Job	Truss	Truss Type	Qty	Ply	Wiggins Resd-Wiggins Resd
Q-2201036-1	CAP1	Piggyback	1	1	Job Reference (optional)

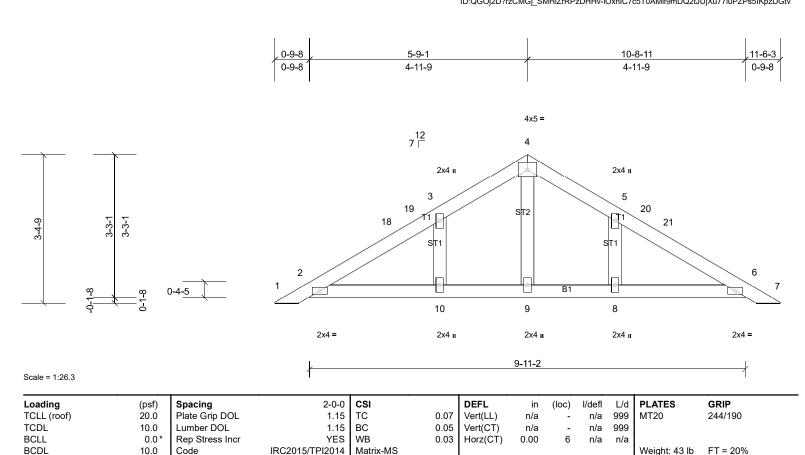
Run: 8.43 S Feb 3 2021 Print: 8.430 S Feb 3 2021 MiTek Industries, Inc. Tue May 24 14:33:41 Page: 1
ID:QGOj2D?rzCMGj SMHIZrRPzDHHv-iOxnlC7c5T0AMif9mDQ2tJUJXu77luPZPs5IKpzDGtv

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.

Installation guide.



LUMBER

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

**REACTIONS** All bearings 9-11-2.

(lb) - Max Horiz 2=-53 (LC 9), 11=-53 (LC 9)

Max Uplift All uplift 100 (lb) or less at joint(s) 2, 6, 8, 10, 11, 15

Max Grav All reactions 250 (lb) or less at joint(s) 2, 6, 8, 9, 10, 11, 15

(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 7-10; 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) and C-C Exterior (2) 0-3-11 to 3-3-11, Interior (1) 3-3-11 to 5-9-8, Exterior (2) 5-9-8 to 8-9-8, Interior (1) 8-9-8 to 11-3-6 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

**BRACING** 

TOP CHORD

**BOT CHORD** 

- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 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 any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6, 10, 8, 2, 6.
- 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.
- 9) 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	Wiggins Resd-Wiggins Resd
Q-2201036-1	CAP2	Piggyback	14	1	Job Reference (optional)

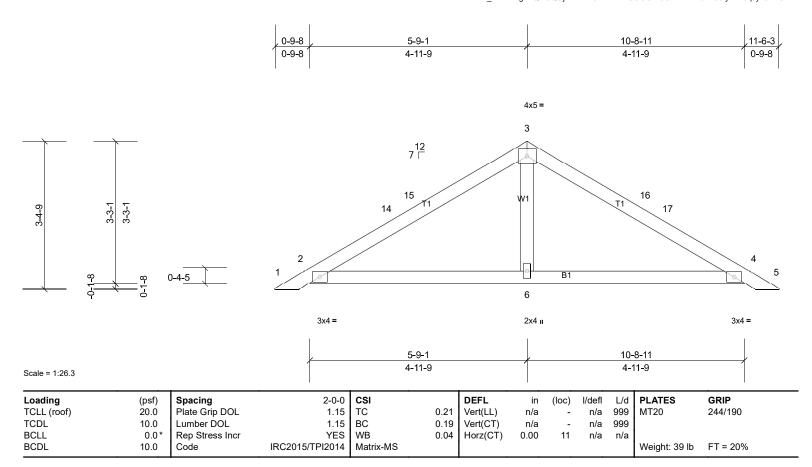
Run: 8.43 S Feb 3 2021 Print: 8.430 S Feb 3 2021 MiTek Industries, Inc. Tue May 24 14:33:43 Page: 1
ID:bNZtM 7kNbliYgoTQYGQQjzDHHk-6zdwwEAUOOOID9OkRLzIVx6Ba56fyF??5qJyx8zDGts

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.

Installation guide.



LUMBER

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

REACTIONS All bearings 9-11-2.

(lb) - Max Horiz 2=-53 (LC 9), 7=-53 (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) except 2=251 (LC 1),

4=251 (LC 1), 6=356 (LC 1), 7=251 (LC 1), 11=251 (LC 1)

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 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=20ft; cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-3-11 to 3-3-11, Interior (1) 3-3-11 to 5-9-8, Exterior (2) 5-9-8 to 8-9-8, Interior (1) 8-9-8 to 11-3-6 zone; cantilever left and right exposed; c-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60

**BRACING** 

TOP CHORD

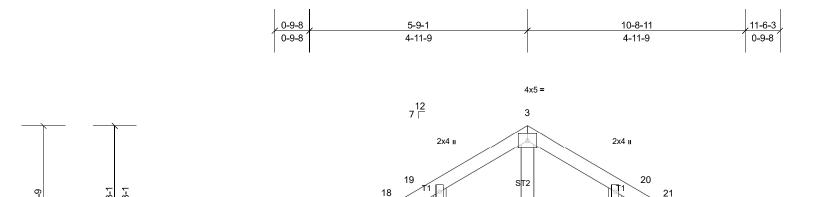
**BOT CHORD** 

- 3) Gable requires continuous bottom chord bearing.
- \*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.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4, 2, 4.
- 6) 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.
- 7) 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	Wiggins Resd-Wiggins Resd
Q-2201036-1	CAP3	Piggyback	1	1	Job Reference (optional)

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8

2x4 II

0.18

TOP CHORD

**BOT CHORD** 

,

<u></u>

 Spacing
 2-0-0
 CSI

 Plate Grip DOL
 1.15
 TC

 Lumber DOL
 1.15
 BC

 Rep Stress Incr
 YES
 WB

 Code
 IRC2015/TPI2014
 Matrix-MS

2

3x4 =

0.23 Vert(CT) n/a 0.00 Horz(CT) 0.00 15

BRACING

**DEFL** 

Vert(LL)

7

9-11-2

2x4 II

in

n/a

(loc)

Installation guide.

 I/defl
 L/d
 PLAT

 n/a
 999
 MT20

 n/a
 999
 MT20

 weigh
 Weigh

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

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

6

2x4 ıı

 PLATES
 GRIP

 MT20
 244/190

3x4 =

Weight: 43 lb FT = 20%

LUMBER

Scale = 1:26.3

Loading

TCDI

**BCLL** 

**BCDL** 

TCLL (roof)

 TOP CHORD
 2x4 SP No.1

 BOT CHORD
 2x4 SP No.1

 OTHERS
 2x4 SP No.3

REACTIONS All bearings 9-11-2.

(lb) - Max Horiz 2=53 (LC 10), 11=53 (LC 10)

(psf)

20.0

10.0

0.0

10.0

Max Uplift All uplift 100 (lb) or less at joint(s) 2, 4, 6, 7, 8, 11, 15

Max Grav All reactions 250 (lb) or less at joint(s) 6, 7, 8 except 2=298 (LC

1), 4=298 (LC 1), 11=298 (LC 1), 15=298 (LC 1)

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

TOP CHORD 2-18=-334/78, 18-19=-273/81, 3-19=-265/96, 3-20=-265/96, 20-21=-273/81, 4-21=-334/78

## NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; B=20ft; L=20ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-3-11 to 3-3-11, Interior (1) 3-3-11 to 5-9-8, Exterior (2) 5-9-8 to 8-9-8, Interior (1) 8-9-8 to 11-3-6 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 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 any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4, 7, 8, 6, 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.
- 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

Г	Job	Truss	Truss Type	Qty	Ply	Wiggins Resd-Wiggins Resd
ľ	Q-2201036-1	T1	Roof Special	1	1	Job Reference (optional)

Run: 8.43 S Feb 3 2021 Print: 8.430 S Feb 3 2021 MiTek Industries, Inc. Tue May 24 14:33:44

Page: 1 ID:GqglzI2bizAFdkSBK0etiVzDKAT-a9BI7aA79iWbqJzx?2U 29fFAVQShZq9KT3WTazDGtr

Structural wood sheathing directly applied or 5-2-4 oc purlins,

installed during truss erection, in accordance with Stabilizer

4-23, 6-23

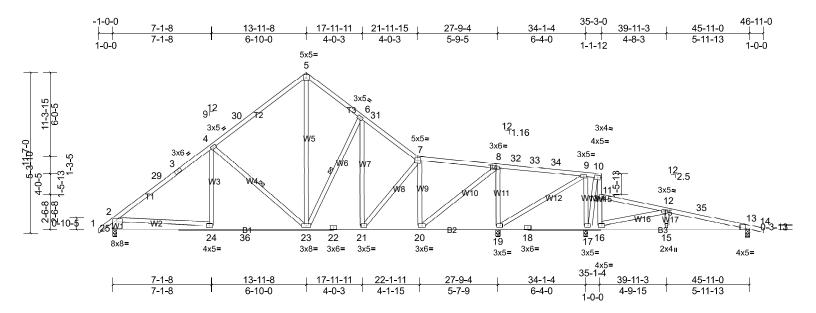
MiTek recommends that Stabilizers and required cross bracing be

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

except end verticals.

1 Row at midpt

Installation guide.



Scale = 1:83.1

LUMBER

Plate Offsets (X, Y): [13:0-3-5,Edge], [25:Edge,0-7-4]

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	0.66	Vert(LL)	0.04	15-28	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.12	23-24	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.58	Horz(CT)	0.02	13	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 289 lb	FT = 20%

**BRACING** 

TOP CHORD

**BOT CHORD** 

**WEBS** 

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

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

**REACTIONS** All bearings 0-3-8.

(lb) - Max Horiz 25=-178 (LC 9)

Max Uplift All uplift 100 (lb) or less at joint(s) 13, 17 except 19=-174 (LC

11), 25=-113 (LC 11)

Max Grav All reactions 250 (lb) or less at joint(s) except 13=444 (LC 21),

17=610 (LC 21), 19=1705 (LC 1), 25=1081 (LC 1)

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

2-29=-1275/105, 3-29=-1151/106, 3-4=-1049/132, 4-30=-872/150, 5-30=-734/194, 5-6=-803/214, 6-31=-777/150, TOP CHORD

7-31=-906/134, 7-8=-608/66, 8-32=-63/539, 32-33=-65/524, 33-34=-66/520, 9-34=-70/515, 11-16=-24/315,

10-11=-66/501, 12-35=-826/72, 13-35=-848/66, 2-25=-1015/150

**BOT CHORD** 24-25=-186/467, 24-36=-72/993, 23-36=-72/993, 22-23=0/672, 21-22=0/672, 20-21=-3/609, 19-20=-517/110, 15-16=-34/816, 13-15=-34/816

**WEBS** 7-20=-782/146, 8-20=-139/1407, 8-19=-1381/224, 12-16=-1042/111, 2-24=0/616, 9-17=-319/111, 9-19=-364/47, 4-23=-517/162, 5-23=-128/586

### NOTES

Unbalanced roof live loads have been considered for this design

- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=46ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -1-0-0 to 3-7-2, Interior (1) 3-7-2 to 13-11-8, Exterior (2) 13-11-8 to 18-6-10, Interior (1) 18-6-10 to 46-11-0 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
- 3) \* 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 13 except (jt=lb) 25=113, 19=173.
- 5) 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.

Job	Truss	Truss Type	Qty	Ply	Wiggins Resd-Wiggins Resd
Q-2201036-1	T1A	Roof Special	1	1	Job Reference (optional)

Run: 8.43 S Feb 3 2021 Print: 8.430 S Feb 3 2021 MiTek Industries, Inc. Tue May 24 14:33:44

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Structural wood sheathing directly applied or 5-2-4 oc purlins,

installed during truss erection, in accordance with Stabilizer

4-23, 6-23

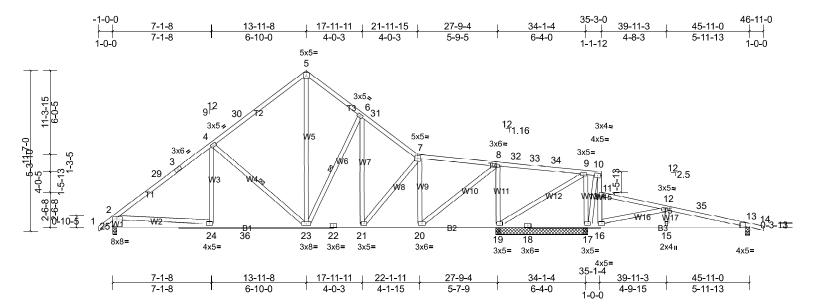
MiTek recommends that Stabilizers and required cross bracing be

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

except end verticals.

1 Row at midpt

Installation guide.



Scale = 1:83.1

LUMBER

Plate Offsets (X, Y): [13:0-3-5,Edge], [25:Edge,0-7-4]

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	0.66	Vert(LL)	0.04	15-28	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.12	23-24	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.58	Horz(CT)	0.02	13	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 289 lb	FT = 20%

**BRACING** 

TOP CHORD

**BOT CHORD** 

**WEBS** 

TOP CHORD **BOT CHORD** 2x4 SP No.1

2x4 SP No.1

2x4 SP No.3 **WEBS** 

**REACTIONS** All bearings 0-3-8. except 17=6-7-8, 19=6-7-8

(lb) - Max Horiz 25=-178 (LC 9)

Max Uplift All uplift 100 (lb) or less at joint(s) 13, 17 except 19=-174 (LC

11), 25=-113 (LC 11)

Max Grav All reactions 250 (lb) or less at joint(s) except 13=444 (LC 21),

17=610 (LC 21), 19=1705 (LC 1), 25=1081 (LC 1)

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

**FORCES** 2-29=-1275/105, 3-29=-1151/106, 3-4=-1049/132, 4-30=-872/150, 5-30=-734/194, 5-6=-803/214, 6-31=-777/150, TOP CHORD

7-31=-906/134, 7-8=-608/66, 8-32=-63/539, 32-33=-65/524, 33-34=-66/520, 9-34=-70/515, 11-16=-24/315,

10-11=-66/501, 12-35=-826/72, 13-35=-848/66, 2-25=-1015/150

24-25=-186/467, 24-36=-72/993, 23-36=-72/993, 22-23=0/672, 21-22=0/672, 20-21=-3/609, 19-20=-517/110,

**BOT CHORD** 15-16=-34/816, 13-15=-34/816

**WEBS** 7-20=-782/146, 12-16=-1042/111, 2-24=0/616, 4-23=-517/162, 5-23=-128/586, 8-19=-1381/224, 8-20=-139/1407,

9-19=-364/47, 9-17=-319/111

### NOTES

Unbalanced roof live loads have been considered for this design

- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=46ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -1-0-0 to 3-7-2, Interior (1) 3-7-2 to 13-11-8, Exterior (2) 13-11-8 to 18-6-10, Interior (1) 18-6-10 to 46-11-0 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
- 3) \* 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 13 except (jt=lb) 25=113, 19=173.
- 5) 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.

	Job	Truss	Truss Type	Qty	Ply	Wiggins Resd-Wiggins Resd
	Q-2201036-1	T1B	Roof Special	3	1	Job Reference (optional)

Run: 8.43 S Feb 3 2021 Print: 8.430 S Feb 3 2021 MiTek Industries, Inc. Tue May 24 14:33:45 Page: 1

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Structural wood sheathing directly applied or 5-2-15 oc purlins,

MiTek recommends that Stabilizers and required cross bracing be

4-23, 6-23, 9-18

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

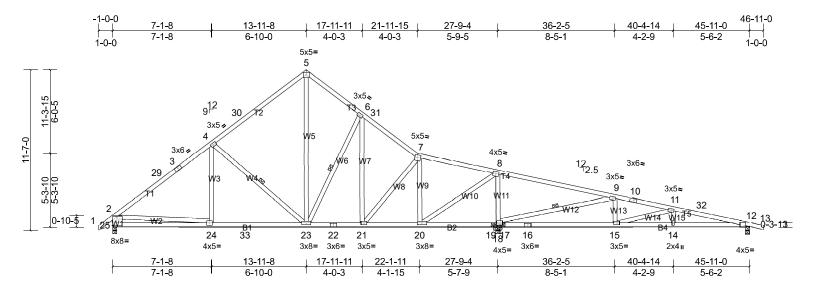
installed during truss erection, in accordance with Stabilizer

except end verticals.

1 Row at midpt

Installation guide.

5-6-6 oc bracing: 18-20.



Scale = 1:83.1

Plate Offsets (X, Y): [12:0-3-5,Edge], [20:0-3-8,0-1-8], [25:Edge,0-7-4]

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	0.76	Vert(LL)	-0.07	14-28	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.16	15-18	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.02	12	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 277 lb	FT = 20%

**BOT CHORD** 

**WEBS** 

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

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

12=512/0-3-8, (min. 0-1-8), 18=2284/(0-3-8 + bearing block), REACTIONS (lb/size)

(req. 0-3-9), 25=994/0-3-8, (min. 0-1-9)

Max Horiz 25=-210 (LC 9)

Max Uplift 12=-71 (LC 11), 18=-203 (LC 11), 25=-117 (LC 11) Max Grav 12=523 (LC 21), 18=2284 (LC 1), 25=994 (LC 1)

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

2-29=-1148/112, 3-29=-1024/113, 3-4=-922/138, 4-30=-737/157, 5-30=-598/201, 5-6=-668/221, 6-31=-547/161,

7-31=-666/145, 7-8=-283/83, 8-9=-89/1263, 9-10=-476/53, 10-11=-522/50, 11-32=-1210/100, 12-32=-1233/95,

2-25=-930/154

**BOT CHORD** 24-25=-100/482, 24-33=0/933, 23-33=0/933, 22-23=0/515, 21-22=0/515, 20-21=0/287, 19-20=-1184/176,

18-19=-1184/176, 17-18=-5/496, 16-17=-5/496, 15-16=-5/496, 14-15=-61/1191, 12-14=-61/1191

7-20=-863/123, 2-24=0/536, 4-23=-525/162, 5-23=-137/497, 7-21=0/407, 8-20=-124/1672, 8-18=-1716/253, 9-18=-1674/174, 9-15=0/319, 11-15=-725/71

## NOTES

**WEBS** 

**FORCES** TOP CHORD

2x4 SP No.1 bearing block 12" long at jt. 18 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.

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=46ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -1-0-0 to 3-7-2, Interior (1) 3-7-2 to 13-11-8, Exterior (2) 13-11-8 to 18-6-10, Interior (1) 18-6-10 to 46-11-0 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

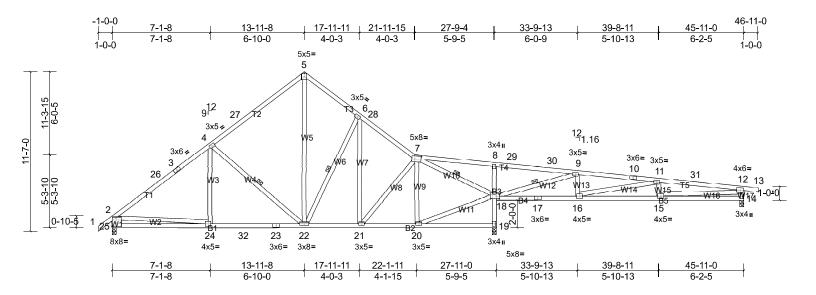
\* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and 4) any other members, with BCDL = 10.0psf.

Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 117 lb uplift at joint 25, 203 lb uplift at joint 18 and 71 lb uplift at joint 12.

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.

-	Job	Truss	Truss Type	Qty	Ply	Wiggins Resd-Wiggins Resd
	Q-2201036-1	T1C	Roof Special	8	1	Job Reference (optional)

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Scale = 1:83.7

Plate Offsets (X, Y): [7:0-5-8,0-2-8], [18:0-2-8,0-2-0], [25:Edge,0-7-4]

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	0.66	Vert(LL)	-0.09	15-16	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.19	15-16	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.03	14	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 291 lb	FT = 20%

LUMBER **BRACING** 

TOP CHORD 2x4 SP No.1 **BOT CHORD** 2x4 SP No.1 \*Except\* B3:2x4 SP No.3

2x4 SP No.3 **WEBS** 

14=608/0-3-8, (min. 0-1-8), 19=2124/0-3-8, (min. 0-3-5), REACTIONS (lb/size)

25=1056/0-3-8, (min. 0-1-10)

Max Horiz 25=-173 (LC 9) Max Uplift 14=-80 (LC 11), 19=-196 (LC 11), 25=-118 (LC 11)

Max Grav 14=614 (LC 21), 19=2124 (LC 1), 25=1056 (LC 1)

TOP CHORD

**BOT CHORD** 

**WEBS** 

Structural wood sheathing directly applied or 4-10-5 oc purlins,

except end verticals.

Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 19-20

3-6-4 oc bracing: 18-19.

1 Row at midnt

7-18, 9-18, 4-22, 6-22

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

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

2-26=-1239/113, 3-26=-1115/115, 3-4=-1013/140, 4-27=-834/159, 5-27=-695/203, 5-6=-764/223, 6-28=-708/166, TOP CHORD

7-28=-837/150, 7-8=-78/1239, 8-29=-97/1250, 29-30=-100/1232, 9-30=-103/1219, 9-10=-530/36, 10-11=-546/30,

11-31=-1489/117, 12-31=-1509/113, 2-25=-991/156, 12-14=-544/112

24-25=-170/461, 24-32=-61/965, 23-32=-61/965, 22-23=-61/965, 21-22=0/617, 20-21=-8/504, 18-19=-2071/226, BOT CHORD

8-18=-400/124, 17-18=-6/527, 16-17=-6/527, 15-16=-85/1483, 14-15=-32/321

WEBS 18-20=-11/552, 7-18=-1942/182, 9-18=-1795/157, 2-24=0/596, 4-22=-519/162, 5-22=-138/581, 12-15=-67/1171,

9-16=0/343, 11-16=-991/100

#### 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=46ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) 2) and C-C Exterior (2) -1-0-0 to 3-7-2, Interior (1) 3-7-2 to 13-11-8, Exterior (2) 13-11-8 to 18-6-10, Interior (1) 18-6-10 to 46-11-0 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
- \* 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 3) any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 118 lb uplift at joint 25, 196 lb uplift at joint 19 and 80 lb uplift at joint 14.
- 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. 5)

#### LOAD CASE(S)

NOTES

Job	Truss	Truss Type	Qty	Ply	Wiggins Resd-Wiggins Resd
Q-2201036-1	T1D	Roof Special	5	1	Job Reference (optional)

Run: 8.43 S Feb 3 2021 Print: 8.430 S Feb 3 2021 MiTek Industries, Inc. Tue May 24 14:33:46 Page: 1
ID:wtsPwa SuRYzXyZDXT3i?RzDKAY-XYI2YFCNgJmJ4d6J6TXS7akaDJ549SbRonYcYTzDGtp

Structural wood sheathing directly applied or 5-2-5 oc purlins,

MiTek recommends that Stabilizers and required cross bracing be

3-22, 5-22, 8-17

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

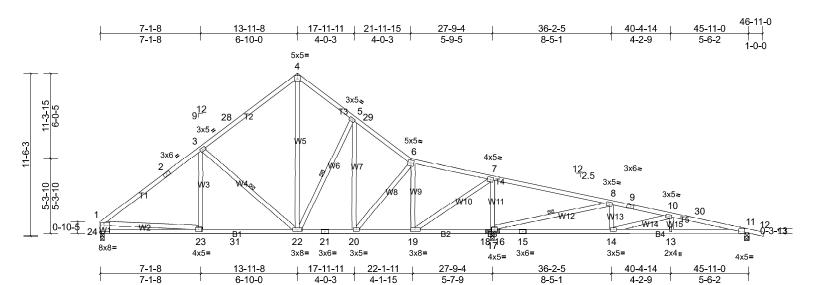
installed during truss erection, in accordance with Stabilizer

except end verticals.

1 Row at midpt

Installation guide.

5-6-5 oc bracing: 17-19.



Scale = 1:81.6

Plate Offsets (X, Y): [11:0-3-5,Edge], [19:0-3-8,0-1-8], [24:Edge,0-7-4]

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	0.76	Vert(LL)	-0.07	13-27	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.16	14-17	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.02	11	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 275 lb	FT = 20%

**BOT CHORD** 

**WEBS** 

LUMBERBRACINGTOP CHORD2x4 SP No.1TOP CHORD

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

**REACTIONS** (lb/size) 11=512/0-3-8, (min. 0-1-8), 17=2286/(0-3-8 + bearing block),

(req. 0-3-9), 24=924/0-3-8, (min. 0-1-8)

Max Horiz 24=-205 (LC 9)

Max Uplift 11=-70 (LC 11), 17=-205 (LC 11), 24=-81 (LC 11) Max Grav 11=523 (LC 21), 17=2286 (LC 1), 24=924 (LC 1)

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

1-2=-1149/109, 2-3=-923/137, 3-28=-740/158, 4-28=-599/203, 4-5=-670/222, 5-29=-546/161, 6-29=-667/145,

6-7=-282/83, 7-8=-91/1266, 8-9=-475/53, 9-10=-521/49, 10-30=-1209/98, 11-30=-1232/93, 1-24=-859/118 23-24=-45/401, 23-31=0/941, 22-31=0/941, 21-22=0/515, 20-21=0/515, 19-20=0/286, 18-19=-1187/178,

17-18=-1187/178, 16-17=-4/495, 15-16=-4/495, 14-15=-4/495, 13-14=-59/1190, 11-13=-59/1190 WEBS 6-19=-865/124, 1-23=0/595, 3-22=-534/166, 4-22=-140/501, 6-20=0/409, 7-19=-125/1676, 7-17=-1719/254,

8-17=-1674/174, 8-14=0/319, 10-14=-725/71

## NOTES

**FORCES** 

TOP CHORD

**BOT CHORD** 

1) 2x4 SP No.1 bearing block 12" long at jt. 17 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.

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

3) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=46ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-1-12 to 4-8-14, Interior (1) 4-8-14 to 13-11-8, Exterior (2) 13-11-8 to 18-6-10, Interior (1) 18-6-10 to 46-11-0 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

- \* 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.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 81 lb uplift at joint 24, 205 lb uplift at joint 17 and 70 lb uplift at joint 11.

  6) 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.

Job	Truss	Truss Type	Qty	Ply	Wiggins Resd-Wiggins Resd
Q-2201036-1	T1ESE	Roof Special Structural Gable	1	1	Job Reference (optional)

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Structural wood sheathing directly applied or 4-7-7 oc purlins,

3-22, 5-22

MiTek recommends that Stabilizers and required cross bracing be

Rigid ceiling directly applied or 6-0-0 oc bracing, Except:

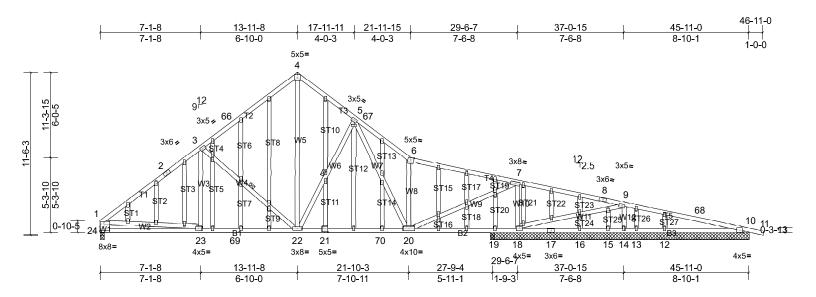
installed during truss erection, in accordance with Stabilizer

except end verticals.

1 Row at midpt

Installation guide.

10-0-0 oc bracing: 23-24,22-23,20-22.



Scale = 1:81.6

**LUMBER** 

TOP CHORD

**BOT CHORD** 

Plate Offsets (X, Y): [5:0-2-0,0-0-4], [21:0-2-8,0-3-0], [24:Edge,0-7-4], [48:0-1-13,0-1-0], [51:0-1-13,0-1-0], [53:0-1-13,0-1-0], [59:0-1-9,0-1-0]

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	0.59	Vert(LL)	-0.16	20-22	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.28	20-22	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.02	19	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 372 lb	FT = 20%

**BRACING** 

TOP CHORD

**BOT CHORD** 

**WEBS** 

2x4 SP No.3 **WEBS OTHERS** 2x4 SP No.3

2x4 SP No.1

2x4 SP No.1

REACTIONS All bearings 18-3-8. except 24=0-3-8 (lb) - Max Horiz 24=-205 (LC 9)

Max Uplift All uplift 100 (lb) or less at joint(s) 10, 15, 24, 63 except 13=-203 (LC 1), 14=-113 (LC 11), 18=-234 (LC 11) Max Grav All reactions 250 (lb) or less at joint(s) 13, 15, 16, 19 except

10=278 (LC 21), 12=313 (LC 1), 14=479 (LC 21), 18=1591 (LC 1), 24=1100 (LC 1), 63=278 (LC 21)

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

TOP CHORD 1-2=-1407/129, 2-3=-1196/158, 3-66=-1022/176, 4-66=-898/221, 4-5=-964/239, 5-67=-1222/247, 6-67=-1334/232,

6-7=-1110/137, 7-8=-44/551, 8-9=-61/482, 1-24=-1031/132

**BOT CHORD** 23-24=-44/427, 23-69=-5/1160, 22-69=-5/1160, 21-22=0/906, 21-70=0/906, 20-70=0/906, 19-20=-502/141, 18-19=-502/141

**WEBS** 3-22=-495/169, 4-22=-160/814, 5-22=-387/154, 5-20=-72/382, 6-20=-857/213, 7-20=-136/1690, 7-18=-1482/246,

9-18=-390/101, 9-14=-340/114, 1-23=0/799

## NOTES

**FORCES** 

- Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph, TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=46ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-1-12 to 4-8-14, Interior (1) 4-8-14 to 13-11-8, Exterior (2) 13-11-8 to 18-6-10, Interior (1) 18-6-10 to 46-11-0 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
- 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.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24, 15, 10, 10 except (jt=lb) 18=234, 14=112, 13=202.
- 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.

J	lob	Truss	Truss Type	Qty	Ply	Wiggins Resd-Wiggins Resd
	Q-2201036-1	T1FSE	Roof Special Structural Gable	1	1	Job Reference (optional)

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

installed during truss erection, in accordance with Stabilizer

MiTek recommends that Stabilizers and required cross bracing be

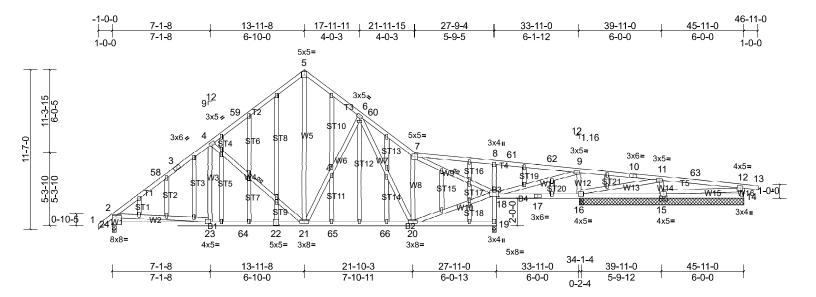
4-21, 6-21, 7-18

Rigid ceiling directly applied or 4-6-8 oc bracing.

except end verticals.

1 Row at midpt

Installation guide.



Scale = 1:83.7

Plate Offsets (X, Y): [6:0-2-0,0-0-4], [18:0-2-4,0-2-0], [22:0-2-8,0-3-0], [24:Edge,0-7-4], [49:0-1-14,0-1-0], [51:0-1-12,0-1-0]

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	0.67	Vert(LL)	-0.14	20-21	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.23	20-21	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.02	19	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 380 lb	FT = 20%

**BOT CHORD** 

**WEBS** 

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

**BOT CHORD** 2x4 SP No.1 \*Except\* B3:2x4 SP No.3

2x4 SP No.3 **WEBS** 

**OTHERS** 2x4 SP No.3

**REACTIONS** All bearings 11-11-8. except 24=0-3-8, 19=0-3-8

(lb) - Max Horiz 24=-173 (LC 9)

Max Uplift All uplift 100 (lb) or less at joint(s) 14, 15, 16 except 19=-162

(LC 11), 24=-123 (LC 11)

Max Grav All reactions 250 (lb) or less at joint(s) except 14=271 (LC 21),

15=470 (LC 21), 16=445 (LC 21), 19=1484 (LC 1), 24=1137

(LC 1)

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

TOP CHORD 2-58=-1356/120, 3-58=-1237/121, 3-4=-1152/147, 4-59=-964/162, 5-59=-844/206, 5-6=-915/226, 6-60=-1049/199,

7-60=-1157/183, 7-8=-37/361, 8-61=-56/366, 61-62=-58/351, 9-62=-62/340, 2-24=-1069/160

**BOT CHORD** 23-24=-169/481, 23-64=-67/1089, 22-64=-67/1089, 21-22=-67/1089, 21-65=-3/812, 65-66=-3/812, 20-66=-3/812,

18-19=-1434/189, 8-18=-393/125

**WEBS** 4-21=-490/165, 5-21=-143/747, 6-21=-322/138, 7-20=-301/125, 18-20=-22/956, 7-18=-1392/151, 2-23=0/699,

9-16=-289/90, 11-15=-327/106

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph, TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=46ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -1-0-0 to 3-7-2, Interior (1) 3-7-2 to 13-11-8, Exterior (2) 13-11-8 to 18-6-10, Interior (1) 18-6-10 to 46-11-0 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
- 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.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 16, 15 except (jt=lb) 24=122, 19=162.
- 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.

Job	Truss	Truss Type	Qty	Ply	Wiggins Resd-Wiggins Resd
Q-2201036-1	T1SE	Piggyback Base Structural Gable	1	1	Job Reference (optional)

Run: 8.43 S Feb 3 2021 Print: 8.430 S Feb 3 2021 MiTek Industries, Inc. Tue May 24 14:33:48 Page: 1
ID:5 1ZEL6MlpxPLfvKgGlHymzDKAN-?ksRmbD?RduAhnhVgB2hgnHo?iPPu0jb0RHA4vzDGto

13-11-8 20-2-0 31-9-0 38-8-4 45-11-0 7-1-8 16-4-51 27-9-4 6-10-0 2-4-13 3-11-12 7-1-8 3-9-11 7-7-4 6-11-4 7-2-12 5x5= 5x5= 4x5= 5x5= 7<sup>12</sup> 3x10= 80 78 798 5 5x5 # 16 19 912 10 <sup>3x6</sup>≈ 77 13 3x5 🗸 11 4 ۲6 3x6 4 15 13 5x5 ♦ 12 8417 169 3x6= 2 ₩10\$†22 15 3x4 ı \$<del>1</del>18 4x5= 0-10-5 19 3x8= 5x14 =3029 2883 2276 20 25 24 23 22 21 3x4 II 4x5 =3x6 =3x8= 3x8=

27-11-0

7-10-12

**BRACING** 

TOP CHORD

**BOT CHORD** 

WEBS

1 Row at midpt

31-10-12

3-11-12

8-18

1 Row at midpt

Installation guide.

38-8-4

6-9-8

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

9-16, 10-16

MiTek recommends that Stabilizers and required cross bracing be

installed during truss erection, in accordance with Stabilizer

except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-9.

Rigid ceiling directly applied or 5-4-12 oc bracing. Except:

45-11-0

7-2-12

4-24, 5-24, 6-24, 6-22, 7-22, 7-18,

Scale = 1:83.6

Plate Offsets (X, Y): [5:0-5-0,0-1-5], [7:0-3-0,0-2-4], [9:0-2-8,0-2-1], [12:0-2-4,0-2-0], [18:0-7-0,0-4-0], [26:0-2-10,0-1-8], [31:Edge,0-7-4], [37:0-1-10,0-1-0], [39:0-1-10,0-1-0]

20-0-4

3-9-11

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	0.56	Vert(LL)	-0.02	15-16	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.07	15-16	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.01	14	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 544 lb	FT = 20%

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

BOT CHORD 2x4 SP No.1 \*Except\* B3:2x4 SP No.3

7-1-8

7-1-8

WEBS 2x4 SP No.3

OTHERS 2x4 SP No.3

REACTIONS All bearings 27-11-0. except 14=0-3-8

(lb) - Max Horiz 31=-201 (LC 9)

Max Uplift All uplift 100 (lb) or less at joint(s) 14, 19, 31 except 22=-113

(LC 11), 24=-142 (LC 11), 29=-154 (LC 9)

Max Grav All reactions 250 (lb) or less at joint(s) 20, 21, 23, 25, 27, 28,

29 except 14=770 (LC 1), 19=1063 (LC 1), 22=424 (LC 24), 24=385 (LC 22), 31=427 (LC 22)

16-2-9

24=385 (LC 23), 30=628 (LC 23), 31=427 (LC 23)

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

TOP CHORD 2-76=-312/23, 4-77=-253/61, 8-80=-273/156, 9-80=-273/156, 9-81=-268/136, 10-81=-380/98, 10-11=-616/104,

11-82=-705/82, 12-82=-809/80, 12-14=-704/127, 2-31=-366/94 30-31=-150/432, 18-19=-1045/109, 8-18=-961/175, 15-16=0/613

WEBS 4-30=-364/96, 7-22=-300/48, 8-16=-55/599, 10-16=-499/140, 12-15=0/463, 2-30=-271/178

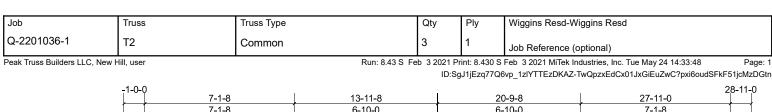
#### NOTES

**FORCES** 

**BOT CHORD** 

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

- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=46ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -0-11-7 to 3-7-11, Interior (1) 3-7-11 to 13-11-8, Exterior (2) 13-11-8 to 16-4-5, Interior (1) 16-4-5 to 20-2-0, Exterior (2) 20-2-0 to 24-9-1, Interior (1) 24-9-1 to 31-9-0, Exterior (2) 31-9-0 to 36-4-2, Interior (1) 36-4-2 to 46-11-0 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
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable 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 any other members, with BCDL = 10.0psf.
- B) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 31, 19, 14 except (jt=lb) 24=141, 22=113, 29=153.
- 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.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



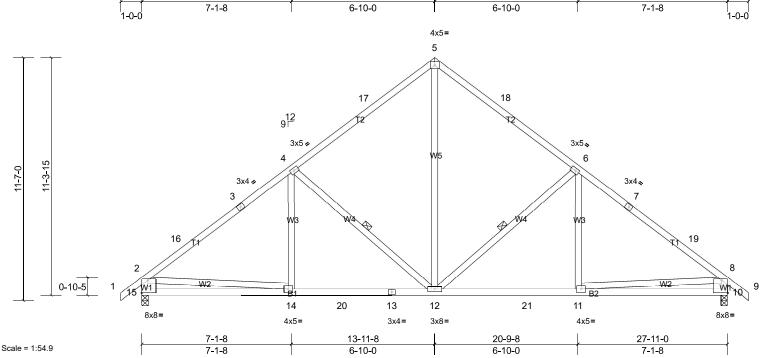


Plate Offsets (X, Y): [10:Edge,0-7-4], [15:Edge,0-7-4]

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	0.69	Vert(LL)	-0.05	11-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.11	12-14	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.03	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 178 lb	FT = 20%

LUMBER TOP CHORD

**WEBS** 

**BOT CHORD** 

2x4 SP No.1 2x4 SP No.1 2x4 SP No.3

**REACTIONS** (lb/size) 10=1174/0-3-8, (min. 0-1-13), 15=1174/0-3-8, (min. 0-1-13)

Max Horiz 15=205 (LC 10)

Max Uplift 10=-134 (LC 11), 15=-134 (LC 11)

**BRACING** 

TOP CHORD

**BOT CHORD** 

WEBS

Structural wood sheathing directly applied or 5-0-8 oc purlins, except end verticals.

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

1 Row at midpt 4-12, 6-12

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

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

TOP CHORD 2-16=-1412/118, 3-16=-1290/136, 3-4=-1186/163, 4-17=-1021/204, 5-17=-883/226, 5-18=-883/226, 6-18=-1021/204,

6-7=-1186/163, 7-19=-1290/136, 8-19=-1412/118, 2-15=-1107/171, 8-10=-1107/171

BOT CHORD 14-15=-99/494, 14-20=0/1125, 13-20=0/1125, 12-13=0/1125, 12-21=0/1032, 11-21=0/1032, 10-11=-84/392

WEBS 2-14=0/723, 8-11=0/732, 4-12=-489/159, 5-12=-129/712, 6-12=-489/159

### **NOTES**

- ) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=28ft; 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 13-11-8, Exterior (2) 13-11-8 to 16-11-8, Interior (1) 16-11-8 to 28-11-0 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
- 3) \* 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.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 134 lb uplift at joint 15 and 134 lb uplift at joint 10.
- 5) 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.



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13-11-8 20-9-8 27-11-0 7-1-8 6-10-0 7-1-8 7-1-8 6-10-0

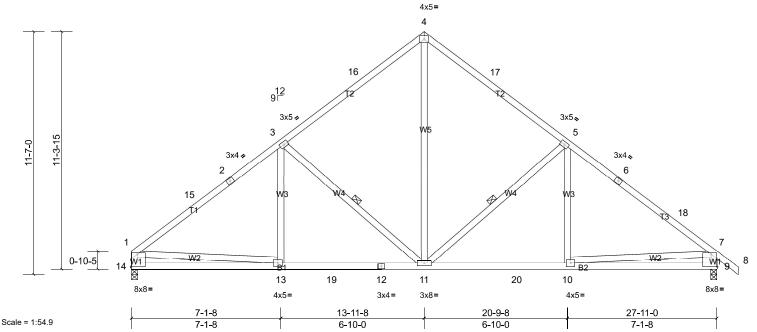


Plate Offsets (X, Y): [9:Edge,0-7-4], [14:Edge,0-7-4]

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	0.69	Vert(LL)	-0.05	11-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.11	11-13	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.03	9	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 176 lb	FT = 20%

**LUMBER** 

**WEBS** 

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

REACTIONS (lb/size) 9=1175/0-3-8, (min. 0-1-13), 14=1104/0-3-8, (min. 0-1-12)

Max Horiz 14=-201 (LC 9)

Max Uplift 9=-134 (LC 11), 14=-97 (LC 11)

**BRACING** 

TOP CHORD

**BOT CHORD** 

**WEBS** 

Structural wood sheathing directly applied or 4-7-1 oc purlins, except end verticals.

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

1 Row at midpt 3-11, 5-11

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

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

1-15=-1413/133, 2-15=-1301/134, 2-3=-1187/162, 3-16=-1025/183, 4-16=-887/228, 4-17=-885/226, 5-17=-1023/205, TOP CHORD

5-6=-1188/164, 6-18=-1292/137, 7-18=-1414/118, 1-14=-1036/135, 7-9=-1108/172

**BOT CHORD** 13-14=-75/412, 13-19=0/1133, 12-19=0/1133, 11-12=0/1133, 11-20=0/1034, 10-20=0/1034, 9-10=-84/392 **WEBS** 1-13=0/789, 7-10=0/734, 3-11=-498/163, 4-11=-132/718, 5-11=-489/159

# 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=28ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-1-12 to 3-1-12, Interior (1) 3-1-12 to 13-11-8, Exterior (2) 13-11-8 to 16-11-8, Interior (1) 16-11-8 to 28-11-0 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
- 3) \* 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 97 lb uplift at joint 14 and 134 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. 5)

LOAD CASE(S)

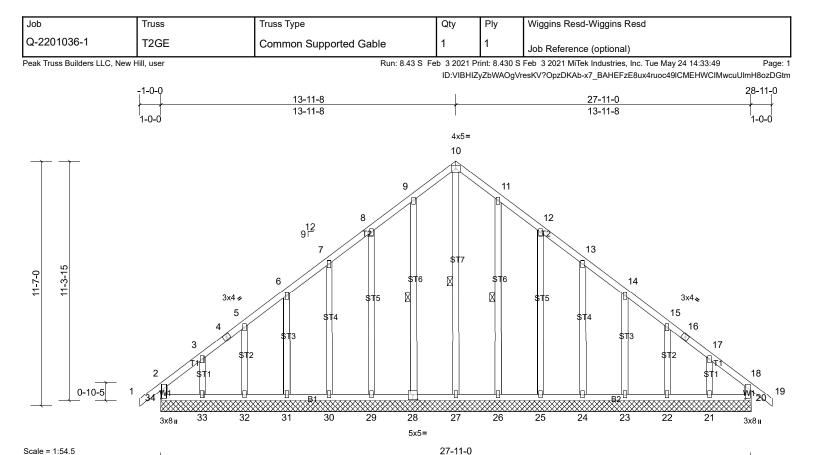


Plate Offsets (X, Y): [20:0-2-3,0-0-4], [28:0-2-8,0-3-0], [34:0-4-12,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.01	20	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MR							Weight: 214 lb	FT = 20%

**BRACING** 

TOP CHORD

**BOT CHORD** 

**WEBS** 

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

installed during truss erection, in accordance with Stabilizer

MiTek recommends that Stabilizers and required cross bracing be

10-27, 9-28, 11-26

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

except end verticals.

1 Row at midpt

Installation guide.

**WEBS OTHERS** 

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

2x4 SP No.3

2x4 SP No.1

REACTIONS All bearings 27-11-0.

(lb) - Max Horiz 34=205 (LC 10)

Max Uplift All uplift 100 (lb) or less at joint(s) 20, 21, 22, 23, 24, 25, 26, 28, 29, 30, 31, 32, 33, 34

Max Grav All reactions 250 (lb) or less at joint(s) 20, 21, 22, 23, 24, 25, 26, 28, 29, 30, 31, 32, 33, 34 except 27=295 (LC 11)

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

TOP CHORD 9-10=-222/275, 10-11=-222/275

**WEBS** 10-27=-270/158

#### NOTES

LUMBER

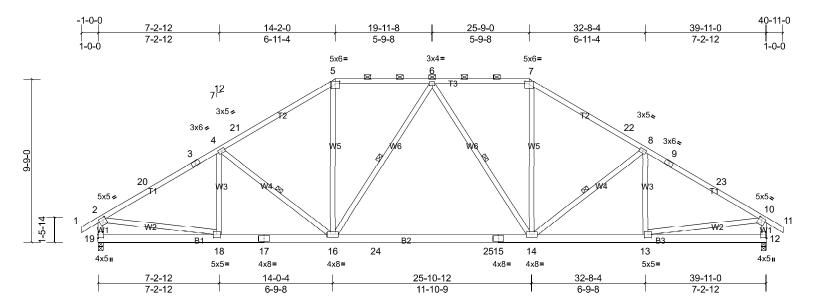
TOP CHORD

- 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=28ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) 2) and C-C Corner (3) -1-0-0 to 1-11-8, Exterior (2) 1-11-8 to 13-11-8, Corner (3) 13-11-8 to 16-11-8, Exterior (2) 16-11-8 to 28-11-0 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
- 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.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing. 5)
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web). 6)
- Gable studs spaced at 2-0-0 oc. 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 8)
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 34, 20, 28, 29, 30, 31, 32, 33, 26, 25, 24, 23, 22, 21.
- 10) 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.

Job	Truss	Truss Type	Qty	Ply	Wiggins Resd-Wiggins Resd
Q-2201036-1	Т3	Piggyback Base	14	1	Job Reference (optional)

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Scale = 1:68.9

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

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	0.74	Vert(LL)	-0.23	14-16	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.42	14-16	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.05	12	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 284 lb	FT = 20%

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

**BOT CHORD** 2x6 SP No.2 2x4 SP No.3 **WEBS** 

REACTIONS (lb/size) 12=1654/0-3-8, (min. 0-2-10), 19=1654/0-3-8, (min. 0-2-10)

Max Horiz 19=-173 (LC 9)

Max Uplift 12=-176 (LC 11), 19=-176 (LC 11)

**BRACING** 

TOP CHORD

**BOT CHORD** 

**WEBS** 

Structural wood sheathing directly applied or 3-10-7 oc purlins, except end verticals, and 2-0-0 oc purlins (4-9-4 max.): 5-7. Rigid ceiling directly applied or 10-0-0 oc bracing. 4-16, 8-14, 6-16, 6-14 1 Row at midpt

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

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

TOP CHORD 2-20=-2166/212, 3-20=-2063/215, 3-4=-1974/238, 4-21=-1930/235, 5-21=-1819/273, 5-6=-1571/274, 6-7=-1571/274,

7-22=-1819/273, 8-22=-1930/235, 8-9=-1974/238, 9-23=-2063/215, 10-23=-2166/212, 2-19=-1569/214, 10-12=-1569/214

**BOT CHORD** 18-19=-78/359, 17-18=-75/1826, 16-17=-75/1826, 16-24=-4/1698, 24-25=-4/1698, 15-25=-4/1698, 14-15=-4/1698,

13-14=-75/1782

4-16=-304/136, 5-16=-18/627, 7-14=-18/627, 8-14=-304/136, 2-18=-42/1564, 10-13=-42/1564, 6-16=-350/67,

6-14=-350/67

#### NOTES

**WEBS** 

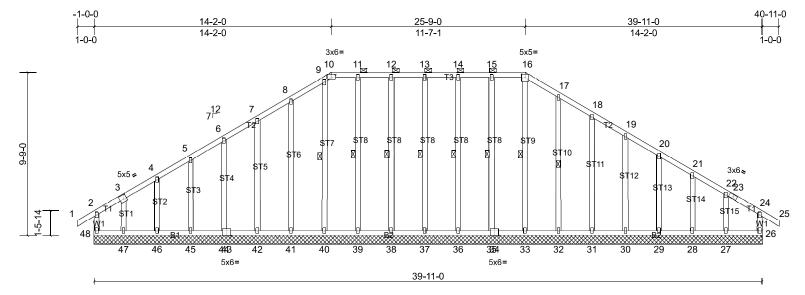
Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph, TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=40ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -1-0-0 to 2-11-14, Interior (1) 2-11-14 to 14-2-0, Exterior (2) 14-2-0 to 19-11-8, Interior (1) 19-11-8 to 25-9-0, Exterior (2) 25-9-0 to 31-4-12, Interior (1) 31-4-12 to 40-11-0 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 176 lb uplift at joint 19 and 176 lb uplift at joint 12.
- 6) 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.

Job	Truss	Truss Type	Qty	Ply	Wiggins Resd-Wiggins Resd			
Q-2201036-1	T3GE	Piggyback Base Supported Gable	1	1	Job Reference (optional)			

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Scale = 1:68.9

Plate Offsets (X, Y): [3:0-2-8,0-3-0], [10:0-3-0,0-1-12], [16:0-2-8,0-2-1]

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	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00	26	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MR							Weight: 317 lb	FT = 20%

 LUMBER
 BRACING

 TOP CHORD
 2x4 SP No.1
 TOP CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 10-16. Rigid ceiling directly applied or 6-0-0 oc bracing.

1 Row at midpt 16-33, 15-35, 14-36, 13-37, 12-38, 11-39, 9-40, 17-32

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

**REACTIONS** All bearings 39-11-0.

(lb) - Max Horiz 48=175 (LC 10)

Max Uplift All uplift 100 (lb) or less at joint(s) 26, 27, 28, 29, 30, 31, 32,

35, 36, 37, 38, 41, 42, 44, 45, 46, 47, 48

Max Grav All reactions 250 (lb) or less at joint(s) 26, 27, 28, 29, 30, 31,

32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 47, 48

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

TOP CHORD 8-9=-205/280, 10-11=-184/259, 11-12=-184/259, 12-13=-184/259, 13-14=-184/259, 14-15=-184/259, 15-16=-184/259, 13-14=

16-17=-208/283

#### NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; B=20ft; L=40ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner (3) -1-0-0 to 2-11-14, Exterior (2) 2-11-14 to 14-2-0, Corner (3) 14-2-0 to 18-1-14, Exterior (2) 18-1-14 to 25-9-0, Corner (3) 25-9-0 to 29-9-0, Exterior (2) 29-9-0 to 40-11-0 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
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- ) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 8) Gable studs spaced at 2-0-0 oc.
- \* 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 48, 26, 35, 36, 37, 38, 41, 42, 44, 45, 46, 47, 32, 31, 30, 29, 28, 27.
- 11) 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.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.