Job	Truss	Truss Type	Qty	Ply	111 Ithica-Roof-51040MM
21020140-A	A01	Half Hip Girder	1	1	Job Reference (optional)

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Fri Mar 19 13:35:16 Page: 1 ID:6JvNaXa5ioP1TIAe90GSQvzZPih-o42rwZu0l?I76 iH0vttZJiiD8Juh0WohNYttfzZN0h

-1-4-0 4-0-8 12-0-5 15-10-0 28-6-0 8-0-7 20-1-0 24-1-12 1-4-0 4-0-8 3-11-15 3-11-15 3-9-11 4-3-0 4-0-12 4-4-4 NAILED 3x5= 5x8= 3x5= 2x41 8x10= 3x5= 4x5= 27 20 25 🖂 26₅ 3 19 21 22 23 5 24 6 7 28 8 30 8¹² A Ш ш пп пп ш Ш πή 1 3-0-13 3-11-3 0-4-7 Ш Ш Ш B1 ١١ Ш Ш Ш B2 Ш ₿ ₿ 38 13 16 32 33 15 34 35 14 36 37 39 1240 41 1142 43 3x5= 2x41 3x5= 3x5= 3x5= 3x5= 2x4 II 8x10= HJC26 NAILED NAILED NAILED NAILED NAILED NAILED NAILED NAILED NAILED NAIL FD NAILED NAILED 16 -2-0 15-10-0 20-1-0 28-6-0 3-10-12 8-0-7 12-0-5 24-1-12 3-10-12 4-1-11 3-11-15 3-9-11 3-11-0 4-0-12 4-4-4 0-4-0 Scale = 1:55.5 Plate Offsets (X, Y): [3:0-4-0,0-1-9], [7:0-5-0,0-4-8], [13:0-5-0,0-4-8]

Loading TCLL (roof) Snow (Pf)	(psf) 20.0 20.0	Spacing Plate Grip DOL Lumber DOL	2-0-0 1.15 1.15	CSI TC BC	0.48 0.40	DEFL Vert(LL) Vert(CT)	in -0.05 -0.07	(loc) 15-16 15-16	l/defl >999 >999	L/d 240 180	PLATES MT20	GRIP 244/190
TCDL BCLL BCDL	10.0 0.0* 10.0	Rep Stress Incr Code	NO IRC2018/TPI2014	WB Matrix-MSH	0.82	Horz(CT)	0.03	10	n/a	n/a	Weight: 195 lb	FT = 20%

LUMBER TOP CHORD BOT CHORD WEBS	2x6 SP No.2 *Except* T1:2x4 SP No.2 2x6 SP No.2 2x4 SP No.3	BRACING TOP CHORD BOT CHORD	Structural wood sheathing directly applied or 4-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (5-7-6 max.): 3-9. Rigid ceiling directly applied or 10-0-0 oc bracing.
REACTIONS ((lb/size) 2=1155/0-3-8, (min. 0-1-8), 10=651/ Mechanical, (min. 0-1-8), 13=2694/0-3-8, (min. 0-3-5) Max Horiz 2=107 (LC 9)		MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.
N	Max Uplift 2=-188 (LC 12), 10=-108 (LC 8), 13=-456 (LC 9) Max Grav 2=1272 (LC 19), 10=738 (LC 33), 13=2800 (LC 33)		
FORCES	(lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when showr	۱.	

TOP CHORD
 2-3=-1768/260, 3-19=-1553/240, 19-20=-1555/240, 4-20=-1558/241, 4-21=-568/90, 21-22=-568/90, 22-23=-568/90, 5-23=-568/90, 5-23=-568/90, 5-24=-204/1115, 6-25=-204/1115, 6-26=-204/1115, 26-27=-204/1115, 7-27=-204/1115, 7-28=-269/62, 28-29=-269/62, 8-30=-762/140, 30-31=-762/140, 9-31=-762/140, 9-10=-667/134

 BOT CHORD
 2-16=-260/1399, 16-32=-261/1373, 32-33=-261/1373, 15-33=-261/1373, 15-34=-278/1554, 34-35=-278/1554,

 WEBS
 14-35=-278/1554, 14-36=-111/568, 36-37=-111/568, 13-37=-111/568, 12-40=-133/762, 40-41=-133/762, 11-41=-133/762

 WEBS
 3-16=0/466, 7-13=-1605/260, 7-12=0/429, 8-12=-586/96, 8-11=-282/151, 9-11=-130/865, 4-14=-1192/200, 5-14=-34/740, 5-13=-2026/334, 6-13=-521/182

NOTES

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

Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

 TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; 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 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.

6) Provide adequate drainage to prevent water ponding.

7) All plates are 3x5 MT20 unless otherwise indicated.

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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

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

11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 108 lb uplift at joint 10.

12) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 13. This connection is for uplift only and does not consider lateral forces.

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

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

Job	Truss	Truss Type	Qty	Ply	111 Ithica-Roof-51040MM
21020140-A	A01	Half Hip Girder	1	1	Job Reference (optional)

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ID:6JvNaXg5ioP1TIAe90GSQyzZPih-o42rwZu0l?l76_iH0vltZJijD8Juh0WohNYtYfzZN0h 15) Use USP HJC26 (With 16-16d nails into Girder & 10d nails into Truss) or equivalent at 4-0-14 from the left end to connect truss(es) J01 (1 ply 2x4 SP), CJ01 (1 ply 2x4 SP) to front face of bottom chord.

16) Fill all nail holes where hanger is in contact with lumber.

17) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.

18) 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (lb/ft)

Vert: 1-3=-60, 3-9=-60, 2-10=-20

Concentrated Loads (lb)

Vert: 3=-105 (F), 16=-304 (F), 19=-105 (F), 20=-105 (F), 21=-105 (F), 22=-105 (F), 24=-105 (F), 25=-105 (F), 26=-105 (F), 27=-105 (F), 28=-105 (F), 29=-105 (F), 29=-105 (F), 31=-105 (F), 32=-40 (F), 33=-40 (F), 35=-40 (F), 36=-40 (F), 37=-40 (F), 38=-40 (F), 39=-40 (F), 40=-40 (F), 41=-40 (F), 42=-40 (F), 43=-40 (F)

Job	Truss	Truss Type	Qty	Ply	111 Ithica-Roof-51040MM
21020140-A	A02	Half Hip	1	1	Job Reference (optional)

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Fri Mar 19 13:35:16 Page: 1 ID:xxCnizKWIBt?6 1FW8luH2zZPi7-o42rwZu0l?l76 iH0vItZJieP8HEh mohNYtYzZN0h



Scale = 1:55.5

Plate Offsets (X,	Y): [2:0-2-9,0-1-8],	[3:0-3-12,0-2-0], [6:0	-4-0,0-3-0], [10:0-4-0,0)-3-0]								
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI TC BC WB Matrix-MSH	0.79 0.57 0.93	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.07 -0.11 0.02	(loc) 12-15 12-15 8	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 157 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3 REACTIONS (Ib/size) 2=630/0-3-8, (min. 0-1-8), 8=391/ Mechanical, (min. 0-1-8), 10=1328/0-3-8, (min. 0-1-14) Max Horiz 2=160 (LC 13) Max Uplift 2=-108 (LC 14), 8=-74 (LC 15), 10=-207 (LC 11)				D-1-8),	BRACIN TOP CH BOT CH	G ORD ORD	Structu except Rigid c MiTek installe Installe	ral wood end ver eiling dir recomm ed during ation gui	l sheath ticals, ar <u>ectly ap</u> nends th g truss e de.	ing dir nd 2-0- plied c plied c rectior	ectly applied or 4 -0 oc purlins (6-0 or 10-0-0 oc braci bilizers and requi n, in accordance	-11-7 oc purlins, -0 max.): 3-7. ng. red cross bracing be with Stabilizer
Ma FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Wind: ASCE	ax Grav 2=775 (L (lb) - Max. Com 2-17=-747/82, 5-21=-69/368, 2-12=-105/513 4-10=-1000/13 E 7-16; Vult=130m	C 36), 8=535 (LC 35) pp./Max. Ten All for 3-17=-618/111, 3-18= 21-22=-69/368, 6-22= 11-12=-107/508, 10- 8, 7-9=-66/380, 4-11= bh (3-second gust) Va	, 10=1563 (LC 35) css 250 (lb) or less ext -392/107, 4-18=-392/1 -69/368, 6-23=-354/82 -11=-88/392, 9-10=-93 -0/285, 3-11=-300/48, s asd=103mph; TCDL=6	cept when show 107, 4-19=-69/36 2, 7-23=-354/82, 7359 5-10=-316/127, .0psf; BCDL=6.	n. 58, 19-20=- 7-8=-477/ 6-10=-878/ 0psf; h=25f	69/368, 5-20 104 115 t; Cat. II; Ex	0=-69/36 p B; Enc	i8, losed; M	IWFRS	(envelo	ope) exterior zon	e and C-C

Exterior(2E) -1-4-0 to 1-8-0, Exterior(2R) 1-8-0 to 10-3-7, Interior (1) 10-3-7 to 25-4-4, Exterior(2E) 25-4-4 to 28-4-4 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; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; 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 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.

5) Provide adequate drainage to prevent water ponding.

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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

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

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 74 lb uplift at joint 8.

10) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 10. This connection is for uplift only and does not consider lateral forces.

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

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

Job	Truss	Truss Type	Qty	Ply	111 Ithica-Roof-51040MM
21020140-A	A03	Half Hip	1	1	Job Reference (optional)

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-1-4-0 8-0-8 16-0-4 28-6-0 4-2-11 21-5-13 11-4-0 4-2-11 3-9-13 7-11-12 5-5-9 7-0-3 5x6= 2x4 I 3x5= 4x6= 3x6= ¹⁷ 18 19 5 <u>21</u>6 7 20 4 22 8, ∇ 8¹² 2x4 3 13 c 6-7-3 , 6-6-2-8-7 2 16 0-4-79 ₿ 11 23 12 10 2x4 II 3x5= 3x5= 5x8= 3x5= 16-2-0 7-10-12 16-0-4 21-5-13 28-6-0 7-10-12 8-1-8 5-3-13 7-0-3 0-1-12

Scale = 1:55.5

Plate Offsets (X, Y): [2:0-2-9,0-1-8], [4:0-3-12,0-2-0], [7:0-3-0,Edge], [11:0-2-4,0-3-4] Loading (psf) Spacing 2-0-0 CSI DEFL (loc) l/defl L/d PLATES GRIP in 20.0 Plate Grip DOL 1.15 0.97 Vert(LL) -0.10 11-12 MT20 244/190 TCLL (roof) тс >999 240 BC Vert(CT) 20.0 Lumber DOL 1.15 0.65 -0.18 11-12 >999 180 Snow (Pf) TCDL 10.0 Rep Stress Incr YES WB 0.72 Horz(CT) 0.02 9 n/a n/a BCLL 0.0* IRC2018/TPI2014 Matrix-MSH Code BCDL 10.0 Weight: 164 lb FT = 20% LUMBER BRACING

TOP CHORD 2 BOT CHORD 2	x4 SP No.1 *Except* T1:2x4 SP No.2 x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 5-9-0 oc purlins, except end verticals, and 2-0-0 oc purlins (2-2-0 max.); 4-8.
WEBS 2	x4 SP No.3	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
REACTIONS (lb/s	size) 2=631/0-3-8, (min. 0-1-8), 9=372/ Mechanical, (min. 0-1-8), 11=1346/0-3-8, (min. 0-1-14) (Horiz 2=208 (LC 13)	WEBS	1 Kow at midpt 4-11 MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation quide
Max	c Grav 2=804 (LC 43), 9=528 (LC 38), 11=1606 (LC 40)		
FORCES TOP CHORD BOT CHORD WEBS	(lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when sho 2-16=-905/93, 3-16=-872/116, 3-4=-653/97, 8-9=-462/105 2-12=-130/804, 12-23=-96/479, 11-23=-96/479, 10-11=-73/255 3-12=-385/133, 4-12=0/564, 4-11=-794/133, 5-11=-571/184, 6-11=-639/8	wn. 32, 8-10=-46/271	
NOTES 1) Unbalanced r	oof live loads have been considered for this design.		

2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -1-4-0 to 1-8-0, Interior (1) 1-8-0 to 3-9-9, Exterior(2R) 3-9-9 to 12-3-7, Interior (1) 12-3-7 to 25-4-4, Exterior(2E) 25-4-4 to 28-4-4 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

3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; 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 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.

6) Provide adequate drainage to prevent water ponding.

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 3-06-00 tall by 2-00-00 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 67 lb uplift at joint 9.

11) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 11. This connection is for uplift only and does not consider lateral forces.

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.

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



Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 64 lb uplift at joint 8. 9)

10) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.

One RT16A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 10. This connection is for uplift only and does not consider lateral forces. 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. 12)









8) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 8. This connection is for uplift only and does not consider lateral forces.

9) One RT16A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 11. This connection is for uplift only and does not consider lateral forces.
 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	111 Ithica-Roof-51040MM
21020140-A	B01G	Piggyback Base Structural Gable	1	1	Job Reference (optional)

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5) Unbalanced snow loads have been considered for this design.

This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads. 6)

7) Provide adequate drainage to prevent water ponding.

8) All plates are MT20 plates unless otherwise indicated.

All plates are 2x4 MT20 unless otherwise indicated. 9)

The Fabrication Tolerance at joint 9 = 12% 10)

11) Gable studs spaced at 2-0-0 oc.

Job	Truss	Truss Type	Qty	Ply	111 Ithica-Roof-51040MM
21020140-A	B01G	Piggyback Base Structural Gable	1	1	Job Reference (optional)

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

13) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

- 14) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 21, 20, 19, and 18. This connection is for uplift only and does not consider lateral forces.
- 15) One RT16A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 26, 22, and 29. This connection is for uplift only and does not consider lateral forces.

16) 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.

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

Job	Truss	Truss Type	Qty	Ply	111 Ithica-Roof-51040MM
21020140-A	B02	Piggyback Base	10	1	Job Reference (optional)

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3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; 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 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.

6) Provide adequate drainage to prevent water ponding.

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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

 One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 11. This connection is for uplift only and does not consider lateral forces.

 One RT16A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 15, 12, and 18. This connection is for uplift only and does not consider lateral forces.

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

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

Job	Truss	Truss Type	Qty	Ply	111 Ithica-Roof-51040MM	
21020140-A	B02	Piggyback Base	10	1	Job Reference (optional)	
Carter Components, Sanford, NC, user Run: 8.42 S De			c 30 2020 P	rint: 8.420 S	Dec 30 2020 MiTek Industries, Inc. Fri Mar 19 13:35:16	Page: 2

LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	111 Ithica-Roof-51040MM
21020140-A	B03G	Piggyback Base Structural Gable	1	1	Job Reference (optional)

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Fri Mar 19 13:35:16 Page: 1 $ID: Pgq02xlU2yl2pNC_3_u5CQzZPia-KuUTiDtOXiAGVq75TBEe169QVluDybrfTjoK0DzZN0iauUtiDtoXiAGVq75TBEe169QVluDybbrfTjoK0DzZN0iauUtiDtoXiAGVq75TBEe169QVluDybbrfTjoK0DzZN0iauUtiDtoXiAGVq75TBEe169QVluDybbrfTjoK0DzZN0iauUtiDtoXiAGVq75TBEe169QVluDybbrfTjoK0DzZN0iauUtiDtoXiAGVq75TBEe169QVluDybbrfTjoK0DzZN0iauUtiDtoXiAGVq75TBEe169QVluDybbrfTjoK0DzZN0iauUtiDtoXiAGVq75TBEe169QVluDybbrfTjoK0DzZN0iauUtiDtoXiAGVq75TBEe169QVluDybbrfTjoK0DzZN0iauUtiDtoXiAGVq75TBEe169QVluDybbrfTjoK0DzXN0iauUtiDtoXiAGVq75TBEe169QVluDybbrfTjoK0DzXN0iauUtiDtoXiAGVq75TBEe169QVluDybbrfTjoK0DzXN0iauUtiDtoXiAGVq75TBEe169QVluDybbrfTjoK0DzXN0iauUtiDtoXiAGVq75TBEe169QVluDybbrfTjoK0DzXN0iauUtiDtoXiAGVq75TBEe169QVluDybbrfTjoK0DzXN0iaUtiDtoXiAGVq75TBEe169QVluDybbrfTjoK0DzXN0iaUtiDtoXiAGVq75TBEe169QVluDybbrfTjoK0DzqXN0iaUtiDtoXiAGVq75TBEe169QVluDybbrfTjoK0DzqXN0iaUtiDtoXiAGVq75TBEe169QVluDybbrfTjoK0DzqXN0iaUtiDtoXiAGVq75TBEe169QVluDybbrfTjoK0DzqXN0iaUtiDtoXiAGVq75TBEe169QVluDybbrfTjoK0DzqXN0iaUtiDtoXiAGVq75TBEe160QVluDybbrfTjoK0DzqXN0iaUtiDtoXiAGVq75TBEe160QVluDybbrfTjoK0QVq7AUUtiDtoXiAGVq75CQZPVq75VVlUDybbrfTjoK0UtiDtoXiAGVq75Vq75Vq$



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Scale = 1:63.3
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Plate Offsets	(X, Y): [1:0-2-3,Edge	e], [3:0-3-0,Edge], [4:0	-3-12,0-2-0], [8:0-9-0,0-	2-3], [13:0-5-0,0)-3-4], [17:()-2-9,0-1-8]						
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI TC BC WB Matrix-MSH	0.99 0.75 0.66	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.11 -0.22 0.03	(loc) 26-27 26-27 21	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 MT18HS Weight: 273 lb	GRIP 244/190 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 *E; 2x4 SP No.3		BRACIN TOP CH BOT CH WEBS	G ORD ORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins (6-0-0 max.): 4-8. Rigid ceiling directly applied or 6-0-0 oc bracing. 1 Row at midpt 2-26, 8-23, 9-32							
REACTIONS All bearings 7-7-8. except 1= Mechanical, 28=0-2-5 JOINTS I Row at Inlight 2-26, 8-23, 9-32 (lb) - Max Horiz 1=-235 (LC 10) JOINTS I Brace at Jt(s): 29, 30, 31, 33, 34 Max Uplift All point 100 (lb) or less at joint(s) 1, 18, 19, 28 except 17=-133 (LC 43) JOINTS 1 Brace at Jt(s): 29, 30, 31, 33, 34 Max Grav All reactions 250 (lb) or less at joint(s) 17, 18, 20, 38 except 1=-1041 (LC 49), 19=276 (LC 51), 21=1930 (LC 47), 28=279 (LC 26) I stallation guide.									red cross bracing be with Stabilizer			
FORCES TOP CHORD	(lb) - Max. Co 1-41=-1582/1 4-5=-570/200 10-11=-688/1 16-47=-61/32	omp./Max. Ten All fc 24, 2-41=-1407/151, 5-6=-570/200, 6-7=- 73, 11-12=-713/145, 24, 16-17=-90/366	orces 250 (lb) or less ex 2-42=-1137/142, 42-43= 570/200, 7-8=-570/200, 12-46=-743/96, 13-46=-	cept when show -1115/147, 3-4 8-45=-583/192 764/82, 13-14=	n. 3=-980/169 , 9-45=-596 0/450, 14-1), 3-44=-958/ 3/188, 9-10= 5=-26/370, 7	/187, 4-4 -679/182 15-47=-4	4=-882/ , 9/374,	190,			
BOT CHORD	1-28=-172/13 22-23=-308/9 2-26=-640/21 32-33=-29/10	77, 27-28=-172/1377 0, 21-22=-308/90, 20 2, 4-26=-41/671, 4-30 151, 33-34=-40/1093,	, 26-27=-172/1377, 25-2 -21=-277/90, 19-20=-27)=-629/134, 29-30=-546 13-34=-31/1078, 13-21=	26=-68/849, 25-4 7/90, 18-19=-27 /110, 29-31=-55 =-764/43, 13-21	48=-68/849 77/90, 17-1 58/125, 23-3 =-764/43), 24-48=-68/ 8=-277/90 31=-520/112	/849, 23- 2, 23-32=	24=-68/ -35/105	849, 6,			
NOTES 1) Unbalan 2) Wind: A Exteriore right exp 3) Truss d qualified 4) TCLLA	iced roof live loads h SCE 7-16; Vult=130 (2E) 0-0-0 to 3-7-3, l posed ; end vertical l esigned for wind loa l building designer a: SCE 7-16: Pr=20 0 0	ave been considered mph (3-second gust) \ nterior (1) 3-7-3 to 9-1 eft and right exposed; ds in the plane of the s per ANSI/TPI 1. psf (roof LL - Lum DO	for this design. /asd=103mph; TCDL=6 /0-14, Exterior(2R) 9-10 C-C for members and fo truss only. For studs ex =1 15 Plate DOI =1 15)	.0psf; BCDL=6. -14 to 26-0-0, Ir proces & MWFRS posed to wind (0psf; h=25f Iterior (1) 2 5 for reaction normal to t	it; Cat. II; Ex 6-0-0 to 32-4 ns shown; L he face), see 15 Plate DC	p B; Encl 4-13, Exte umber D e Standar 01 =1 15 ^{),}	osed; M erior(2E OL=1.6 rd Indus	IWFRS) 32-4-1 0 plate o try Gab	(envel 3 to 36 grip D0 le End Cat B ⁻	ope) exterior zon 6-0-0 zone; cantil DL=1.60 Details as applic Fully Exp - Ce=0	e and C-C ever left and able, or consult

Ct=1.10

5) Unbalanced snow loads have been considered for this design.

6) Provide adequate drainage to prevent water ponding.

7) All plates are MT20 plates unless otherwise indicated.

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

The Fabrication Tolerance at joint 8 = 8% 9)

10) Gable studs spaced at 2-0-0 oc.

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

Job	Truss	Truss Type	Qty	Ply	111 Ithica-Roof-51040MM
21020140-A	B03G	Piggyback Base Structural Gable	1	1	Job Reference (optional)

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ID:Pgq02xlU2yl2pNC_3_u5CQzZPia-KuUTiDtOXiAGVq75TBEe169QVluDybrfTjoK0DzZN0i

- 12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 13) Refer to girder(s) for truss to truss connections.
- 14) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 28.
- 15) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1.
- 16) One RT16A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 21 and 28. This connection is for uplift only and does not consider lateral forces.
- 17) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 20, 19, 18, and 17. This connection is for uplift only and does not consider lateral forces.
- 18) 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.
- 19) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job	Truss	Truss Type	Qty	Ply	111 Ithica-Roof-51040MM
21020140-A	C01G	Common	1	1	Job Reference (optional)

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Fri Mar 19 13:35:16 Page: 1 ID:EH7RAMPveLm0S33bQ6NX3XzZPi0-KuUTiDtOXiAGVq75TBEe169e5l39viTfTioK0DzZN0i



Scale = 1:53.7

Plate Offsets (X, Y): [1:0-2-9,0-1-8], [17:0-2-9,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999			
TCDL	10.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.01	36	n/a	n/a			
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH									
BCDL	10.0										Weight: 195 lb	FT = 20%	

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
OTHERS	2x4 SP No.3

REACTIONS All bearings 28-8-0.

(lb) - Max Horiz 1=-238 (LC 10), 33=-238 (LC 10)

Max Uplift All uplift 100 (lb) or less at joint(s) 1, 17, 19, 20, 21, 22, 23, 24, 27, 28, 29, 30, 31, 32, 33, 36

Max Grav All reactions 250 (lb) or less at joint(s) 1, 17, 19, 20, 21, 22, 23, 26, 28, 29, 30, 31, 32, 33, 36 except 24=259 (LC 22), 27=258 (LC 21)

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

NOTES

Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-0-0 to 3-0-0, Exterior(2N) 3-0-0 to 11-4-0, Corner(3R) 11-4-0 to 17-4-0, Exterior(2N) 17-4-0 to 27-0-0, Corner(3E) 27-0-0 to 30-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 3) qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; 4) Ct=1 10
- Unbalanced snow loads have been considered for this design. 5)
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated. 7)
- Gable requires continuous bottom chord bearing. 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and 11) any other members.

One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1, 27, 28, 29, 30, 31, 32, 24, 23, 22, 21, 20, 19, and 17. This connection is 12) for uplift only and does not consider lateral forces.

13) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 33.

This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. 14)

LOAD CASE(S) Standard BRACING TOP CHORD BOT CHORD WEBS

Structural wood sheathing directly applied or 6-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing. 1 Row at midpt 9-26, 8-27, 10-24

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.



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	Ply	111 Ithica-F	Roof-510	40MN	I	
21020140-A	CJ01		Diagonal Hip Girde	r	1	1	Job Refere	nce (opti	ional)		
Carter Component	ts, Sanford, NC, user			Run: 8.42 S D	ec 30 2020 F ID:x	rint: 8.420 CkDGnXBI	S Dec 30 2020 I IQ1bfcqW0DZtT	MiTek Indu dzZPis-Ku	ustries, iUTiDtC	Inc. Fri Mar 19 13 DXiAGVq75TBEe1	:35:16 Page: 1 69bZl2CykgfTjoK0DzZN0i
			<u>-1-10-1</u> 1-10-1	0 <u>2-10-</u> 0 2-10-	<u>14</u> 14		<u>5-7-1</u> 2-8-3	\rightarrow			
						NAILE	D				
						NAILE	D	2x4 II			
		<u></u>			5.66	12	4	-		<u> </u>	
					3	3x5 ≠					
	ې 10-ئ 3			2	T1	V1 N	v2			3-0-1	
		0-4-7	- 1			6		5	_		
		L		3x5 =	2	2x4 II	3>	(5 =			
						NAILE	D				
				I		NAILE	D				
Scale = 1:30.6				<u>2-10-</u> 2-10-	<u>14</u> 14	1	<u>5-7-1</u> 2-8-3	\rightarrow			
Loading TCLL (roof) Snow (Pf) TCDL BCLL	(psf) 20.0 20.0 10.0 0.0*	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 NO IRC2018/TPI2014	CSI TC BC WB Matrix-MP	0.29 Ver 0.11 Ver 0.08 Hor	FL t(LL) t(CT) z(CT)	in (loc) 0.00 6-9 -0.01 5-6 0.00 5	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 244/190
BCDL	10.0		-							Weight: 30 lb	FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3			BF TC BC	RACING OP CHORD	e F	Structural woo except end ver Rigid ceiling di	d sheath ticals. rectly ap	ing dir plied o	ectly applied or	5-7-1 oc purlins,
REACTIONS ((Ib/size) 2=350/0 Max Horiz 2=115 (L Max Uplift 2=-67 (LC Max Gray 2=444 (L)	4-9, (min. 0-1-8), 5= ⁻ C 11) C 12), 5=-38 (LC 12) C 19), 5=292 (LC 19	98/ Mechanical, (min.))-1-8)			MiTek recomr installed durin Installation gu	nends th g truss e ide.	at Sta rectio	oilizers and requ n, in accordance	uired cross bracing be with Stabilizer
FORCES TOP CHORD BOT CHORD	(lb) - Max. Com 2-3=-374/101 2-6=-114/299,	5-6=-30/299	rces 250 (lb) or less exc	cept when shown.							
WEBS NOTES	3-5=-343/52										
 Wind: ASC and right e TCLL: ASC 	CE 7-16; Vult=130mj exposed ; end vertica CE 7-16; Pr=20.0 ps	ph (3-second gust) V al left and right expos f (roof LL: Lum DOL:	asd=103mph; TCDL=6 sed; Lumber DOL=1.60 =1.15 Plate DOL=1.15)	.0psf; BCDL=6.0psf; plate grip DOL=1.60 ; Pf=20.0 psf (Lum D	h=25ft; Ca) OL=1.15 P	t. II; Exp I late DOL:	B; Enclosed; N =1.15); ls=1.0	Rough	(envel Cat B;	Spe) exterior zoi ; Fully Exp.; Ce=	ne; cantilever left =0.9; Cs=1.00;
Ct=1.10 3) Unbalance	ed snow loads have	been considered for	this design.	r 1 00 times flat roof	load of 20	0 pof op c	workenge ner	00000	ont wi	ith other live lea	do
 5) This truss 6) * This trus 	has been designed s has been designed has been designed	for a 10.0 psf bottom d for a live load of 20	chord live load of 12.0 psrd chord live load noncor .0psf on the bottom cho	ord in all areas where	er live loads a rectangl	s. le 3-06-00) tall by 2-00-0	0 wide w	vill fit b	between the bott	iom chord and
any other 7) Refer to g 8) Provide m	mempers. irder(s) for truss to tr nechanical connectio	uss connections. n (by others) of truss	to bearing plate capab	le of withstanding 38	lb uplift at	joint 5.					
9) One RT74 10) This truss	A USP connectors re is designed in accor	commended to conn dance with the 2018	ect truss to bearing wa International Residenti	lls due to UPLIFT at al Code sections R5	jt(s) 2. This 02.11.1 and	connecti d R802.10	ion is for uplift 0.2 and refere	only and nced star	l does ndard	not consider late ANSI/TPI 1.	eral forces.
12) In the LO	AD CASE(S) section	, loads applied to the	face of the truss are n	oted as front (F) or b	ack (B).						

LOAD CASE(S) Standard 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (lb/ft) Vert: 1-4=-60, 5-7=-20 Concentrated Loads (lb) Vert: 6=1 (F=0, B=0)

Job	Truss	Truss Type	Qty	Ply	111 Ithica-Roof-51040MM
21020140-A	D01G	Common Supported Gable	1	1	Job Reference (optional)

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Scale = 1:30.2

5-2-14

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

												-
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	19	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 61 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 OTHERS 2x4 SP No.3

REACTIONS All bearings 12-0-0.

(lb) - Max Horiz 2=-115 (LC 12), 15=-115 (LC 12)

Max Uplift All uplift 100 (lb) or less at joint(s) 2, 8, 10, 11, 13, 14, 15, 19

Max Grav All reactions 250 (lb) or less at joint(s) 2, 8, 10, 12, 14, 15, 19

except 11=266 (LC 22), 13=266 (LC 21)

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

FORCES

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C 2) Corner(3E) -1-4-0 to 1-8-0, Exterior(2N) 1-8-0 to 3-0-0, Corner(3R) 3-0-0 to 9-0-0, Exterior(2N) 9-0-0 to 10-4-0, Corner(3E) 10-4-0 to 13-4-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; 4) Ct=1 10
- 5) Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads. 6)
- All plates are 2x4 MT20 unless otherwise indicated. 7)

8) Gable requires continuous bottom chord bearing.

- 9) Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 10)
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and 11) any other members.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 8, 13, 14, 11, and 10. This connection is for uplift only and does not 12) consider lateral forces
- 13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

BRACING TOP CHORD BOT CHORD

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

9



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

Job	Truss		Truss Type		Qty		Ply	111 Ithica-	Roof-51040MN	1		
21020140-A	D03		Common Girder		1		2	Job Refere	ence (optional)			
Carter Components, Sa	anford, NC, user			Run: 8.42	2 S Dec 30 2	2020 Pi	rint: 8.420 S	Dec 30 2020	MiTek Industries,	Inc. Fri N	/ar 19 13:3	35:16 Page: 1
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					aial	MOL	120	Createl	MELIOO			
			Special	Spe	CIAI	IVIOF	129	Special	M3H29			
			MSF	129								
			4-1-1	0	-	7-10-6	3	ļ	12-0-0		ł	
Scale = 1:35.5			4-1-1	0		3-8-12	2		4-1-10			
Plate Offsets (X, Y):	: [1:0-4-0,0-1-9], [5:0-4-0,0-1-9], [6:0·	-5-0,0-5-8], [7:0-5-0,0-5-	-8]								
Loading TCLL (roof)	(psf) 20.0	Spacing Plate Grip DOL	2-0-0 1.15	CSI TC	0.32	DEF Vert	=L t(LL) -0	in (loc)).05 6-7	l/defl L/d >999 240	MT20	ES	GRIP 244/190
Snow (Pf)	20.0 10.0	Lumber DOL Rep Stress Incr	1.15 NO	BC WB	0.30	Vert	t(CT) -0).09 6-7	>999 180	1		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH	0.71		2(01) 0		nia nia		4. 450 lb	FT - 2004
BCDL	10.0									vveign	IT: 152 ID	FT = 20%
LUMBER	x4 SP No 2				BRACIN		St	ructural woo	od sheathing dir	rectly an	onlied or f	5-1-1 oc purlins
BOT CHORD 22	x8 SP 2400F 2.	0E			BOT CH	ORD	Rię	gid ceiling d	lirectly applied o	or 10-0-0	0 oc brac	ing.
REACTIONS (lb/si	ize) 1=4401/	0-3-8, (min. 0-2-2), 5:	=3659/0-3-8, (min. 0-1-1	3)								
Max Max	Horiz 1=-92 (L	.C 10) (I C 12) 5=-191 (I C 1	3)	- /								
Max	Grav 1=5082	(LC 21), 5=4357 (LC	22)									
FORCES TOP CHORD	(lb) - Max. Co 1-12=-5864/2	mp./Max. Ten All fo 55, 2-12=-5833/266, 2	rces 250 (lb) or less exc 2-3=-5811/297, 3-4=-586	ept when show 62/299, 4-13=-5	n. 6889/269, 5	5-13=-	5914/257					
BOT CHORD WEBS	1-14=-236/49	08, 7-14=-236/4908, 7 3, 3-7=-174/3436	7-15=-116/3382, 6-15=-7	116/3382, 6-16=	-184/4897	', 16-1	17=-184/48	97, 5-17=-1	184/4897			
NOTES		.,										
1) 2-ply truss to t Top chords co	be connected to onnected as foll	ogether with 10d (0.13 ows: 2x4 - 1 row at 0-	9-0 oc.									
Bottom chords Web connecte	s connected as ed as follows: 2	follows: 2x8 - 2 rows x4 - 1 row at 0-9-0 oc.	staggered at 0-7-0 oc.									
 All loads are of distribute only 	considered equation in the second s	ally applied to all plies (F) or (B), unless oth	, except if noted as fron erwise indicated.	t (F) or back (B)) face in the	e LOA	D CASE(S	8) section. P	Ply to ply conne	ctions h	ave been	provided to
 Unbalanced ro Wind: ASCE 7 	oof live loads ha 7-16: Vult=130n	ave been considered to the second gust) V	for this design. /asd=103mph: TCDL=6.	.0psf: BCDL=6.0	0psf: h=25	ft: Cat	. II: Exp B:	Enclosed: I	MWFRS (envel	ope) ext	terior zor	e: cantilever left
and right expo	r_{16} sed ; end vertic	cal left and right expos	sed; Lumber DOL=1.60	plate grip DOL=	=1.60	15 DI	lata DOI -1	15): lc=1 (). Pouch Cat B	· Eully E		0.0: Ce=1.00:
Ct=1.10	7-10, F1-20.0 p	si (1001 EE. Eurit DOE	this design	, FI-20.0 pSI (Et		. 13 FI		1.15), 15–1.0	, Rough Cat B,	, i uliy ∟	хр., Се-с	J. J , US=1.00,
6) Unbalanced s7) This truss has	now loads have been designed	for a 10.0 psf bottom	this design. I chord live load noncon	current with any	y other live	loads	S.					
 This truss has any other mer 	as been designe nbers.	ed for a live load of 20	0.0psf on the bottom chc	ord in all areas w	vhere a rec	tangle	e 3-06-00 t	all by 2-00-	00 wide will fit b	between	the botto	om chord and
9) Une RT/A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 5. This connection is for uplift only and does not consider lateral forces.												
10) This truss is d 11) Use USP MSE	lesigned in acco H29 (With 10d r	ordance with the 2018 nails into Girder & 4-1	International Residentia	al Code section	s R502.11. d at 4-0-0	.1 and oc ma	R802.10.2 x. starting	2 and refere at 2-3-4 fro	enced standard m the left end to	ANSI/TI o 10-3-4	PI 1. I to conne	ect truss(es)
C02 (1 ply 2x6	6 SP) to front fa	ce of bottom chord.	mber	,								
13) Hanger(s) or c	other connection	n device(s) shall be p	rovided sufficient to sup	port concentrate	ed load(s)	1039 I	lb down an	d 94 lb up a	at 0-1-12, and 1	1508 lb (down and	d 58 lb up at
4-3-4, and 150	Standard	ο ib up at δ-3-4 0h	DOLLOTTI CHOTA. THE DESI	gn/selection of s	SUCH CONNO	SCUON	uevice(s)	is the respo	Insidility of othe	15.		

Job	Truss	Truss Type	Qty	Ply	111 Ithica-Roof-51040MM
21020140-A	D03	Common Girder	1	2	Job Reference (optional)

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Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15 1) Uniform Loads (lb/ft)

Vert: 1-3=-60, 3-5=-60, 1-5=-20

Concentrated Loads (lb) Vert: 1=-997 (F), 7=-1225 (F), 14=-1225 (F), 15=-1225 (F), 16=-1225 (F), 17=-1225 (F)

Job	Truss	Truss Type	Qty	Ply	111 Ithica-Roof-51040MM
21020140-A	E01G	Common	1	1	Job Reference (optional)

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Fri Mar 19 13:35:16 Page: 1 ID:AfFBb2RAAy0khND_YXQ?9yzZPj_-KuUTiDtOXiAGVq75TBEe169drl34ylLfTjoK0DzZN0i

5-6-0 -1-4-0 11-0-0 12-4-0 1 - 4 - 05-6-0 5-6-0 1 - 4 - 04x5 = 5 8¹² 4 6 ST3 1-0-1 3 ST2 ST2 7 23 22 গা' S 2 8



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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999			
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	19	n/a	n/a			
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH									
BCDL	10.0										Weight: 55 lb	FT = 20%	

LUMBER

Scale = 1:28.7

4-10-14

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 OTHERS 2x4 SP No.3

REACTIONS All bearings 11-0-0.

(lb) - Max Horiz 2=107 (LC 13), 15=107 (LC 13)

Max Uplift All uplift 100 (lb) or less at joint(s) 2, 8, 10, 11, 13, 14, 15, 19

Max Grav All reactions 250 (lb) or less at joint(s) 2, 8, 10, 12, 14, 15, 19

except 11=272 (LC 22), 13=272 (LC 21)

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

FORCES

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C 2) Corner(3E) -1-4-0 to 1-6-0, Exterior(2N) 1-6-0 to 2-6-0, Corner(3R) 2-6-0 to 8-6-0, Exterior(2N) 8-6-0 to 9-4-0, Corner(3E) 9-4-0 to 12-4-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; 4) Ct=1 10
- 5) Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads. 6)
- All plates are 2x4 MT20 unless otherwise indicated. 7)

8) Gable requires continuous bottom chord bearing.

- 9) Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 10)
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and 11) any other members.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 8, 13, 14, 11, and 10. This connection is for uplift only and does not 12) consider lateral forces
- 13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

BRACING TOP CHORD BOT CHORD

11-0-0

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

9



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

Job	Truss Truss Type							111 Ithica-Roof-51040MM						
21020140-A	E03		Common Girder		1	2		Job Re	ference	e (opti	onal)			
Carter Components, Sanford, N	C, user			Run: 8.42 S	Dec 30 20)20 Print:	8.420 S	Dec 30 20	020 MiT	ek Indu ZPil -K	ustries,	Inc. Fri	Mar 19 13: /ɑ75TBEe1	35:16 Page: 1
				560				1/	1 0 0	2112-13	uondi		12 4 0	
			1	5-6-0		1		5	5-6-0				<u>12-4-0</u> 1-4-0	7
			I			1 4×5 =						I		Ι
						4x5 =								
		_		8 ¹²										
				71		w1		\searrow						
4	-0-7							I	2					
10-1	4									\searrow				
4						Ц					\searrow		_	
			1				B1				\rightarrow		3	
		0-4-7		11		5		12		13			$\langle $	4
						5		12		10				4
			4x8=			3X6 II						4x8 =		7
					NAL		N				D			
			NAILED	NAILED	INAI	LED	INZ	AILED		NAILE	U			
												One R	Г7А	
			One RT/A			1						I		
			·	5-6-0				11	1-0-0				,	
Scale = 1:33.1	0.0.4.01	[2:0 4 0 0 4 0]		5-0-0					0-0-0					
	-0,0-1-9],	, [3:0-4-0,0-1-9]												
Loading TCLL (roof)	(psf) 20.0	Spacing Plate Grip DOL	2-0-0 1.15	CSI TC	0.24	DEFL Vert(LL) (in (l).01	oc) l/ 5-7 >	/defl •999	L/d 240	PLAT	ES	GRIP 244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.06	Vert(CT) -C	0.01	5-7 >	999	180	11120		211,100
BCLL	10.0 0.0*	Rep Stress Incr Code	NO IRC2018/TPI2014	WB Matrix-MSH	0.07	Horz(C	r) (0.00	3	n/a	n/a			
BCDL	10.0							_				Weig	nt: 122 lb	FT = 20%
LUMBER				F	BRACIN	3								
TOP CHORD 2x4 SP N	lo.2			1	OP CHO	DRD	Sti	ructural v	wood s	heathi	ing dir	ectly a	oplied or	6-0-0 oc purlins.
WEBS 2x4 SP N	400F 2.0 lo.3			E		JRD	Rig	gia cellin	ig allec	uy ap	plied C	51 10-0-	0 oc brac	ung.
REACTIONS (lb/size) Max Horiz Max Uplift	1=495/0- 1=-99 (L0 1=-241 (I	3-8, (min. 0-1-8), 3=5 C 10) C 12) 3=-261 (I C 1	591/0-3-8, (min. 0-1-8)											
Max Grav	1=596 (L	C 19), 3=690 (LC 20)											
FORCES (lb) - M TOP CHORD 1-2=-6	/lax. Con	np./Max. Ten All for 2-3=-692/300	rces 250 (lb) or less exc	ept when shown.										
BOT CHORD 1-10=	-180/544	, 10-11=-180/544, 5-	11=-180/544, 5-12=-180	0/544, 12-13=-180	/544, 3-1	3=-180/5	544							
WEBS 2-5=-2 NOTES	230/447													
1) 2-ply truss to be conr	ected to	gether with 10d (0.13	1"x3") nails as follows:											
Bottom chords conne	cted as f	ollows: 2x8 - 2 rows	staggered at 0-9-0 oc.											
2) All loads are consider	llows: 2x ed equa	4 - 1 row at 0-9-0 oc. Ily applied to all plies	, except if noted as fron	t (F) or back (B) fa	ce in the	LOAD C	CASE(S	S) sectior	n. Ply to	o ply c	connec	ctions h	ave beer	n provided to
distribute only loads r 3) Unbalanced roof live	noted as loads ha	(F) or (B), unless oth	erwise indicated.											
4) Wind: ASCE 7-16; Vu	ilt=130m	ph (3-second gust) V	asd=103mph; TCDL=6.	.0psf; BCDL=6.0ps	f; h=25ft	; Cat. II;	Exp B;	; Enclose	ed; MW	FRS (envel	ope) ex	terior zor	ne; cantilever left
5) TCLL: ASCE 7-16; Pi	=20.0 ps	of (roof LL: Lum DOL:	=1.15 Plate DOL=1.15);	Pf=20.0 psf (Lum	DOL=1.	15 Plate	DOL=1	1.15); ls=	=1.0; R	ough (Cat B;	Fully E	xp.; Ce=	0.9; Cs=1.00;
Ct=1.10 6) Unbalanced snow loa	ids have	been considered for	this desian.											
7) This truss has been of	lesigned	for greater of min roo	of live load of 12.0 psf o	r 1.00 times flat roo	of load of	f 20.0 ps	f on ov	rerhangs	non-co	oncurr	ent wi	th othe	r live load	ls.
9) * This truss has been	designe	d for a live load of 20	.0psf on the bottom cho	ord in all areas whe	re a rect	angle 3-	06-00 t	tall by 2-0	00-00 v	wide w	/ill fit b	etweer	the bott	om chord and
any other members. 10) One RT7A USP conn	ectors re	commended to conn	ect truss to bearing wal	Is due to UPLIFT a	atjt(s)1a	and 3. Th	nis coni	nection is	s for ur	olift on	ly and	l does i	not consid	der lateral
forces.	l in acco	rdance with the 2019	International Residenti	al Code sections P	502 11	and Do	02 10 1	2 and rof	ferenco	nd etar	ndard		РI 1	
12) "NAILED" indicates 3	-10d (0.1	48"x3") or 3-12d (0.1	48"x3.25") toe-nails pe	r NDS guidlines.	JUZ.11.		02.10.4		ierence	Ju sidi	ualu	ANOI/1		
LOAD CASE(S) Stand	lard													

Vert: 1-2=-60, 2-4=-60, 1-3=-20

Job	Truss	Truss Type	Qty	Ply	111 Ithica-Roof-51040MM
21020140-A	E03	Common Girder	1	2	Job Reference (optional)

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Concentrated Loads (lb) Vert: 5=-28 (B), 10=-28 (B), 11=-28 (B), 12=-28 (B), 13=-28 (B)

Job	Truss	Truss Type	Qty	Ply	111 Ithica-Roof-51040MM
21020140-A	F01G	Common	1	1	Job Reference (optional)

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Scale = 1:42.5

Plate Offsets (X, Y): [2:0-2-9,0-1-8], [12:0-2-9,0-1-8], [16:0-2-8,0-1-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	28	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 118 lb	FT = 20%

LUMBER

TOP CHORD2x4 SP No.2BOT CHORD2x4 SP No.2OTHERS2x4 SP No.3

REACTIONS All bearings 20-0-0.

(lb) - Max Horiz 2=-177 (LC 12), 24=-177 (LC 12)

Max Uplift All uplift 100 (lb) or less at joint(s) 2, 14, 15, 17, 18, 20, 21, 22, 23, 24

Max Grav All reactions 250 (lb) or less at joint(s) 2, 12, 14, 15, 17, 19, 21, 22, 23, 24, 28 except 18=260 (LC 22), 20=260 (LC 21)

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

FORCES

NOTES

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

2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -1-4-0 to 1-8-0, Exterior(2N) 1-8-0 to 7-0-0, Corner(3R) 7-0-0 to 13-0-0, Exterior(2N) 13-0-0 to 18-4-0, Corner(3E) 18-4-0 to 21-4-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; 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 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.

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

8) Gable requires continuous bottom chord bearing.

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.

11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

12) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 20, 21, 22, 23, 18, 17, 15, and 14. This connection is for uplift only and does not consider lateral forces.

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

LOAD CASE(S) Standard

BRACING TOP CHORD BOT CHORD

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.



8) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.

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.



One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6 and 2. This connection is for uplift only and does not consider lateral

forces.

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

- 12) Use USP THD26 (With 18-16d nails into Girder & 12-10d x 1-1/2 nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 4-1-4 from the left end to 8-1-4 to connect truss(es) A01 (1 ply 2x6 SP), A02 (1 ply 2x4 SP), A03 (1 ply 2x4 SP) to back face of bottom chord.
- 13) Use USP JUS26 (With 4-10d nails into Girder & 4-10d nails into Truss) or equivalent at 10-1-4 from the left end to connect truss(es) A04G (1 ply 2x4 SP) to back face of bottom chord.

Job	Truss	Truss Type	Qty	Ply	111 Ithica-Roof-51040MM
21020140-A	F03	Common Girder	1	2	Job Reference (optional)

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ID:t7vqq5zmpUZUz8aR7mCJxDzZPil-shw5VtsmmO2PthYvvUjPUudPjLhMDA0VE33nTnzZN0jinderical and the standard stress of t14) Use USP MSH29 (With 10d nails into Girder & 4-10d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 12-1-4 from the left end to 18-1-4 to connect truss(es) A04 (1 ply 2x4 SP), A05 (1 ply 2x4 SP) to back face of bottom chord.

15) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (lb/ft) 1)

Vert: 1-4=-60, 4-6=-60, 2-6=-20

Concentrated Loads (lb)

Vert: 8=395 (B), 9=-372 (B), 15=-718 (B), 16=-515 (B), 17=-508 (B), 18=-395 (B), 19=-395 (B), 20=-283 (B)



Scale = 1:22.6				<u>}</u>		4-0-8			\rightarrow			
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	-0.02	4-7	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.03	4-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 16 lb	FT = 20%

LUNDER

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 REACTIONS (lb/size) 2=253/0-3-8, (min. 0-1-8), 3=98/ Mechanical, (min. 0-1-8),

4=47/ Mechanical, (min. 0-1-8) Max Horiz 2=125 (LC 14)

Max Uplift 2=-25 (LC 14), 3=-61 (LC 14)

Max Grav 2=362 (LC 21), 3=165 (LC 21), 4=73 (LC 7)

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

FORCES NOTES

 Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior 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; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; 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 12.0 psf or 1.00 times flat roof load of 20.0 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.

6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 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 61 lb uplift at joint 3.

9) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.

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.

LOAD CASE(S) Standard

BRACING TOP CHORD BOT CHORD

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

Job	Truss	Truss Type	Qty	Ply	111 Ithica-Roof-51040MM
21020140-A	J02	Jack-Open	2	1	Job Reference (optional)

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Scale = 1:20.3

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

			-										
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	0.00	4-7	>999	240	MT20	244/190	
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	4-7	>999	180			
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a			
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP									
BCDL	10.0										Weight: 9 lb	FT = 20%	

LUMBER

TOP CHORD 2x4 SP No.2 BOT CHORD

2x4 SP No.2 **REACTIONS** (lb/size) 2=185/0-3-8, (min. 0-1-8), 3=37/ Mechanical, (min. 0-1-8),

4=13/ Mechanical, (min. 0-1-8) Max Horiz 2=75 (LC 14)

Max Uplift 2=-36 (LC 14), 3=-23 (LC 14)

Max Grav 2=277 (LC 21), 3=56 (LC 21), 4=31 (LC 7)

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

NOTES

Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C 1) 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; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

3) Unbalanced snow loads have been considered for this design.

This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads. 4)

This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 5)

6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

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

Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 3. 8)

One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces. 9)

This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. 10)

LOAD CASE(S) Standard

BRACING TOP CHORD BOT CHORD

1-11-7

Structural wood sheathing directly applied or 1-11-7 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

Job	Truss	Truss Type	Qty	Ply	111 Ithica-Roof-51040MM
21020140-A	PB01	Piggyback	10	1	Job Reference (optional)

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2x4 II

4-5-12

Installation guide.

5

2x4 =

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer

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

2x4 =

BRACING

TOP CHORD

BOT CHORD

Scale - 1.21

Scale = 1:21					1						1		
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999			
TCDL	10.0	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	4	n/a	n/a			
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP									
BCDL	10.0										Weight: 19 lb	FT = 20%	

LUMBER

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 OTHERS 2x4 SP No.3

REACTIONS All bearings 4-5-12.

(lb) - Max Horiz 2=-43 (LC 12), 7=-43 (LC 12)

Max Uplift All uplift 100 (lb) or less at joint(s) 2, 4, 6, 7, 11

Max Grav All reactions 250 (lb) or less at joint(s) 2, 4, 6, 7, 11

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

FORCES NOTES

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

2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; 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 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.

Gable requires continuous bottom chord bearing.

8) Gable studs spaced at 4-0-0 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

11) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 4, and 6. This connection is for uplift only and does not consider lateral forces.

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.

13) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

Job	Truss	Truss Type	Qty	Ply	111 Ithica-Roof-51040MM
21020140-A	PB01G	Piggyback	2	1	Job Reference (optional)

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2x4 II

4-5-12

Installation guide.

5

2x4 =

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer

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

2x4 =

BRACING

TOP CHORD

BOT CHORD

Scale = 1:21					1						1		
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999			
TCDL	10.0	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	4	n/a	n/a			
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP									
BCDL	10.0										Weight: 19 lb	FT = 20%	

LUMBER

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 2x4 SP No.3 OTHERS

REACTIONS All bearings 4-5-12.

(lb) - Max Horiz 2=-43 (LC 12), 7=-43 (LC 12)

Max Uplift All uplift 100 (lb) or less at joint(s) 2, 4, 6, 7, 11

Max Grav All reactions 250 (lb) or less at joint(s) 2, 4, 6, 7, 11

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

FORCES NOTES

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

Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C 2) Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) 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.

TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; 4) Ct=1.10

5) Unbalanced snow loads have been considered for this design.

This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads. 6)

Gable requires continuous bottom chord bearing. 7)

8) Gable studs spaced at 2-0-0 oc.

This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 9)

10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

11) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 4, and 6. This connection is for uplift only and does not consider lateral forces.

This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. 12)

13) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) All plates are 2x4 MT20 unless otherwise indicated
- 7) Gable requires continuous bottom chord bearing.
- 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 3-06-00 tall by 2-00-00 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) 1, 18, 19, 20, 21, 16, 15, 13, 12.
- 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.



8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (it=lb) 9=147, 6=142.

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



NOTES

Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-6 to 3-0-6, Interior (1) 3-0-6 to 3-6-8, Exterior(2R) 3-6-8 to 9-7-4, Exterior(2E) 9-7-4 to 12-7-4 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

3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

4) Unbalanced snow loads have been considered for this design

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 3-06-00 tall by 2-00-00 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, 5 except (jt=lb) 8=113, 6=116.

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	Ply	111 Ithica-Roof-51040MM
21020140-A	V04	Valley	1	1	Job Reference (optional)

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Structural wood sheathing directly applied or 9-0-4 oc purlins.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer

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

Installation guide.







9-0-4

3x5 🖌

BRACING

TOP CHORD

BOT CHORD

Scale = 1:25.2

			1									-	
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.35	Vert(TL)	n/a	-	n/a	999			
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horiz(TL)	0.00	4	n/a	n/a			
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MSH									
BCDL	10.0										Weight: 32 lb	FT = 20%	

LUMBER

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 2x4 SP No.3 OTHERS

REACTIONS (lb/size) 1=41/9-0-4, (min. 0-1-8), 3=41/9-0-4, (min. 0-1-8), 4=640/9-0-4, (min. 0-1-8) Max Horiz 1=-67 (LC 10)

Max Uplift 1=-32 (LC 21), 3=-32 (LC 20), 4=-70 (LC 14) Max Grav 1=120 (LC 20), 3=120 (LC 21), 4=684 (LC 20)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-110/338, 2-3=-86/338

WEBS 2-4=-519/204

NOTES

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

2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-6 to 3-0-6, Exterior(2R) 3-0-6 to 6-0-10, Exterior(2E) 6-0-10 to 9-0-10 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

TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; 3) Ct=1.10

4) Unbalanced snow loads have been considered for this design

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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members

Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 32 lb uplift at joint 1, 32 lb uplift at joint 3 and 70 lb uplift at joint 4. 8)

This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. 9)

Job	Truss	Truss Type	Qty	Ply	111 Ithica-Roof-51040MM
21020140-A	V05	Valley	1	1	Job Reference (optional)

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5-0-4

0----

Scale = 1:20.9					1						1		
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.0	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.1	I Vert(TL)	n/a	-	n/a	999			
TCDL	10.0	Rep Stress Incr	YES	WB	0.0	Horiz(TL)	0.00	4	n/a	n/a			
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP									
BCDL	10.0										Weight: 16 lb	FT = 20%	

LUMBER

TOP CHORD2x4 SP No.2BOT CHORD2x4 SP No.2OTHERS2x4 SP No.3

REACTIONS (lb/size) 1=52/5-0-4, (min. 0-1-8), 3=52/5-0-4, (min. 0-1-8), 4=299/5-0-4, (min. 0-1-8)

Max Horiz 1=36 (LC 11)

Max Uplift 1=-5 (LC 14), 3=-11 (LC 15), 4=-26 (LC 14)

Max Grav 1=88 (LC 20), 3=88 (LC 21), 4=301 (LC 20)

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

NOTES

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.

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 3-06-00 tall by 2-00-00 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 5 lb uplift at joint 1, 11 lb uplift at joint 3 and 26 lb uplift at joint 4.

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.

LOAD CASE(S) Standard

BRACING TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 5-0-4 oc purlins. Rigid ceiling directly applied or 6-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

Job	Truss	Truss Type	Qty	Ply	111 Ithica-Roof-51040MM
21020140-A	V06	Valley	1	1	Job Reference (optional)

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2





2x4 II

3x5 🖌

3x5 👟

Structural wood sheathing directly applied or 8-2-4 oc purlins.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer

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

Installation guide.

GRIP

244/190

FT = 20%

Scale = 1:24.3		2									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	n/a	-	n/a	999	MT20
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.32	Vert(TL)	n/a	-	n/a	999	
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horiz(TL)	0.00	4	n/a	n/a	
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP							
BCDL	10.0										Weight: 28 lb

LUMBER	L	JM	BE	R
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Loadi

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
OTHERS	2x4 SP No.3

REACTIONS (lb/size)	1=36/8-2-4, (min. 0-1-8), 3=36/8-2-4, (min. 0-1-8), 4=584/8-2-4,
	(min. 0-1-8)
Max Horiz	$1 = -60 (I \oplus 10)$

Max Uplift 1=-29 (LC 21), 3=-29 (LC 20), 4=-67 (LC 14) Max Grav 1=105 (LC 20), 3=105 (LC 21), 4=618 (LC 21)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-98/299, 2-3=-98/299 WEBS 2-4=-451/195

NOTES

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

2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-6 to 3-0-6, Exterior(2R) 3-0-6 to 5-2-10, Exterior(2E) 5-2-10 to 8-2-10 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

BRACING TOP CHORD

BOT CHORD

4) Unbalanced snow loads have been considered for this design

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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members

Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 1, 29 lb uplift at joint 3 and 67 lb uplift at joint 4. 8)

This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. 9)

Job	Truss	Truss Type	Qty	Ply	111 Ithica-Roof-51040MM
21020140-A	V07	Valley	1	1	Job Reference (optional)

-2-0

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4-2-4

Scale = 1:20

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.07	Vert(TL)	n/a	-	n/a	999			
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	4	n/a	n/a			
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-MP									
BCDL	10.0										Weight: 13 lb	FT = 20%	

LUMBER

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 2x4 SP No.3 OTHERS

REACTIONS (lb/size) 1=60/4-2-4, (min. 0-1-8), 3=35/4-2-4, (min. 0-1-8), 4=204/4-2-4, (min. 0-1-8)

V

1-1-5

0-0-#

Max Horiz 1=29 (LC 11)

Max Uplift 1=-4 (LC 14), 3=-11 (LC 15), 4=-24 (LC 14)

Max Grav 1=78 (LC 20), 3=67 (LC 21), 4=221 (LC 20)

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

NOTES

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

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C 2) Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.

5) Gable requires continuous bottom chord bearing.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 6)
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and 7) any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 4 lb uplift at joint 1, 11 lb uplift at joint 3 and 24 lb uplift at joint 4.
- 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.

LOAD CASE(S) Standard

BRACING TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 4-2-4 oc purlins. Rigid ceiling directly applied or 6-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

Job	Truss		Truss Type		Qty	P	ly	111 Ith	nica-Ro	of-510	40MM			
21020140-A	V08		Valley		1	1		Job Re	eferenc	e (opti	onal)			
Carter Components, Sanford, N	IC, user			Run: 8.42	S Dec 30 20	20 Print	: 8.420 S	Dec 30 2	2020 Mil	Fek Indu	ustries,	Inc. Fri Mar 19 13		ge: 1
					ID.	rpcoso	vvxmomu	QIGOUOVI	ODZZP	nu-snwa	ovisnin	9-11-2		ZNUJ
			1-1	0-0			9-5-1	15						
			1-1	0-0			7-7-1	15				11		
												0-5-3		
			8	12 ^{4x5} =										
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Scale = 1:32.9						9-1	11-2							
Loading	(psf)	Spacing	2-0-0	CSI		DEFL		in ((loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof) Snow (Pf)	20.0 20.0	Plate Grip DOL Lumber DOL	1.15 1.15	TC BC	0.25 0.12	Vert(Ll Vert(Tl	L) L)	n/a n/a	-	n/a n/a	999 999	MT20	244/190	
TCDL	10.0 0.0*	Rep Stress Incr	YES	WB Matrix-SH	0.10	Horiz(TĹ) (0.00	4	n/a	n/a			
BCDL	10.0	Code		Wathx-Off								Weight: 48 lb	FT = 20%	
					BRACING	2								
TOP CHORD 2x4 SP N	lo.2				TOP CHC	RD	St	ructural	wood s	sheathi	ing dir	ectly applied or	6-0-0 oc purlins,	
WEBS 2x4 SP N	10.2 10.3				вот сно	RD	ex Ri	cept en gid ceili	a vertic ng dire	ais. ctly ap	plied c	or 10-0-0 oc bra	cing.	
OTHERS 2x4 SP N	lo.3						M	liTek red stalled o	comme durina t	nds tha	at Stat	pilizers and req	uired cross bracing e with Stabilizer	be
(lb) - Max Horiz	9-11-2. 7=-169 (L	.C 12)					In	stallatio	on guide	а об о Э.	Toodor			
Max Uplift	All uplift 1 15)	00 (lb) or less at joir	nt(s) 4, 6, 7 except 5=-1	35 (LC										
Max Grav	All reactic 21), 6=25	ons 250 (lb) or less a 9 (LC 21)	at joint(s) 4, 7 except 5=	392 (LC										
FORCES (lb) - M	Max. Com	np./Max. Ten All fo	rces 250 (lb) or less exc	cept when shown										
NOTES 3-5=-2	295/216													
1) Unbalanced roof live 2) Wind: ASCE 7-16: V	loads hav	ve been considered t	for this design. /asd=103mph [:] TCDI =6	0psf: BCDI = 6.0	psf h=25ft	Cat II	· Fxn B·	- Enclos	ed· M\A	VFRS ((envel	ope) exterior zo	ine and C-C	
Exterior(2E) 0-1-12 to	0 1-10-0,	Exterior(2R) 1-10-0	to 4-10-0, Interior (1) 4-	10-0 to 6-5-12, E	xterior(2E)	6-5-12	to 9-5-1	12 zone	; cantile	ever lef	ft and	right exposed ;	end vertical left	
 TCLL: ASCE 7-16; Pr 	r=20.0 ps	f (roof LL: Lum DOL	=1.15 Plate DOL=1.15)	; Pf=20.0 psf (Lui	m DOL=1.1	5 Plate	e DOL=1	1.15); Is	=1.0; R	ough (Cat B;	Fully Exp.; Ce	=0.9; Cs=1.00;	
Ct=1.10 4) Unbalanced snow loa	ads have	been considered for	this design.											
5) Gable requires contin6) This truss has been d	uous bot	tom chord bearing. for a 10.0 psf bottom	- n chord live load noncor	current with any	other live li	oads								
 7) * This truss has been 	designed	d for a live load of 20).0psf on the bottom cho	ord in all areas wi	here a rect	angle 3	3-06-00 t	tall by 2	-00-00	wide w	vill fit b	etween the bot	tom chord and	

7) any other members.

8)

Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 4, 6 except (jt=lb) 5=135. This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. 9)

Job	Truss	Truss Type		Qty	Ply	111 Ithica-Roof-51040MM
21020140-A	V09	Valley		1	1	Job Reference (optional)
Carter Components, Sanford, N	IC, user		Run: 8.42 S D	ec 30 2020 P	rint: 8.420 S	Dec 30 2020 MiTek Industries, Inc. Fri Mar 19 13:35:16 Page: 1
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		1	i			7-11-2
			, 1-10-0		7	7-5-15
		1	1-10-0 1		Ę	5-7-15
		I	I			 0-5-3



2x4 II

2x4 II

except end verticals

Installation guide.

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer

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

7-11-2



Scale = 1:28.6

			1	-							1		
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.09	Vert(TL)	n/a	-	n/a	999			
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	4	n/a	n/a			
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-P									
BCDL	10.0										Weight: 35 lb	FT = 20%	

BRACING

TOP CHORD

BOT CHORD

L	UN	ſВ	ER
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TOP CHORD2x4 SP No.2BOT CHORD2x4 SP No.2WEBS2x4 SP No.3OTHERS2x4 SP No.3

REACTIONS All bearings 7-11-2.

(Ib) - Max Horiz 7=-121 (LC 10)

Max Uplift All uplift 100 (lb) or less at joint(s) 4, 6, 7 except 5=-127 (LC

15)

Max Grav All reactions 250 (lb) or less at joint(s) 4, 6, 7 except 5=360 (LC

21)

4-1-0

FORCES (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. WEBS 3-5=-290/240

WEBS NOTES

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

2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 1-10-0, Exterior(2R) 1-10-0 to 4-5-12, Exterior(2E) 4-5-12 to 7-5-12 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

3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

4) Unbalanced snow loads have been considered for this design.

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 3-06-00 tall by 2-00-00 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) 7, 4, 6 except (jt=lb) 5=126.

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	Ply	111 Ithica-Roof-51040MM
21020140-A	V10	Valley	1	1	Job Reference (optional)

1-10-0

1-10-0

Carter Components, Sanford, NC, user

2-9-0

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> 5-5-15 3-7-15

5-11-2

0-5-3





5-11-2

Scale = 1:24.2

				-									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999			
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	3	n/a	n/a			
BCLL	0.0*	Code	IRC2018/TPI2014	Matrix-P									
BCDL	10.0										Weight: 24 lb	FT = 20%	

LUMBER		BRACING	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 5-11-8 oc purlins,
BOT CHORD	2x4 SP No.2		except end verticals.
WEBS	2x4 SP No.3	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS	2x4 SP No.3		MiTek recommends that Stabilizers and required cross bracing be
REACTIONS (lb/size) 3=139/5-11-2 (min 0-1-8) 4=235/5-11-2 (min 0-1-8)		installed during truss erection, in accordance with Stabilizer
	5=53/5-11-2, (min. 0-1-8)		Installation guide.
Ν	Max Horiz 5=-73 (LC 10)		
Ν	Max Uplift 3=-21 (LC 15), 5=-28 (LC 14)		
Ν	Max Grav 3=163 (LC 21), 4=252 (LC 21), 5=82 (LC 20)		

FORCES

NOTES

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

Wind: ASCE 7-16; Vult=130mph (3-second gust) Vase103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 1-10-0, Exterior(2R) 1-10-0 to 2-5-12, Exterior(2E) 2-5-12 to 5-5-12 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

3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

4) Unbalanced snow loads have been considered for this design.

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.

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

7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 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 28 lb uplift at joint 5 and 21 lb uplift at joint 3.

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	Ply	111 Ithica-Roof-51040MM
21020140-A	V11	Valley	1	1	Job Reference (optional)

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4x5 =





2x4 🧔



Installation guide.

2x4 。

Structural wood sheathing directly applied or 3-11-2 oc purlins.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer

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

Scale = 1:23.7

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.06	Vert(TL)	n/a	-	n/a	999			
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	3	n/a	n/a			
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-MP									
BCDL	10.0										Weight: 13 lb	FT = 20%	

BRACING

TOP CHORD

BOT CHORD

LUMBER

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 2x4 SP No.3 WFBS

REACTIONS All bearings 3-11-8.

(lb) - Max Horiz 1=28 (LC 11)

Max Uplift All uplift 100 (lb) or less at joint(s) 1, 3, 4, 9

Max Grav All reactions 250 (lb) or less at joint(s) 1 except 4=298 (LC 21)

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

FORCES NOTES

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

Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C 2) 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

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

TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; 4) Ct=1.10

5) Unbalanced snow loads have been considered for this design.

Gable requires continuous bottom chord bearing. 6)

Gable studs spaced at 4-0-0 oc 7)

This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 8)

9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members

Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 1, 1 lb uplift at joint 3, 21 lb uplift at joint 4 and 1 lb uplift at joint 10)

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.