



RE: 201026

201026-Skytor-Ralston-Bldg 1 - Type 14

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

Site Information:

Customer: Project Name: 201026

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 8.5

Wind Code: ASCE 7-16 Wind Speed: 136 mph Roof Load: 55.0 psf Floor Load: 55.0 psf

This package includes 42 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I47314770	B01	8/6/2021	21	147314790	C04	8/6/2021
2	147314771	B01E	8/6/2021	22	147314791	C04E	8/6/2021
3	147314772	B02	8/6/2021	23	147314792	C05	8/6/2021
4	147314773	B03	8/6/2021	24	147314793	C05E	8/6/2021
5	147314774	B04	8/6/2021	25	147314794	C06E	8/6/2021
6	147314775	B04E	8/6/2021	26	147314795	CV01	8/6/2021
7	147314776	B05	8/6/2021	27	147314796	CV02	8/6/2021
8	147314777	B07E	8/6/2021	28	147314797	CV03	8/6/2021
9	147314778	B08	8/6/2021	29	147314798	FB01	8/6/2021
10	147314779	B09	8/6/2021	30	147314799	FB02	8/6/2021
11	147314780	BV01	8/6/2021	31	147314800	FB03	8/6/2021
12	I47314781	BV02	8/6/2021	32	147314801	FB04	8/6/2021
13	147314782	BV03	8/6/2021	33	147314802	FB06	8/6/2021
14	147314783	C01	8/6/2021	34	147314803	FB07	8/6/2021
15	147314784	C01A	8/6/2021	35	147314804	FC02	8/6/2021
16	147314785	C01E	8/6/2021	36	147314805	FC03	8/6/2021
17	147314786	C02	8/6/2021	37	147314806	FC04	8/6/2021
18	147314787	C02E	8/6/2021	38	147314807	FC05	8/6/2021
19	147314788	C03	8/6/2021	39	147314808	FC06	8/6/2021
20	147314789	C03E	8/6/2021	40	147314809	FC07	8/6/2021

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

Truss Design Engineer's Name: Johnson, Andrew

My license renewal date for the state of Colorado is October 31, 2021.

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





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Site Information:

Address:

Project Customer: Project Name: 201026

Lot/Block: Subdivision:

City, County: State:

 No.
 Seal#
 Truss Name
 Date

 41
 I47314810
 FC08
 8/6/2021

 42
 I47314811
 FC09
 8/6/2021

Job Truss Truss Type Qty 201026-Skytor-Ralston-Bldg 1 - Type 14 147314770 201026 B01 MONOPITCH 16 Job Reference (optional) 8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:25:17 2021 Page 1

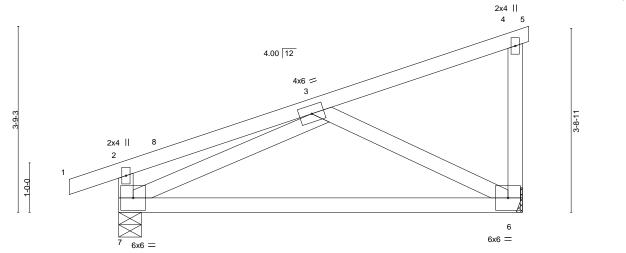
Builders Inc., Aurora, CO - 80011, ID:QS8hjBL9ClM8AxVMglothazLZKy-l03Z4Wq8jXd2l323ELETEjbxrJdcS_VrcE6cMcyrAX0

Sheathed or 6-0-0 oc purlins, except end verticals.

Rigid ceiling directly applied or 7-6-4 oc bracing.

-1-0-0 1-0-0 4-1-4 4-0-12

Scale = 1:23.3



LOADING (psf) SPACING-DEFL. I/defI **PLATES** GRIP 2-0-0 (loc) L/d TCLL 30.0 Plate Grip DOL Vert(LL) 240 197/144 1.15 TC 0.40 -0.23 6-7 >410 MT20 (Roof Snow=30.0) Lumber DOL 1.15 ВС 0.73 Vert(CT) -0.46 6-7 >205 180 **TCDL** 15.0 Rep Stress Incr YES WB 0.22 Horz(CT) 0.01 6 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-MP Weight: 34 lb FT = 20% **BCDL** 10.0

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS.

6=Mechanical, 7=0-5-8 (size) Max Horz 7=218(LC 11) Max Uplift 6=-159(LC 14), 7=-188(LC 10) Max Grav 6=596(LC 21), 7=654(LC 21)

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

TOP CHORD 2-7=-281/284 **BOT CHORD** 6-7=-544/558

WEBS 3-6=-627/546, 3-7=-631/296

- 1) Wind: ASCE 7-16; Vult=136mph (3-second gust) Vasd=108mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 8-3-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate
- 2) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 159 lb uplift at joint 6 and 188 lb uplift at
- 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.





Job Truss Truss Type Qty 201026-Skytor-Ralston-Bldg 1 - Type 14 147314771 201026 B01E MONOPITCH SUPPORTED 8

Builders Inc., Aurora, CO - 80011,

Job Reference (optional) 8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:25:25 2021 Page 1 ID:QS8hjBL9ClM8AxVMglothazLZKy-WYYbmFx9q?dwGlfbi1NLZPwL0XUsKdx0SU21d8yrAWu

Sheathed or 6-0-0 oc purlins, except end verticals.

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

Scale = 1:21.8

8-2-0 1-0-0 8-2-0

7 4.00 12 5 4x6 II 12 10 9 11 3x4 =

Plate Offsets (X,Y) [2:	0-3-0,0-1-12]								
LOADING (psf) TCLL 30.0 (Roof Snow=30.0) TCDL 15.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.26 BC 0.19 WB 0.07 Matrix-R	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (I 0.00 0.00 0.00	loc) 6 6 8	I/defl n/r n/r n/a	L/d 120 120 n/a	PLATES MT20 Weight: 31 lb	GRIP 197/144 FT = 20%

TOP CHORD

BOT CHORD

LUMBER-BRACING-

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

(lb) -

2x4 SPF No.2

Max Horz 12=218(LC 11) Max Uplift All uplift 100 lb or less at joint(s) 12, 8, 9, 10 except 11=-135(LC 14)

Max Grav All reactions 250 lb or less at joint(s) 8 except 12=272(LC 20), 9=296(LC 21), 10=292(LC 21),

11=279(LC 21)

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

TOP CHORD 2-3=-389/191. 3-4=-261/148

All bearings 8-2-8.

WEBS 5-9=-255/260, 4-10=-253/243, 3-11=-238/382

REACTIONS.

- 1) Wind: ASCE 7-16; Vult=136mph (3-second gust) Vasd=108mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-0-0 to 2-2-8, Exterior(2N) 2-2-8 to 8-3-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable requires continuous bottom chord bearing.
- 8) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web). 9) Gable studs spaced at 2-0-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
- will fit between the bottom chord and any other members. 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 8, 9, 10 except (jt=lb) 11=135.
- 13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



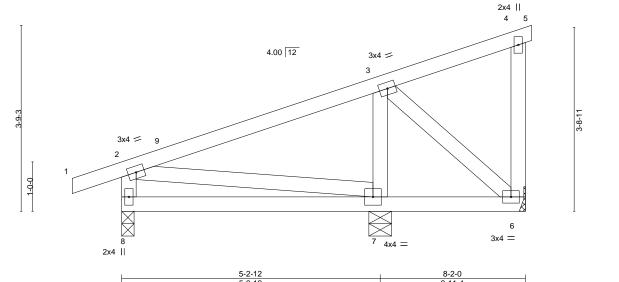
August 5,2021







Job Truss Truss Type Qty 201026-Skytor-Ralston-Bldg 1 - Type 14 147314772 201026 B02 MONOPITCH 8 Job Reference (optional) 8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:25:27 2021 Page 1 Builders Inc., Aurora, CO - 80011, ID:QS8hjBL9ClM8AxVMglothazLZKy-SxgLBxyQMcteVbp_qSPpeq0d0L7roXAJvoX8i1yrAWs -1-0-0 8-2-0 1-0-0 5-2-12 2-11-4 Scale = 1:23.3



LOADING (psf) SPACING-CSI. DEFL. I/defI **PLATES** GRIP 2-0-0 (loc) L/d TCLL 30.0 >704 Plate Grip DOL Vert(LL) 0.09 240 197/144 1.15 TC 0.55 7-8 MT20 (Roof Snow=30.0) Lumber DOL 1.15 ВС 0.35 Vert(CT) 0.07 7-8 >833 180 **TCDL** 15.0 Rep Stress Incr YES WB 0.08 Horz(CT) -0.00 6 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-MP Weight: 37 lb FT = 20% **BCDL** 10.0

BRACING-

TOP CHORD

BOT CHORD

Sheathed or 6-0-0 oc purlins, except end verticals.

Rigid ceiling directly applied or 8-0-10 oc bracing.

LUMBER-

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

REACTIONS.

8=0-3-0, 7=0-5-8, 6=Mechanical (size) Max Horz 8=218(LC 13)

Max Uplift 8=-247(LC 10), 7=-323(LC 10), 6=-133(LC 11) Max Grav 8=429(LC 21), 7=636(LC 21), 6=186(LC 21)

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

TOP CHORD 2-8=-387/347

BOT CHORD 7-8=-422/246

WEBS 3-7=-541/391, 3-6=-168/278

- 1) Wind: ASCE 7-16; Vult=136mph (3-second gust) Vasd=108mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 8-3-8 zone; cantilever left and right exposed; end vertical left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=247, 7=323, 6=133.
- 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.



August 5,2021



Job Truss Truss Type Qty 201026-Skytor-Ralston-Bldg 1 - Type 14 147314773 201026 B₀3 MONOPITCH 16 Job Reference (optional) 8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:25:27 2021 Page 1 Builders Inc., Aurora, CO - 80011, ID:QS8hjBL9ClM8AxVMglothazLZKy-SxgLBxyQMcteVbp_qSPpeq0huL4poW9JvoX8i1yrAWs

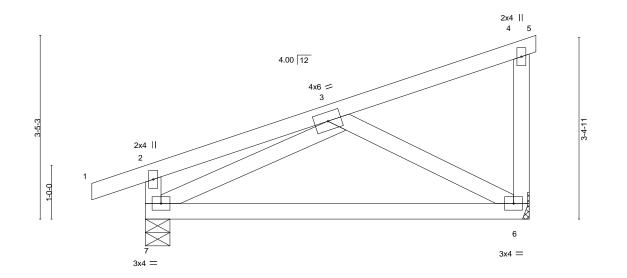
3-6-12

Sheathed or 6-0-0 oc purlins, except end verticals.

Rigid ceiling directly applied or 8-2-0 oc bracing.

3-7-4

Scale = 1:21.5



LOADING (psf) SPACING-2-0-0 DEFL. I/defI **PLATES** GRIP (loc) L/d TCLL 30.0 Plate Grip DOL Vert(LL) 240 197/144 1.15 TC 0.30 -0.13 6-7 >616 MT20 (Roof Snow=30.0) Lumber DOL 1.15 ВС 0.54 Vert(CT) -0.27 6-7 >308 180 **TCDL** 15.0 Rep Stress Incr YES WB 0.15 Horz(CT) 0.01 6 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-MP Weight: 31 lb FT = 20% **BCDL** 10.0

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS.

6=Mechanical, 7=0-5-8 (size) Max Horz 7=197(LC 11) Max Uplift 6=-140(LC 14), 7=-174(LC 10) Max Grav 6=524(LC 21), 7=609(LC 21)

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

1-0-0

TOP CHORD 2-7=-286/281 **BOT CHORD** 6-7=-482/460

WEBS 3-6=-522/487, 3-7=-526/247

- 1) Wind: ASCE 7-16; Vult=136mph (3-second gust) Vasd=108mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 7-3-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate
- 2) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 5,2021



Job Truss Truss Type Qty 201026-Skytor-Ralston-Bldg 1 - Type 14 147314774 201026 B04 Common 24 Job Reference (optional) Builders Inc., Aurora, CO - 80011, 8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:25:29 2021 Page 1 ID:QS8hjBL9CIM8AxVMglothazLZKy-PKn6cd_guD8LkvzNxtSHjF5vN8jaGGJcN60FmvyrAWq 29-0-3 36-2-5

7-2-3

7-2-3

Sheathed or 2-2-0 oc purlins, except end verticals.

7-16, 5-16

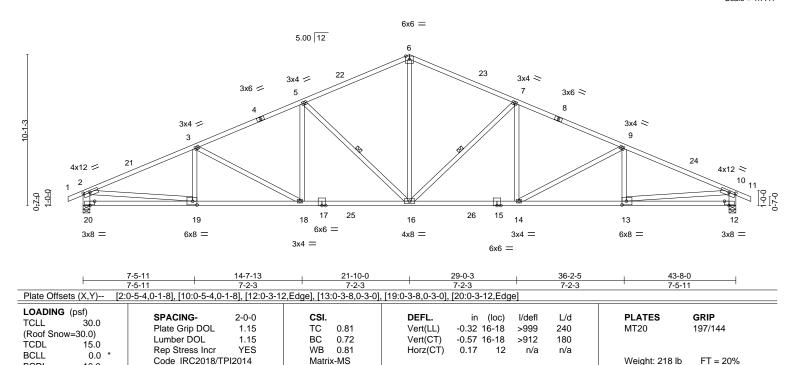
Rigid ceiling directly applied or 7-5-14 oc bracing.

1 Row at midpt

7-2-3

1-0-0 Scale = 1:77.1

7-5-11



BRACING-

WEBS

TOP CHORD

BOT CHORD

LUMBER-

BCDL

2x4 DF-N 2400F 2.0E *Except* TOP CHORD 1-4,8-11: 2x4 DF-N 1800F 1.6E

BOT CHORD 2x4 DF-N 1800F 1.6E WEBS 2x4 SPF No.2 *Except*

2-20,10-12: 2x6 DF-N 1800F 1.6E

REACTIONS. (size) 20=0-5-8, 12=0-5-8

Max Horz 20=-197(LC 19)

Max Uplift 20=-600(LC 14), 12=-600(LC 15) Max Grav 20=2516(LC 2), 12=2516(LC 2)

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

TOP CHORD $2-3=-4374/970,\ 3-5=-3918/914,\ 5-6=-3070/830,\ 6-7=-3070/830,\ 7-9=-3918/914,$

9-10=-4374/970, 2-20=-2406/653, 10-12=-2406/653

BOT CHORD 19-20=-445/703, 18-19=-980/3933, 16-18=-737/3526, 14-16=-588/3526, 13-14=-783/3933,

7-2-3

12-13=-257/676

WFBS 6-16=-348/1787, 7-16=-1259/479, 7-14=-46/508, 9-14=-471/275, 5-16=-1259/479,

5-18=-46/508, 3-18=-471/276, 2-19=-554/3304, 10-13=-556/3304

NOTES-

- 1) Wind: ASCE 7-16; Vult=136mph (3-second gust) Vasd=108mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 3-4-6, Interior(1) 3-4-6 to 21-10-0, Exterior(2R) 21-10-0 to 26-2-6, Interior(1) 26-2-6 to 44-8-0 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) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Bearing at joint(s) 20, 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 20=600, 12=600
- 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.

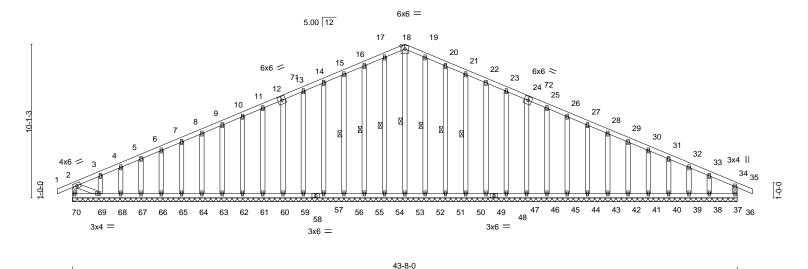


August 5,2021



Job Truss Truss Type Qty 201026-Skytor-Ralston-Bldg 1 - Type 14 147314775 201026 B04E **GABLE** Job Reference (optional) 8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:25:31 2021 Page 1 Builders Inc., Aurora, CO - 80011, ID:QS8hjBL9ClM8AxVMglothazLZKy-Livs0J?wQrO3_D6l3lUlogAOayZrkKgvqQVLroyrAWo 44-8-0 1-0-0

Scale = 1:75.7



LOADING (psf) SPACING-DEFL. **PLATES GRIP** 2-0-0 CSI (loc) I/defl L/d TCLL 30.0 Plate Grip DOL Vert(LL) 197/144 1.15 TC 0.19 0.00 34 n/r 120 MT20 (Roof Snow=30.0) Lumber DOL 1.15 BC 0.09 Vert(CT) 0.00 34 120 n/r **TCDL** 15.0 Rep Stress Incr YES WB 0.18 Horz(CT) 0.01 36 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-S Weight: 295 lb FT = 20% **BCDL** 10.0

LUMBER-

-<u>1-0-0</u> 1-0-0

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

BOT CHORD WEBS

Sheathed or 6-0-0 oc purlins, except end verticals. Rigid ceiling directly applied or 6-0-0 oc bracing

21-10-0

1 Row at midpt 18-53, 17-54, 16-55, 15-56, 19-52, 20-51,

21-50

REACTIONS. All bearings 43-8-0.

Max Horz 70=-199(LC 19) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 70, 36, 54, 55, 56, 57, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 52, 51, 50, 49, 47, 46, 45, 44, 43, 42, 41, 40, 39, 38 except 69=-173(LC 14), 37=-163(LC 15)

Max Grav All reactions 250 lb or less at joint(s) 53, 54, 55, 56, 57, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 52, 51, 50, 49, 47, 46, 45, 44, 43, 42, 41, 40, 39, 38, 37 except 70=255(LC 20), 36=260(LC 20)

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

TOP CHORD 10-11=-94/268, 11-12=-105/286, 12-13=-118/305, 13-14=-132/344, 14-15=-145/382,

21-10-0

15-16=-158/419, 16-17=-173/462, 17-18=-181/484, 18-19=-181/484, 19-20=-173/462,

20-21=-158/419, 21-22=-145/382, 22-23=-132/344, 23-24=-118/305, 24-25=-105/266

WEBS 18-53=-252/49, 2-69=-97/253

- 1) Wind: ASCE 7-16; Vult=136mph (3-second gust) Vasd=108mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-0-0 to 3-2-0, Exterior(2N) 3-2-0 to 21-10-0, Corner(3R) 21-10-0 to 26-2-6 Exterior(2N) 26-2-6 to 44-8-0 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable requires continuous bottom chord bearing.
- 8) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 9) Gable studs spaced at 1-4-0 oc
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 70, 36, 54, 55, 56, 57, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 52, 51, 50, 49, 47, 46, 45, 44, 43, 42, 41, 40, 39, 38 except (jt=lb) 69=173, 37=163.
- 13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 5,2021



MiTek

Job Truss Truss Type Qty 201026-Skytor-Ralston-Bldg 1 - Type 14 147314776 201026 B05 Common 16 Job Reference (optional) 8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:25:33 2021 Page 1 Builders Inc., Aurora, CO - 80011, ID:QS8hjBL9ClM8AxVMglothazLZKy-H51dR_1AxSenDWG8AjWDt5FYum4ZC3kClk_SvgyrAWm 21-10-0 29-0-3 43-5-0 7-2-3 7-2-3 7-2-3 7-2-11

Scale = 1:75.3

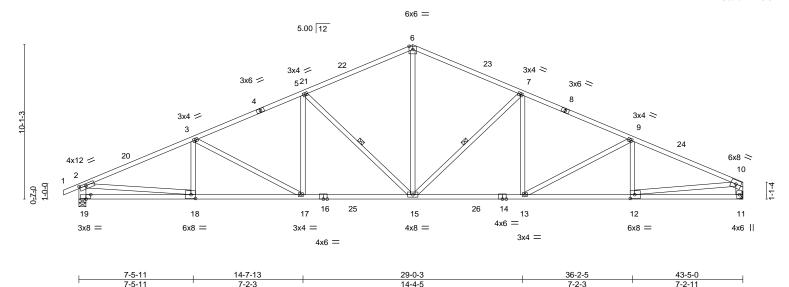


Plate Offsets (X,Y) [2	2:0-5-4,0-1-8], [12:0-3-8,0-3-0], [18:0-3-8,	0-3-0], [19:0-3-12,Edge]						
LOADING (psf) TCLL 30.0 (Roof Snow=30.0) TCDL 15.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.91 BC 0.71 WB 0.85 Matrix-MS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) -0.31 15-17 -0.56 15-17 0.16 11	I/defI >999 >926 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 216 lb	GRIP 197/144 FT = 20%

BRACING-

WEBS

TOP CHORD

BOT CHORD

Sheathed, except end verticals.

1 Row at midpt

Rigid ceiling directly applied or 7-5-7 oc bracing.

7-15, 5-15

LUMBER-

2x4 DF-N 2400F 2.0E *Except* TOP CHORD 1-4,8-10: 2x4 DF-N 1800F 1.6E

BOT CHORD 2x4 DF-N 1800F 1.6E

WEBS 2x4 SPF No.2 *Except* 2-19,10-11: 2x6 DF-N 1800F 1.6E

REACTIONS. (size) 11=Mechanical, 19=0-5-8

Max Horz 19=210(LC 18)

Max Uplift 11=-549(LC 15), 19=-598(LC 14) Max Grav 11=2409(LC 2), 19=2503(LC 2)

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

TOP CHORD $2-3=-4348/966,\ 3-5=-3888/907,\ 5-6=-3039/823,\ 6-7=-3039/827,\ 7-9=-3861/910,$

9-10=-4236/940, 2-19=-2394/650, 10-11=-2282/583

BOT CHORD 18-19=-457/678, 17-18=-989/3909, 15-17=-745/3499, 13-15=-631/3471, 12-13=-793/3821,

11-12=-138/400

WEBS 6-15=-345/1762, 7-15=-1223/469, 7-13=-40/479, 9-13=-413/265, 9-12=-301/179, 5-15=-1241/479, 10-12=-661/3454, 5-17=-46/509, 3-17=-474/276, 2-18=-550/3281

NOTES-

- 1) Wind: ASCE 7-16; Vult=136mph (3-second gust) Vasd=108mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 3-4-2, Interior(1) 3-4-2 to 21-10-0, Exterior(2R) 21-10-0 to 26-2-2, Interior(1) 26-2-2 to 43-2-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- 8) Bearing at joint(s) 19 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=549, 19=598.
- 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.



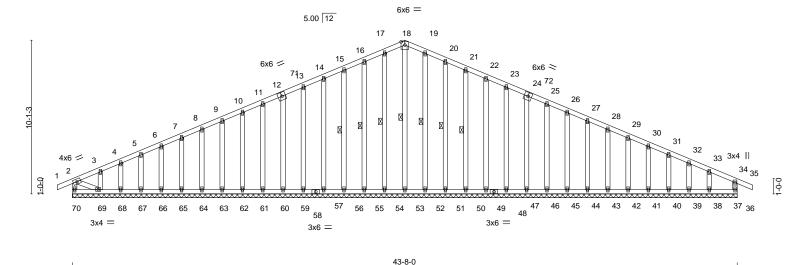
August 5,2021





Job Truss Truss Type Qty 201026-Skytor-Ralston-Bldg 1 - Type 14 147314777 201026 B07E **GABLE** Job Reference (optional) 8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:25:35 2021 Page 1 Builders Inc., Aurora, CO - 80011, ID:QS8hjBL9ClM8AxVMglothazLZKy-DU9Nsg2RT3uVSqQWI7ZhyWL3ZZwng8gUI1TZ_ZyrAWk 44-8-0 1-0-0 -<u>1-0-0</u> 1-0-0

Scale = 1:75.7



LOADING (psf) SPACING-DEFL. **PLATES GRIP** 2-0-0 CSI (loc) I/defl L/d TCLL 30.0 Plate Grip DOL Vert(LL) 197/144 1.15 TC 0.19 0.00 34 n/r 120 MT20 (Roof Snow=30.0) Lumber DOL 1.15 BC 0.09 Vert(CT) -0.00 34 120 n/r **TCDL** 15.0 Rep Stress Incr YES WB 0.18 Horz(CT) 0.01 36 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-S Weight: 295 lb FT = 20% **BCDL** 10.0

LUMBER-

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

WEBS 2x4 SPF No.2 **OTHERS** 2x4 SPF No.2 BRACING-

TOP CHORD **BOT CHORD WEBS**

Sheathed or 6-0-0 oc purlins, except end verticals. Rigid ceiling directly applied or 6-0-0 oc bracing

21-10-0

1 Row at midpt 18-53, 17-54, 16-55, 15-56, 19-52, 20-51,

21-50

REACTIONS. All bearings 43-8-0.

Max Horz 70=-199(LC 19) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 70, 36, 54, 55, 56, 57, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 52, 51, 50, 49, 47, 46, 45, 44, 43, 42, 41, 40, 39, 38 except 69=-173(LC 14), 37=-163(LC 15)

Max Grav All reactions 250 lb or less at joint(s) 53, 54, 55, 56, 57, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 52, 51, 50, 49, 47, 46, 45, 44, 43, 42, 41, 40, 39, 38, 37 except 70=255(LC 20), 36=260(LC 20)

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

TOP CHORD 10-11=-94/268, 11-12=-105/286, 12-13=-118/305, 13-14=-132/344, 14-15=-145/382,

21-10-0

15-16=-158/419, 16-17=-173/462, 17-18=-181/484, 18-19=-181/484, 19-20=-173/462,

20-21=-158/419, 21-22=-145/382, 22-23=-132/344, 23-24=-118/305, 24-25=-105/266

WEBS 18-53=-252/49, 2-69=-97/253

- 1) Wind: ASCE 7-16; Vult=136mph (3-second gust) Vasd=108mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-0-0 to 3-2-0, Exterior(2N) 3-2-0 to 21-10-0, Corner(3R) 21-10-0 to 26-2-6 Exterior(2N) 26-2-6 to 44-8-0 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable requires continuous bottom chord bearing.
- 8) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 9) Gable studs spaced at 1-4-0 oc
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 70, 36, 54, 55, 56, 57, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 52, 51, 50, 49, 47, 46, 45, 44, 43, 42, 41, 40, 39, 38 except (jt=lb) 69=173, 37=163.
- 13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 5,2021





Job Truss Truss Type Qty 201026-Skytor-Ralston-Bldg 1 - Type 14 147314778 201026 B08 Monopitch Job Reference (optional) 8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:25:36 2021 Page 1 Builders Inc., Aurora, CO - 80011, ID:QS8hjBL9ClM8AxVMglothazLZKy-hgil4033EN0M4_?jsr4wVjtCsz7jPbse_hC6W?yrAWj 9-0-0 1-0-0 4-0-0 4-0-0 1-0-0 Scale = 1:28.6 2x4 || 4.00 12 3x6 = 3 2x4 || 2-0-0 3x4 6x6 =

DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

I/defI

>437

>218

n/a

L/d

240

180

n/a

Sheathed or 6-0-0 oc purlins, except end verticals.

Rigid ceiling directly applied or 8-0-13 oc bracing.

(loc)

6-7

6-7

6

-0.21

-0.42

-0.00

PLATES

Weight: 38 lb

MT20

GRIP

197/144

FT = 20%

LUMBER-

TCLL

TCDL

BCLL

BCDL

LOADING (psf)

(Roof Snow=30.0)

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

30.0

15.0

10.0

0.0

REACTIONS.

6=0-5-8, 7=0-5-8 (size) Max Horz 7=287(LC 11) Max Uplift 6=-204(LC 14), 7=-170(LC 10) Max Grav 6=700(LC 21), 7=611(LC 21)

SPACING-

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

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

TOP CHORD 4-6=-368/293, 2-7=-259/279

BOT CHORD 6-7=-476/348

WEBS 3-6=-426/500, 3-7=-438/168

NOTES-

- 1) Wind: ASCE 7-16; Vult=136mph (3-second gust) Vasd=108mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 9-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate
- 2) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

2-0-0

1.15

1.15

YES

TC

ВС

WB

Matrix-MP

0.35

0.68

0.18

- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=204, 7=170
- 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.



August 5,2021





Job Truss Truss Type Qty Ply 201026-Skytor-Ralston-Bldg 1 - Type 14 147314779 201026 B09 Monopitch Girder Job Reference (optional)
8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:25:37 2021 Page 1 Builders Inc., Aurora, CO - 80011,

ID:QS8hjBL9ClM8AxVMglothazLZKy-AsG7HM4h?h8Di8avPYb92xQPyNZD8zgnDLyg2SyrAWi

Sheathed or 6-0-0 oc purlins, except end verticals.

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

9-0-0 1-0-0 4-0-0 4-0-0

Scale = 1:28.6

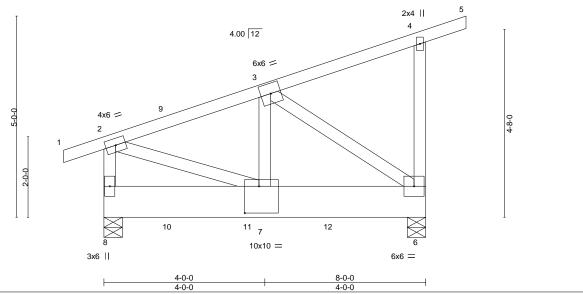


Plate Offsets	(X,Y)	 [7:0-4-4,0-8-0]

LOADING (psf) TCLL 30.0 (Roof Snow=30.0) TCDL 15.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO	CSI. TC 0.20 BC 0.28 WB 0.47	DEFL. i Vert(LL) -0.02 Vert(CT) -0.04 Horz(CT) 0.00	7	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 197/144
BCLL 0.0 * BCDL 10.0	Code IRC2018/TPI2014	WB 0.47 Matrix-MP	Horz(C1) 0.00	6	n/a	n/a	Weight: 115 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

2x4 SPF No.2 TOP CHORD **BOT CHORD** 2x10 DF-N 1950F 1.7E 2x4 SPF No.2 **WEBS**

REACTIONS. (size) 8=0-5-8, 6=0-5-8

Max Horz 8=274(LC 7)

Max Uplift 8=-1095(LC 6), 6=-1520(LC 10) Max Grav 8=4464(LC 17), 6=6218(LC 17)

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

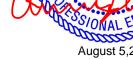
2-3=-3786/872, 4-6=-370/136, 2-8=-2846/733 TOP CHORD

BOT CHORD 7-8=-254/20, 6-7=-910/3542

WFBS 3-7=-823/3431, 3-6=-4374/1103, 2-7=-839/3804

NOTES-

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 - Top chords connected as follows: 2x4 1 row at 0-9-0 oc.
 - Bottom chords connected as follows: 2x10 2 rows staggered at 0-4-0 oc. Webs connected as follows: 2x4 - 1 row at 0-2-0 oc, Except member 6-3 2x4 - 1 row at 0-9-0 oc, member 7-2 2x4 - 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Wind: ASCE 7-16; Vult=136mph (3-second gust) Vasd=108mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 4) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=1095, 6=1520,
- 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2389 lb down and 569 lb up at 1-7-8, 2389 lb down and 569 lb up at 3-7-8, and 2389 lb down and 569 lb up at 5-7-8, and 2397 lb down and 562 lb up at 7-10-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



August 5,2021

LOAD CASE(S) Standard

Continued on page 2





Qty Job Truss Truss Type Ply 201026-Skytor-Ralston-Bldg 1 - Type 14 147314779 201026 B09 Monopitch Girder

Builders Inc., Aurora, CO - 80011, Job Reference (optional)

8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:25:37 2021 Page 2
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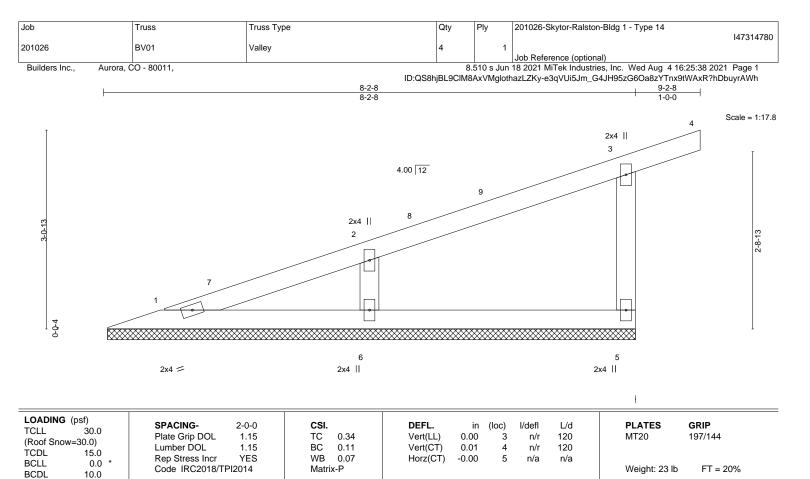
LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-2=-90, 2-4=-90, 4-5=-90, 6-8=-20

Concentrated Loads (lb)

Vert: 6=-2349(B) 10=-2341(B) 11=-2341(B) 12=-2341(B)





BRACING-

TOP CHORD

BOT CHORD

Sheathed or 6-0-0 oc purlins, except end verticals.

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

LUMBER-

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

OTHERS 2x4 SPF No.2

REACTIONS. (size) 1=8-1-12, 5=8-1-12, 6=8-1-12

Max Horz 1=171(LC 11)

Max Uplift 1=-9(LC 14), 5=-110(LC 11), 6=-166(LC 10) Max Grav 1=134(LC 21), 5=397(LC 21), 6=611(LC 21)

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

1-2=-275/151, 3-5=-366/309 TOP CHORD

WEBS 2-6=-521/340

NOTES-

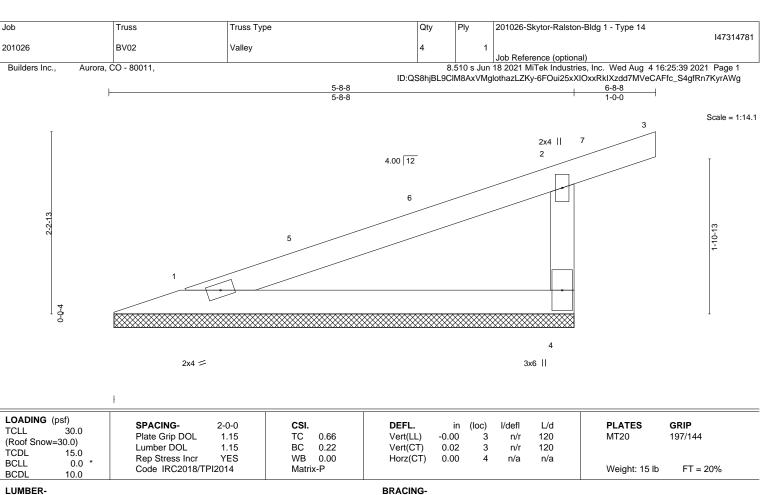
- 1) Wind: ASCE 7-16; Vult=136mph (3-second gust) Vasd=108mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-11-5 to 4-1-4, Interior(1) 4-1-4 to 9-2-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate
- 2) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb)
- 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.



August 5,2021







TOP CHORD

BOT CHORD

Sheathed or 5-8-8 oc purlins, except end verticals.

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

LUMBER-

REACTIONS.

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

WEBS 2x4 SPF No.2

> 1=5-7-12, 4=5-7-12 (size) Max Horz 1=119(LC 11)

Max Uplift 1=-60(LC 14), 4=-138(LC 10) Max Grav 1=317(LC 21), 4=496(LC 21)

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

TOP CHORD 2-4=-450/406

NOTES-

- 1) Wind: ASCE 7-16; Vult=136mph (3-second gust) Vasd=108mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-11-5 to 3-11-5, Interior(1) 3-11-5 to 6-8-8 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
- 2) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb)
- 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.



August 5,2021







Job Truss Truss Type Qty 201026-Skytor-Ralston-Bldg 1 - Type 14 147314782 Valley 201026 BV03 Job Reference (optional) 8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:25:40 2021 Page 1 Builders Inc., Aurora, CO - 80011, ID:QS8hjBL9ClM8AxVMglothazLZKy-aRyGvO6ZlcWoZbIU5h8sfZ2wBaeiLRiEvJAKfmyrAWf 4-2-8 1-0-0 Scale = 1:9.8 3 4.00 12 2x4 || 2 4 0-0-4 2x4 = 2x4 | LOADING (psf) SPACING-2-0-0 DEFL. I/defI **PLATES GRIP** (loc) 30.0 TCLL Plate Grip DOL 1.15 Vert(LL) 0.00 197/144 TC 0.20 n/r 120 MT20 (Roof Snow=30.0) Lumber DOL 1.15 ВС 0.04 Vert(CT) -0.00 2 120 n/r **TCDL** 15.0 Rep Stress Incr YES WB 0.00 Horz(CT) 0.00 4 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-P Weight: 8 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

Sheathed or 3-2-8 oc purlins, except end verticals.

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

LUMBER-TOP CHORD BOT CHORD

REACTIONS.

BCDL

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

WEBS 2x4 SPF No.2

10.0

1=3-1-12, 4=3-1-12 (size) Max Horz 1=67(LC 11) Max Uplift 1=-12(LC 10), 4=-100(LC 14)

Max Grav 1=110(LC 21), 4=319(LC 21)

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

2-4=-298/291

NOTES-

- 1) Wind: ASCE 7-16; Vult=136mph (3-second gust) Vasd=108mph; TCDL=6.0psf; BCDL=6.0psf; 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) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 4=100.
- 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.



August 5,2021





Job Truss Truss Type Qty 201026-Skytor-Ralston-Bldg 1 - Type 14 147314783 201026 C01 Monopitch 2 Job Reference (optional) 8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:25:41 2021 Page 1 Builders Inc., Aurora, CO - 80011, ID:QS8hjBL9CIM8AxVMglothazLZKy-2dWe7j7C3veeAltgeOf5Cnb0q_wF4muN7zwtBDyrAWe 11-10-8 10-10-8 5-5-4 1-0-0 1-0-0 Scale = 1:28.3 5 4x4 || 4 4.00 12 3x4 = 3 6x6 = 7

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

2x4 ||

LOADING (psf) TCLL 30.0 (Roof Snow=30.0) TCDL 15.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.53 BC 0.28 WB 0.52	DEFL. in (loc) l/defl L/d Vert(LL) -0.02 6-7 >999 240 Vert(CT) -0.04 6-7 >999 180 Horz(CT) 0.01 6 n/a n/a	PLATES GRIP MT20 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS		Weight: 48 lb FT = 20%

4x4 =

LUMBER-

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

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

6x6 =

10-10-8

REACTIONS. (size) 8=0-5-8, 6=0-5-8 Max Horz 8=302(LC 11)

Max Uplift 8=-218(LC 10), 6=-251(LC 14) Max Grav 8=746(LC 21), 6=880(LC 21)

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

2-3=-901/262, 4-6=-444/269, 2-8=-694/367 TOP CHORD

BOT CHORD 7-8=-535/414, 6-7=-468/789 WFBS 3-6=-853/433, 2-7=-81/648

- 1) Wind: ASCE 7-16; Vult=136mph (3-second gust) Vasd=108mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 11-10-8 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
- 2) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 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.



August 5,2021



Job Truss Truss Type Qty 201026-Skytor-Ralston-Bldg 1 - Type 14 147314784 201026 C01A Monopitch 2 Job Reference (optional) 8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:25:41 2021 Page 1 Builders Inc., Aurora, CO - 80011, ID:QS8hjBL9CIM8AxVMglothazLZKy-2dWe7j7C3veeAltgeOf5Cnb0K_wD4mhN7zwtBDyrAWe 11-10-8 10-10-8 5-5-4 5-5-4 5-5-4 1-0-0 Scale = 1:28.3 4x4 || 3 4.00 12 10 3x4 = 4x6 = 1-2-0 6 4x4 = 2x4 || 6x6 = 10-10-8 Plate Offsets (X,Y)--[3:0-2-0,0-1-12] LOADING (psf) SPACING-GRIP 2-0-0 CSI. **DEFL** (loc) I/defl L/d **PLATES** TCLL 30.0 Plate Grip DOL 1.15 TC 0.56 Vert(LL) -0.02 5-6 >999 240 MT20 197/144 (Roof Snow=30.0) Lumber DOL 1.15 BC 0.28 Vert(CT) -0.04 5-6 >999 180 **TCDL** 15.0 Rep Stress Incr YES WB 0.53 Horz(CT) 0.01 5 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 FT = 20% Matrix-MS Weight: 47 lb BCDL

BRACING-

TOP CHORD

BOT CHORD

Sheathed or 5-8-3 oc purlins, except end verticals.

Rigid ceiling directly applied or 8-3-8 oc bracing.

LUMBER-

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

REACTIONS. (size) 7=0-5-8, 5=0-5-8

Max Horz 7=291(LC 11)

Max Uplift 7=-143(LC 10), 5=-252(LC 14) Max Grav 7=638(LC 21), 5=886(LC 21)

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

1-2=-914/277, 3-5=-440/266, 1-7=-586/265 TOP CHORD

BOT CHORD 6-7=-503/393, 5-6=-475/807 WFBS 2-5=-874/442. 1-6=-126/681

NOTES-

- 1) Wind: ASCE 7-16; Vult=136mph (3-second gust) Vasd=108mph; TCDL=6.0psf; BCDL=6.0psf; 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 11-10-8 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
- 2) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.







Job Truss Truss Type Qty 201026-Skytor-Ralston-Bldg 1 - Type 14 147314785 201026 C01E Monopitch Supported Gable 2 Job Reference (optional) 8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:25:42 2021 Page 1 Builders Inc., Aurora, CO - 80011, ID:QS8hjBL9ClM8AxVMglothazLZKy-Wq40K38qqDmVovStC5BKI_7GlOJJpKYWMdfRkfyrAWd

11-10-8 10-10-8 1-0-0 10-10-8 1-0-0 Scale = 1:26.2 4.00 12 5 4x4 = 16 15 14 13 12 11 10 6x6 = ł

LOADING (psf) TCLL 30.0 (Roof Snow=30.0) TCDL 15.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TP	2-0-0 1.15 1.15 YES PI2014	CSI. TC BC WB Matri	0.23 0.10 0.11 x-S	DEFL. Vert(LL) Vert(CT) Horz(CT)	in 0.00 -0.00 -0.00	(loc) 8 9 10	l/defl n/r n/r n/a	L/d 120 120 n/a	PLATES MT20 Weight: 49 lb	GRIP 197/144 FT = 20%	
-------------------------------------------------------------------------	--------------------------------------------------------------------------------	----------------------------------------	---------------------------------	-----------------------------	-------------------------------------------	------------------------------	-----------------------	-----------------------------	--------------------------	---------------------------------	------------------------------------	--

LUMBER-BRACING-

2x4 SPF No 2 TOP CHORD Sheathed or 6-0-0 oc purlins, except end verticals. TOP CHORD BOT CHORD 2x4 SPF No.2 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. WEBS 2x4 SPF No.2 **OTHERS** 2x4 SPF No.2

REACTIONS. All bearings 10-10-8 Max Horz 16=302(LC 11) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 13, 14, 12, 11 except 10=-111(LC 11), 15=-193(LC 11)

Max Grav All reactions 250 lb or less at joint(s) 14, 15, 11 except 16=272(LC 20), 10=268(LC 21), 13=277(LC

21), 12=305(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD $2-16=-340/123,\ 2-3=-490/226,\ 3-4=-434/215,\ 4-5=-356/192,\ 5-6=-282/172,$

8-10=-261/276

BOT CHORD 15-16=-561/316 **WEBS** 6-12=-265/232, 2-15=-264/601

NOTES-

- 1) Wind: ASCE 7-16; Vult=136mph (3-second gust) Vasd=108mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-0-0 to 2-0-0, Exterior(2N) 2-0-0 to 11-10-8 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
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable requires continuous bottom chord bearing.
- 8) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 9) Gable studs spaced at 2-0-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 14, 12, 11 except (jt=lb) 10=111, 15=193.
- 13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





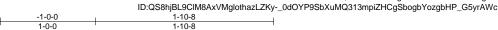


Job Truss Truss Type Qty 201026-Skytor-Ralston-Bldg 1 - Type 14 147314786 201026 C02 Monopitch 10 Job Reference (optional)

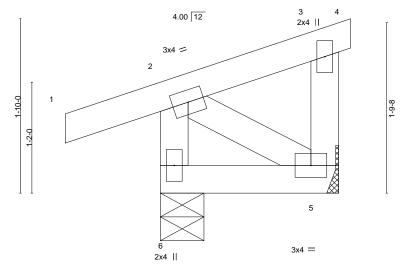
Builders Inc., Aurora, CO - 80011, 8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:25:43 2021 Page 1

Sheathed or 1-10-8 oc purlins, except end verticals.

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



Scale: 1"=1



1-10-8 1-10-8

BRACING-

TOP CHORD

BOT CHORD

LOADING (psf) TCLL 30.0 (Roof Snow=30.0) TCDL 15.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.19 BC 0.03 WB 0.03 Matrix-MP	DEFL. Vert(LL) -0.0 Vert(CT) -0.0 Horz(CT) -0.0	0 6	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 10 lb	GRIP 197/144 FT = 20%	
BCLL 0.0 * BCDL 10.0			Horz(CT) -0.0	0 5	n/a	n/a	Weight: 10 lb	FT = 20	%

LUMBER-

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

REACTIONS.

6=0-5-8, 5=Mechanical (size) Max Horz 6=96(LC 11) Max Uplift 6=-111(LC 10), 5=-56(LC 11) Max Grav 6=289(LC 21), 5=95(LC 21)

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

TOP CHORD 2-6=-273/218

- 1) Wind: ASCE 7-16; Vult=136mph (3-second gust) Vasd=108mph; TCDL=6.0psf; BCDL=6.0psf; 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) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 6=111.
- 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.





Job Truss Truss Type Qty 201026-Skytor-Ralston-Bldg 1 - Type 14 147314787 201026 C₀₂E Monopitch Supported Gable 2

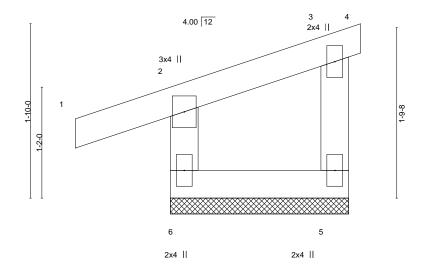
Builders Inc., Aurora, CO - 80011, Job Reference (optional) 8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:25:44 2021 Page 1

Sheathed or 1-10-8 oc purlins, except end verticals.

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

ID:QS8hjBL9ClM8AxVMglothazLZKy-SCBnll94Mq0D1CcFKWDoqPDdLB_9HEhpqx8XoYyrAWb 1-10-8 1-0-0 1-10-8

Scale: 1"=1



LOADING (psf) SPACING-2-0-0 CSI. DEFL. **PLATES GRIP** (loc) I/defl L/d TCLL 30.0 Plate Grip DOL TC Vert(LL) 120 197/144 1.15 0.19 0.00 3 n/r MT20 (Roof Snow=30.0) Lumber DOL 1.15 ВС 0.07 Vert(CT) 0.00 3 120 n/r **TCDL** 15.0 Rep Stress Incr YES WB 0.00 Horz(CT) -0.00 5 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-R Weight: 8 lb FT = 20% **BCDL** 10.0

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS.

6=1-10-8, 5=1-10-8 (size) Max Horz 6=96(LC 11) Max Uplift 6=-111(LC 10), 5=-56(LC 11) Max Grav 6=289(LC 21), 5=95(LC 21)

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

TOP CHORD 2-6=-266/352

- 1) Wind: ASCE 7-16; Vult=136mph (3-second gust) Vasd=108mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 6) Gable requires continuous bottom chord bearing.
- 7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 8) Gable studs spaced at 2-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 6=111.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 5,2021



Job Truss Truss Type Qty 201026-Skytor-Ralston-Bldg 1 - Type 14 147314788 201026 C03 Monopitch 2 Job Reference (optional) 8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:25:45 2021 Page 1 Builders Inc., Aurora, CO - 80011, ID:QS8hjBL9ClM8AxVMglothazLZKy-xPl9y5Ai7894fMBRtEk1MdljFbBz0exz2bu5K_yrAWa 1-0-0 3-6-13 3-7-11 Scale = 1:21.5 2x4 || 5.00 12 2x4 ≈ 10 0-6-3 11 12 5 6x6 = 4x6 =

LOADING (psf) TCLL 30.0 (Roof Snow=30.0) TCDL 15.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.50 BC 0.67 WB 0.19	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (0.28 0.23 -0.01	(loc) 5-8 5-8 2	l/defl >302 >363 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP						Weight: 27 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

Sheathed or 6-0-0 oc purlins, except end verticals.

Rigid ceiling directly applied or 4-9-9 oc bracing.

LUMBER-

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

WEDGE Left: 2x4 SP No.3

REACTIONS. (size) 2=0-3-0, 5=Mechanical

Max Horz 2=204(LC 13)

Max Uplift 2=-260(LC 10), 5=-246(LC 11) Max Grav 2=614(LC 21), 5=520(LC 21)

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

TOP CHORD 2-3=-735/555 BOT CHORD 2-5=-723/621 **WEBS** 3-5=-679/758

- 1) Wind: ASCE 7-16; Vult=136mph (3-second gust) Vasd=108mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 7-0-12 zone; cantilever left and right exposed; end vertical left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 5,2021





Job Truss Truss Type Qty 201026-Skytor-Ralston-Bldg 1 - Type 14 147314789 201026 C03E Monopitch Structural Gable 2 Job Reference (optional) 8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:25:45 2021 Page 1 Builders Inc., Aurora, CO - 80011, ID:QS8hjBL9CIM8AxVMglothazLZKy-xPl9y5Ai7894fMBRtEk1MdljubE00drz2bu5K_yrAWa

4-1-9

Scale = 1:26.4 5 5.00 12 18 3x4 | 0-6-3 19 4x6 =6x6 =

4-2-

9-4-0

1-0-0

Sheathed or 6-0-0 oc purlins, except end verticals.

Rigid ceiling directly applied or 7-8-9 oc bracing.

8-4-0

Plate Offsets (X,Y)	[2:0-0-0,0-0-15], [3:0-1-0,0-1-4], [12:0-1-13,0-1-0]	

1-0-0

TCLL 30.0 (Roof Snow=30.0) TCDL 15.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.46 BC 0.48 WB 0.26	DEFL. in (loc) l/defl L/d Vert(LL) 0.36 6-15 >271 240 Vert(CT) 0.30 6-15 >330 180 Horz(CT) -0.02 2 n/a n/a	PLATES GRIP MT20 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP		Weight: 42 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 DF-N 1800F 1.6E 2x4 DF-N 2400F 2.0E **BOT CHORD** WEBS 2x4 SPF No.2 **OTHERS** 2x4 SPF No.2

WEDGE

Left: 2x4 SP No.3

REACTIONS. (size) 2=0-3-0, 6=0-3-0

Max Horz 2=249(LC 11)

Max Uplift 2=-284(LC 10), 6=-352(LC 11) Max Grav 2=605(LC 21), 6=745(LC 21)

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

TOP CHORD 2-3=-742/553, 4-6=-395/273

BOT CHORD 2-6=-758/652 WEBS 3-6=-712/793

- 1) Wind: ASCE 7-16; Vult=136mph (3-second gust) Vasd=108mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Pr. Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 9-4-0 zone; cantilever left and right exposed; end vertical left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=284, 6=352.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 5,2021



Job Truss Truss Type Qty 201026-Skytor-Ralston-Bldg 1 - Type 14 147314790 201026 C04 Common 8 Job Reference (optional) Builders Inc., Aurora, CO - 80011, 8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:25:46 2021 Page 1 ID:QS8hjBL9ClM8AxVMglothazLZKy-PbJXARBKtSHxHWmeRxFGvqloE?W7lvg6HFdetQyrAWZ

6-2-7

31-3-10

6-2-7

Sheathed or 2-2-0 oc purlins, except end verticals.

4-18, 5-17, 6-17, 7-17, 9-16

Rigid ceiling directly applied or 6-10-0 oc bracing.

1 Row at midpt

6-2-7

Scale = 1:86.3

49-8-8

6-0-0

43-8-8

6-2-7

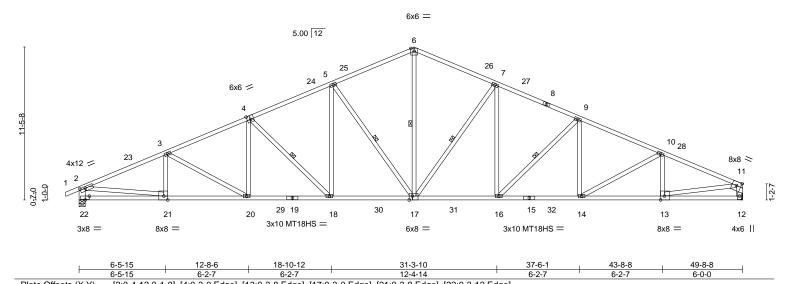


Plate Offsets (X,Y) [2:	0-4-12,0-1-8j, [4:0-3-0,Eagej, [13:0-3-8,	Eagej, [17:0-3-0,Eagej,]	[21:0-3-8,Eage], [22:0-3-12,Eage]	
LOADING (psf) TCLL 30.0 (Roof Snow=30.0) TCDL 15.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.87 BC 0.74 WB 0.99	DEFL. in (loc) l/defl L/d PLATES GRIP Vert(LL) -0.41 17-18 >999 240 MT20 197/144 Vert(CT) -0.73 16-17 >811 180 MT18HS 220/195 Horz(CT) 0.23 12 n/a n/a MT18HS 220/195	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS	Weight: 267 lb FT = 20%	

BRACING-

WEBS

TOP CHORD

BOT CHORD

LUMBER-

2x4 DF-N 1800F 1.6E TOP CHORD **BOT CHORD** 2x4 DF-N 1800F 1.6E WEBS 2x4 SPF No.2 *Except*

2-22,11-12: 2x6 DF-N 1800F 1.6E

REACTIONS. (size) 12=Mechanical, 22=0-5-8

6-5-15

6-2-7

6-2-7

Max Horz 22=244(LC 14)

Max Uplift 12=-629(LC 15), 22=-680(LC 14) Max Grav 12=2793(LC 2), 22=2886(LC 2)

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

2-3=-5044/1124, 3-4=-4892/1103, 4-5=-4273/1035, 5-6=-3516/961, 6-7=-3491/960, 7-9=-4234/1032, 9-10=-4775/1073, 10-11=-4712/1045, 2-22=-2762/719, 11-12=-2681/655 TOP CHORD

BOT CHORD 21-22=-432/628, 20-21=-1184/4562, 18-20=-1014/4431, 17-18=-760/3864, 16-17=-664/3827, 14-16=-815/4327, 13-14=-909/4275, 12-13=-96/285 WEBS 3-21=-386/181, 4-20=-22/333, 4-18=-796/358, 5-18=-176/811, 5-17=-1383/510,

6-17=-481/2189, 7-17=-1353/496, 7-16=-155/743, 9-16=-696/334, 9-14=0/259,

10-13=-569/224, 2-21=-758/4027, 11-13=-825/4049

NOTES-

- 1) Wind: ASCE 7-16; Vult=136mph (3-second gust) Vasd=108mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 3-11-10, Interior(1) 3-11-10 to 25-1-3, Exterior(2R) 25-1-3 to 30-0-14. Interior(1) 30-0-14 to 49-5-12 zone: cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 5) All plates are MT20 plates unless otherwise indicated.
- 6) All plates are 3x6 MT20 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) Refer to girder(s) for truss to truss connections
- 10) Bearing at joint(s) 22 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=629, 22=680,
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 5,2021

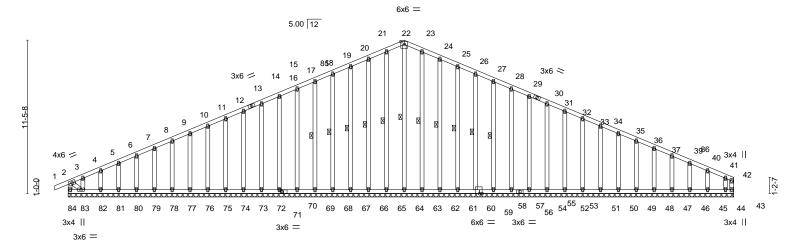




Job Truss Truss Type Qty 201026-Skytor-Ralston-Bldg 1 - Type 14 147314791 201026 C04E **GABLE** 2 Job Reference (optional) 8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:25:50 2021 Page 1 Builders Inc., Aurora, CO - 80011,

ID:QS8hjBL9ClM8AxVMglothazLZKy-HMZ20oErxgnNm73PgnKC3gSdnc1ehwdiCtbs0ByrAWV 24-7-5

Scale = 1:86.0



49-8-8 Plate Offsets (X,Y)--[60:0-2-4,0-0-0], [71:0-1-9,0-1-8] LOADING (psf) SPACING-CSI. **DEFL** (loc) I/defl L/d **PLATES** GRIP TCLL 30.0 Plate Grip DOL 1.15 TC 0.19 Vert(LL) 0.00 120 MT20 197/144 n/r (Roof Snow=30.0) Lumber DOL 1.15 BC 0.13 Vert(CT) -0.00 n/r 120 TCDL 15.0 Rep Stress Incr YES WB 0.16 Horz(CT) 0.01 43 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Weight: 366 lb FT = 20%Matrix-S BCDL

49-8-8

LUMBER-BRACING-

25-1-3 25-1-3

TOP CHORD 2x4 SPF No.2 TOP CHORD Sheathed or 6-0-0 oc purlins, except end verticals. BOT CHORD 2x4 SPF No.2 **BOT CHORD** Rigid ceiling directly applied or 6-0-0 oc bracing. WEBS 2x4 SPF No.2 **WEBS** 1 Row at midpt

22-64, 21-65, 20-66, 19-67, 18-68, 17-69, **OTHERS** 2x4 SPF No.2 23-63, 24-62, 25-61, 26-60, 27-58

REACTIONS. All bearings 49-8-8.

Max Horz 84=245(LC 18) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 65, 66, 67, 68, 69, 70, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 63, 62, 61, 60, 58, 57, 55, 54, 53, 52, 51, 50, 49, 48, 47, 46, 45 except 84=-114(LC 15), 83=-266(LC 14), 44=-391(LC 15)

All reactions 250 lb or less at joint(s) 65, 66, 67, 68, 69, 70, 72, 73, Max Grav 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 63, 62, 61, 60, 58, 57, 55, 54, 53 52, 51, 50, 49, 48, 47, 46, 45, 44 except 84=338(LC 26), 43=404(LC 15),

64=253(LC 15)

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

TOP CHORD 2-84=-321/114, 2-3=-306/134, 3-4=-281/142, 10-11=-91/252, 11-12=-92/272,

12-14=-106/291, 14-15=-119/311, 15-16=-132/330, 16-17=-145/366, 17-18=-158/404, 18-19=-171/442, 19-20=-185/480, 20-21=-200/524, 21-22=-205/542, 22-23=-205/542, 23-24=-200/524, 24-25=-185/480, 25-26=-171/442, 26-27=-158/404, 27-28=-145/366,

28-29=-132/329, 29-31=-119/291, 31-32=-106/253

WEBS 22-64=-285/64, 2-83=-110/342

NOTES-

- 1) Wind: ASCE 7-16; Vult=136mph (3-second gust) Vasd=108mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-0-0 to 3-9-3, Exterior(2N) 3-9-3 to 25-1-3, Corner(3R) 25-1-3 to 30-0-14, Exterior(2N) 30-0-14 to 49-6-12 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable requires continuous bottom chord bearing.
- 8) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 9) Gable studs spaced at 1-4-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide Continuited between the bottom chord and any other members.



August 5,2021





Job	Truss	Truss Type	Qty	Ply	201026-Skytor-Ralston-Bldg 1 - Type 14	
201026	C04E	GABLE	2	1		147314791
20.020	00.2	0/1022	-		Job Reference (optional)	

Builders Inc., Aurora, CO - 80011,

8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:25:51 2021 Page 2 ID:QS8hjBL9CIM8AxVMglothazLZKy-IZ6QD8FTi_vENHebEUrRcu?oX0MtQNtrRXLPYeyrAWU

- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 65, 66, 67, 68, 69, 70, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 63, 62, 61, 60, 58, 57, 55, 54, 53, 52, 51, 50, 49, 48, 47, 46, 45 except (jt=lb) 84=114, 83=266, 44=391.
 13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job Truss Truss Type Qty 201026-Skytor-Ralston-Bldg 1 - Type 14 147314792 201026 C05 Common 12 Job Reference (optional) Builders Inc., Aurora, CO - 80011, 8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:25:52 2021 Page 1

6-2-7

18-10-12

6-2-7

ID:QS8hjBL9CIM8AxVMglothazLZKy-DlgoQUG5TI15?RDooCMg95YnxQZc9dM?fB4z44yrAWT 31-3-10 43-8-8 49-4-12 6-2-7 6-2-7 6-2-7 5-8-4

Scale = 1:85.8

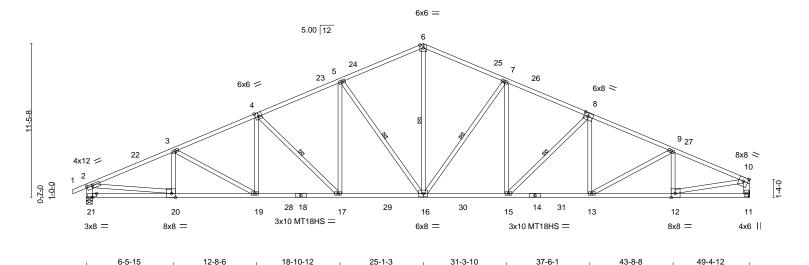


Plate Offsets (X,Y)	[2:0-5-0,0-1-8], [4:0-3-0,E	dge], [8:0-3-8,0-3-	·0], [12:0-3-8,Edge], [20):0-3-8,Edge], [21	:0-3-12,Edge]			
LOADING (psf) TCLL 30.0 (Roof Snow=30.0) TCDL 15.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/	-	CSI. TC 0.98 BC 0.74 WB 0.98 Matrix-MS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) -0.41 16-17 -0.72 16-17 0.23 11	l/defl L/d >999 240 >815 180 n/a n/a	PLATES MT20 MT18HS Weight: 263 lb	GRIP 197/144 220/195 FT = 20%

BRACING-

WEBS

TOP CHORD

BOT CHORD

Sheathed, except end verticals.

1 Row at midpt

Rigid ceiling directly applied or 6-10-1 oc bracing.

4-17, 5-16, 6-16, 7-16, 8-15

LUMBER-

TOP CHORD 2x4 DF-N 1800F 1.6E *Except*

6-5-15

6-2-7

8-10: 2x4 SPF No.2 **BOT CHORD** 2x4 DF-N 1800F 1.6E

WEBS 2x4 SPF No.2 *Except* 2-21,10-11: 2x6 DF-N 1800F 1.6E

REACTIONS. (size) 11=Mechanical, 21=0-5-8

Max Horz 21=244(LC 18)

Max Uplift 11=-623(LC 15), 21=-678(LC 14) Max Grav 11=2776(LC 2), 21=2868(LC 2)

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

TOP CHORD 2-3=-5009/1119, 3-4=-4852/1097, 4-5=-4232/1026, 5-6=-3460/949, 6-7=-3460/953,

7-8=-4162/1018, 8-9=-4654/1046, 9-10=-4460/989, 2-21=-2745/715, 10-11=-2671/646

20-21=-432/619, 19-20=-1179/4530, 17-19=-1010/4394, 16-17=-755/3826, **BOT CHORD**

15-16=-659/3761, 13-15=-800/4212, 12-13=-865/4048

WEBS 3-20=-382/180, 4-19=-23/334, 4-17=-798/358, 5-17=-175/816, 5-16=-1385/510,

6-16=-473/2155, 7-16=-1307/485, 7-15=-149/700, 8-15=-632/320, 9-13=-35/270,

9-12=-670/244, 2-20=-753/3996, 10-12=-806/3917

NOTES-

- 1) Wind: ASCE 7-16; Vult=136mph (3-second gust) Vasd=108mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 3-11-4, Interior(1) 3-11-4 to 25-1-3, Exterior(2R) 25-1-3 to 30-0-8, Interior(1) 30-0-8 to 49-2-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 5) All plates are MT20 plates unless otherwise indicated.
- 6) All plates are 3x6 MT20 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) Refer to girder(s) for truss to truss connections.
- 10) Bearing at joint(s) 21 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=623, 21=678,
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 5,2021

🗥 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE



Job Truss Truss Type Qty 201026-Skytor-Ralston-Bldg 1 - Type 14 147314793 201026 C05E **GABLE** 2 Job Reference (optional) 8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:25:55 2021 Page 1 Builders Inc., Aurora, CO - 80011,

ID:QS8hjBL9CIM8AxVMglothazLZKy-eKMx3WI_mDPfsvyMTKwNmkAQwdgEM9YRL9JdhPyrAWQ

18-10-12 31-1-3 49-4-12 -1-0-0 1-0-0 6-5-15 6-2-7 6-2-7 6-2-7 6-0-0 6-0-0 6-0-0 6-3-8

Scale = 1:85.3

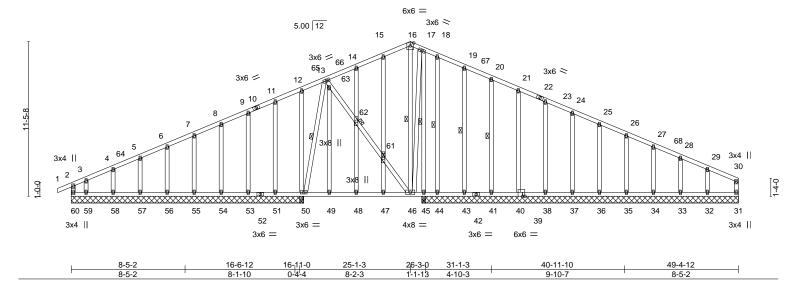


Plate Offsets (X,Y) [40	0:0-2-0,0-0-0]			
LOADING (psf) TCLL 30.0 (Roof Snow=30.0) TCDL 15.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.49 BC 0.42 WB 0.31 Matrix-MS	DEFL. in (loc) l/defl L/d Vert(LL) -0.11 47-48 >999 240 Vert(CT) -0.16 47-48 >678 180 Horz(CT) 0.01 31 n/a n/a	PLATES GRIP MT20 197/144 Weight: 327 lb FT = 20%

LUMBER-BRACING-

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

Sheathed or 6-0-0 oc purlins, except end verticals. Rigid ceiling directly applied or 6-0-0 oc bracing. 1 Row at midpt 16-46, 13-50, 17-45, 18-44, 19-43, 20-41

1 Brace at Jt(s): 61, 62

All bearings 23-5-4 except (jt=length) 60=17-2-8, 50=17-2-8, 50=17-2-8, 51=17-2-8, REACTIONS. 53=17-2-8, 54=17-2-8, 55=17-2-8, 56=17-2-8, 57=17-2-8, 58=17-2-8, 59=17-2-8.

Max Horz 60=245(LC 18)

Max Uplift All uplift 100 lb or less at joint(s) 50, 45, 51, 53, 54, 55, 56, 57, 58, 43, 41, 40, 38, 37, 36, 35, 34, 33 except 60=-125(LC 15), 59=-225(LC 14),

44=-122(LC 15), 32=-186(LC 15)

Max Grav All reactions 250 lb or less at joint(s) 31, 51, 53, 54, 55, 56, 57, 58 59, 44, 38, 37, 36, 35, 34, 33, 32 except 60=266(LC 20), 50=915(LC 21) 50=723(LC 1), 45=581(LC 21), 45=485(LC 1), 43=321(LC 22), 41=315(LC 22),

40=267(LC 22)

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

8-9=-106/273, 9-11=-125/302, 11-12=-148/332, 12-13=-133/352, 13-14=-277/414,

14-15=-258/442, 15-16=-263/465, 16-17=-253/452, 17-18=-259/470, 18-19=-241/431,

19-20=-222/375, 20-21=-202/325, 21-23=-183/273, 2-60=-252/123

WEBS 16-46=-291/20, 13-50=-872/136, 17-45=-580/56, 17-46=-113/649, 19-43=-273/128,

20-41=-277/108

NOTES-

- 1) Wind: ASCE 7-16; Vult=136mph (3-second gust) Vasd=108mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-Č Exterior(2E) -1-0-0 to 3-11-4, Interior(1) 3-11-4 to 25-1-3, Exterior(2R) 25-1-3 to 30-0-8, Interior(1) 30-0-8 to 49-3-0 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 50, 45, 51, 53,



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Job	Truss	Truss Type	Qty	Ply	201026-Skytor-Ralston-Bldg 1 - Type 14
004000	0055	OARLE			147314793
201026	C05E	GABLE	2	1	Job Reference (optional)

Aurora, CO - 80011, Builders Inc.,

8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:25:55 2021 Page 2 ID:QS8hjBL9ClM8AxVMglothazLZKy-eKMx3WI_mDPfsvyMTKwNmkAQwdgEM9YRL9JdhPyrAWQ

NOTES-

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

Job Truss Truss Type Qty 201026-Skytor-Ralston-Bldg 1 - Type 14 147314794 201026 C06E Monopitch Supported Gable 2 Job Reference (optional)

Builders Inc., Aurora, CO - 80011,

8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:25:56 2021 Page 1 ID:QS8hjBL9ClM8AxVMglothazLZKy-6WwJGsJcXWXWU2XZ12RcJxieO1225fPaap2ADryrAWP

10-8-0 -1-0-0 1-0-0 9-8-0 9-8-0 1-0-0

Scale = 1:33.5

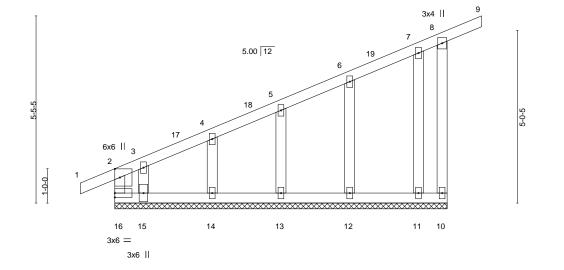


Plate Offsets (X,Y) [2	:0-3-0,0-1-12]							
COADING (psf) TCLL 30.0 (Roof Snow=30.0) TCDL 15.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.31 BC 0.26 WB 0.08 Matrix-R	Vert(CT) -0.	in (loc) .00 8 .00 8 .00 10	l/defl n/r n/r n/a	L/d 120 120 n/a	PLATES MT20 Weight: 45 lb	GRIP 197/144 FT = 20%

LUMBER-BRACING-

2x4 SPF No.2 TOP CHORD TOP CHORD Sheathed or 6-0-0 oc purlins, except end verticals. **BOT CHORD** 2x4 SPF No.2 **BOT CHORD** Rigid ceiling directly applied or 6-0-0 oc bracing. WEBS 2x4 SPF No.2 **OTHERS** 2x4 SPF No.2

REACTIONS. All bearings 9-8-0.

Max Horz 16=320(LC 11) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 13, 14, 12, 11 except 10=-145(LC 11), 15=-333(LC 11)

Max Grav All reactions 250 lb or less at joint(s) 14, 15, 11 except 16=362(LC 11), 10=273(LC 20), 13=281(LC

21), 12=308(LC 21)

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

TOP CHORD 2-16=-406/163, 2-3=-660/318, 3-4=-480/251, 4-5=-394/223, 5-6=-306/195,

8-10=-281/303

WEBS 3-15=-235/459, 6-12=-267/213

NOTES-

- 1) Wind: ASCE 7-16; Vult=136mph (3-second gust) Vasd=108mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-0-0 to 2-0-0, Exterior(2N) 2-0-0 to 10-8-0 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable requires continuous bottom chord bearing.
- 8) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 9) Gable studs spaced at 2-0-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 14, 12, 11 except (jt=lb) 10=145, 15=333.
- 13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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Job Truss Truss Type Qty 201026-Skytor-Ralston-Bldg 1 - Type 14 147314795 201026 CV01 Valley 2 Job Reference (optional) 8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:25:57 2021 Page 1 Builders Inc., Aurora, CO - 80011, ID:QS8hjBL9CIM8AxVMglothazLZKy-aiUhUCJEIqfN5C6lalyrs9Fo2RQNq6pkpSokmHyrAWO 9-7-12 8-7-12 1-0-0 Scale = 1:18.5 2x4 || 3 4.00 12 9 2x4 || 2 4-0-0 2x4 = 2x4 || 2x4 || LOADING (psf) SPACING-2-0-0 DEFL. **PLATES** GRIP (loc) I/defl L/d TCLL 30.0 Plate Grip DOL 1.15 TC Vert(LL) 120 197/144 0.38 0.00 3 n/r MT20 (Roof Snow=30.0) Lumber DOL 1.15 ВС 0.12 Vert(CT) 0.01 120 n/r **TCDL** 15.0 Rep Stress Incr YES WB 0.07 Horz(CT) -0.00 5 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-P Weight: 24 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

Sheathed or 6-0-0 oc purlins, except end verticals.

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

LUMBER-

BCDL

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

10.0

OTHERS 2x4 SPF No.2

REACTIONS. (size) 1=8-7-0, 5=8-7-0, 6=8-7-0

Max Horz 1=180(LC 11)

Max Uplift 1=-12(LC 14), 5=-112(LC 11), 6=-178(LC 10) Max Grav 1=137(LC 21), 5=409(LC 21), 6=646(LC 21)

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

1-2=-282/157, 3-5=-376/311 TOP CHORD

WEBS 2-6=-550/350

NOTES-

- 1) Wind: ASCE 7-16; Vult=136mph (3-second gust) Vasd=108mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-11-5 to 3-11-5, Interior(1) 3-11-5 to 9-7-12 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
- 2) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 5=112, 6=178
- 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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b	Truss	Truss Type	Qty	Ply	201026-Skytor-Ralston	-Bldg 1 - Type 14	147314796
1026	CV02	Valley	2	1			147314796
Builders Inc., Aurora,	CO - 80011,			9 510 c lun	Job Reference (optiona	l) s, Inc. Wed Aug 4 16:25	57 2021 Page 1
duliders inc., Autora,	CO - 60011,					fN5C6lalyrs9Fh8RN7q7v	
H		6-1-12 6-1-12				7-1-12 1-0-0	
							0 1 1110
_						3	Scale = 1:14.9
					2x4		
			4.00 12		2		Ţ
			4.00 12				
			6				
2-4-9							
2		5					2-0-9
							2
	1	1					
					•		
0-0-4			***************************************	*******			1
J	·····	***************************************	***************************************	*******	***************************************		
					4		
	2x4 =				3x6		
OADING (psf)							
CLL 30.0	SPACING- Plate Grip DOL	2-0-0 CSI. 1.15 TC 0.83	DEFL. Vert(LL) -0	in (loc) .01 3	l/defl L/d n/r 120		RIP 97/144
Roof Snow=30.0) CDL 15.0	Lumber DOL	1.15 BC 0.27	Vert(CT) 0	.03 3	n/r 120	25	,
CLL 0.0 *	Rep Stress Incr Code IRC2018/TPI2	YES WB 0.00 2014 Matrix-P	Horz(CT) 0	.00 4	n/a n/a	Weight: 16 lb	FT = 20%
CDL 10.0	300C 11(02010/11 12	IVIQUIA I				Worgin. 10 lb	11-20/0
IMRED.			RPACING.				

TOP CHORD

BOT CHORD

Sheathed or 6-0-0 oc purlins, except end verticals.

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

WEBS

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

REACTIONS.

(size) 1=6-1-0, 4=6-1-0 Max Horz 1=128(LC 11)

Max Uplift 1=-68(LC 14), 4=-145(LC 10) Max Grav 1=350(LC 21), 4=526(LC 21)

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

TOP CHORD 2-4=-475/419

NOTES-

- 1) Wind: ASCE 7-16; Vult=136mph (3-second gust) Vasd=108mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-11-5 to 3-11-5, Interior(1) 3-11-5 to 7-1-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb)
- 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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Job Truss Truss Type Qty 201026-Skytor-Ralston-Bldg 1 - Type 14 147314797 Valley 201026 CV03 2 Job Reference (optional) 8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:25:58 2021 Page 1 Builders Inc., Aurora, CO - 80011, ID:QS8hjBL9CIM8AxVMglothazLZKy-2v13hYKs38nEjMhx8TT4OMo?YrnaZa9t26XHlkyrAWN 3-7-12 1-0-0 Scale = 1:10.5 3 4.00 12 2x4 || 2 **7-0-**0 4 2x4 = 2x4 || LOADING (psf) SPACING-2-0-0 DEFL. I/defI **PLATES GRIP** (loc) L/d TCLL 30.0 Plate Grip DOL 1.15 TC Vert(LL) 0.00 197/144 0.21 n/r 120 MT20 Lumber DOL 1.15 ВС 0.06 Vert(CT) 0.00 3 120 n/r 15.0 Rep Stress Incr YES WB 0.00 Horz(CT) 0.00 4 n/a n/a

(Roof Snow=30.0) **TCDL BCLL** 0.0 Code IRC2018/TPI2014 Matrix-P Weight: 9 lb FT = 20% **BCDL** 10.0

BRACING-

TOP CHORD

BOT CHORD

Sheathed or 3-7-12 oc purlins, except end verticals.

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

LUMBER-TOP CHORD

REACTIONS.

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

BOT CHORD WEBS 2x4 SPF No.2

> 1=3-7-0, 4=3-7-0 (size) Max Horz 1=76(LC 11)

Max Uplift 1=-21(LC 10), 4=-106(LC 14) Max Grav 1=149(LC 21), 4=348(LC 21)

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

TOP CHORD 2-4=-323/312

- 1) Wind: ASCE 7-16; Vult=136mph (3-second gust) Vasd=108mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-11-5 to 3-11-5, Interior(1) 3-11-5 to 4-7-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=30.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 2.00 times flat roof load of 30.0 psf on overhangs non-concurrent with other live loads.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb)
- 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.







Job Truss Truss Type Qty 201026-Skytor-Ralston-Bldg 1 - Type 14 147314798 201026 FB01 **FLOOR** Job Reference (optional)

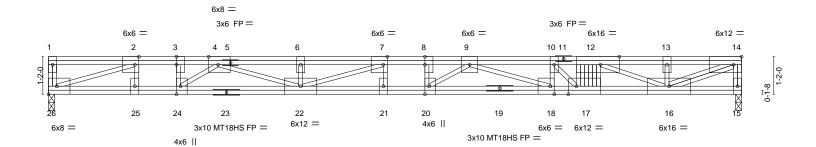
Builders Inc., Aurora, CO - 80011,

2-6-0

8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:25:59 2021 Page 1 ID:QS8hjBL9CIM8AxVMglothazLZKy-W5bSvtLUpRv5LWF8iA_JxaK4jEw9ltW1GmHqqAyrAWM

1-2-0 1-3-2 0-8-4 2-0-0

Scale = 1:35.7



11-1-2 0-7-0 0-7-0 16-9-0 5-0-14 10-6-2 2-3-12 Plate Offsets (X,Y)--[2:0-1-8,Edge], [3:0-3-0,Edge], [4:0-3-8,Edge], [7:0-1-8,Edge], [8:0-3-0,0-0-0], [12:0-7-0,Edge], [14:0-3-0,Edge], [17:0-3-0,Edge], [18:0-1-8,Edge], [20:0-3-0,Edge], [24:0-3-0,Edge] LOADING (psf) SPACING-CSI. GRIP DEFL. in (loc) I/defI L/d **PLATES TCLL** 40.0 Plate Grip DOL 1.00 TC 0.63 Vert(LL) -0.62 18-20 >409 360 MT20 197/144 Lumber DOL TCDL 10.0 1.00 вс 0.87 Vert(CT) -0.69 18-20 >369 240 MT18HS 197/144 WB Horz(CT) **BCLL** 0.0 Rep Stress Incr NO 0.70 0.08 15 n/a n/a Code IRC2018/TPI2014 Weight: 284 lb FT = 20%F 11%F BCDI 5.0 Matrix-S

11-8-2

I UMRER-BRACING-

TOP CHORD 2x4 SPF No.2(flat) TOP CHORD Sheathed or 6-0-0 oc purlins, except end verticals.

BOT CHORD 2x4 DF-N 1800F 1.6E(flat) *Except* **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. 23-26: 2x4 SPF No.2(flat)

WFBS 2x4 SPF No.2(flat)

Max Grav 26=1616(LC 1), 15=3453(LC 1)

(size) 26=0-2-4, 15=0-2-4

1-2-0

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

TOP CHORD 14-15=-3467/0, 2-3=-5041/0, 3-4=-5041/0, 4-6=-10596/0, 6-7=-10596/0, 7-8=-13308/0,

8-9=-13308/0, 9-10=-15660/0, 10-12=-15447/0, 12-13=-7842/0, 13-14=-7801/0 BOT CHORD

25-26=0/5041, 24-25=0/5041, 22-24=0/7658, 21-22=0/13308, 20-21=0/13308,

18-20=0/14575, 17-18=0/15660, 16-17=0/15476

2-25=0/675, 3-24=0/1365, 7-21=0/281, 8-20=0/613, 2-26=-5342/0, 7-22=-2908/0, 4-22=0/3157, 4-24=-3301/0, 9-18=0/1210, 9-20=-1569/0, 12-17=-343/0, 10-17=-280/1,

14-16=0/8520, 13-16=-377/0, 12-16=-8156/0

NOTES-

WEBS

REACTIONS.

- 1) Fasten trusses together to act as a single unit as per standard industry detail, or loads are to be evenly applied to all plies.
- 2) Unbalanced floor live loads have been considered for this design.
- 3) All plates are MT20 plates unless otherwise indicated.
- 4) All plates are 3x6 MT20 unless otherwise indicated.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 26, 15.
- 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) Load case(s) 1, 2, 3, 4, 5, 6 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 8) Required 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 3200 lb down at 16-9-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 15-26=-8, 1-14=-80



August 5,2021





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

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	201026-Skytor-Ralston-Bldg 1 - Type 14	
201026	FB01	FLOOR	4	2		147314798
				Z	Job Reference (optional)	

Aurora, CO - 80011, Builders Inc.,

8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:25:59 2021 Page 2 ID:QS8hjBL9CIM8AxVMglothazLZKy-W5bSvtLUpRv5LWF8iA_JxaK4jEw9ltW1GmHqqAyrAWM

LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 12=-3200(F)

2) Dead: Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 15-26=-8, 1-14=-80

Concentrated Loads (lb)

Vert: 12=-3200(F)

3) 1st chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 15-26=-8, 1-8=-80, 8-14=-16

Concentrated Loads (lb)

Vert: 12=-3200(F)

4) 2nd chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 15-26=-8, 1-2=-16, 2-14=-80

Concentrated Loads (lb)

Vert: 12=-3200(F)

5) 3rd chase Dead: Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 15-26=-8, 1-8=-80, 8-14=-16

Concentrated Loads (lb)

Vert: 12=-3200(F)

6) 4th chase Dead: Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 15-26=-8, 1-2=-16, 2-14=-80

Concentrated Loads (lb) Vert: 12=-3200(F)



Job Truss Truss Type Qty 201026-Skytor-Ralston-Bldg 1 - Type 14 147314799 Floor 201026 FB02 84 Job Reference (optional) 8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:26:00 2021 Page 1 Builders Inc., Aurora, CO - 80011,

1-2-0 2-6-0 1-2-0 1-9-14

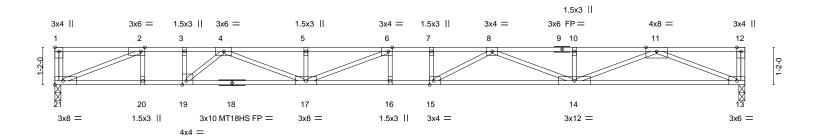
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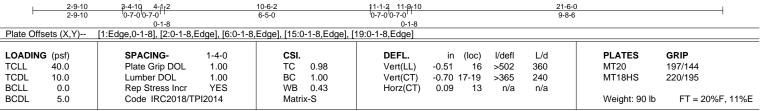
ID:QS8hjBL9ClM8AxVMglothazLZKy-_H9q6DM6al1yygqKGtVYTnt9xeEP1O?AVQ0OMcyrAWL

Sheathed or 2-2-0 oc purlins, except end verticals.

2-2-0 oc bracing: 17-19.

Rigid ceiling directly applied or 10-0-0 oc bracing, Except:





11-8-2

TOP CHORD

BOT CHORD

LUMBER-BRACING-

TOP CHORD 2x4 DF-N 1800F 1.6E(flat) *Except*

9-12: 2x4 SPF No.2(flat) 2x4 DF-N 1800F 1.6E(flat)

BOT CHORD WEBS 2x4 SPF No.2(flat)

REACTIONS. (size) 21=0-2-4, 13=0-2-4 Max Grav 21=779(LC 1), 13=779(LC 1)

3-11-10

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

2-3=-2029/0, 3-4=-2029/0, 4-5=-3730/0, 5-6=-3730/0, 6-7=-3951/0, 7-8=-3951/0, TOP CHORD

8-10=-2964/0, 10-11=-2964/0

BOT CHORD 20-21=0/2029, 19-20=0/2029, 17-19=0/2894, 16-17=0/3951, 15-16=0/3951, 14-15=0/3691,

13-14=0/1744

2-20=0/285, 3-19=0/509, 2-21=-2184/0, 6-17=-265/170, 4-17=0/929, 4-19=-1167/0,

11-13=-1876/0, 11-14=0/1317, 8-14=-784/0, 8-15=0/538

NOTES-

WEBS

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 21, 13.
- 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Required 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



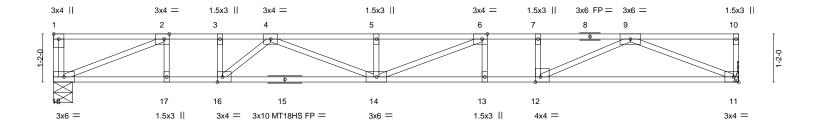


Job		Truss	Truss Type	Qty	Ply	201026-Skytor-Ralston-Bldg 1 - Type 14				
						I47314800				
201026		FB03	Floor	32	1					
						Job Reference (optional)				
Builders Inc	Builders Inc., Aurora. CO - 80011. 8.510 s Jun 18 2021 MiTek Industries. Inc. Wed Aug 4 16:26:01 2021 Page 1									

ID:QS8hjBL9CIM8AxVMglothazLZKy-TUjCJZNkL3ApaqPWpb0n0?QMl2almt?Jk4mxv3yrAWK

1-2-0 1-2-0 2-6-0 1-2-0 2-2-2

Scale = 1:27.9



	10-6-	2	₁ 11-1-2 ₁ 11-8-2 ₁	16-7-4	
l	10-6-	2	0-7-0 0-7-0	4-11-2	
Plate Offsets (X,Y)	[1:Edge,0-1-8], [2:0-1-8,Edge], [6:0-1-8,	Edge], [12:0-1-8,Edge], [16:0-1-8,Edge]		
LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0 BCDL 5.0	SPACING- 1-4-0 Plate Grip DOL 1.00 Lumber DOL 1.00 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.85 BC 0.99 WB 0.31 Matrix-S	DEFL. in (loc) l/defl L Vert(LL) -0.31 14-16 >643 36 Vert(CT) -0.43 14-16 >463 24 Horz(CT) 0.04 11 n/a n/a	0 MT18HS 197/144	F, 11%E

TOP CHORD

BOT CHORD

Sheathed or 6-0-0 oc purlins, except end verticals.

Rigid ceiling directly applied or 2-2-0 oc bracing.

LUMBER-BRACING-

TOP CHORD 2x4 SPF No.2(flat) BOT CHORD 2x4 DF-N 1800F 1.6E(flat) *Except*

11-15: 2x4 SPF No.2(flat)

WEBS 2x4 SPF No.2(flat)

REACTIONS. (size) 18=0-5-8, 11=Mechanical

Max Grav 18=602(LC 1), 11=602(LC 1)

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

TOP CHORD 2-3=-1489/0, 3-4=-1489/0, 4-5=-2446/0, 5-6=-2446/0, 6-7=-2092/0, 7-9=-2092/0

BOT CHORD 17-18=0/1489, 16-17=0/1489, 14-16=0/2025, 13-14=0/2092, 12-13=0/2092, 11-12=0/1280 **WEBS**

3-16=0/297, 2-18=-1603/0, 6-14=0/518, 4-14=0/489, 4-16=-739/0, 9-11=-1381/0,

9-12=0/900

NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) Refer to girder(s) for truss to truss connections.
- 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.





Job Truss Truss Type Qty 201026-Skytor-Ralston-Bldg 1 - Type 14 147314801 201026 FB04 FLOOR GIRDER Job Reference (optional) Builders Inc., Aurora, CO - 80011, 8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:26:02 2021 Page 1

ID:QS8hjBL9ClM8AxVMglothazLZKy-xgHaXvNN6MlgCz_jNIY0YCydlSxEVH8TykVURVyrAWJ

1-2-0 2-6-0 1-2-0 2-0-10

Scale = 1:26.6

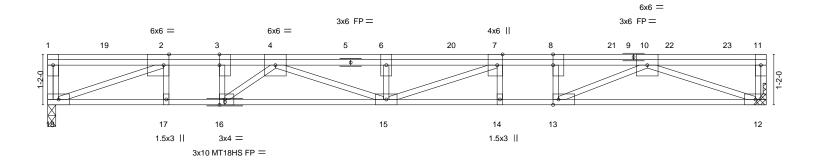


Plate Offsets (X,Y)--[2:0-1-8,Edge], [3:0-3-0,0-0-0], [7:0-3-0,Edge], [8:0-3-0,0-0-0], [13:0-1-8,Edge], [16:0-1-8,Edge] SPACING-**PLATES** GRIP LOADING (psf) (loc) I/defl L/d TCLL 40.0 Plate Grip DOL 1.00 TC 0.48 Vert(LL) -0.21 14-15 >943 360 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.00 BC 0.91 Vert(CT) -0.29 15-16 >672 240 MT18HS 197/144 **BCLL** 0.0 Rep Stress Incr NO WB 0.38 Horz(CT) 0.06 12 n/a n/a Code IRC2018/TPI2014 FT = 20%F, 11%E **BCDL** 5.0 Weight: 81 lb Matrix-S

BRACING-LUMBER-

TOP CHORD 2x4 SPF No.2(flat) TOP CHORD Sheathed or 6-0-0 oc purlins, except end verticals. 2x4 SPF No.2(flat) **BOT CHORD BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. WEBS 2x4 SPF No.2(flat)

REACTIONS. (size) 18=0-2-4, 12=Mechanical Max Grav 18=757(LC 1), 12=810(LC 1)

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

TOP CHORD 2-3=-1869/0, 3-4=-1869/0, 4-6=-2922/0, 6-7=-2922/0, 7-8=-2594/0, 8-10=-2594/0

BOT CHORD 17-18=0/1869, 16-17=0/1869, 15-16=0/2494, 14-15=0/2594, 13-14=0/2594, 12-13=0/1742

3-16=-37/477, 8-13=-333/64, 2-18=-1996/0, 7-15=-125/424, 4-15=-80/471, WEBS

4-16=-826/107, 10-12=-1860/0, 10-13=-96/940

NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) All plates are 3x6 MT20 unless otherwise indicated.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 18.
- 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) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 109 lb down at 1-4-8, 92 lb down at 2-8-8, 101 lb up at 4-0-12, 101 lb up at 5-4-12, 101 lb up at 6-8-12, 101 lb up at 8-0-12, 101 lb up at 9-4-12, 101 lb up at 10-5-4, 13 lb down and 101 lb up at 11-9-4, 109 lb down at 13-1-4, and 109 lb down at 14-5-4, and 109 lb down at 15-9-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00. Plate Increase=1.00 Uniform Loads (plf)

Vert: 12-18=-7, 1-11=-67

Concentrated Loads (lb) Vert: 2=-74(B) 19=-74(B) 21=-74(B) 22=-74(B) 23=-74(B)



August 5,2021



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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

ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty 201026-Skytor-Ralston-Bldg 1 - Type 14 147314802 Floor 201026 FB06 20 Job Reference (optional) 8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:26:02 2021 Page 1 Builders Inc., Aurora, CO - 80011, ID:QS8hjBL9ClM8AxVMglothazLZKy-xgHaXvNN6MlgCz_jNIY0YCyjLS8GVNrTykVURVyrAWJ 1-5-13 3 3x4 || 3x4 || 3x4 = Scale = 1:8.6 3x6 = 3x6 = Plate Offsets (X,Y)--[1:Edge,0-1-8] LOADING (psf) SPACING-CSI. DEFL. L/d **PLATES** GRIP in (loc) I/defI Plate Grip DOL 1.00 360 197/144 TCLL 40.0 TC 0.09 Vert(LL) 0.00 5 MT20 TCDL 10.0 Lumber DOL 1.00 BC 0.08 Vert(CT) -0.01 4-5 >999 240

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

0.00

n/a

Sheathed or 3-5-10 oc purlins, except end verticals.

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

Weight: 16 lb

FT = 20%F, 11%E

n/a

LUMBER-

BCLL

BCDL

TOP CHORD 2x4 SPF No.2(flat) **BOT CHORD** 2x4 SPF No.2(flat) WEBS 2x4 SPF No.2(flat)

0.0

5.0

REACTIONS. (size) 5=0-8-14, 4=Mechanical Max Grav 5=118(LC 1), 4=118(LC 1)

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

YES

WB

Matrix-P

0.02

Rep Stress Incr

Code IRC2018/TPI2014

- 1) Refer to girder(s) for truss to truss connections.
- 2) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



August 5,2021



Job Truss Truss Type Qty 201026-Skytor-Ralston-Bldg 1 - Type 14 147314803 201026 FB07 Floor 28 Job Reference (optional) 8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:26:02 2021 Page 1 Builders Inc., Aurora, CO - 80011, ID:QS8hjBL9ClM8AxVMglothazLZKy-xgHaXvNN6MlgCz_iNIY0YCyi9S9gVMKTykVURVyrAWJ 3x6 =0-7-12 1-6-7 3 3x4 = 4 3x4 || Scale = 1:8.5 3x6 =5 3x6 =3x6 =1-3-13 0-3-9 Plate Offsets (X,Y)--[1:Edge,0-1-8] SPACING-**PLATES** LOADING (psf) 1-4-0 CSI. in (loc) I/defI L/d Plate Grip DOL 1.00 TCLL 40.0 TC 0.17 Vert(LL) 0.00 5-6 >999 360 MT20 197/144 TCDL 10.0 Lumber DOL 1.00 BC 0.05 Vert(CT) -0.01 5-6 >999 240 **BCLL** 0.0 Rep Stress Incr NO WB 0.12 Horz(CT) -0.00 n/a 5 n/a Code IRC2018/TPI2014 FT = 20%F. 11%E **BCDL** 5.0 Matrix-P Weight: 22 lb LUMBER-**BRACING-**TOP CHORD 2x4 SPF No.2(flat) TOP CHORD Sheathed or 4-5-10 oc purlins, except end verticals. BOT CHORD 2x4 SPF No.2(flat) **BOT CHORD** Rigid ceiling directly applied or 6-0-0 oc bracing. WEBS 2x4 SPF No.2(flat) REACTIONS. (size) 5=Mechanical, 6=0-10-2 Max Uplift 5=-57(LC 3) Max Grav 5=39(LC 4), 6=577(LC 1)

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

TOP CHORD 1-7=-322/0, 2-3=0/270

BOT CHORD 6-7=-270/0

WEBS 2-6=-405/0, 2-7=0/414, 3-6=-273/0

NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Refer to girder(s) for truss to truss connections.
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5.
- 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 5-7=-7, 1-4=-67 Concentrated Loads (lb) Vert: 1=-300



August 5,2021





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

AMSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty 201026-Skytor-Ralston-Bldg 1 - Type 14 147314804 Floor 201026 FC02 36 Job Reference (optional) 8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:26:03 2021 Page 1 Builders Inc.,

Aurora, CO - 80011,

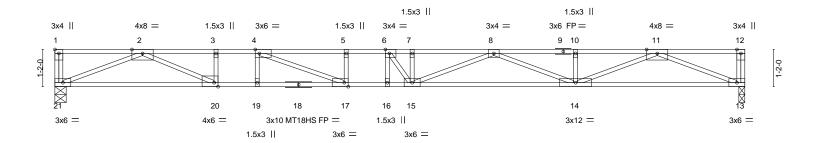
ID:QS8hjBL9CIM8AxVMglothazLZKy-PsrykFO?tgQXp7Zvx03F5QVjVsJmEk2cBOF2zxyrAWI

Sheathed or 5-6-9 oc purlins, except end verticals.

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

2-6-0 2-2-15 1-2-0 2-8-0 1-2-0 0-7-13

Scale = 1:36.1



			3-0-1		3-3-1							
1		4-11-15 5	-11 _F 7 ₁ 6-3-7 ₁	9-0-15	9-2-7 10-	4-7			21-7-12		1	
		4-11-15 0	-1 ¹ -8 ¹ 0-7-0 ¹	2-9-8	0-1-8 0-7	7-0 ¹			11-3-5			
			0-7-0		0-7-0							
Plate Offse	Plate Offsets (X,Y) [1:Edge,0-1-8], [4:0-1-8,Edge], [6:0-1-8,Edge], [17:0-1-8,Edge]											
LOADING	(psf)	SPACING-	1-4-0	CSI.		DEFL.	in (loc)	I/defI	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.77	Vert(LL)	-0.51 17-19	>502	360	MT20	197/144	
TCDL	10.0	Lumber DOL	1.00	BC	0.76	Vert(CT)	-0.70 17-19	>367	240	MT18HS	220/195	
BCLL	0.0	Rep Stress Incr	YES	WB	0.41	Horz(CT)	0.08 13	n/a	n/a			
BCDL	5.0	Code IRC2018/	TPI2014	Matri	ix-S					Weight: 90 lb	FT = 20%F, 11%E	

TOP CHORD

BOT CHORD

9-9-7

BRACING-LUMBER-

5-8-7

TOP CHORD 2x4 SPF No.2(flat) *Except* 1-9: 2x4 DF-N 1800F 1.6E(flat) **BOT CHORD**

2x4 DF-N 2400F 2.0E(flat) *Except* 13-18: 2x4 DF-N 1800F 1.6E(flat)

WEBS 2x4 SPF No.2(flat)

REACTIONS. (size) 21=0-4-4, 13=0-2-4

Max Grav 21=785(LC 1), 13=785(LC 1)

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

 $2\text{-}3\text{=-}3087/0,\ 3\text{-}4\text{=-}3087/0,\ 4\text{-}5\text{=-}4008/0,\ 5\text{-}6\text{=-}4008/0,\ 6\text{-}7\text{=-}4038/0,\ 7\text{-}8\text{=-}4038/0,\ 7\text{-}8\text{--}4038/0,\ 7\text{--}8\text{--}4038/0,\ 7\text{-$ TOP CHORD

8-10=-2991/0, 10-11=-2991/0

20-21=0/1775, 19-20=0/3087, 17-19=0/3087, 16-17=0/4008, 15-16=0/4008, 14-15=0/3735, 13-14=0/1759

3-20=-363/0, 4-19=-266/0, 5-17=-265/0, 2-21=-1910/0, 2-20=0/1440, 4-17=0/1116,

11-13=-1893/0, 11-14=0/1330, 8-14=-802/0, 8-15=0/327, 6-15=0/364

WEBS

BOT CHORD

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 13.
- 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Required 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



August 5,2021



Job Truss Truss Type Qty 201026-Skytor-Ralston-Bldg 1 - Type 14 147314805 Floor 201026 FC03 14 Job Reference (optional) 8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:26:04 2021 Page 1

Builders Inc., Aurora, CO - 80011,

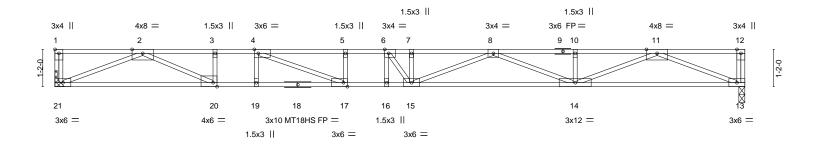
ID:QS8hjBL9CIM8AxVMglothazLZKy-t3PLybPde_YORH85VjaUed2vHFf3zBNmQ2_bVNyrAWH

Sheathed or 5-7-1 oc purlins, except end verticals.

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

2-6-0 2-2-7 1-2-0 2-8-0 1-2-0 0-7-13

Scale = 1:36.1



10-3-15 9-8-15 0-7-0 0-7-0 9-1-15 21-7-4 9-1-15 11-3-5 Plate Offsets (X,Y)--[1:Edge,0-1-8], [4:0-1-8,Edge], [6:0-1-8,Edge], [17:0-1-8,Edge], [20:0-1-8,Edge] SPACING-L/d GRIP LOADING (psf) in (loc) I/defl **PLATES** TCLL 40.0 Plate Grip DOL 1.00 TC 0.77 Vert(LL) -0.51 17-19 >505 360 MT20 197/144 TCDL 10.0 Lumber DOL 1.00 BC 0.76 Vert(CT) -0.69 17-19 >369 240 MT18HS 220/195 **BCLL** 0.0 Rep Stress Incr YES WB 0.40 Horz(CT) 0.08 13 n/a n/a Code IRC2018/TPI2014 FT = 20%F, 11%E **BCDL** 5.0 Weight: 90 lb Matrix-S

TOP CHORD

BOT CHORD

LUMBER-**BRACING-**

TOP CHORD 2x4 SPF No.2(flat) *Except* 1-9: 2x4 DF-N 1800F 1.6E(flat)

BOT CHORD 2x4 DF-N 2400F 2.0E(flat) *Except* 13-18: 2x4 DF-N 1800F 1.6E(flat)

WEBS 2x4 SPF No.2(flat)

REACTIONS. (size) 21=Mechanical, 13=0-2-4

Max Grav 21=783(LC 1), 13=783(LC 1)

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

2-3=-3065/0, 3-4=-3065/0, 4-5=-3991/0, 5-6=-3991/0, 6-7=-4023/0, 7-8=-4023/0, TOP CHORD

8-10=-2984/0, 10-11=-2984/0 20-21=0/1772, 19-20=0/3065, 17-19=0/3065, 16-17=0/3991, 15-16=0/3991, 14-15=0/3723,

13-14=0/1755

3-20=-364/0, 4-19=-266/0, 5-17=-266/0, 2-21=-1906/0, 2-20=0/1423, 4-17=0/1119,

11-13=-1889/0, 11-14=0/1326, 8-14=-798/0, 8-15=0/323, 6-15=0/366

WEBS

BOT CHORD

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 13.
- 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) Required 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



August 5,2021



Job Truss Truss Type Qty 201026-Skytor-Ralston-Bldg 1 - Type 14 147314806 201026 Floor FC04 6 Job Reference (optional) 8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:26:04 2021 Page 1

Builders Inc., Aurora, CO - 80011,

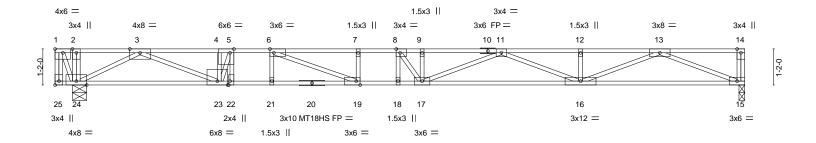
ID:QS8hjBL9ClM8AxVMglothazLZKy-t3PLybPde_YORH85VjaUed2vsFdVzBGmQ2_bVNyrAWH

Sheathed or 6-0-0 oc purlins, except end verticals.

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

0-3-12 1-11-4 2-6-0 1-2-0 2-8-0 1-2-0 0-7-13

Scale = 1:37.3



11-0-7 0-6-12 0-6-12 5-9-7 9-10-7 22-3-12 0-7-00-7-0 0-7-00-7-0 2-11-0 11-3-5 5-2-11 Plate Offsets (X,Y)--[1:Edge,0-1-8], [5:0-1-8,Edge], [6:0-1-8,Edge], [8:0-1-8,Edge], [19:0-1-8,Edge], [22:0-1-8,Edge], [25:Edge,0-1-8] SPACING-GRIP LOADING (psf) CSI. (loc) L/d **PLATES** TCLL 40.0 Plate Grip DOL 1.00 TC 0.73 Vert(LL) -0.46 18 >562 360 MT20 197/144 **TCDL** 10.0 Lumber DOL 1.00 BC 0.86 Vert(CT) -0.63 18 >409 240 MT18HS 220/195 **BCLL** 0.0 Rep Stress Incr NO WB 0.41 Horz(CT) 0.08 15 n/a n/a Code IRC2018/TPI2014 FT = 20%F, 11%E **BCDL** Weight: 97 lb 5.0 Matrix-S

TOP CHORD

BOT CHORD

LUMBER-**BRACING-**

2x4 SPF No.2(flat) *Except* TOP CHORD 1-10: 2x4 DF-N 1800F 1.6E(flat)

BOT CHORD 2x4 DF-N 2400F 2.0E(flat) *Except* 15-20: 2x4 DF-N 1800F 1.6E(flat)

WEBS 2x4 SPF No.2(flat)

REACTIONS. (size) 15=0-2-4, 24=0-5-8

Max Grav 15=778(LC 4), 24=1140(LC 1)

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

TOP CHORD 3-4=-2589/0, 4-5=-2589/0, 5-6=-3074/0, 6-7=-3924/0, 7-8=-3924/0, 8-9=-3977/0,

9-11=-3977/0, 11-12=-2961/0, 12-13=-2961/0

23-24=0/1248, 22-23=0/3074, 21-22=0/3074, 19-21=0/3074, 18-19=0/3924, 17-18=0/3924, BOT CHORD

16-17=0/3689, 15-16=0/1743

5-22=0/735, 6-21=-280/0, 3-24=-1557/0, 3-23=0/1449, 4-23=0/401, 5-23=-1469/0, **WEBS**

6-19=0/1032, 13-15=-1875/0, 13-16=0/1314, 11-16=-786/0, 11-17=0/312, 8-17=0/401,

1-24=-327/0

NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 15.
- 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Required 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 15-25=-7, 1-14=-67 Concentrated Loads (lb)

Vert: 1=-300

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August 5,2021



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

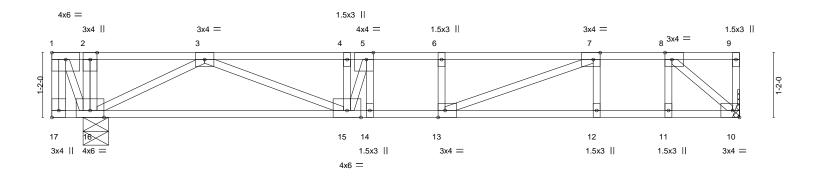
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

AMSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty 201026-Skytor-Ralston-Bldg 1 - Type 14 147314807 Floor 201026 FC05 12 Job Reference (optional) 8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:26:05 2021 Page 1 Builders Inc., Aurora, CO - 80011, ID:QS8hjBL9ClM8AxVMglothazLZKy-LFzj9xQFPHgF3RjH2R5jAra4Vf_CiiYvfik92qyrAWG 0-3-12 1-11-4 2-6-0 0-3-7 1-2-0 2-8-0 1-2-0

Scale = 1:20.7



0-6-12	5-9-7	1	6-4-7 6-11-7	9-10-7	10-5-7 11-0-7	12-4-8
0-6-12	5-2-11	ı	0-7-0 0-7-0	2-11-0	0-7-0 0-7-0	1-4-1
Plate Offsets (X,Y)	[1:Edge,0-1-8], [5:0-1-8,Edge], [7:0-1-8,	Edge], [8:0-1-8,Edge], [1	3:0-1-8,Edge], [17:E	Edge,0-1-8]		
LOADING (psf)	SPACING- 1-4-0	CSI.	DEFL.	in (loc) I/defl L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.67	Vert(LL)	-0.15 12-13 >944 360	MT20	197/144
TCDL 10.0	Lumber DOL 1.00	BC 0.83	Vert(CT)	-0.20 12-13 >681 240		
BCLL 0.0	Rep Stress Incr NO	WB 0.15	Horz(CT)	0.01 10 n/a n/a		
BCDL 5.0	Code IRC2018/TPI2014	Matrix-S			Weight: 51 lb	FT = 20%F, 11%E

LUMBER-BRACING-

TOP CHORD 2x4 SPF No.2(flat) TOP CHORD Sheathed or 6-0-0 oc purlins, except end verticals. BOT CHORD 2x4 SPF No.2(flat) **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. WEBS 2x4 SPF No.2(flat)

REACTIONS. (size) 10=Mechanical, 16=0-5-8 Max Grav 10=409(LC 4), 16=786(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 3-4=-1051/0, 4-5=-1051/0, 5-6=-1126/0, 6-7=-1126/0, 7-8=-649/0

BOT CHORD 15-16=0/559, 14-15=0/1126, 13-14=0/1126, 12-13=0/649, 11-12=0/649, 10-11=0/649

WEBS 8-11=0/255, 3-16=-794/0, 3-15=0/534, 5-15=-434/0, 7-13=0/524, 8-10=-854/0,

1-16=-333/0

NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Refer to girder(s) for truss to truss connections.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 10-17=-7, 1-9=-67

Concentrated Loads (lb) Vert: 1=-300



August 5,2021



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

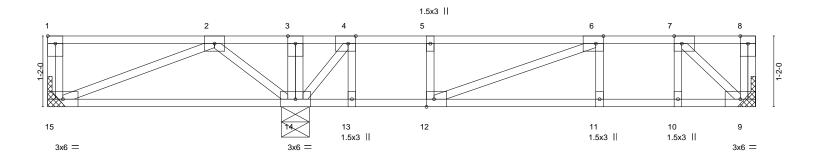
Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

AMSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty 201026-Skytor-Ralston-Bldg 1 - Type 14 147314808 Floor FC06 201026 Job Reference (optional) 8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:26:06 2021 Page 1 Builders Inc., Aurora, CO - 80011, ID:QS8hjBL9ClM8AxVMglothazLZKy-pRW5NHQtAbo5gblUc8cyj27l63PTRAg2tMTiaGyrAWF 1-2-0 2-6-0 0-8-15 1-2-0 2-8-0 0-11-9

Scale = 1:19.0



		3-10-4		11-8-0							
		3-10-4		<u> </u>			7-9-12			<u> </u>	
_Plate (Offsets (X,Y)	[1:Edge,0-1-8], [4:0-1-8,I	Edge], [6:0-1-8	Edge], [7:0-1-8,Edge], [1	2:0-1-8,Edge]						
LOAD	ING (psf)	SPACING-	1-4-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC 0.49	Vert(LL)	-0.10 11-12	>872	360	MT20	197/144	
TCDL	10.0	Lumber DOL	1.00	BC 0.51	Vert(CT)	-0.14 11-12	>623	240			
BCLL	0.0	Rep Stress Incr	YES	WB 0.09	Horz(CT)	0.00 9	n/a	n/a			
BCDL	5.0	Code IRC2018/T	PI2014	Matrix-S					Weight: 48 lb	FT = 20%F, 11%E	

TOP CHORD

BOT CHORD

Sheathed or 6-0-0 oc purlins, except end verticals.

6-0-0 oc bracing: 14-15.

Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

LUMBER-BRACING-

TOP CHORD 2x4 SPF No.2(flat) BOT CHORD 2x4 SPF No.2(flat) WEBS 2x4 SPF No.2(flat)

REACTIONS. (size) 15=Mechanical, 9=Mechanical, 14=0-5-8

Max Grav 15=127(LC 3), 9=255(LC 4), 14=484(LC 7)

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

TOP CHORD 4-5=-270/0, 5-6=-270/0, 6-7=-365/0

BOT CHORD 13-14=0/270, 12-13=0/270, 11-12=0/365, 10-11=0/365, 9-10=0/365

2-14=-289/0, 4-14=-628/0, 7-9=-492/0 WEBS

NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- 3) Refer to girder(s) for truss to truss connections.
- 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.





Job Truss Truss Type Qty 201026-Skytor-Ralston-Bldg 1 - Type 14 147314809 Floor 201026 FC07 Job Reference (optional)

Builders Inc., Aurora, CO - 80011,

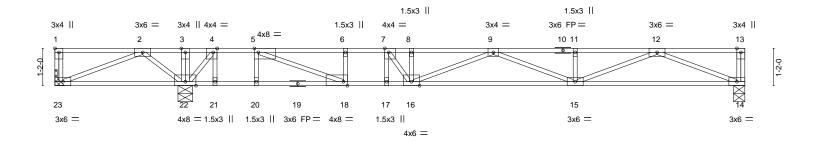
8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:26:06 2021 Page 1 ID:QS8hjBL9ClM8AxVMglothazLZKy-pRW5NHQtAbo5gblUc8cyj27Cc3KGR4C2tMTiaGyrAWF

Sheathed or 6-0-0 oc purlins, except end verticals.

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

1-2-8 0-8-15 1-2-0 2-8-0 1-2-0 0-7-13

Scale = 1:36.1



10-3-15 9-8-15 0-7-0 0-7-0 9-1-15 21-7-4 3-10-4 5-3-11 11-3-5 Plate Offsets (X,Y)--[1:Edge,0-1-8], [4:0-1-8,Edge], [5:0-1-8,Edge], [7:0-1-8,Edge], [18:0-1-8,Edge] SPACING-LOADING (psf) CSI. in (loc) I/def L/d **PLATES** GRIP TCLL 40.0 Plate Grip DOL 1.00 TC 0.84 Vert(LL) -0.24 16-17 >881 360 197/144 MT20 TCDL 10.0 Lumber DOL 1.00 BC 0.78 Vert(CT) -0.33 16-17 >642 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.51 Horz(CT) 0.03 14 n/a n/a Code IRC2018/TPI2014 FT = 20%F, 11%E **BCDL** 5.0 Weight: 90 lb Matrix-S

TOP CHORD

BOT CHORD

LUMBER-**BRACING-**

TOP CHORD 2x4 SPF No.2(flat) *Except* 1-10: 2x4 DF-N 2400F 2.0E(flat)

BOT CHORD 2x4 DF-N 1800F 1.6E(flat) *Except*

14-19: 2x4 SPF No.2(flat) WEBS 2x4 SPF No.2(flat)

REACTIONS. (size) 23=Mechanical, 22=0-5-8, 14=0-4-4

Max Uplift 23=-294(LC 4)

Max Grav 23=45(LC 3), 22=1201(LC 1), 14=563(LC 4)

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

TOP CHORD 2-3=0/1333, 3-4=0/1337, 4-5=0/316, 5-6=-1492/0, 6-7=-1492/0, 7-8=-1872/0,

8-9=-1872/0, 9-11=-1892/0, 11-12=-1892/0

BOT CHORD 22-23=-799/0, 21-22=-316/0, 20-21=-316/0, 18-20=-316/0, 17-18=0/1492, 16-17=0/1492, 15-16=0/2087, 14-15=0/1202

4-21=0/500, 5-20=-335/0, 6-18=-425/0, 7-17=-265/0, 3-22=0/365, 2-23=0/860, 2-22=-810/0, 4-22=-1675/0, 5-18=0/1803, 12-14=-1293/0, 12-15=0/745, 9-16=-297/0,

8-16=-334/0, 7-16=0/753

NOTES-

WEBS

- 1) Unbalanced floor live loads have been considered for this design.
- Refer to girder(s) for truss to truss connections.
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 23=294
- 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.



August 5,2021



Job Truss Truss Type Qty Ply 201026-Skytor-Ralston-Bldg 1 - Type 14 147314810 201026 FC08 **FLOOR** 2 Job Reference (optional)

Builders Inc., Aurora, CO - 80011,

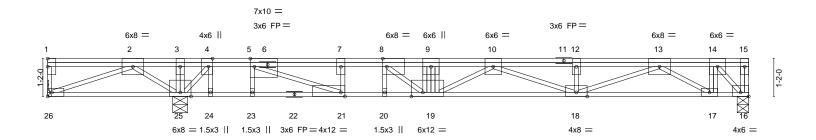
8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:26:07 2021 Page 1 ID:QS8hjBL9ClM8AxVMglothazLZKy-He4TacRVxvwylltgAr7BFGgMATgcAQoC60DF6iyrAWE

Sheathed or 6-0-0 oc purlins, except end verticals.

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

1-4-0 0-8-15 1-2-0 2-8-0 1-2-0 1-1-5 1-8-0 1-6-8 0-8-8

Scale = 1:35.5



				10-3-	15					
1	3-10-	4	9-1-15	9-8-15	11-9-12			20-6-4		21-7-4
Г	3-10-	4	5-3-11	0-7-0 0-7-	1-5-13			8-8-8		1-1-0
Plate	Offsets (X,Y)	[4:0-3-0,Edge], [5:0-1-8,	Edge], [8:0-1-8,	Edge], [16:Edge,0-1-8], [9:0-4-4,Edge], [2	21:0-1-8,Edge]				
		0040010	4.7.0	001	5==:		1/1 0		DI 4750	anın
LOAL	DING (psf)	SPACING-	1-7-3	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC 0.92	Vert(LL)	-0.28 19-20	>750	360	MT20	197/144
TCDL	. 10.0	Lumber DOL	1.00	BC 0.77	Vert(CT)	-0.38 19-20	>547	240		
BCLL	0.0	Rep Stress Incr	NO	WB 0.93	Horz(CT)	0.03 16	n/a	n/a		
BCDL	5.0	Code IRC2018/T	PI2014	Matrix-S	. ,				Weight: 236 lb	FT = 20%F, 11%E

TOP CHORD

BOT CHORD

LUMBER-**BRACING-**

2x4 SPF No.2(flat) *Except* TOP CHORD

1-11,1-6: 2x4 DF-N 1800F 1.6E(flat) 2x4 SPF No.2(flat) *Except*

BOT CHORD 16-22: 2x4 DF-N 1800F 1.6E(flat)

WEBS 2x4 SPF No.2(flat)

REACTIONS. (size) 25=0-5-8, 26=Mechanical, 16=0-4-4

Max Uplift 26=-1029(LC 4)

Max Grav 25=3156(LC 1), 16=1942(LC 4)

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

TOP CHORD 2-3=0/4495, 3-4=0/4521, 4-5=0/1350, 5-7=-5017/0, 7-8=-5017/0, 8-9=-7988/0,

9-10=-7942/0. 10-12=-5649/0. 12-13=-5649/0. 13-14=-1860/0 25-26=-2676/0, 24-25=-1350/0, 23-24=-1350/0, 21-23=-1350/0, 20-21=0/5017,

19-20=0/5017, 18-19=0/6998, 17-18=0/3514, 16-17=0/1860 WEBS

4-24=0/482, 5-23=-361/0, 7-21=-1826/0, 8-20=-380/0, 3-25=0/1392, 2-26=0/2864, 2-25=-2352/0, 4-25=-4688/0, 5-21=0/6621, 13-17=-1917/0, 13-18=0/2286, 12-18=-269/0,

10-18=-1444/0, 10-19=0/1166, 8-19=0/3717, 9-19=-2389/0, 14-17=0/1000,

14-16=-2660/0

NOTES-

BOT CHORD

- 1) Fasten trusses together to act as a single unit as per standard industry detail, or loads are to be evenly applied to all plies.
- 2) Unbalanced floor live loads have been considered for this design.
- 3) All plates are 3x6 MT20 unless otherwise indicated.
- 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) except (jt=lb)
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss has large uplift reaction(s) from gravity load case(s). Proper connection is required to secure truss against upward movement at the bearings. Building designer must provide for uplift reactions indicated.
- 8) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 9) CAUTION, Do not erect truss backwards.
- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1500 lb down at 11-9-12, and 800 lb down at 20-6-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard



August 5,2021





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

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply 201026-Skytor-Ralston-Bldg 1 - Type 14 147314810 FLOOR 2 FC08 201026

Builders Inc., Aurora, CO - 80011, | 2 | Job Reference (optional)

8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:26:07 2021 Page 2
ID:QS8hjBL9CIM8AxVMglothazLZKy-He4TacRVxvwylltgAr7BFGgMATgcAQoC60DF6iyrAWE

LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf) Vert: 16-26=-8, 1-15=-80

Concentrated Loads (lb)

Vert: 9=-1500(F) 14=-800(F)



Job Truss Truss Type Qty 201026-Skytor-Ralston-Bldg 1 - Type 14 147314811 FC09 2 201026 Floor Job Reference (optional) 8.510 s Jun 18 2021 MiTek Industries, Inc. Wed Aug 4 16:26:08 2021 Page 1 Builders Inc., Aurora, CO - 80011, ID:QS8hjBL9ClM8AxVMglothazLZKy-lqernyS7iC2pwvRskZeQoTCiRt9_v4hLLgype9yrAWD

2-6-0 0-6-0 2-2-12

Scale = 1:15.6

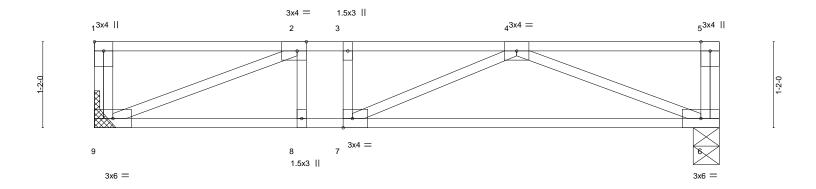


Plate Offsets (X V)-- [1:Edge 0-1-8] [2:0-1-8 Edge] [7:0-1-8 Edge]

1 1010 0110	oets (X, 1)	[1.Luge,0-1-0], [2.0-1-0,Lt	<u>agoj, [</u>	,								
LOADING	(psf)	SPACING-	1-4-0	CSI.		DEFL.	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.24	Vert(LL)	-0.04	6-7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.00	BC	0.25	Vert(CT)	-0.08	6-7	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.01	6	n/a	n/a		
BCDL	5.0	Code IRC2018/TP	I2014	Matri	x-S						Weight: 34 lb	FT = 20%F, 11%E

LUMBER-**BRACING-**

TOP CHORD 2x4 SPF No.2(flat) TOP CHORD Sheathed or 6-0-0 oc purlins, except end verticals. **BOT CHORD BOT CHORD** 2x4 SPF No.2(flat) Rigid ceiling directly applied or 10-0-0 oc bracing. WEBS 2x4 SPF No.2(flat)

REACTIONS. (size) 9=Mechanical, 6=0-4-4 Max Grav 9=302(LC 1), 6=302(LC 1)

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

2-3=-582/0, 3-4=-582/0 8-9=0/582, 7-8=0/582, 6-7=0/550 TOP CHORD **BOT CHORD**

4-6=-591/0, 2-9=-625/0 WEBS

NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Refer to girder(s) for truss to truss connections.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



August 5,2021

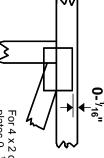


Symbols

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 × 4

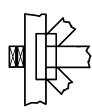
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



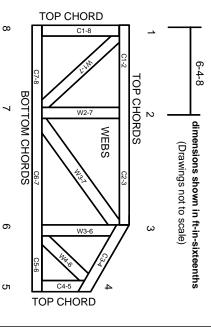
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

National Design Specification for Metal Plate Connected Wood Truss Construction. Design Standard for Bracing.
Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

ANSI/TPI1: DSB-89:

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.

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- 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.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.

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- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other.

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- 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.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

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- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber
- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
- Connections not shown are the responsibility of others.
- Do not cut or alter truss member or plate without prior approval of an engineer.
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- 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.