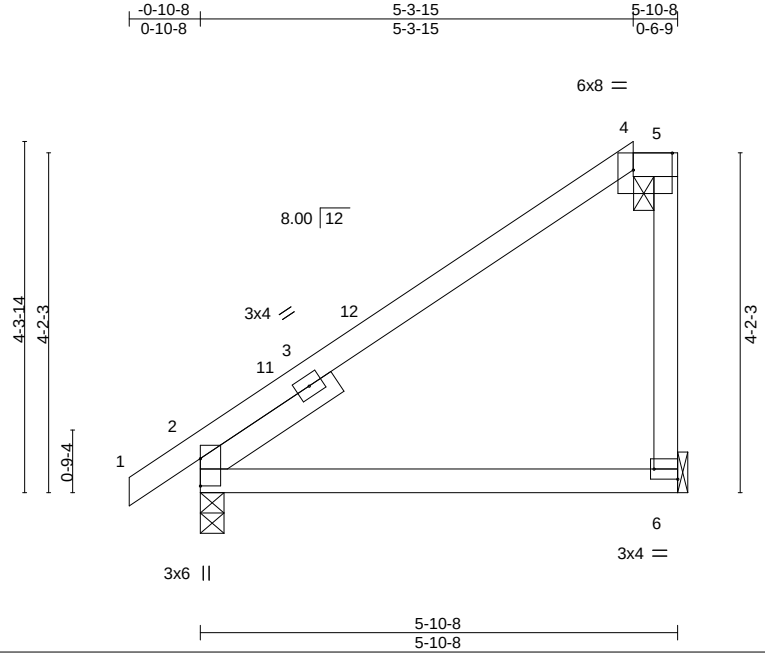

Plate Offsets (X,Y)-- [4:0-5-12,Edge], [6:Edge,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	0.03	6-9	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.05	6-9	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.02	2	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 22 lb	FT = 20%

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

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

REACTIONS. (size) 6=Mechanical, 2=0-3-8
Max Horz 2=159(LC 11)
Max Uplift 6=-78(LC 12), 2=-52(LC 12)
Max Grav 6=262(LC 19), 2=324(LC 1)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-3-15, Exterior(2E) 5-3-15 to 5-8-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	J3	Half Hip	4	1	I57272429
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 20 11:27:33 2023 Page 1
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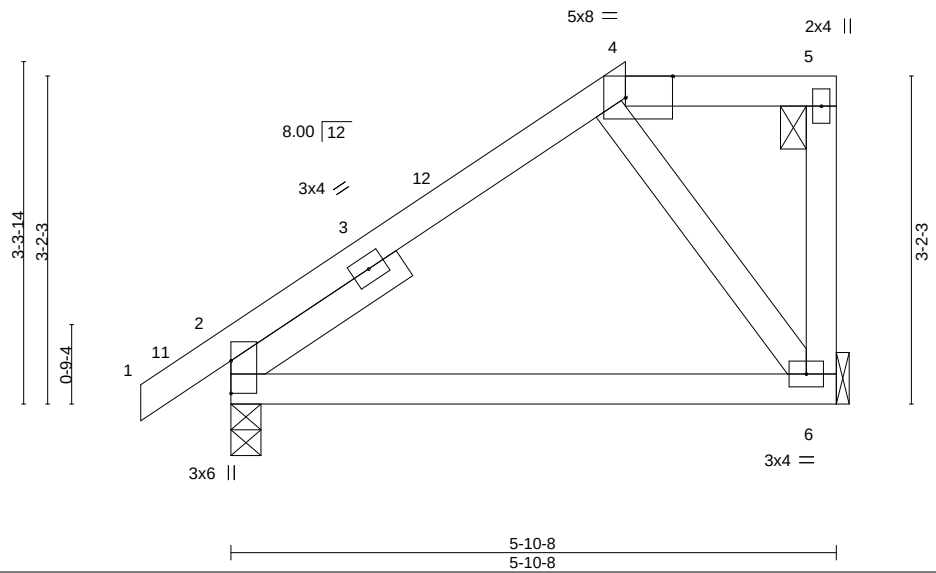

Plate Offsets (X,Y)-- [4:0-5-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	-0.03	6-9	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.07	6-9	>931	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 25 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-3-8, 6=Mechanical
Max Horz 2=119(LC 11)
Max Uplift 2=-59(LC 12), 6=-64(LC 9)
Max Grav 2=324(LC 1), 6=253(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-350/72

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-9-15, Exterior(2E) 3-9-15 to 5-8-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	J4	Half Hip Girder	4	1	I57272430
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 20 11:27:34 2023 Page 1
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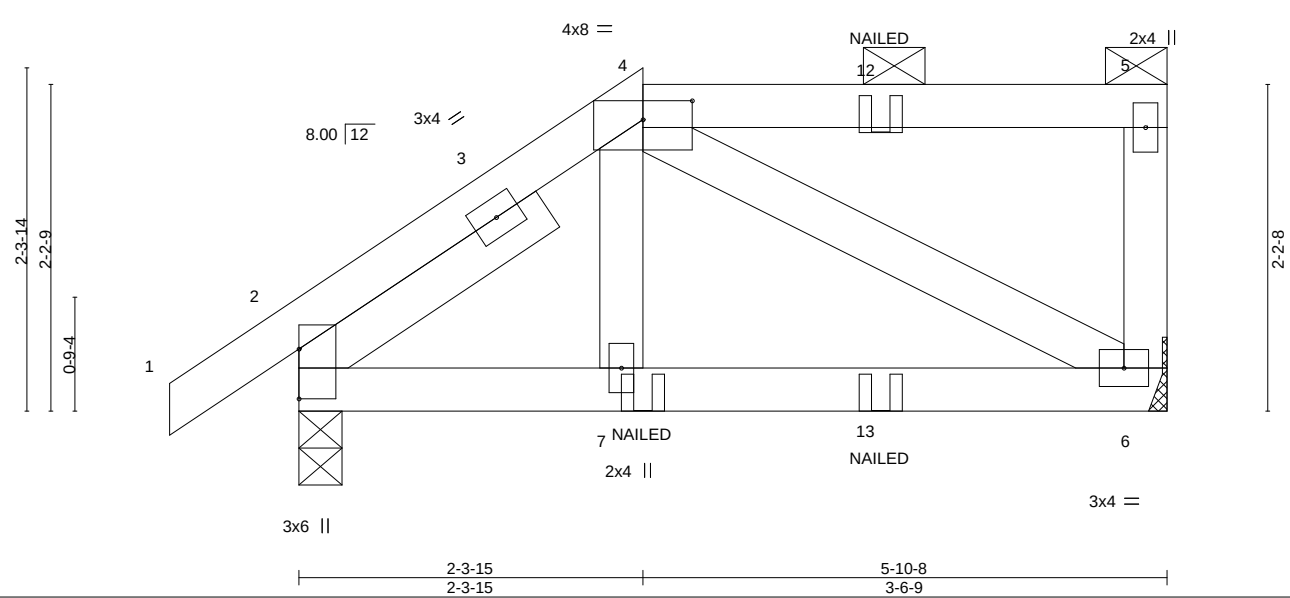

Plate Offsets (X,Y)-- [4:0-4-0,0-1-9]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.01	6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.02	6-7	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.09	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 26 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-10-8 oc purlins, except end verticals, and 2-0-0 oc purlins: 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 6=Mechanical
Max Horz 2=81(LC 7)
Max Uplift 2=-119(LC 8), 6=-115(LC 5)
Max Grav 2=416(LC 1), 6=336(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-373/124
BOT CHORD 2-7=-128/296, 6-7=-124/282
WEBS 4-6=-325/125

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=119, 6=115.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-70, 4-5=-70, 6-8=-20
Concentrated Loads (lb)
Vert: 7=-121(B) 12=-27(B) 13=-27(B)

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	J5	Jack-Open	4	1	I57272431
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 20 11:27:35 2023 Page 1
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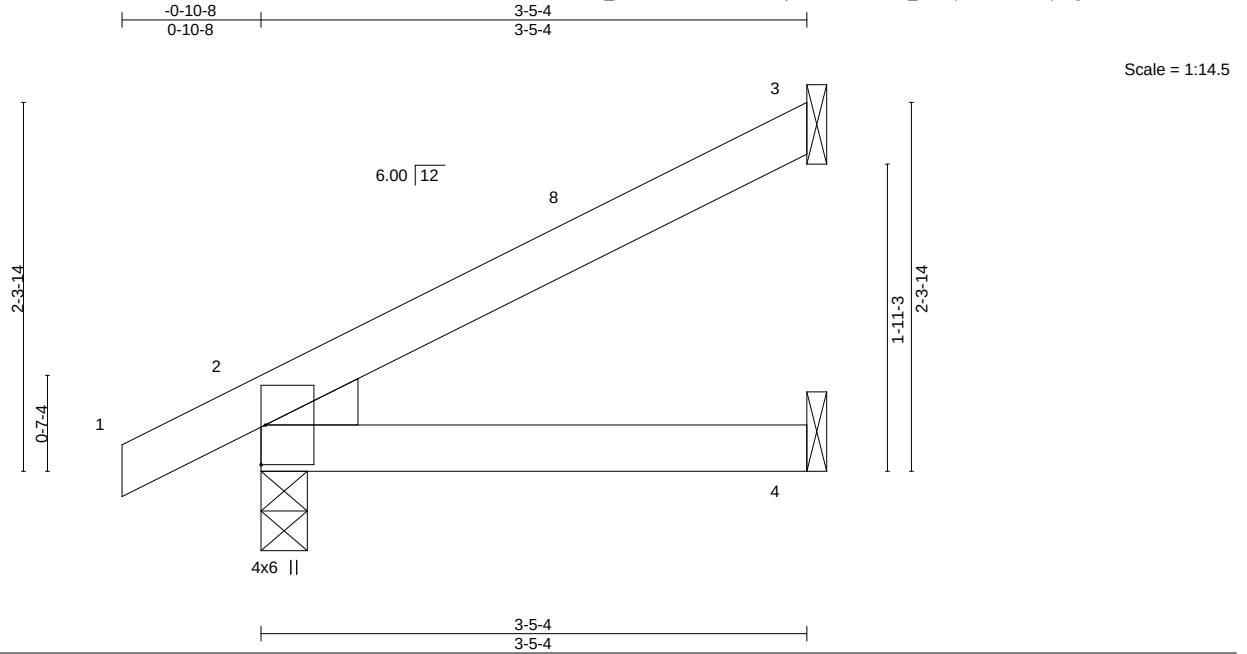

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	-0.01	4-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.01	4-7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 10 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-5-4 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=84(LC 12)
Max Uplift 3=-52(LC 12), 2=-34(LC 12), 4=-3(LC 12)
Max Grav 3=97(LC 1), 2=221(LC 1), 4=61(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-4-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	J6	Jack-Open	4	1	I57272432
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 20 11:27:36 2023 Page 1
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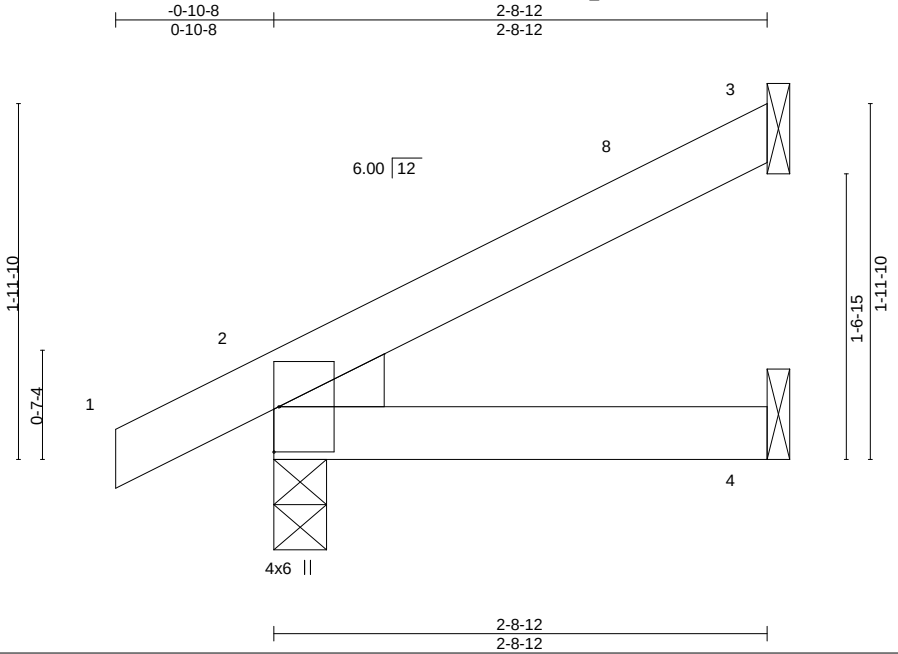

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.01	4-7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 9 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-8-12 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=70(LC 12)
Max Uplift 3=-40(LC 12), 2=-30(LC 12), 4=-4(LC 12)
Max Grav 3=74(LC 1), 2=191(LC 1), 4=47(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 2-8-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	LG1	GABLE	2	1	I57272433
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 20 11:27:37 2023 Page 1
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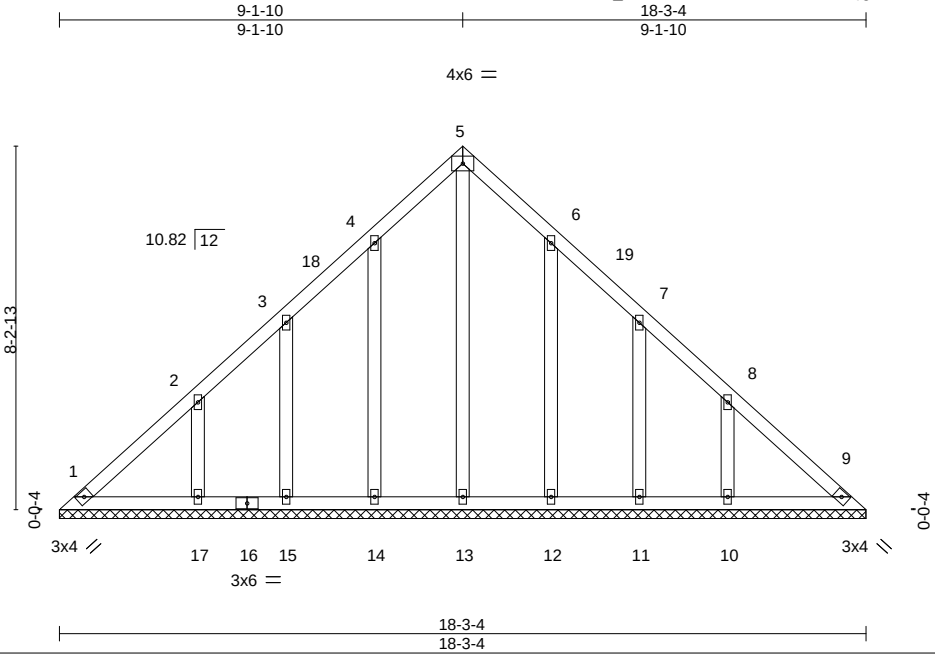

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.01	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 84 lb	FT = 20%

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

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

REACTIONS. All bearings 18-3-4.
(lb) - Max Horz 1=-206(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 15, 11 except 14=-112(LC 12), 17=-153(LC 12), 12=-110(LC 13), 10=-153(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 14, 15, 12, 11 except 17=280(LC 19), 10=279(LC 20)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-9 to 3-1-10, Interior(1) 3-1-10 to 9-1-10, Exterior(2R) 9-1-10 to 12-1-10 , Interior(1) 12-1-10 to 17-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9, 15, 11 except (jt=lb) 14=112, 17=153, 12=110, 10=153.
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.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	LG3	GABLE	2	1	I57272434
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 20 11:27:39 2023 Page 1
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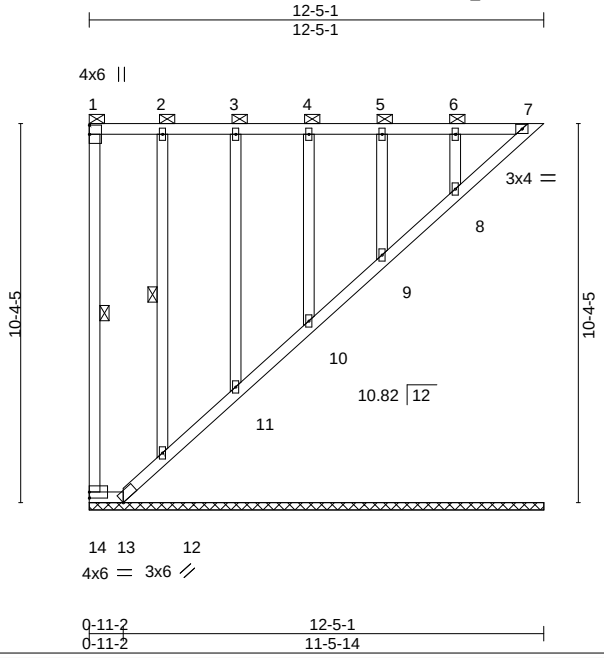

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 73 lb	FT = 20%

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

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

REACTIONS. All bearings 12-5-1.
(lb) - Max Horz 14=-286(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 13, 11, 10, 9, 8 except 14=-134(LC 10), 7=-113(LC 9), 12=-113(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 14, 7, 13, 12, 11, 10, 9, 8

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
BOT CHORD 11-12=-259/246, 10-11=-257/243, 9-10=-258/243, 8-9=-258/244, 7-8=-256/238

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 11, 10, 9, 8 except (jt=lb) 14=134, 7=113, 12=113.
7) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 7, 12, 11, 10, 9, 8.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	M2A	Monopitch	6	1	I57272435
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 20 11:27:40 2023 Page 1
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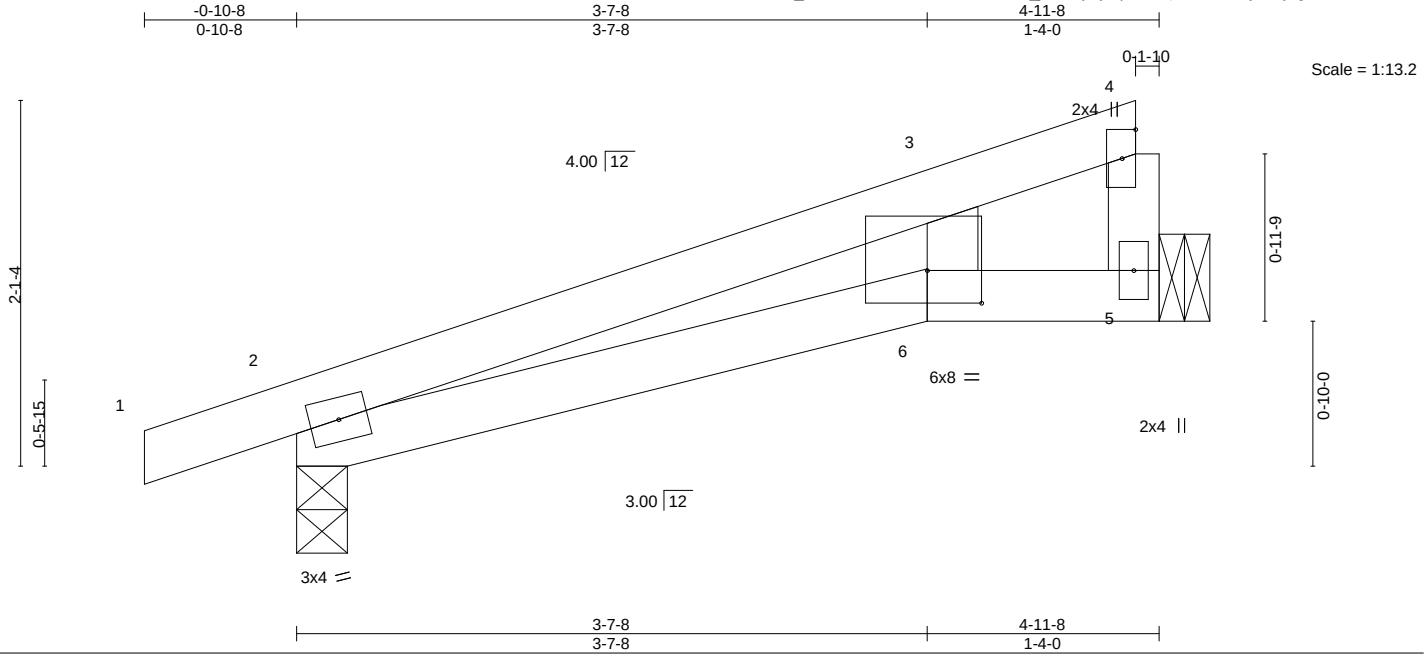

Plate Offsets (X,Y)-- [6:0-3-12,0-2-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	-0.04	6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.07	6-9	>886	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 14 lb	FT = 20%

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

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

REACTIONS. (size) 5=Mechanical, 2=0-3-8
Max Horz 2=67(LC 9)
Max Uplift 5=-56(LC 12), 2=-81(LC 8)
Max Grav 5=211(LC 1), 2=283(LC 1)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-9-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
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.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	M2B	GABLE	1	1	I57272436
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 20 11:27:40 2023 Page 1
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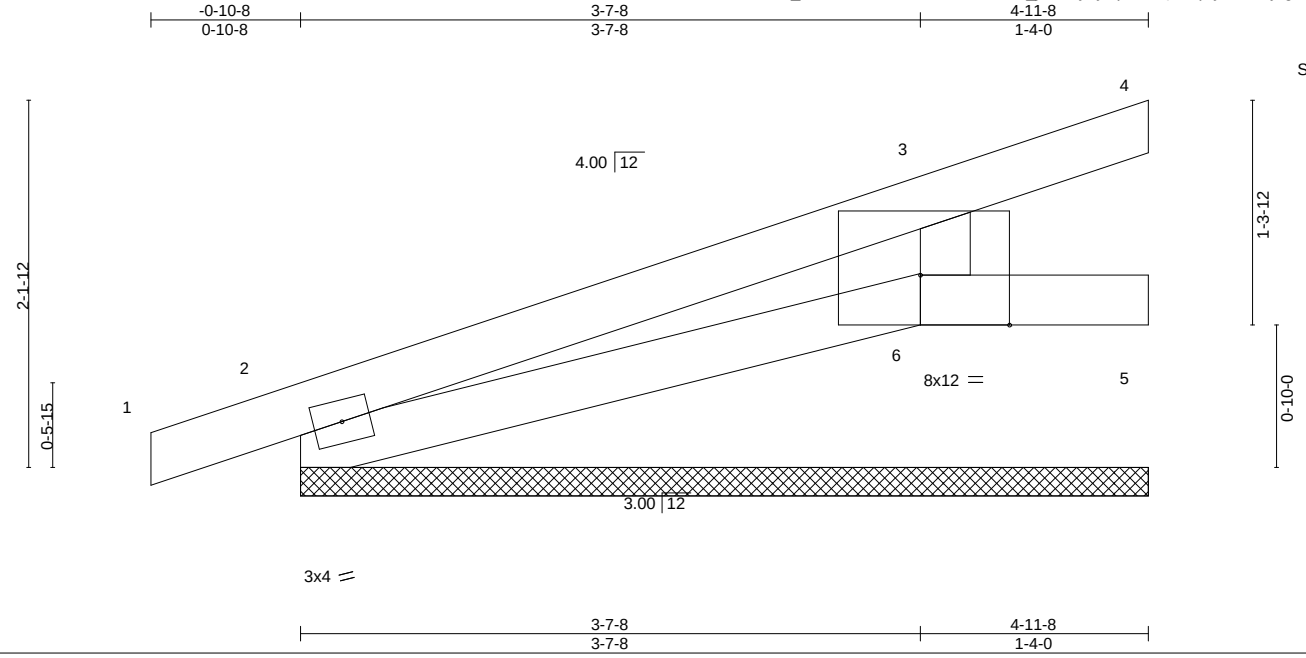

Plate Offsets (X,Y)-- [6:0-6-4,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 13 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-11-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings 4-11-8.
(lb) - Max Horz 2=80(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 4, 2 except 6=-120(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 4, 2, 5 except 6=322(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-264/129
WEBS 3-6=-297/466

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 4-11-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 1-4-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2 except (jt=lb) 6=120.
7) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 4, 6, 5.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	M3	Monopitch	18	1	I57272437
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 20 11:27:41 2023 Page 1
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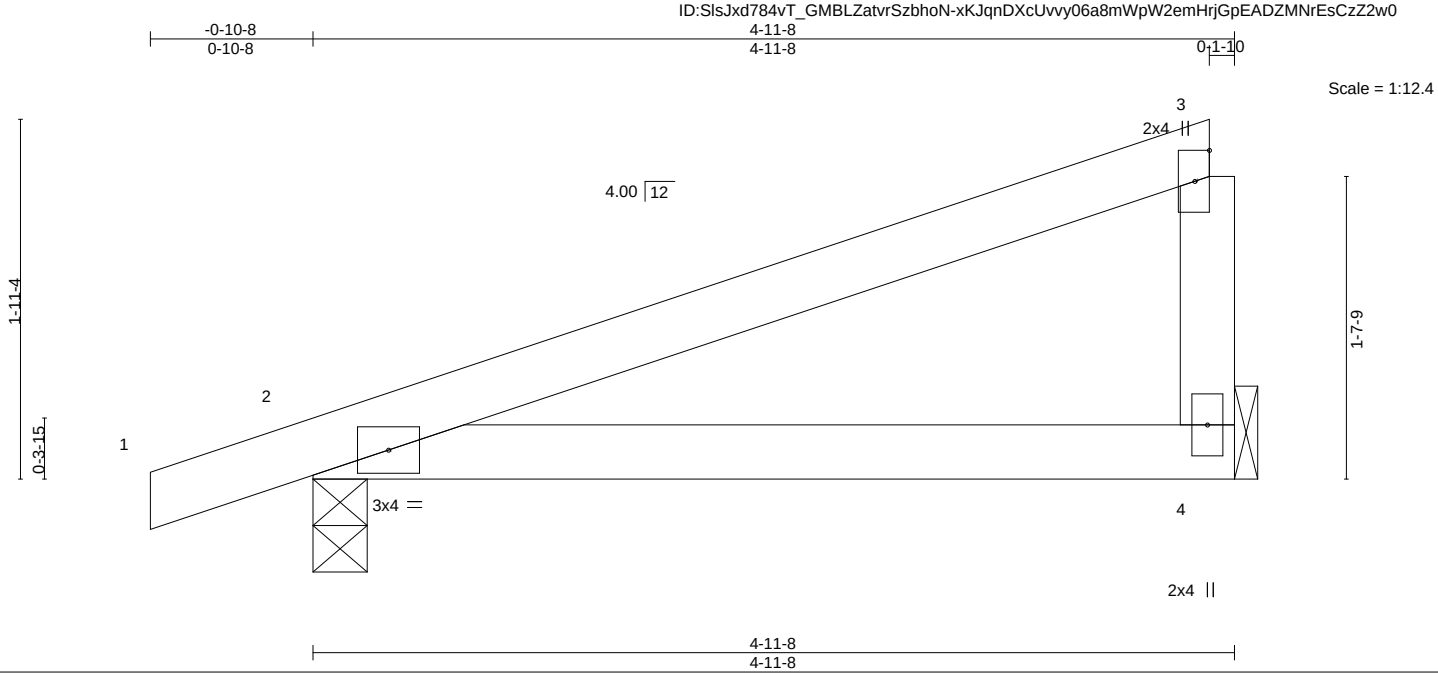

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.03	4-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.06	4-7	>988	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 14 lb	FT = 20%

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

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

REACTIONS. (size) 4=Mechanical, 2=0-3-8
Max Horz 2=79(LC 11)
Max Uplift 4=-53(LC 12), 2=-85(LC 8)
Max Grav 4=211(LC 1), 2=283(LC 1)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-9-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	M4	GABLE	3	1	I57272438
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 20 11:27:42 2023 Page 1
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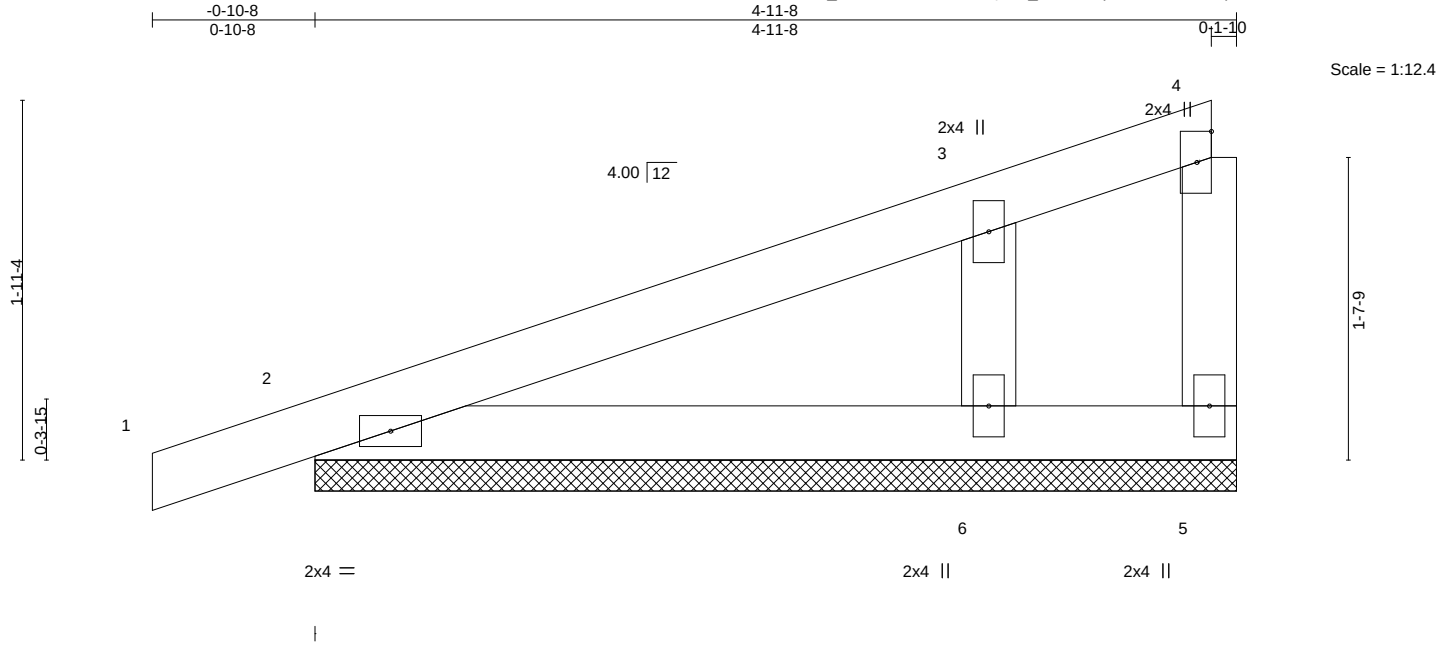

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 15 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-11-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 5=4-11-8, 2=4-11-8, 6=4-11-8
Max Horz 2=78(LC 9)
Max Uplift 5=-37(LC 1), 2=-64(LC 8), 6=-89(LC 12)
Max Grav 5=15(LC 12), 2=203(LC 1), 6=326(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-6=-249/372

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 4-9-5 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 1-4-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2, 6.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	V9	Valley	2	1	I57272439
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 20 11:27:49 2023 Page 1
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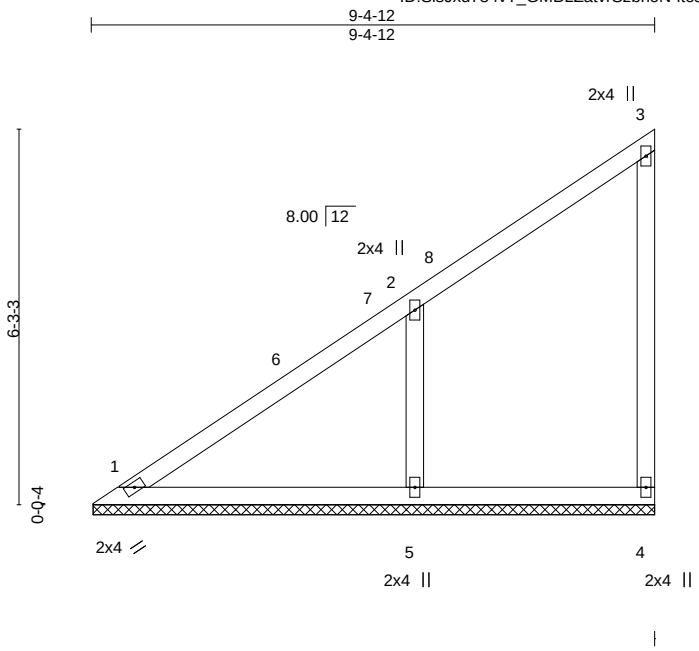

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 33 lb	FT = 20%

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

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

REACTIONS. (size) 1=9-4-6, 4=9-4-6, 5=9-4-6
Max Horz 1=233(LC 9)
Max Uplift 1=-4(LC 8), 4=-50(LC 9), 5=-183(LC 12)
Max Grav 1=203(LC 20), 4=138(LC 19), 5=511(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-339/242
WEBS 2-5=-393/281

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 9-3-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4 except (jt=lb) 5=183.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	V10	Valley	2	1	I57272440
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 20 11:27:43 2023 Page 1
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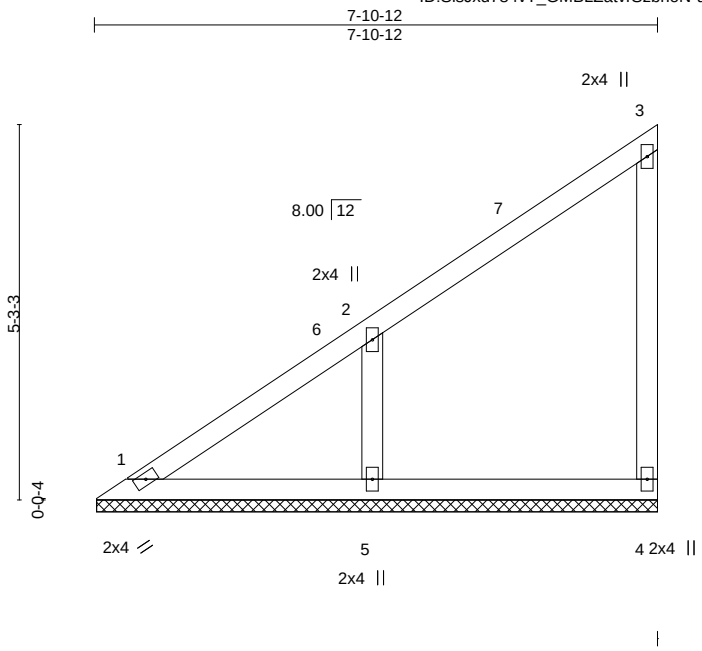

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 27 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 1=7-10-6, 4=7-10-6, 5=7-10-6
Max Horz 1=193(LC 9)
Max Uplift 1=-14(LC 8), 4=-46(LC 9), 5=-165(LC 12)
Max Grav 1=142(LC 20), 4=152(LC 19), 5=425(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-318/221
WEBS 2-5=-334/262

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 7-9-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4 except (jt=lb) 5=165.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	V11	Valley	2	1	I57272441
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 20 11:27:44 2023 Page 1
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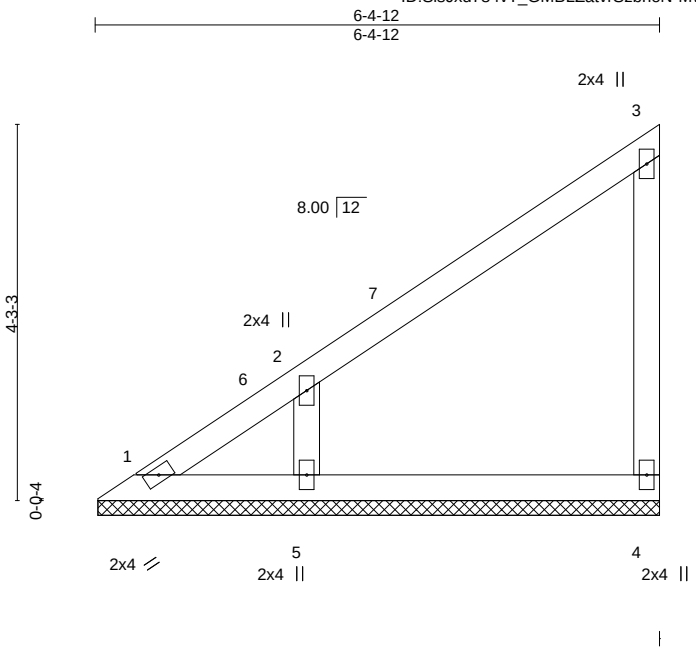

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 21 lb	FT = 20%

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

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

REACTIONS. (size) 1=6-4-6, 4=6-4-6, 5=6-4-6
Max Horz 1=153(LC 9)
Max Uplift 1=-36(LC 10), 4=-42(LC 9), 5=-153(LC 12)
Max Grav 1=78(LC 9), 4=156(LC 19), 5=371(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-300/200
WEBS 2-5=-291/259

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 6-3-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4 except (jt=lb) 5=153.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	V12	Valley	2	1	I57272442
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 20 11:27:44 2023 Page 1
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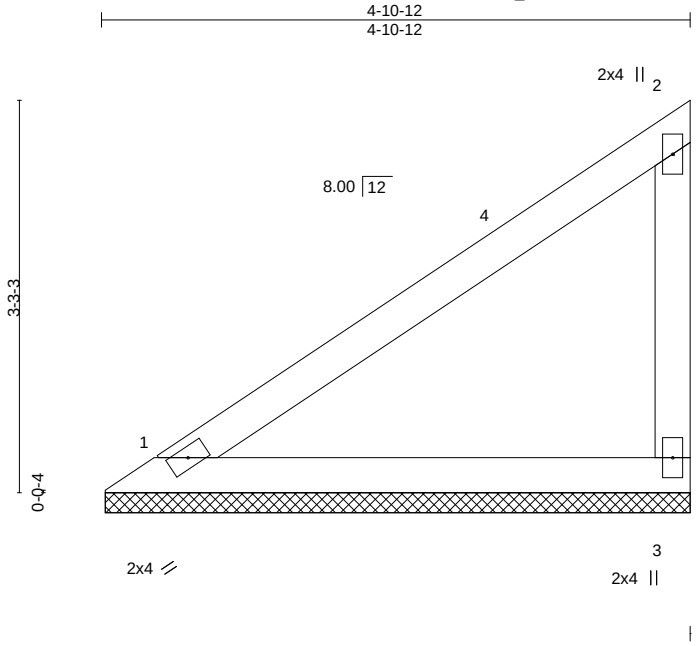

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 15 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-10-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-10-6, 3=4-10-6
Max Horz 1=113(LC 9)
Max Uplift 1=-24(LC 12), 3=-63(LC 12)
Max Grav 1=192(LC 1), 3=206(LC 19)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 4-9-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	V13	Valley	2	1	I57272443
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 20 11:27:45 2023 Page 1
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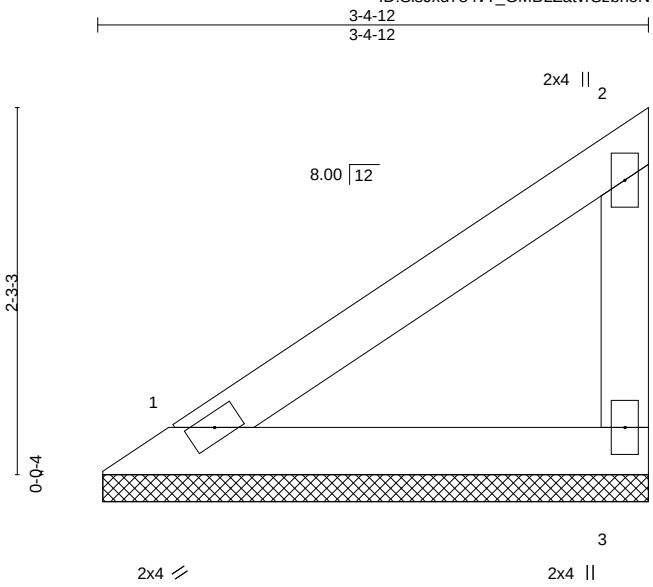

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LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 10 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-4-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-4-6, 3=3-4-6
Max Horz 1=74(LC 9)
Max Uplift 1=-15(LC 12), 3=-41(LC 12)
Max Grav 1=125(LC 1), 3=134(LC 19)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	V15	Valley	2	1	I57272444
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 20 11:27:46 2023 Page 1
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8-1-15 / 8-1-15 | 16-3-14 / 8-1-15

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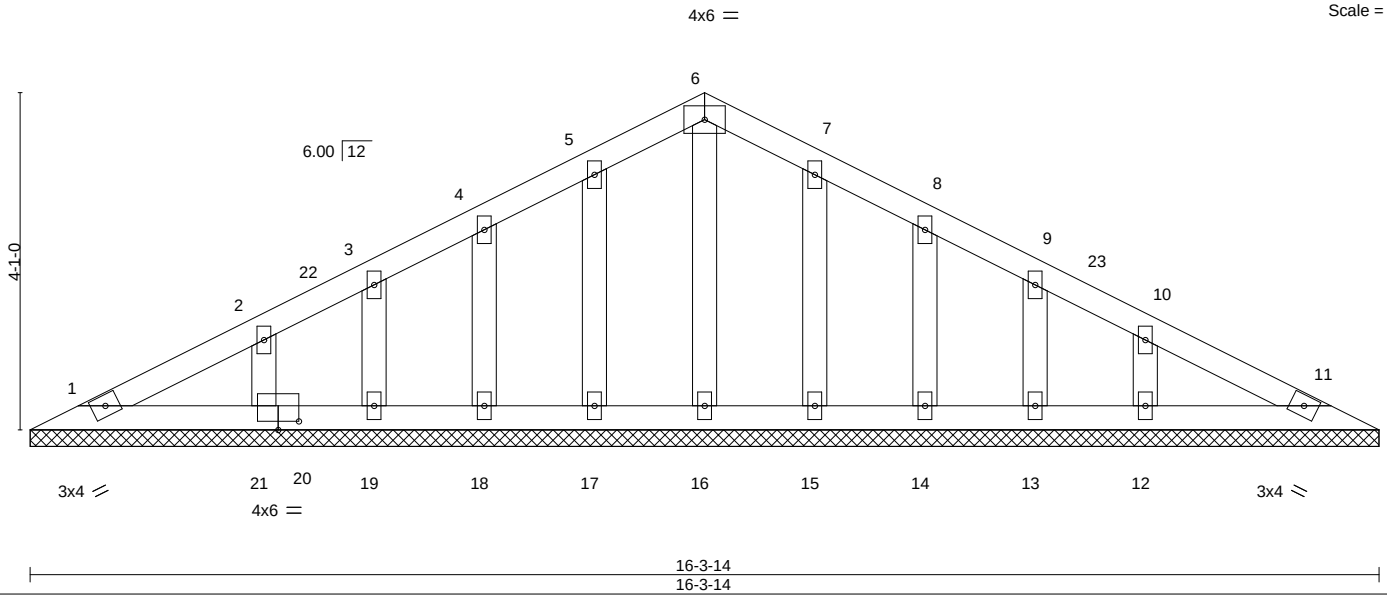

16-3-14 / 16-3-14

Plate Offsets (X,Y)-- [20:0-3-0,0-1-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 59 lb	FT = 20%

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

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

REACTIONS. All bearings 16-3-14.
(lb) - Max Horz 1=66(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1, 17, 18, 19, 21, 15, 14, 13, 12
Max Grav All reactions 250 lb or less at joint(s) 1, 11, 16, 17, 18, 19, 21, 15, 14, 13, 12

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-7-7 to 3-7-7, Exterior(2N) 3-7-7 to 8-1-15, Corner(3R) 8-1-15 to 11-1-15, Exterior(2N) 11-1-15 to 15-8-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 1-4-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 17, 18, 19, 21, 15, 14, 13, 12.
8) N/A
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.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	V16	Valley	2	1	I57272445
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 20 11:27:48 2023 Page 1
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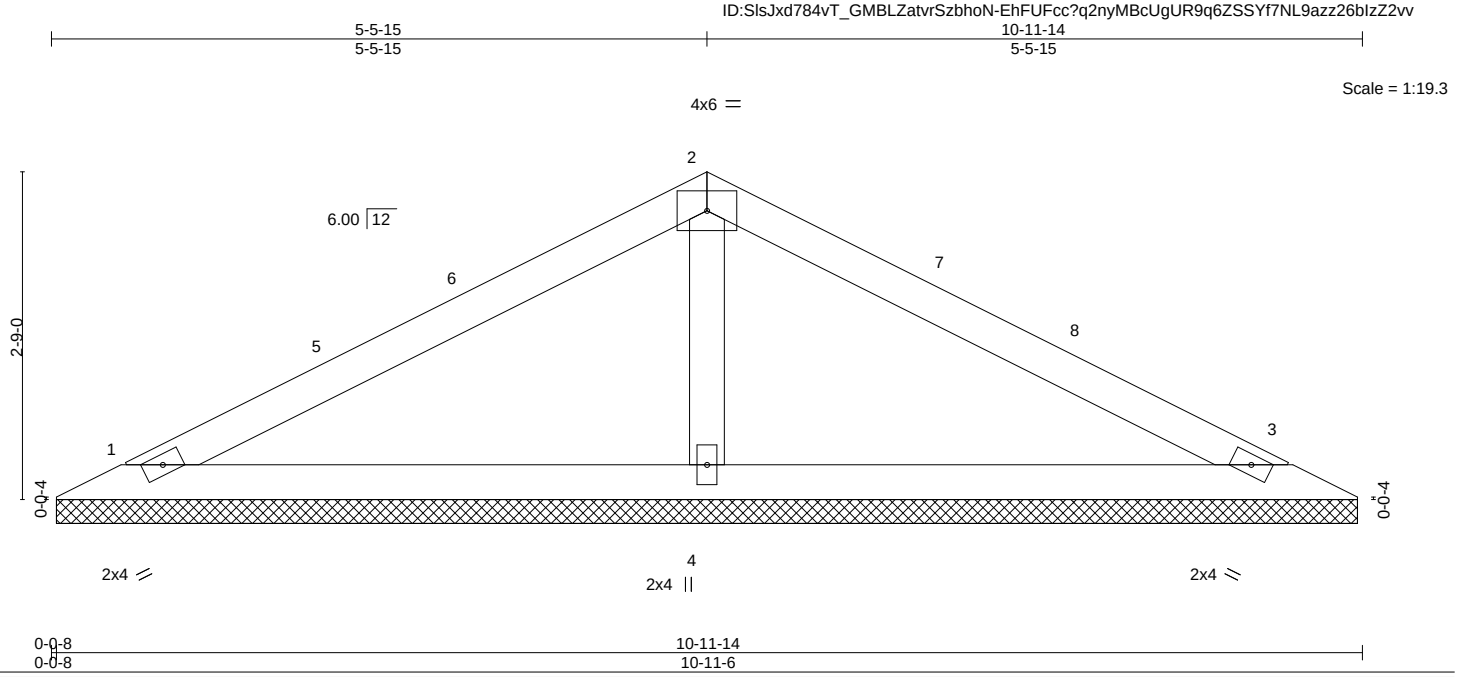

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 27 lb	FT = 20%

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

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

REACTIONS. (size) 1=10-10-14, 3=10-10-14, 4=10-10-14
Max Horz 1=43(LC 12)
Max Uplift 1=-47(LC 12), 3=-55(LC 13), 4=-51(LC 12)
Max Grav 1=202(LC 25), 3=202(LC 26), 4=477(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-330/192

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 5-5-15, Exterior(2R) 5-5-15 to 8-5-15, Interior(1) 8-5-15 to 10-4-5 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

March 21,2023

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/Juneau Townhome
2820534	V17	Valley	2	1	I57272446
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 20 11:27:48 2023 Page 1
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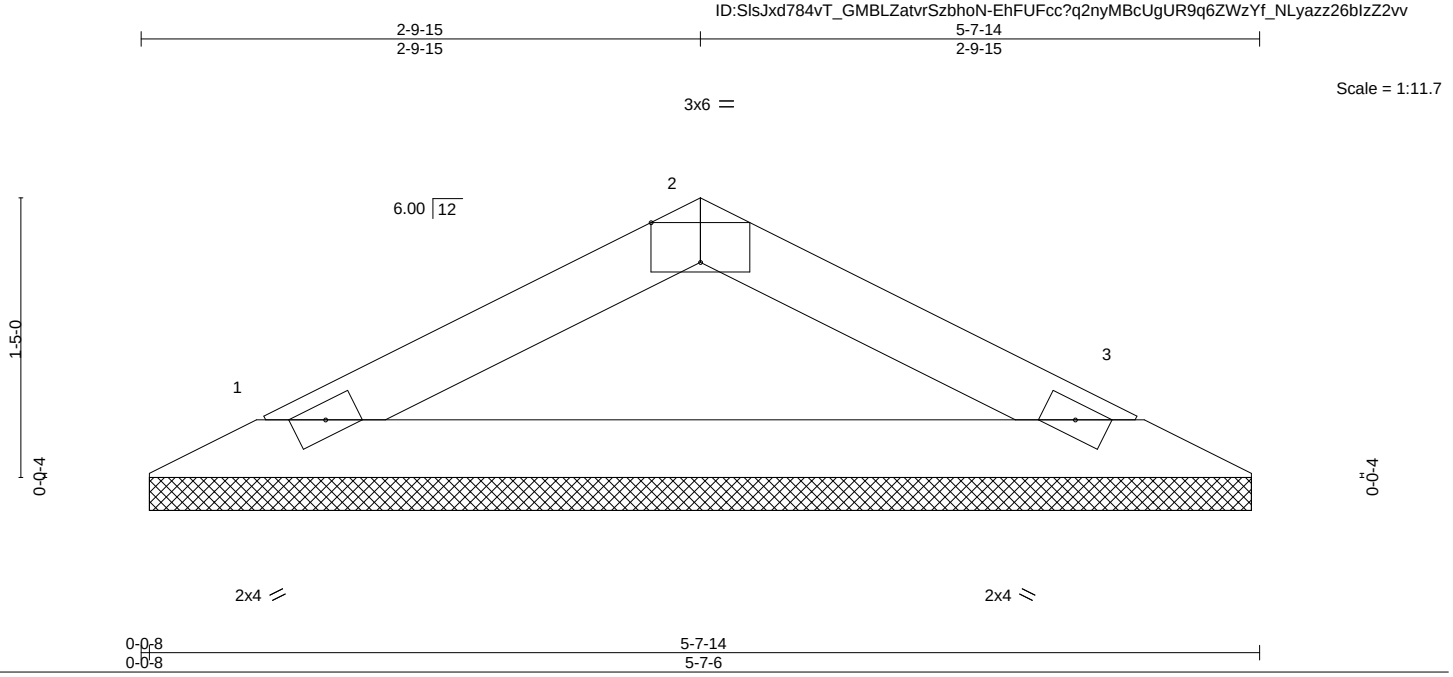


Plate Offsets (X,Y)-- [2:0-3-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 12 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-7-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=5-6-14, 3=5-6-14
Max Horz 1=19(LC 16)
Max Uplift 1=-33(LC 12), 3=-33(LC 13)
Max Grav 1=198(LC 1), 3=198(LC 1)

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

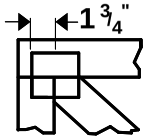
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
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.

March 21,2023

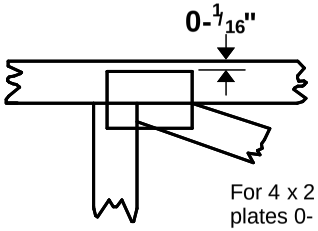
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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.

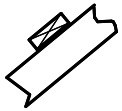
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

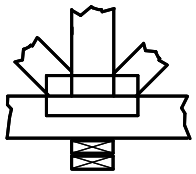
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

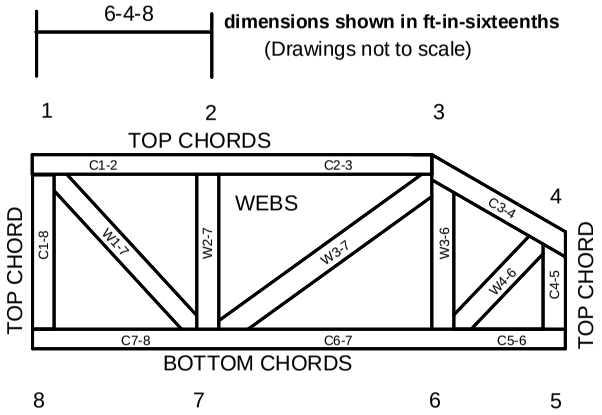


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.