Job	Truss	Truss Type	Qty	Ply	Wiggins Resd (Future Hobby House)-Roof
Q-2201190-1	CAP1	Piggyback	2	1	Job Reference (optional)

Run: 8.43 S Feb 3 2021 Print: 8.430 S Feb 3 2021 MiTek Industries, Inc. Wed May 25 09:26:34 ID:G7AWPuzr8Z2VucE06McZ4czD0NB-BlyZcW7d8FOh9TX7GcnE19m?wdZ9APRk?G B5xzD0Hp

2-7-11 4-7-8 0 - 7 - 131-11-13 1-11-13 0 - 7 - 13

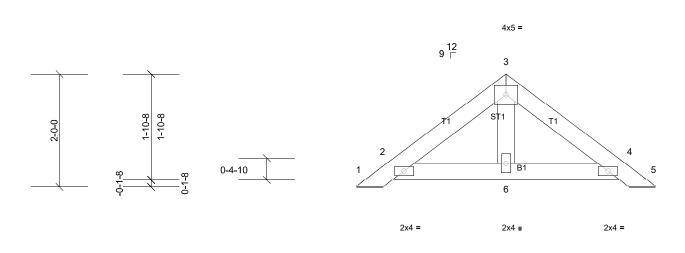
3-11-11

Installation guide.

Structural wood sheathing directly applied or 5-4-0 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.



Scale = 1:20.4

FORCES

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	0.03	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 18 lb	FT = 20%

BOT CHORD

LUMBER **BRACING** TOP CHORD 2x4 SP No.1 TOP CHORD

2x4 SP No.1 **BOT CHORD** 2x4 SP No.3 **OTHERS**

REACTIONS All bearings 3-11-11.

(lb) - Max Horiz 2=-30 (LC 9), 7=-30 (LC 9)

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

NOTES

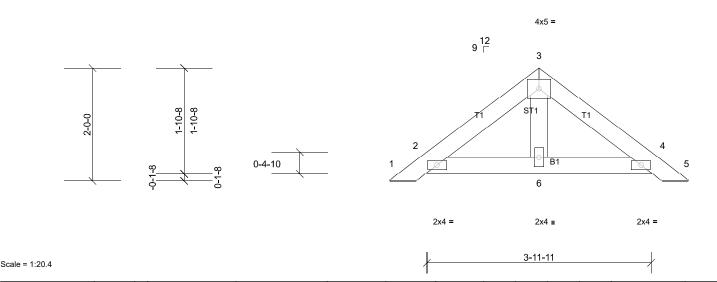
- Unbalanced roof live loads have been considered for this design. Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=20ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) 2) and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc. 5)
- * 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 6) any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4, 2, 4.
- 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Wiggins Resd (Future Hobby House)-Roof
Q-2201190-1	CAP2	Piggyback	17	1	Job Reference (optional)

Run: 8.43 S Feb 3 2021 Print: 8.430 S Feb 3 2021 MiTek Industries, Inc. Wed May 25 09:26:35 Page: 1 ID:G7AWPuzr8Z2VucE06McZ4czD0NB-gUWxps8FvZWYnd6JgJITZMJAg0vOvshuEwjleNzD0Ho





DEFL

Vert(LL)

Vert(CT)

Horz(CT)

0.03

0.04

0.01

BRACING

TOP CHORD

BOT CHORD

in

n/a

n/a

0.00

(loc)

4

Installation guide.

I/defl

n/a 999

n/a

n/a n/a

L/d

999

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

PLATES

Weight: 18 lb

MT20

Structural wood sheathing directly applied or 5-4-0 oc purlins.

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

GRIP

244/190

FT = 20%

BCLL BCDL

FORCES

Loading

TCDL

TCLL (roof)

LUMBER TOP CHORD 2x4 SP No.1 2x4 SP No.1 **BOT CHORD** 2x4 SP No.3 **OTHERS**

REACTIONS All bearings 3-11-11.

(lb) - Max Horiz 2=-30 (LC 9), 7=-30 (LC 9)

(psf)

20.0

10.0

0.0

10.0

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

Spacing

Code

Plate Grip DOL

Rep Stress Incr

Lumber DOL

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.

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph, TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=20ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) 2) and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc. 5)
- * 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 6) any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4, 2, 4.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

2-0-0

1.15 TC

1.15 BC

YES WB

IRC2015/TPI2014

CSI

Matrix-MP

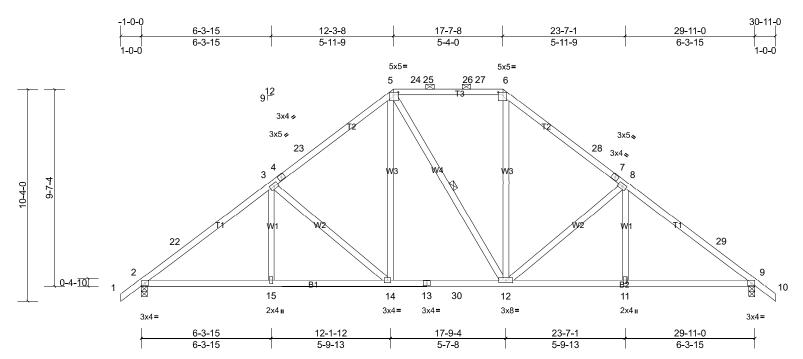
LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Wiggins Resd (Future Hobby House)-Roof				
Q-2201190-1	T1	Piggyback Base	17	1	Job Reference (optional)				

Run: 8.43 S Feb 3 2021 Print: 8.430 S Feb 3 2021 MiTek Industries, Inc. Wed May 25 09:26:35

ID:HsZ4maEfhwFBxHhp3a4LbfzD0S?-aUWxps8FvZWYnd6JaJITZMJ5d0aBvl7uEwileNzD0Ho

Page: 1



Scale = 1:56.2

Plate Offsets (X, Y): [5:0-2-12,0-1-12], [6:0-2-12,0-1-12]

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	0.35	Vert(LL)	-0.07	12-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.13	12-14	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.05	9	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 180 lb	FT = 20%

LUMBER TOP CHORD 2x4 SP No.1

BOT CHORD 2x4 SP No.1 2x4 SP No.3 **WEBS**

REACTIONS (lb/size) 2=1257/0-3-8, (min. 0-2-0), 9=1257/0-3-8, (min. 0-2-0)

Max Horiz 2=168 (LC 10)

Max Uplift 2=-137 (LC 11), 9=-137 (LC 11)

BRACING

BOT CHORD

WEBS

TOP CHORD

except

Installation guide.

2-0-0 oc purlins (5-11-11 max.): 5-6.

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

1 Row at midpt 5-12

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

Structural wood sheathing directly applied or 4-6-10 oc purlins,

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

TOP CHORD 2-22=-1716/149, 3-22=-1623/180, 3-4=-1308/183, 4-23=-1291/188, 5-23=-1188/227, 5-24=-942/226, 24-25=-942/226,

25-26=-942/226, 26-27=-942/226, 6-27=-942/226, 6-28=-1189/227, 7-28=-1291/188, 7-8=-1309/183, 8-29=-1622/180,

9-29=-1715/149

BOT CHORD 2-15=-22/1336, 14-15=-22/1336, 13-14=0/979, 13-30=0/979, 12-30=0/979, 11-12=-22/1298, 9-11=-22/1298

WEBS 3-14=-456/150, 5-14=-26/474, 6-12=-26/427, 8-12=-455/150

NOTES

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

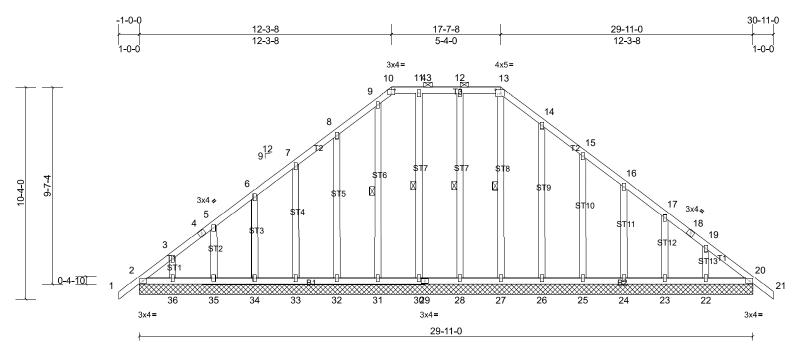
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=30ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -1-0-0 to 2-0-0, Interior (1) 2-0-0 to 12-3-8, Exterior (2) 12-3-8 to 16-6-7, Interior (1) 16-6-7 to 17-7-8, Exterior (2) 17-7-8 to 21-10-7, Interior (1) 21-10-7 to 30-11-0 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
- Provide adequate drainage to prevent water ponding.
- * 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 4) any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 137 lb uplift at joint 2 and 137 lb uplift at joint 9.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Wiggins Resd (Future Hobby House)-Roof				
Q-2201190-1	T1GE	Piggyback Base Supported Gable	2	1	Job Reference (optional)				

Run: 8.43 S Feb 3 2021 Print: 8.430 S Feb 3 2021 MiTek Industries, Inc. Wed May 25 09:26:36

Page: 1 ID:HsZ4maEfhwFBxHhp3g4LbfzD0S?-8h4J1C9tgtePOnhWN1pi6arLzQFkeHq1TaTlAqzD0Hn



Scale = 1:56.2

Plate Offsets (X, Y): [10:0-2-0,0-2-0], [13:0-3-0,0-2-0]

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
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.01	40	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 220 lb	FT = 20%

LUMBER TOP CHORD 2x4 SP No.1

BOT CHORD 2x4 SP No.1 2x4 SP No.3 **OTHERS**

REACTIONS All bearings 29-11-0.

(lb) - Max Horiz 2=168 (LC 10), 37=168 (LC 10)

Max Uplift All uplift 100 (lb) or less at joint(s) 2, 22, 23, 24, 25, 26, 28, 32, 33, 34, 35, 36, 37

Max Grav All reactions 250 (lb) or less at joint(s) 2, 20, 22, 23, 24, 25, 26, 27, 28, 30, 31, 32, 33, 34, 35, 36, 37, 40

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

BRACING

TOP CHORD

WEBS

except 2-0-0 oc purlins (6-0-0 max.): 10-13. **BOT CHORD**

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

1 Row at midpt 13-27, 12-28, 11-30, 9-31

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 Installation guide.

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph, TCDL=6.0psf; BCDL=6.0psf; b=30ft; B=20ft; L=30ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner (3) -1-0-0 to 2-0-0, Exterior (2) 2-0-0 to 12-3-8, Corner (3) 12-3-8 to 15-3-8, Exterior (2) 15-3-8 to 17-7-8, Corner (3) 17-7-8 to 20-7-8, Exterior (2) 20-7-8 to 30-11-0 zone; cantillever 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.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated
- 6) Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 2-0-0 oc.
- * 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
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 28, 32, 33, 34, 35, 36, 26, 25, 24, 23, 22, 2.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. 10)
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord. 11)

LOAD CASE(S)