

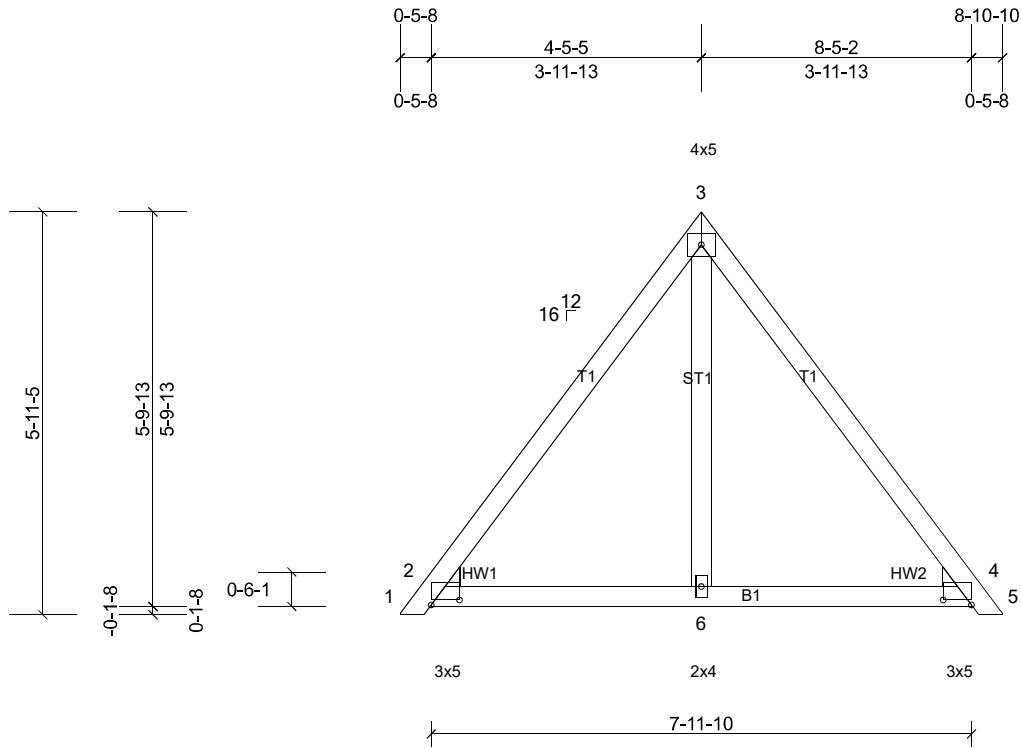
Job 20070044	Truss PB1	Truss Type Piggyback	Qty 1	Ply 1	106 The Crossings Job Reference (optional)
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Carter Components - Sanford, Sanford, NC, user

Run: 8.33 S Apr 7 2020 Print: 8.330 S Apr 7 2020 MiTek Industries, Inc. Fri Jul 10 16:26:12

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Scale = 1:34

Plate Offsets (X, Y): [2:0-5-0,0-0-14], [4:0-5-0,0-0-14]

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	0.31	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 42 lb	FT = 20%

**LUMBER**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
OTHERS 2x4 SP No.2  
WEDGE Left: 2x4 SP No.3  
Right: 2x4 SP No.3

**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.

**REACTIONS** All bearings 7-11-10.  
(lb) - Max Horiz 2=-122 (LC 9), 7=-122 (LC 9)  
Max Uplift All uplift 100 (lb) or less at joint(s) 2, 4, 7, 10  
Max Grav All reactions 250 (lb) or less at joint(s) 2, 4, 6, 7, 10

**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.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.33
  - 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 4-0-0 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.
  - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.
  - 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

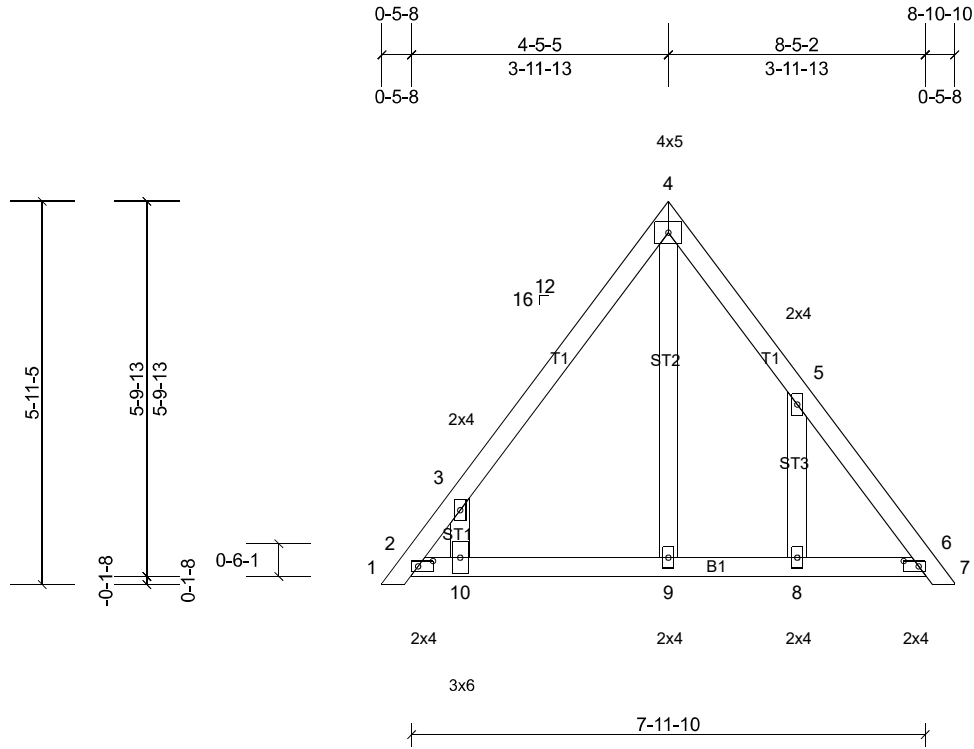
Job 20070044	Truss PB1GE	Truss Type Piggyback	Qty 1	Ply 1	106 The Crossings Job Reference (optional)
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Carter Components - Sanford, Sanford, NC, user

Run: 8.33 S Apr 7 2020 S Apr 7 2020 MiTek Industries, Inc. Fri Jul 10 16:26:14

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Scale = 1:35.7

Plate Offsets (X, Y): [2:0-2-13,0-1-0], [6:0-2-12,0-1-0]

Loading	(psf)	Spacing	2-0-0	CSI	0.23	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 47 lb	FT = 20%

**LUMBER**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
OTHERS 2x4 SP No.3 \*Except\* ST2:2x4 SP No.2

**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.

**REACTIONS** All bearings 7-11-10.  
(lb) - Max Horiz 2=-122 (LC 9), 11=-122 (LC 9)  
Max Uplift All uplift 100 (lb) or less at joint(s) 6, 14 except 2=-155 (LC 11), 8=-138 (LC 14), 10=-208 (LC 13), 11=-155 (LC 11)  
Max Grav All reactions 250 (lb) or less at joint(s) 2, 6, 8, 9, 11, 14 except 10=358 (LC 25)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-340/283  
WEBS 3-10=-482/481, 5-8=-269/260

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.33
  - 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
  - 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 any other members.
  - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 6, 10, and 8. This connection is for uplift only and does not consider lateral forces.
  - 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

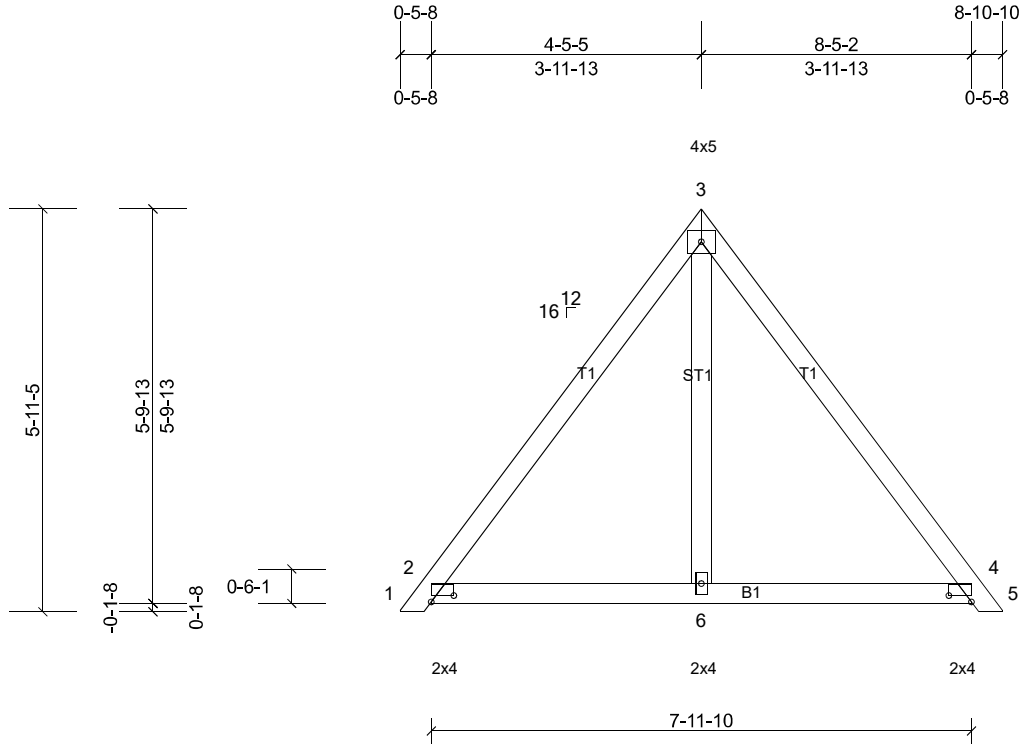
Job 20070044	Truss PB1GR	Truss Type Piggyback	Qty 1	Ply 2	106 The Crossings Job Reference (optional)
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Carter Components - Sanford, Sanford, NC, user

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Scale = 1:34

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

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	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP							Weight: 83 lb	FT = 20%
BCDL	10.0											

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

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

**REACTIONS** All bearings 7-11-10.  
(lb) - Max Horiz 2--122 (LC 9), 7--122 (LC 9)  
Max Uplift All uplift 100 (lb) or less at joint(s) 2, 4, 7, 10  
Max Grav All reactions 250 (lb) or less at joint(s) 2, 4, 6, 7, 10

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

- NOTES**
- 2-ply truss to be connected together as follows:  
Top chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.33
  - 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 4-0-0 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.
  - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.
  - 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

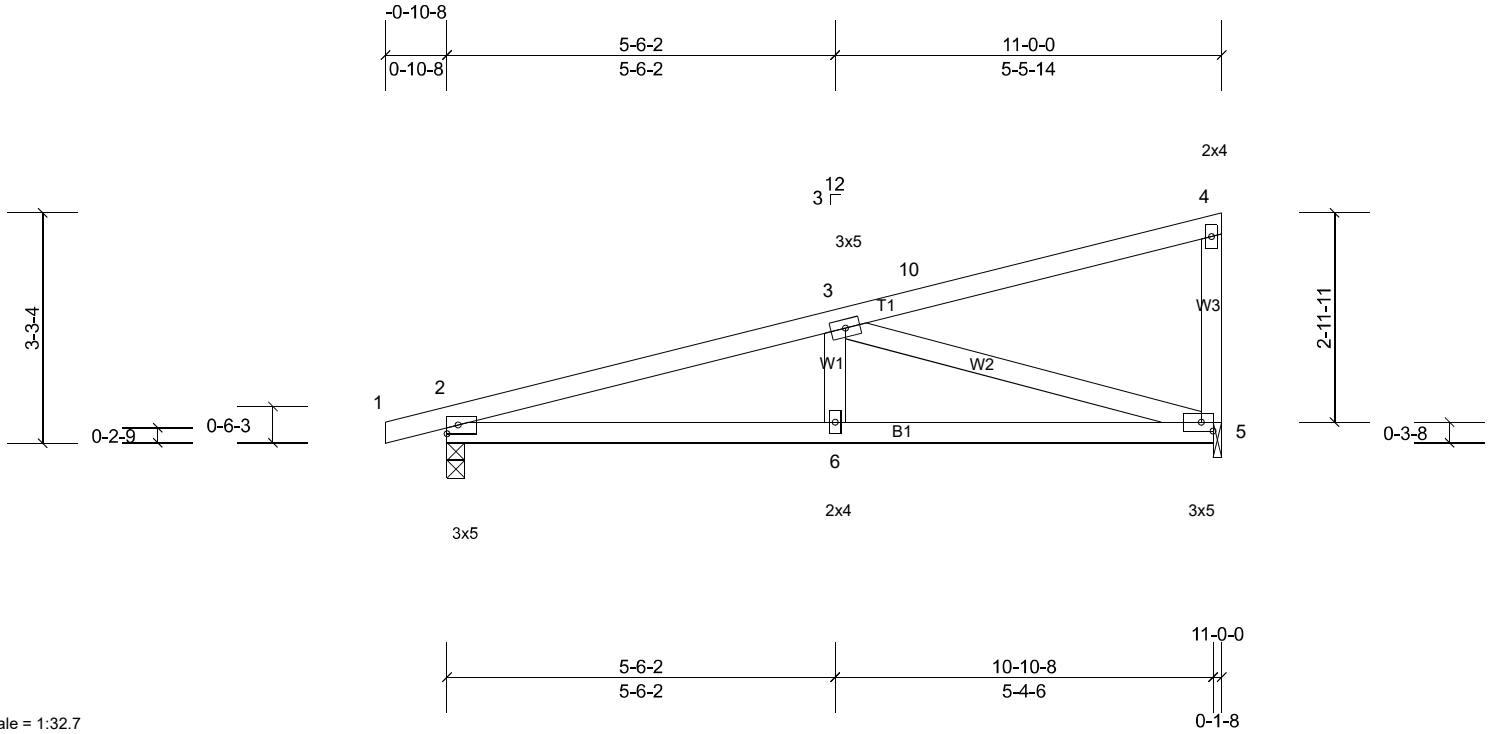
Job 20070044	Truss T1	Truss Type	Qty 3	Ply 1	106 The Crossings Job Reference (optional)
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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	-0.02	6-9	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.05	5-6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.01	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 48 lb	FT = 20%

**LUMBER**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3 \*Except\* W2:2x4 SP No.2

**BRACING**

TOP CHORD  
 BOT CHORD

Structural wood sheathing directly applied or 5-11-3 oc purlins, except end verticals.  
 Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (lb/size) 2=411/0-3-0, (min. 0-1-8), 5=366/0-1-8, (min. 0-1-8)  
 Max Horiz 2=92 (LC 14)  
 Max Uplift 2=-37 (LC 11), 5=-20 (LC 15)  
 Max Grav 2=489 (LC 2), 5=432 (LC 2)

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 2-3=-905/267  
 BOT CHORD 2-6=-342/843, 5-6=-342/843  
 WEBS 3-5=-850/313

**NOTES**

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.33
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10; Min. flat roof snow load governs.
- 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 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 5. This connection is for uplift only and does not consider lateral forces.
- 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.

**LOAD CASE(S)** Standard

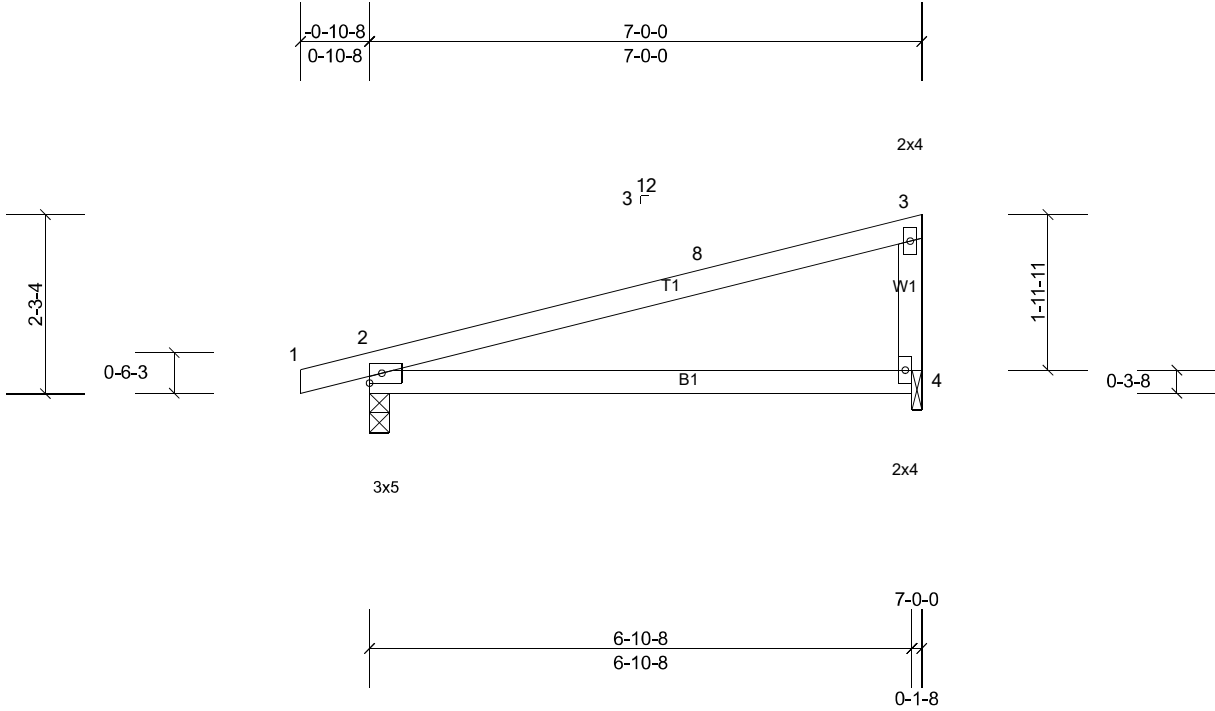
Job 20070044	Truss T1A	Truss Type	Qty 3	Ply 1	106 The Crossings Job Reference (optional)
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Scale = 1:29.2

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	0.77	Vert(LL)	0.10	4-7	>861	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.22	4-7	>381	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.03	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP							Weight: 25 lb	FT = 20%
BCDL	10.0											

**LUMBER**

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

**BRACING**

TOP CHORD  
 BOT CHORD

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

**REACTIONS** (lb/size) 2=277/0-3-0, (min. 0-1-8), 4=229/0-1-8, (min. 0-1-8)  
 Max Horiz 2=61 (LC 14)  
 Max Uplift 2=-33 (LC 11), 4=-13 (LC 15)  
 Max Grav 2=330 (LC 2), 4=271 (LC 2)

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.

**NOTES**

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.33
- 2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10; Min. flat roof snow load governs.
- 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 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- 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 any other members.
- 6) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 8) One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.
- 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.

**LOAD CASE(S)** Standard

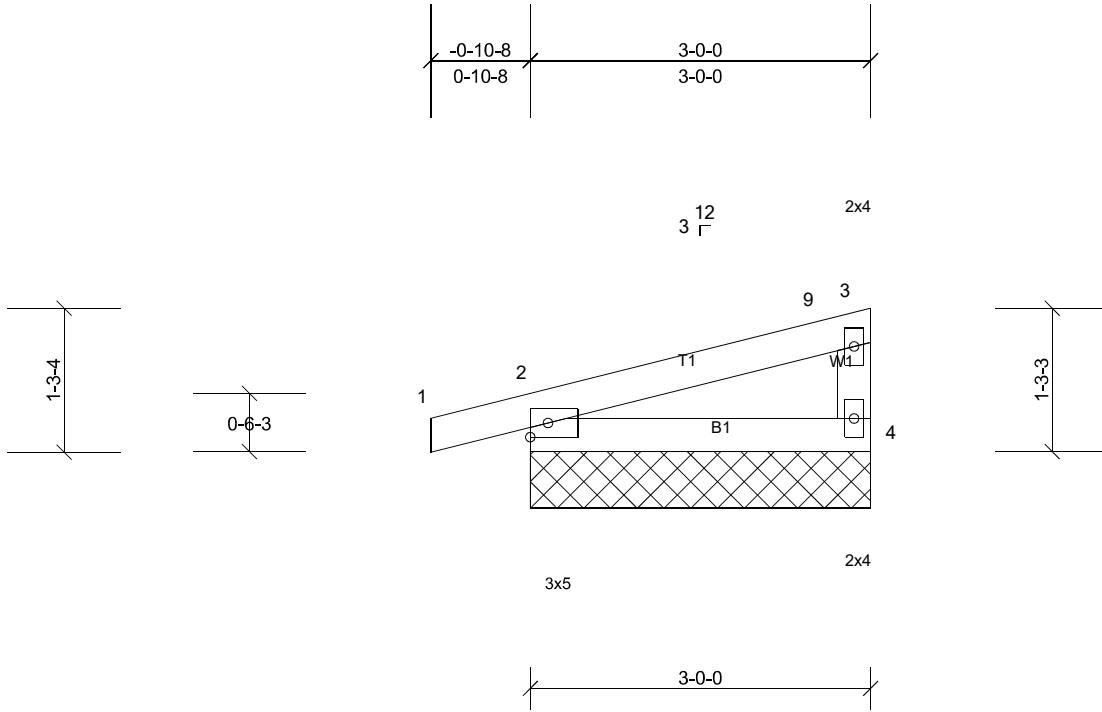
Job 20070044	Truss T1AGE	Truss Type	Qty 1	Ply 1	106 The Crossings Job Reference (optional)
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Carter Components - Sanford, Sanford, NC, user

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Scale = 1:20.3

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	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 12 lb	FT = 20%

**LUMBER**

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

**BRACING**

TOP CHORD  
 BOT CHORD

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

**REACTIONS** (lb/size) 2=145/3-0-0, (min. 0-1-8), 4=93/3-0-0, (min. 0-1-8), 5=145/3-0-0, (min. 0-1-8)  
 Max Horiz 2=30 (LC 14), 5=30 (LC 14)  
 Max Uplift 2=-31 (LC 11), 4=-3 (LC 15), 5=-31 (LC 11)  
 Max Grav 2=175 (LC 2), 4=109 (LC 2), 5=175 (LC 2)

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.

**NOTES**

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.33
- 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10; Min. flat roof snow load governs.
- 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 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- 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 any other members.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.
- 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.

**LOAD CASE(S)** Standard

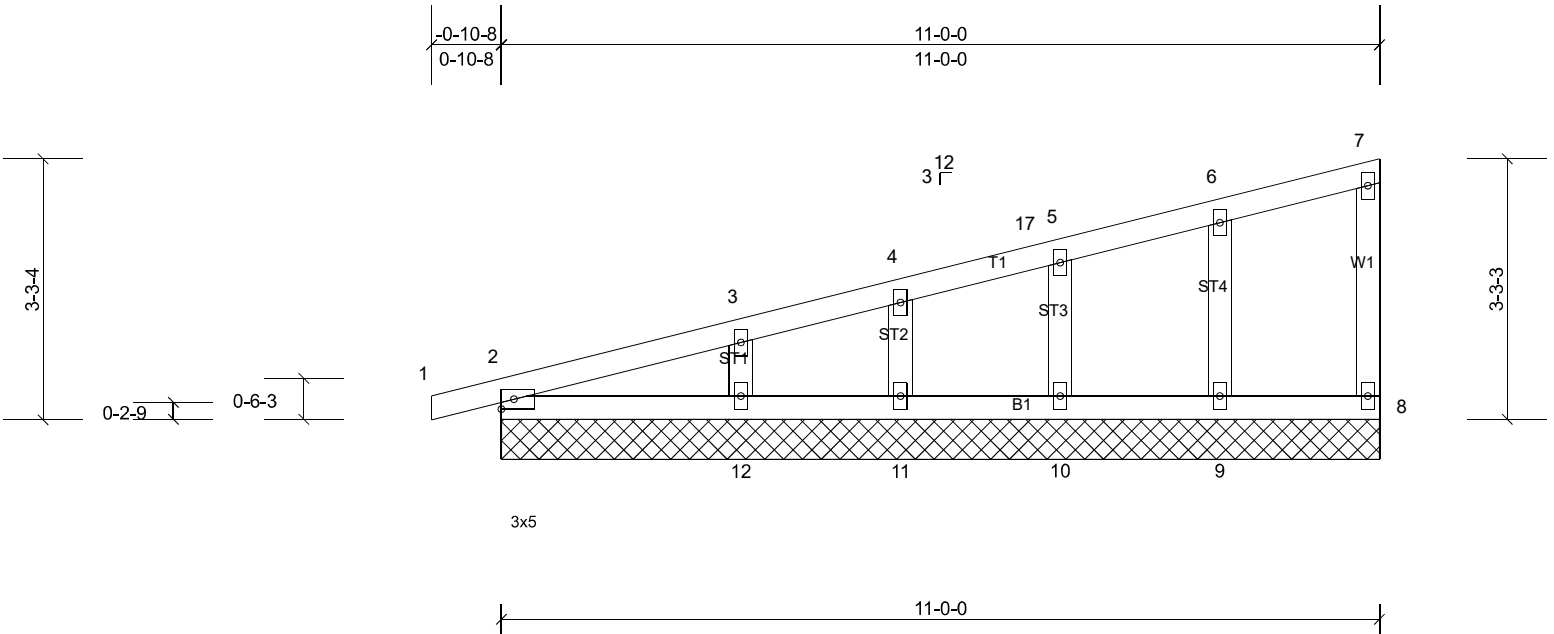
Job 20070044	Truss T1GE	Truss Type	Qty 1	Ply 1	106 The Crossings Job Reference (optional)
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Carter Components - Sanford, Sanford, NC, user

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Scale = 1:28.9

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	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 47 lb	FT = 20%

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

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

**REACTIONS** All bearings 11'-0".  
(lb) - Max Horiz 2=92 (LC 14), 13=92 (LC 14)  
Max Uplift All uplift 100 (lb) or less at joint(s) 2, 8, 9, 10, 11, 12, 13  
Max Grav All reactions 250 (lb) or less at joint(s) 2, 8, 9, 10, 11, 12, 13

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.

- NOTES**
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.33
  - 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10; Min. flat roof snow load governs.
  - 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 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2'-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.
  - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 8, 9, 10, 11, and 12. This connection is for uplift only and does not consider lateral forces.
  - 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.

**LOAD CASE(S)** Standard

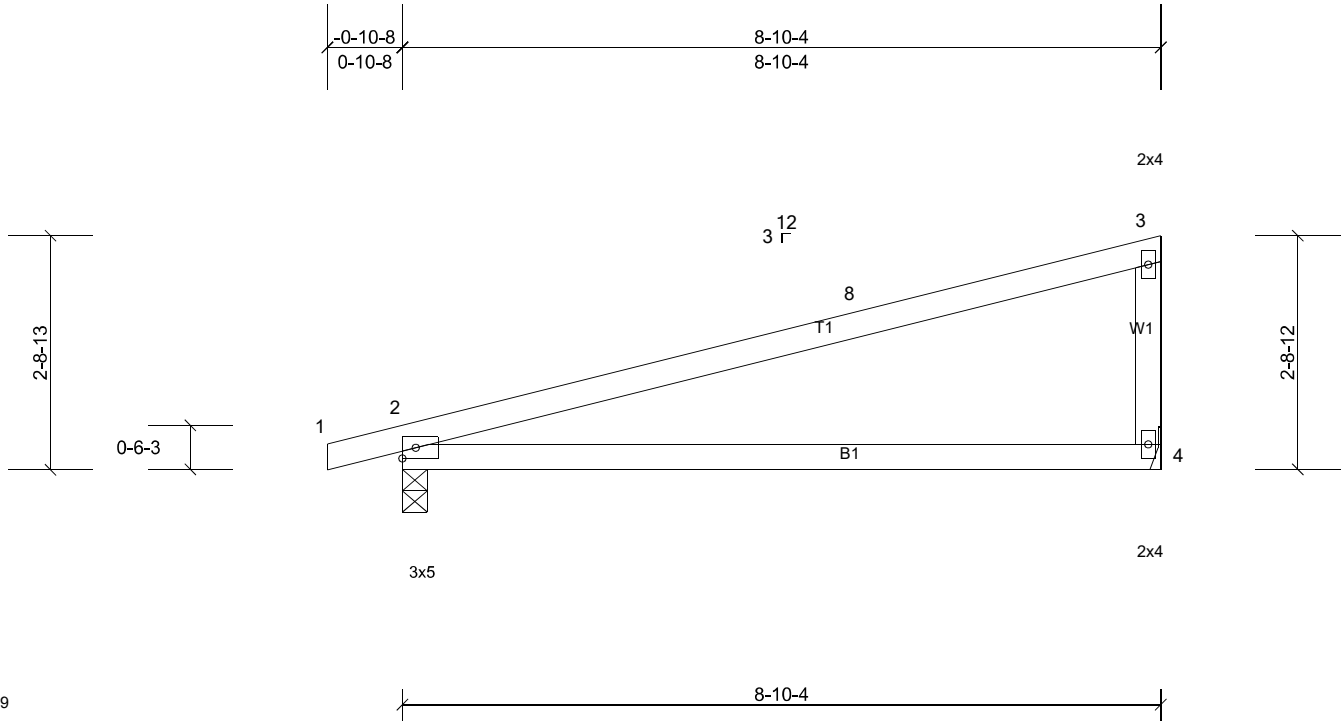
Job 20070044	Truss T2	Truss Type Monopitch	Qty 3	Ply 1	106 The Crossings Job Reference (optional)
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Carter Components - Sanford, Sanford, NC, user

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Scale = 1:26.9

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	0.99	Vert(LL)	0.22	4-7	>485	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.54	4-7	>195	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.05	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 31 lb	FT = 20%

#### LUMBER

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

#### BRACING

TOP CHORD  
BOT CHORD

Structural wood sheathing directly applied, except end verticals.  
Rigid ceiling directly applied or 9'-0" oc bracing.

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

**REACTIONS** (lb/size) 2=339/0-3-8, (min. 0-1-8), 4=293/ Mechanical, (min. 0-1-8)

Max Horiz 2=75 (LC 14)  
Max Uplift 2=-35 (LC 11), 4=-16 (LC 15)  
Max Grav 2=403 (LC 2), 4=346 (LC 2)

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

#### NOTES

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.33
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10; Min. flat roof snow load governs.
- 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 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-0"-0" tall by 2'-0"-0" wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 16 lb uplift at jt(s) 2.
- 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.
- 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.

**LOAD CASE(S)** Standard



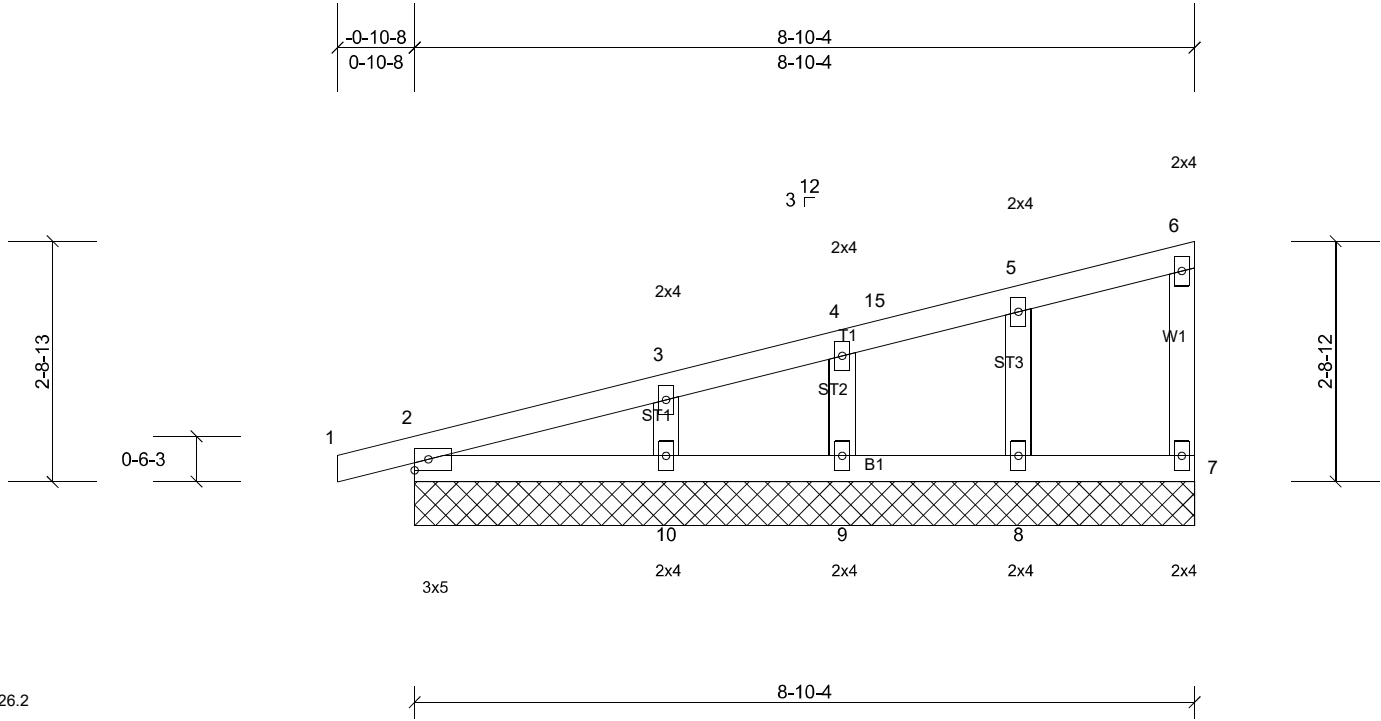
Job 20070044	Truss T2GE	Truss Type Monopitch Supported Gable	Qty 1	Ply 1	106 The Crossings Job Reference (optional)
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Scale = 1:26.2

Loading	(psf)	Spacing	2-0-0	CSI	0.09	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 37 lb	FT = 20%

**LUMBER**

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

**BRACING**

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

**REACTIONS** All bearings 8-10-4.

(lb) - Max Horiz 2=75 (LC 14), 11=75 (LC 14)  
 Max Uplift All uplift 100 (lb) or less at joint(s) 2, 7, 8, 9, 10, 11  
 Max Grav All reactions 250 (lb) or less at joint(s) 2, 7, 8, 9, 10, 11

**FORCES**

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

**NOTES**

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.33
- 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10; Min. flat roof snow load governs.
- 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 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- 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'-0-0 tall by 2'-0-0 wide will fit between the bottom chord and any other members.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2, 7, 8, 9, and 10. This connection is for uplift only and does not consider lateral forces.
- 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.

**LOAD CASE(S)** Standard

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

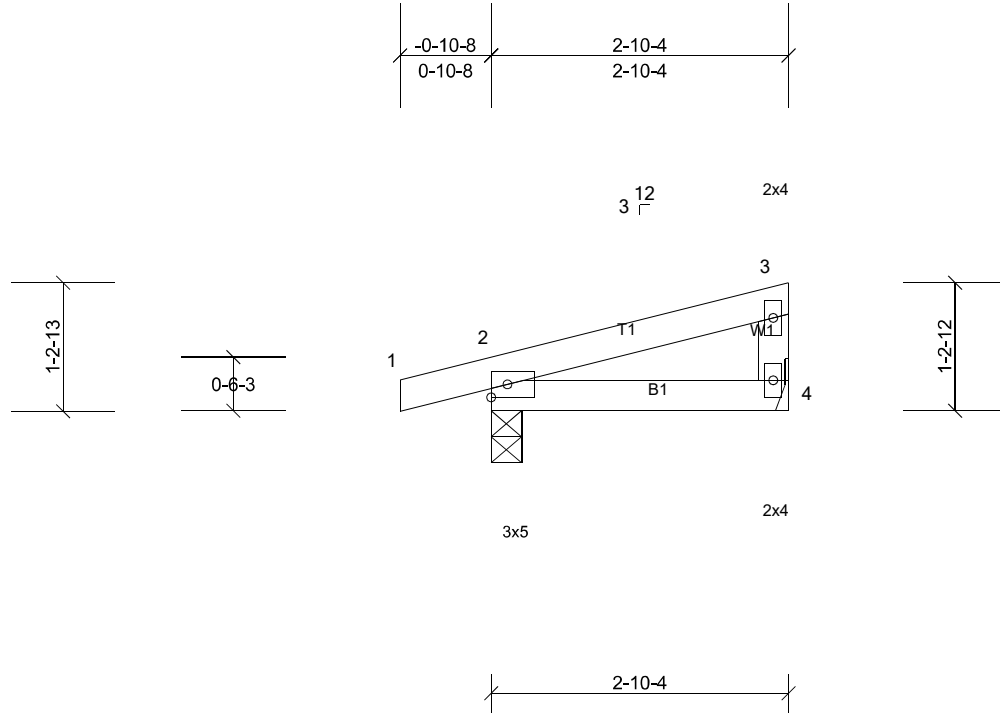
Job 20070044	Truss T3	Truss Type Monopitch	Qty 7	Ply 1	106 The Crossings Job Reference (optional)
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Scale = 1:22.1

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	0.09	Vert(LL)	0.00	4-7	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00	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	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 11 lb	FT = 20%

#### LUMBER

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

#### BRACING

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

**REACTIONS** (lb/size) 2=140/0-3-8, (min. 0-1-8), 4=85/ Mechanical, (min. 0-1-8)  
Max Horiz 2=29 (LC 14)  
Max Uplift 2=-31 (LC 11), 4=-4 (LC 15)  
Max Grav 2=169 (LC 2), 4=100 (LC 2)

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.

#### NOTES

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.33
- 2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10; Min. flat roof snow load governs.
- 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 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- 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 any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 4 lb uplift at jt(s) 2.
- 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 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

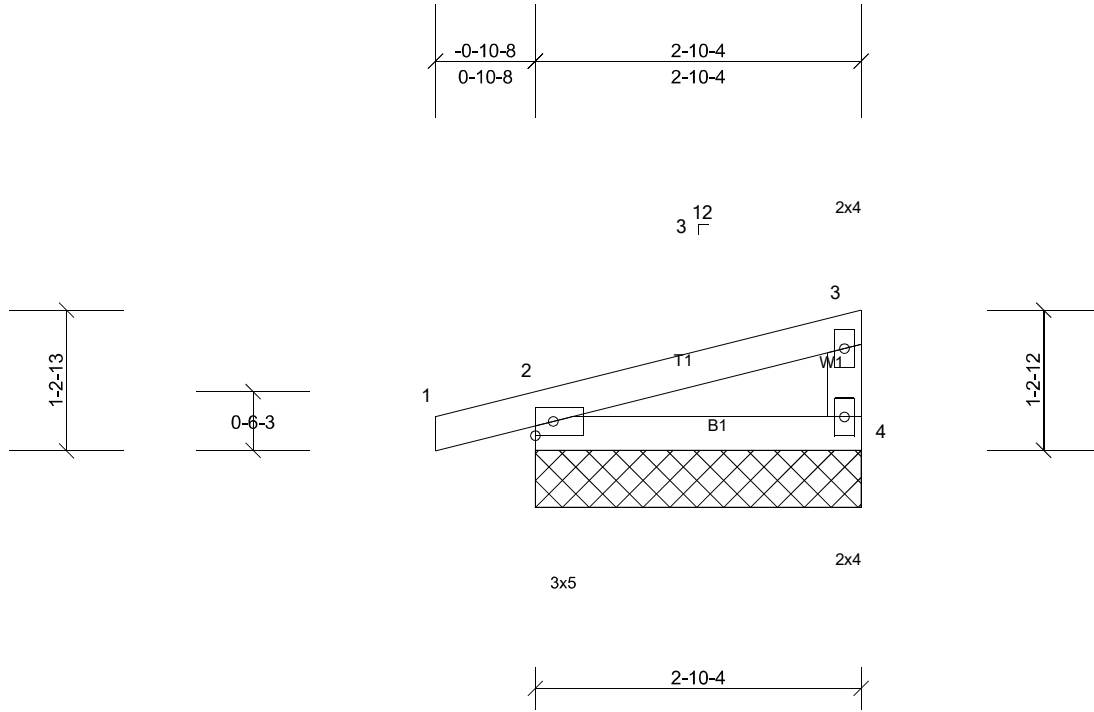
Job 20070044	Truss T3GE	Truss Type Monopitch Supported Gable	Qty 1	Ply 1	106 The Crossings Job Reference (optional)
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Scale = 1:20.2

Loading	(psf)	Spacing	2-0-0	CSI	0.09	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MP								
BCDL	10.0										Weight: 11 lb	FT = 20%

**LUMBER**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3

**BRACING**  
 TOP CHORD  
 BOT CHORD

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

**REACTIONS** (lb/size) 2=140/2-10-4, (min. 0-1-8), 4=88/2-10-4, (min. 0-1-8), 5=140/2-10-4, (min. 0-1-8)  
 Max Horiz 2=29 (LC 14), 5=29 (LC 14)  
 Max Uplift 2=-31 (LC 11), 4=-3 (LC 15), 5=-31 (LC 11)  
 Max Grav 2=169 (LC 2), 4=103 (LC 2), 5=169 (LC 2)

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.

- NOTES**
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.33
  - 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10; Min. flat roof snow load governs.
  - 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 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
  - 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 any other members.
  - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.
  - 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.

**LOAD CASE(S)** Standard

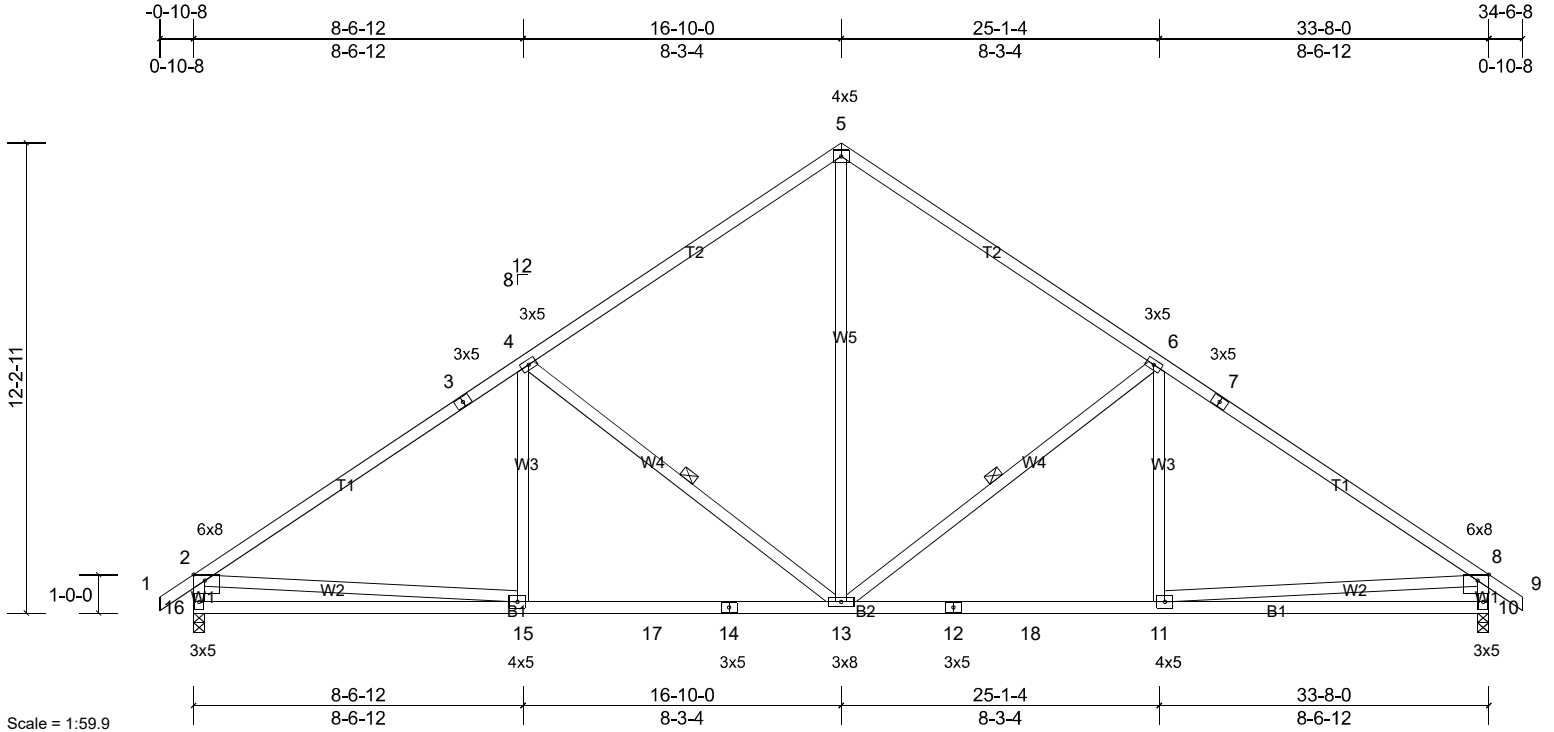
Job 20070044	Truss T4	Truss Type Common	Qty 7	Ply 1	106 The Crossings Job Reference (optional)
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Scale = 1:59.9

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

Loading	(psf)	Spacing	2-0-0	CSI	0.92	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.92	Vert(LL)	-0.12 13-15	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.23 13-15	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.05 10	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH							
BCDL	10.0									Weight: 205 lb	FT = 20%

**LUMBER**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.2

**BRACING**  
TOP CHORD Structural wood sheathing directly applied, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 6-13, 4-13

**REACTIONS** (lb/size) 10=1179/0-3-8, (min. 0-1-10), 16=1179/0-3-8, (min. 0-1-10)  
Max Horiz 16=256 (LC 12)  
Max Grav 10=1396 (LC 2), 16=1396 (LC 2)

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 2-3=-1806/292, 3-4=-1582/321, 4-5=-1303/358, 5-6=-1303/358, 6-7=-1582/321, 7-8=-1806/292, 2-16=-1317/298, 8-10=-1317/298  
BOT CHORD 15-16=-247/634, 15-17=-121/1550, 14-17=-121/1550, 13-14=-121/1550, 12-13=-119/1397, 12-18=-119/1397, 11-18=-119/1397, 10-11=-171/517  
WEBS 5-13=-190/896, 6-13=-653/234, 4-13=-653/234, 2-15=0/1036, 8-11=0/1045

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.33
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
  - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
  - All plates are 3x5 MT20 unless otherwise indicated.
  - \* 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.
  - 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.

**LOAD CASE(S)** Standard

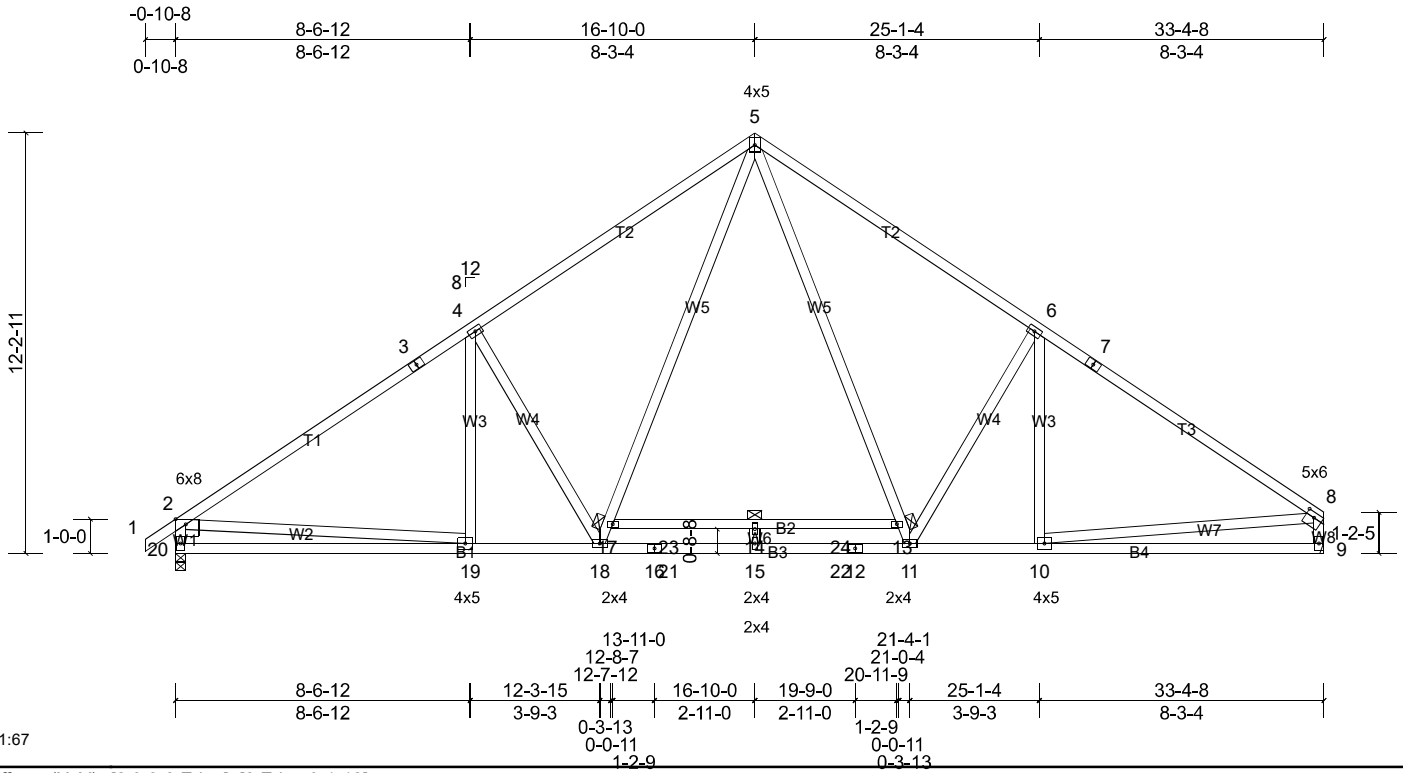
Job 20070044	Truss T4A	Truss Type Common	Qty 10	Ply 1	106 The Crossings Job Reference (optional)
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Scale = 1:67

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

Loading	(psf)	Spacing	2-0-0	CSI	0.89	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.32	14	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.66	14	>604	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.44	Horz(CT)	0.04	9	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 227 lb	FT = 20%

**LUMBER**  
TOP CHORD 2x4 SP No.1 \*Except\* T1:2x4 SP No.2  
BOT CHORD 2x4 SP 2400F 2.0E \*Except\* B3:2x4 SP No.1, B2:2x4 SP No.2  
WEBS 2x4 SP No.2 \*Except\* W8,W6:2x4 SP No.3

**BRACING**  
TOP CHORD Structural wood sheathing directly applied, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:  
6-0-0 oc bracing: 13-17

**REACTIONS** (lb/size) 9=1307/ Mechanical, (min. 0-1-8), 20=1354/0-3-8, (min. 0-1-8)  
Max Horiz 20=254 (LC 12)  
Max Grav 9=1564 (LC 26), 20=1617 (LC 25)

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 2-3=-2137/60, 3-4=-1927/90, 4-5=-1988/165, 5-6=-1974/165, 6-7=-1879/87, 7-8=-2082/56, 2-20=-1521/153, 8-9=-1469/104  
BOT CHORD 19-20=-232/701, 18-19=0/1829, 16-18=0/1364, 16-21=0/1364, 15-21=0/1364, 15-22=0/1364, 12-22=0/1364, 11-12=0/1364, 10-11=0/1644, 9-10=-67/279  
WEBS 2-19=0/1252, 8-10=0/1419, 4-18=-459/304, 17-18=-42/846, 5-17=0/987, 5-13=0/953, 11-13=-41/812, 6-11=-423/305

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.33
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
  - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
  - 200.0lb AC unit load placed on the bottom chord, 16-10-0 from left end, supported at two points, 5-0-0 apart.
  - All plates are 3x5 MT20 unless otherwise indicated.
  - \* 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.
  - Refer to girder(s) for truss to truss connections.
  - 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.

**LOAD CASE(S)** Standard

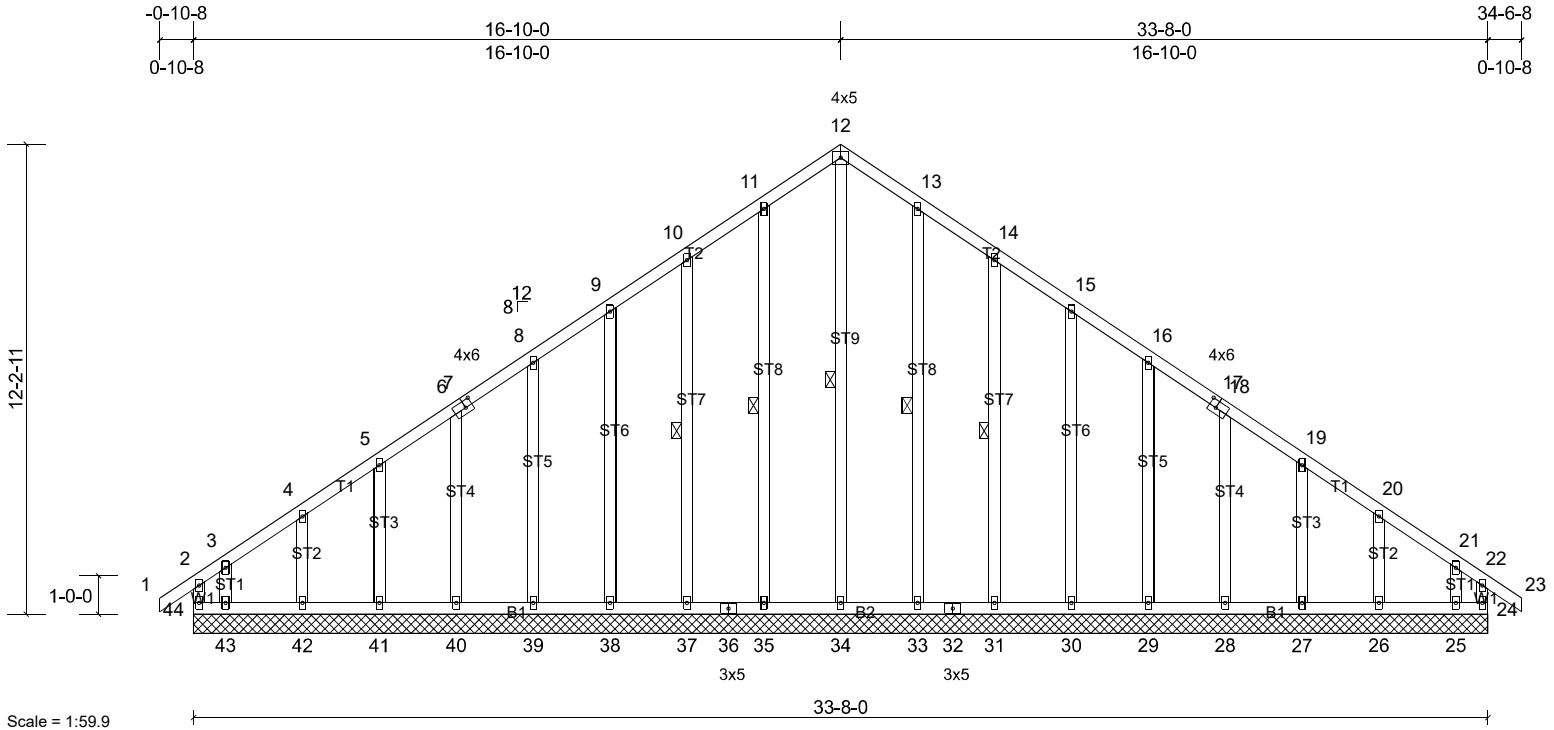
Job 20070044	Truss T4GE	Truss Type Common Supported Gable	Qty 2	Ply 1	106 The Crossings Job Reference (optional)
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Scale = 1:59.9

Plate Offsets (X, Y): [7:0-2-4,0-2-4], [17:0-2-4,0-2-4]

Loading	(psf)	Spacing	2-0-0	CSI	0.20	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.01	24	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MR								
BCDL	10.0											
											Weight: 268 lb	FT = 20%

**LUMBER**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3  
 OTHERS 2x4 SP No.2 \*Except\* ST3,ST2,ST1:2x4 SP No.3

**BRACING**  
 TOP CHORD Structural wood sheathing directly applied or 6'-0" oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 6'-0" oc bracing.  
 WEBS 1 Row at midpt 12-34, 11-35, 10-37, 13-33, 14-31

**REACTIONS** All bearings 33-8-0.  
 (lb) - Max Horiz 44=256 (LC 12)  
 Max Uplift All uplift 100 (lb) or less at joint(s) 26, 27, 28, 29, 30, 31, 33, 35, 37, 38, 39, 40, 41, 42 except 24=-138 (LC 12), 25=-163 (LC 9), 43=-224 (LC 10), 44=-233 (LC 11)  
 Max Grav All reactions 250 (lb) or less at joint(s) 24, 25, 26, 27, 28, 29, 30, 31, 33, 34, 35, 37, 38, 39, 40, 41, 42 except 43=268 (LC 11), 44=313 (LC 10)

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 10-11=-252/298, 11-12=-294/347, 12-13=-294/347, 13-14=-252/298  
 WEBS 12-34=-313/204

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.33
  - 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
  - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 2'-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'-0" tall by 2'-0" wide will fit between the bottom chord and any other members.
  - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 44, 24, 35, 37, 38, 39, 40, 41, 42, 43, 33, 31, 30, 29, 28, 27, 26, and 25. This connection is for uplift only and does not consider lateral forces.
  - 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.

**LOAD CASE(S)** Standard

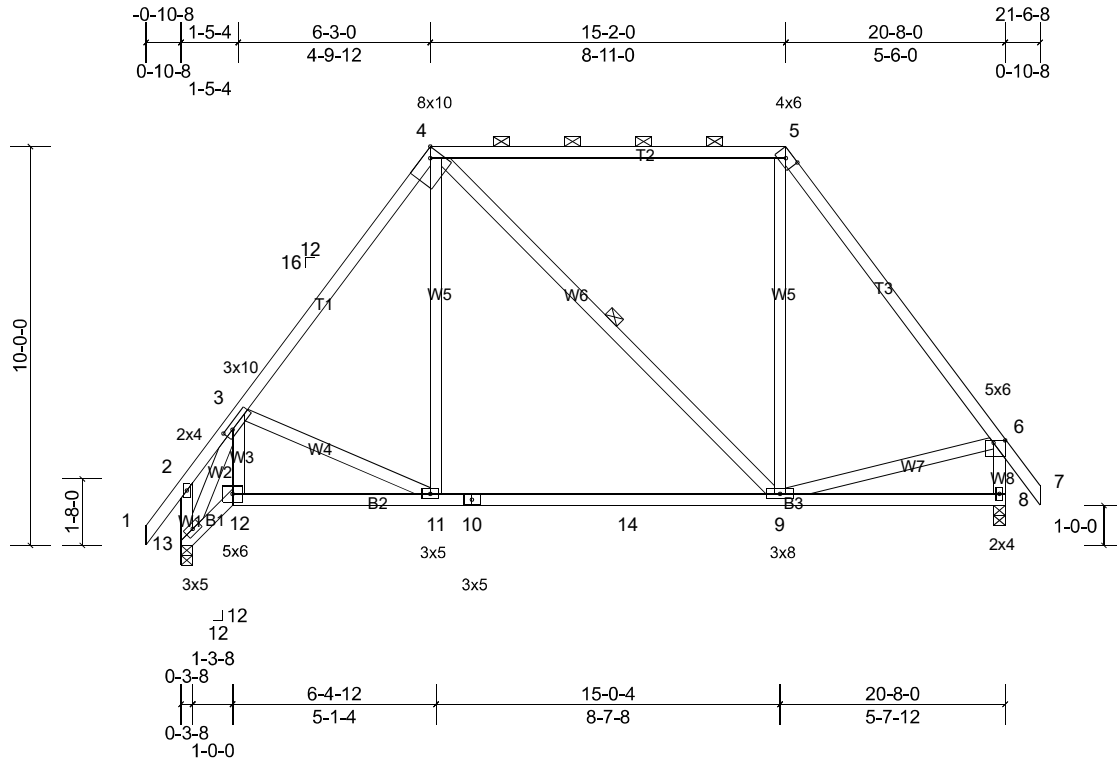
Job 20070044	Truss T5	Truss Type Piggyback Base	Qty 1	Ply 1	106 The Crossings Job Reference (optional)
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Scale = 1:57.8

Plate Offsets (X, Y): [3:0-2-9,0-1-8], [4:0-2-13,Edge], [5:0-3-2,0-2-0], [6:0-3-8,0-0-12]

Loading	(psf)	Spacing	2-0-0	CSI	0.68	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.68	Vert(LL)	-0.17	9-11	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.29	9-11	>844	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.03	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0										Weight: 149 lb	FT = 20%

**LUMBER**

TOP CHORD 2x4 SP No.2 \*Except\* T2:2x4 SP 2400F 2.0E  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.2 \*Except\* W3,W1,W2,W8:2x4 SP No.3

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.  
 BOT CHORD Rigid ceiling directly applied or 9-11-9 oc bracing.  
 WEBS 1 Row at midpt 4-9

**REACTIONS** (lb/size) 8=785/0-3-8, (min. 0-1-8), 13=782/0-3-8, (min. 0-1-8)  
 Max Horiz 13=-242 (LC 11)  
 Max Grav 8=876 (LC 2), 13=876 (LC 2)

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 3-4=-826/232, 4-5=-431/230, 5-6=-788/205, 6-8=-837/209  
 BOT CHORD 12-13=-354/904, 11-12=-246/653, 10-11=-82/525, 10-14=-82/525, 9-14=-82/525  
 WEBS 3-12=-206/588, 3-11=-265/226, 4-11=0/354, 3-13=-1316/282, 6-9=-56/431

**NOTES**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.33
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=18.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- 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 any other members, with BCDL = 10.0psf.
- Bearing at joint(s) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 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

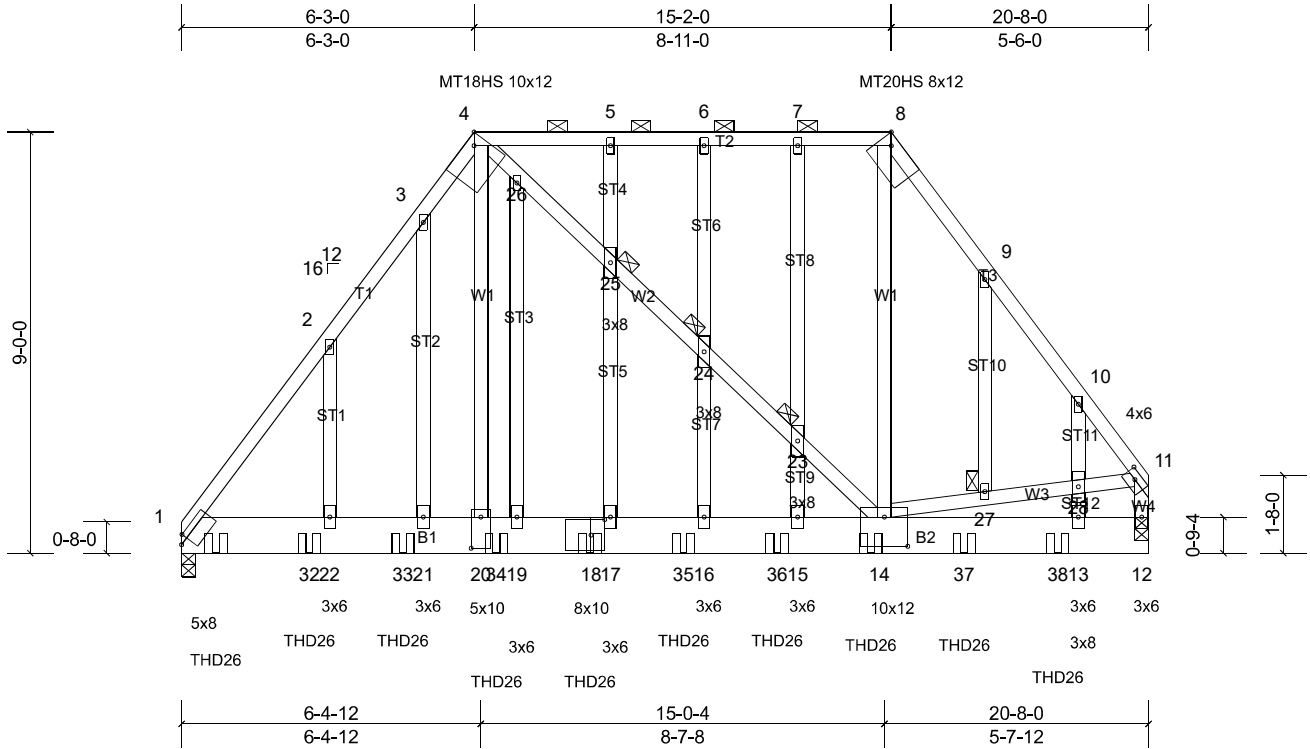
Job 20070044	Truss T5GR	Truss Type Piggyback Base Girder	Qty 1	Ply 2	106 The Crossings Job Reference (optional)
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Scale = 1:49.2

Plate Offsets (X, Y): [1:0-2-3,0-1-8], [4:0-2-13,Edge], [8:0-2-13,Edge], [11:0-2-12,0-1-12], [14:0-6-0,0-7-8], [18:0-3-8,0-4-0], [20:0-8-0,0-2-8]

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	0.86	Vert(LL)	-0.10	16-17	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.38	Vert(CT)	-0.23	16-17	>999	180	MT18HS	244/190
TCDL	10.0	Rep Stress Incr	NO	WB	0.84	Horz(CT)	0.02	12	n/a	n/a	MT20HS	187/143
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 492 lb	FT = 20%

LUMBER	TOP CHORD	2x4 SP No.2	BOT CHORD	2x10 SP 2400F 2.0E	WEBS	2x4 SP No.2 *Except* W3:2x4 SP No.1, W4:2x4 SP No.3	OTHERS	2x4 SP No.3 *Except* ST8,ST5,ST3,ST2:2x4 SP No.2	REACTIONS	(lb/size)	1=7512/0-3-8, (req. 0-3-9), 12=6837/0-3-8, (min. 0-3-4)	Max Horiz	1=177 (LC 29)	Max Grav	1=8664 (LC 2), 12=7878 (LC 2)	FORCES	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	TOP CHORD	1-2=-7859/0, 2-3=-7965/0, 3-4=-7794/0, 4-5=-4484/0, 5-6=-4484/0, 6-7=-4484/0, 7-8=-4484/0, 8-9=-7131/0, 9-10=-7512/0, 10-11=-7115/0	BOT CHORD	1-32=0/4691, 22-32=0/4691, 22-33=0/4691, 21-33=0/4691, 20-21=0/4691, 20-34=0/4793, 19-34=0/4793, 18-19=0/4793, 17-18=0/4793, 17-35=0/4793, 16-35=0/4793, 16-36=0/4793, 15-36=0/4793, 14-15=0/4793	WEBS	4-20=0/5914, 4-26=-289/9, 25-26=-543/0, 24-25=-435/0, 23-24=-516/0, 14-23=-520/0, 8-14=0/5246, 14-27=0/4511, 27-28=0/4411, 11-28=0/4344, 11-12=-6079/0, 19-26=0/395, 2-22=-318/117, 9-27=0/398, 10-28=-579/19, 13-28=-1078/0	BRACING	TOP CHORD	Structural wood sheathing directly applied or 3-1-4 oc purlins, except 2-0-0 oc purlins (5-4-3 max.): 4-8.	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.	JOINTS	1 Brace at Jt(s): 23, 24, 25, 27
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- NOTES**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-7-0 oc.  
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.33
  - 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=18.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - 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.
  - WARNING: Required bearing size at joint(s) 1 greater than input bearing size.



Job 20070044	Truss T5GR	Truss Type Piggyback Base Girder	Qty 1	Ply 2	106 The Crossings Job Reference (optional)
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- 13) 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.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 15) 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 0-8-12 from the left end to 18-8-12 to connect truss(es) T4A (1 ply 2x4 SP) to back face of bottom chord.
- 16) Fill all nail holes where hanger is in contact with lumber.

**LOAD CASE(S)** Standard

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

Vert: 1-4=-48, 4-8=-58, 8-11=-48, 12-29=-20

Concentrated Loads (lb)

Vert: 18=-1287 (B), 14=-1287 (B), 31=-1290 (B), 32=-1287 (B), 33=-1287 (B), 34=-1287 (B), 35=-1287 (B), 36=-1287 (B), 37=-1287 (B), 38=-1287 (B)

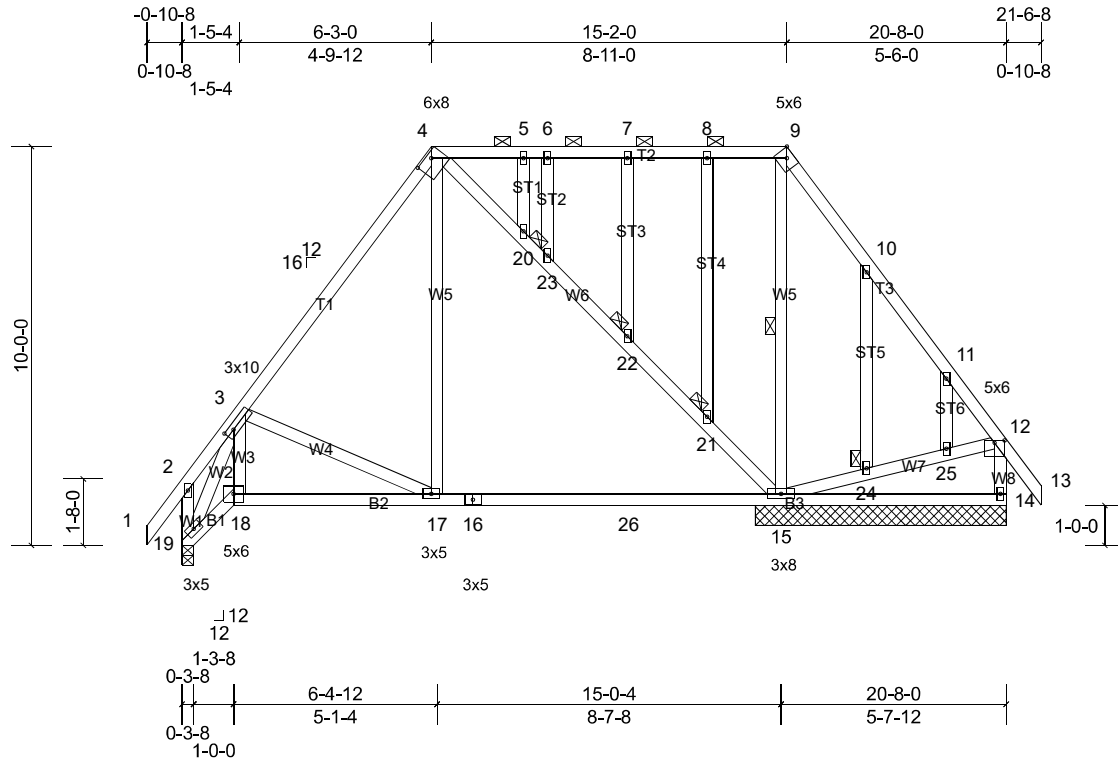
Job 20070044	Truss T5SE	Truss Type Piggyback Base Structural Gable	Qty 1	Ply 1	106 The Crossings Job Reference (optional)
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Scale = 1:57.8

Plate Offsets (X, Y): [3:0-2-9,0-1-8], [4:0-4-12,0-1-8], [9:0-2-13,Edge], [12:0-3-0,0-0-12]

Loading	(psf)	Spacing	2-0-0	CSI	0.65	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.17 15-17	>999	240	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.27 15-17	>650	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.02 14	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH							
BCDL	10.0										
										Weight: 183 lb	FT = 20%

**LUMBER**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.2 \*Except\* W3,W1,W2,W8:2x4 SP No.3  
 OTHERS 2x4 SP No.3 \*Except\* ST4,ST5:2x4 SP No.2

**REACTIONS** (lb/size) 14=70/6-3-8, (min. 0-1-8), 15=980/6-3-8, (min. 0-1-8),  
 19=517/0-3-8, (min. 0-1-8)  
 Max Horiz 19=-242 (LC 11)  
 Max Uplift 14=-28 (LC 29), 15=-37 (LC 13)  
 Max Grav 14=125 (LC 30), 15=1068 (LC 2), 19=599 (LC 29)

**FORCES**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 3-4=-507/122, 9-10=-44/277  
 BOT CHORD 18-19=-354/699, 17-18=-246/503, 16-17=-84/336, 16-26=-84/336, 15-26=-84/336  
 WEBS 3-18=-206/463, 3-17=-304/239, 4-17=-4/369, 4-20=-502/134, 20-23=-488/113, 22-23=-522/140, 21-22=-544/159,  
 15-21=-553/154, 9-15=-501/194, 3-19=-934/150, 15-24=-366/335, 24-25=-341/314, 12-25=-332/306

**NOTES**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.33
- 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=18.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- 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.
- Bearing at joint(s) 19 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14 and 15. This connection is for uplift only and does not consider lateral forces.
- 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

**BRACING**

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.): 4-9.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS 1 Row at midpt 9-15  
 JOINTS 1 Brace at Jt(s): 20, 21, 22, 24

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

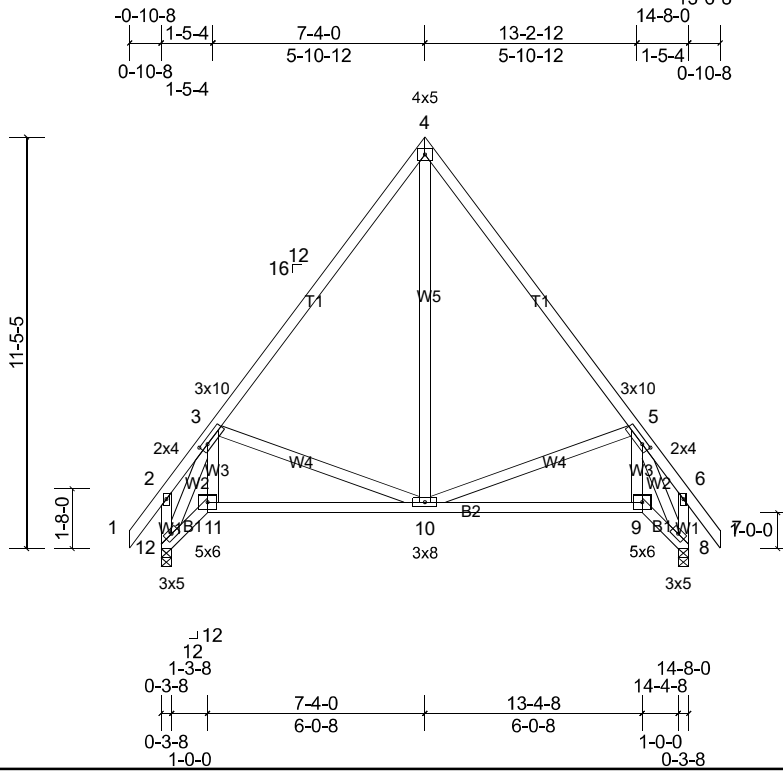
Job 20070044	Truss T6	Truss Type	Qty 1	Ply 1	106 The Crossings Job Reference (optional)
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Scale = 1:64.1

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

Loading	(psf)	Spacing	2-0-0	CSI	0.52	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.02	9-10	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.06	9-10	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.05	8	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH								
BCDL	10.0											
											Weight: 116 lb	FT = 20%

**LUMBER**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3 \*Except\* W5,W4:2x4 SP No.2

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 9-6-9 oc bracing.

**REACTIONS** (lb/size) 8=535/0-3-8, (min. 0-1-8), 12=535/0-3-8, (min. 0-1-8)  
Max Horiz 12=-279 (LC 11)  
Max Uplift 8=-7 (LC 13), 12=-7 (LC 14)  
Max Grav 8=636 (LC 2), 12=636 (LC 2)

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 3-4=-517/201, 4-5=-526/201  
BOT CHORD 11-12=-381/870, 10-11=-271/602, 9-10=-96/473, 8-9=-125/674  
WEBS 4-10=-128/408, 5-10=-349/289, 5-9=-32/495, 3-10=-389/310, 3-11=-208/632, 3-12=-1177/339, 5-8=-1241/343

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.33
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
  - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
  - Bearing at joint(s) 12, 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 12 and 8. This connection is for uplift only and does not consider lateral forces.
  - 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.

**LOAD CASE(S)** Standard

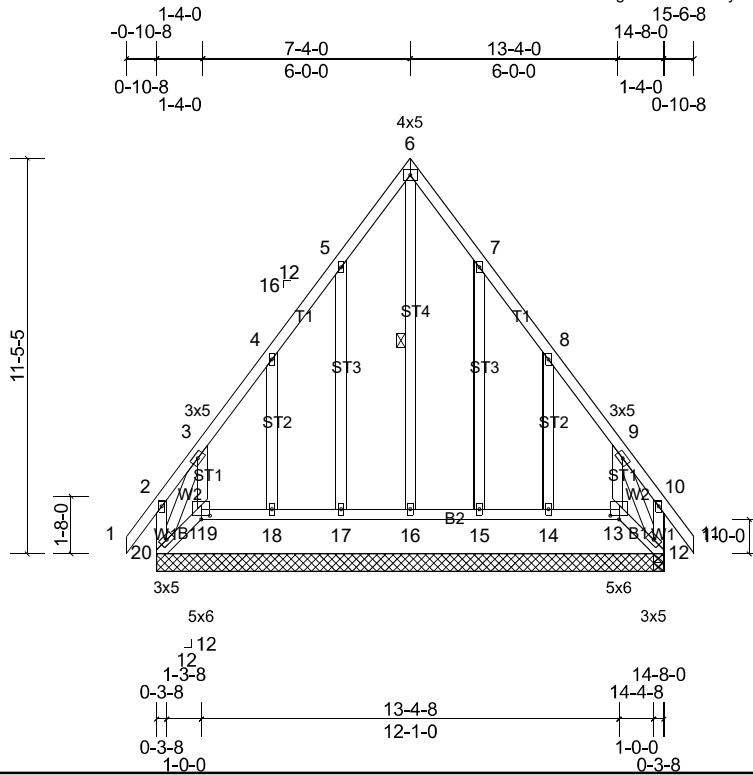
Job 20070044	Truss T6GE	Truss Type	Qty 1	Ply 1	106 The Crossings Job Reference (optional)
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Scale = 1:66.6

Plate Offsets (X, Y): [13:0-3-0,0-1-4], [19:0-3-0,0-1-4]

Loading	(psf)	Spacing	2-0-0	CSI	0.17	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	0.00 19-20	>999	240	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	0.00 13-14	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.00 12	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-MSH							
BCDL	10.0										
											Weight: 132 lb FT = 20%

**LUMBER**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3  
 OTHERS 2x4 SP No.3 \*Except\* ST4,ST3:2x4 SP No.2

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 6-16

**REACTIONS** All bearings 14-8-0.

(lb) - Max Horiz 20=-279 (LC 11)  
 Max Uplift All uplift 100 (lb) or less at joint(s) 12, 15, 16, 17 except 13=-135 (LC 14), 14=-109 (LC 14), 18=-108 (LC 13), 19=-346 (LC 10), 20=-397 (LC 11)  
 Max Grav All reactions 250 (lb) or less at joint(s) 12, 13, 14, 15, 17, 18 except 16=274 (LC 14), 19=434 (LC 11), 20=473 (LC 12)

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 5-6=-269/323, 6-7=-269/323  
 BOT CHORD 19-20=-282/328, 12-13=-273/326  
 WEBS 3-20=-516/442, 9-12=-503/404, 6-16=-442/299, 3-19=-387/408, 9-13=-368/401

**NOTES**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.33
- 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 13.9 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 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.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 19, 20, and 12. 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) 13. 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) 16, 17, 18, 15, and 14. This connection is for uplift only and does not consider lateral forces.
- 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.

**LOAD CASE(S)** Standard

Job 20070044	Truss T6GE	Truss Type	Qty 1	Ply 1	106 The Crossings Job Reference (optional)
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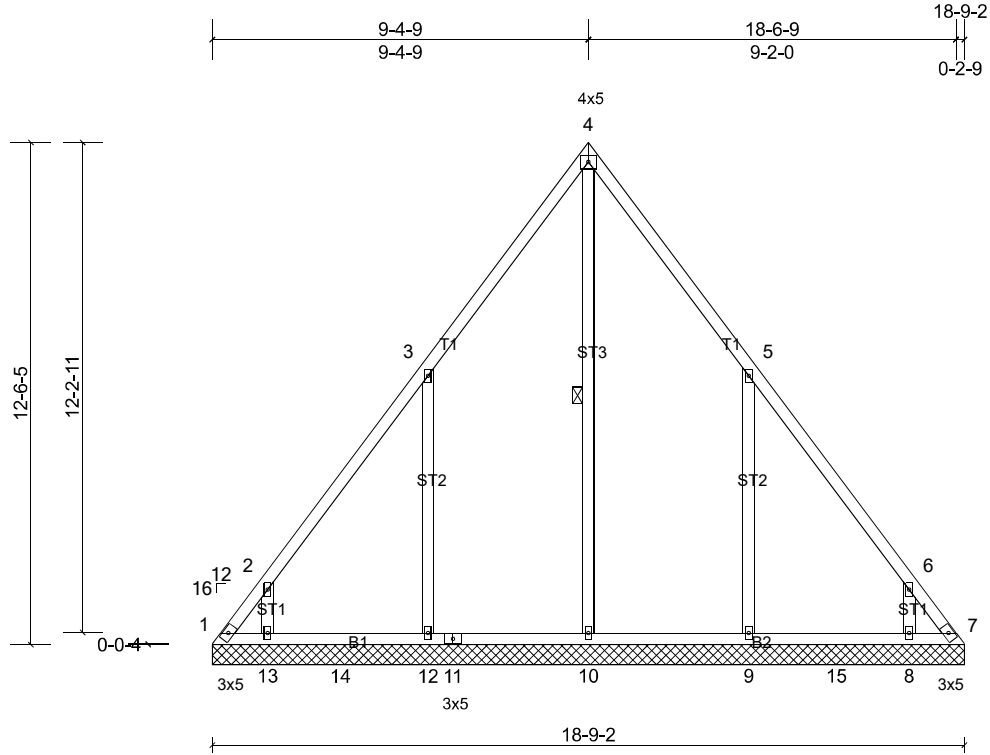
Job 20070044	Truss V1	Truss Type Valley	Qty 1	Ply 1	106 The Crossings Job Reference (optional)
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Scale = 1:57.5

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	0.26	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.17	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.36	Horiz(TL)	0.01	7	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-SH								
BCDL	10.0											
											Weight: 114 lb	FT = 20%

**LUMBER**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 OTHERS 2x4 SP No.2 \*Except\* ST1:2x4 SP No.3

**BRACING**

TOP CHORD  
 BOT CHORD  
 WEBS

Structural wood sheathing directly applied or 6'-0" oc purlins.  
 Rigid ceiling directly applied or 10'-0" oc bracing.  
 1 Row at midpt 4-10

**REACTIONS** All bearings 18-9-2.

(lb) - Max Horiz 1=-260 (LC 9)  
 Max Uplift All uplift 100 (lb) or less at joint(s) except 1=-228 (LC 11),  
 7=-195 (LC 12), 8=-166 (LC 14), 9=-227 (LC 14), 12=-227 (LC 13),  
 13=-166 (LC 13)  
 Max Grav All reactions 250 (lb) or less at joint(s) except 1=304 (LC 13),  
 7=289 (LC 14), 8=348 (LC 25), 9=547 (LC 25), 10=349 (LC 27),  
 12=547 (LC 24), 13=348 (LC 24)

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 1-2=-452/368, 6-7=-452/368  
 WEBS 3-12=-455/394, 2-13=-363/318, 5-9=-455/394, 6-8=-363/318

**NOTES**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.33
- 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4'-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'-0" tall by 2'-0" 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) 1, 7, 12, 13, 9, and 8. This connection is for uplift only and does not consider lateral forces.
- 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.

**LOAD CASE(S)** Standard

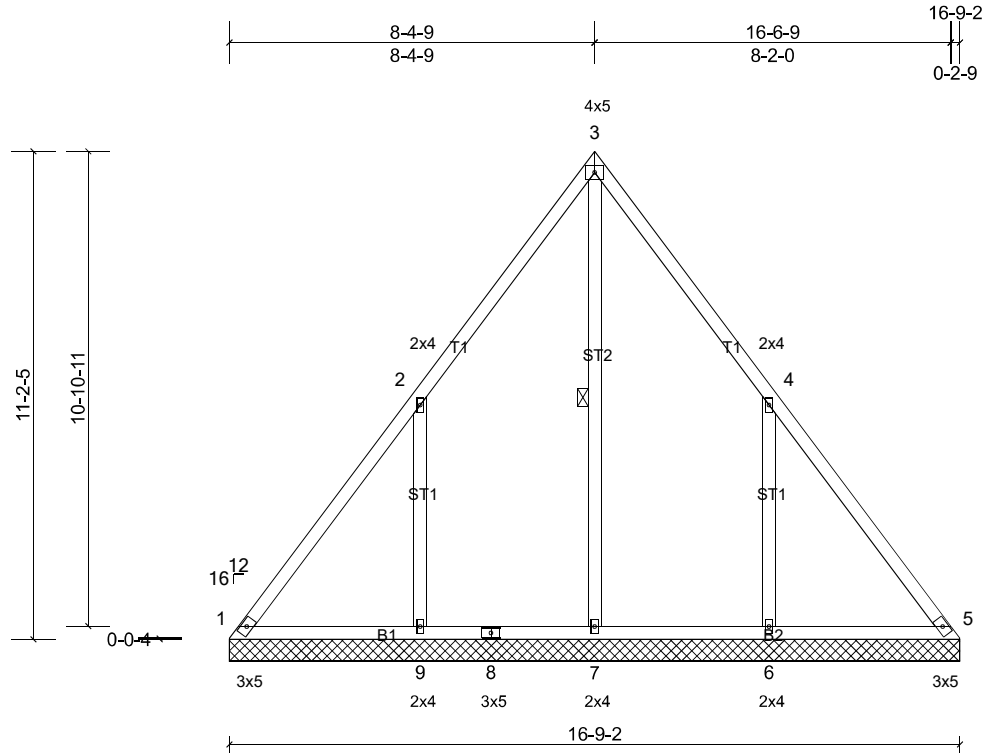
Job 20070044	Truss V2	Truss Type Valley	Qty 1	Ply 1	106 The Crossings Job Reference (optional)
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Scale = 1:52.9

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	0.29	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.18	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.24	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-SH								
BCDL	10.0											
											Weight: 97 lb	FT = 20%

**LUMBER**

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

**BRACING**

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 3-7

**REACTIONS** All bearings 16-9-2.  
 (lb) - Max Horiz 1=-231 (LC 9)  
 Max Uplift All uplift 100 (lb) or less at joint(s) 1, 5 except 6=-251 (LC 14), 9=-251 (LC 13)  
 Max Grav All reactions 250 (lb) or less at joint(s) 1, 5 except 6=537 (LC 25), 7=344 (LC 27), 9=538 (LC 24)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-9=-481/418, 4-6=-481/418

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.33
  - 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 4-0-0 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.
  - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1, 5, 9, and 6. This connection is for uplift only and does not consider lateral forces.
  - 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.

**LOAD CASE(S)** Standard

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

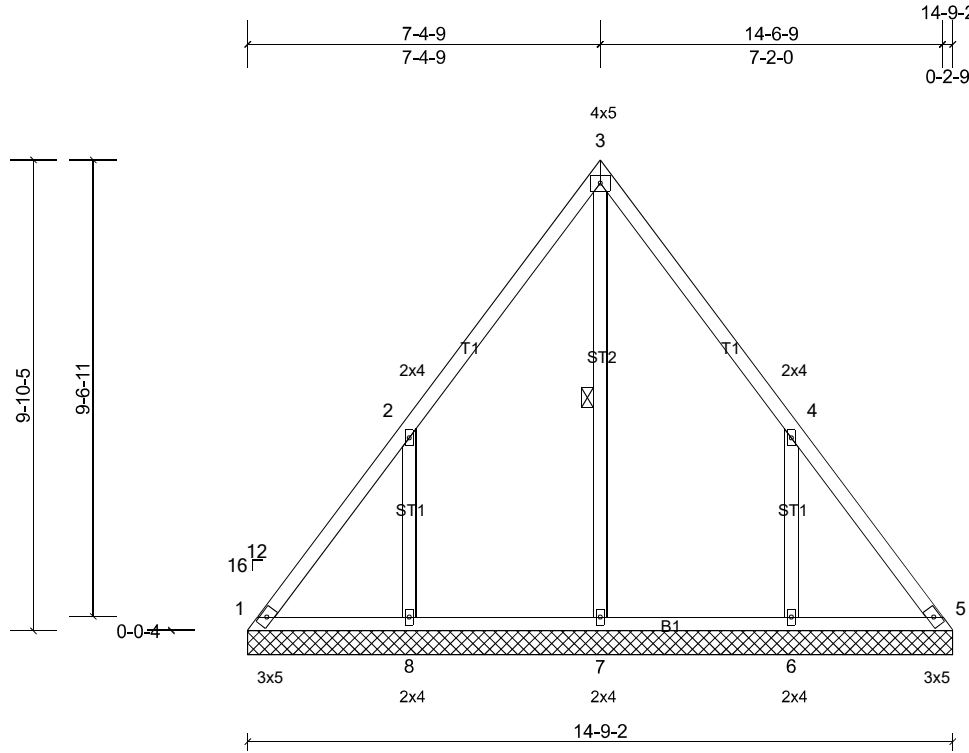
Job 20070044	Truss V3	Truss Type Valley	Qty 1	Ply 1	106 The Crossings Job Reference (optional)
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Scale = 1:48.2

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	0.24	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.19	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.14	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-SH								
BCDL	10.0											
										Weight: 83 lb	FT = 20%	

**LUMBER**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
OTHERS 2x4 SP No.3 \*Except\* ST2:2x4 SP No.2

**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 3-7

**REACTIONS** All bearings 14-9-2.  
(lb) - Max Horiz 1=203 (LC 9)  
Max Uplift All uplift 100 (lb) or less at joint(s) 1, 5 except 6=219 (LC 14), 8=219 (LC 13)  
Max Grav All reactions 250 (lb) or less at joint(s) 1, 5 except 6=476 (LC 25), 7=344 (LC 27), 8=477 (LC 24)

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.  
WEBS 2-8=-435/388, 4-6=-435/388

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.33
  - 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 4-0-0 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.
  - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1, 5, 8, and 6. This connection is for uplift only and does not consider lateral forces.
  - 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.

**LOAD CASE(S)** Standard



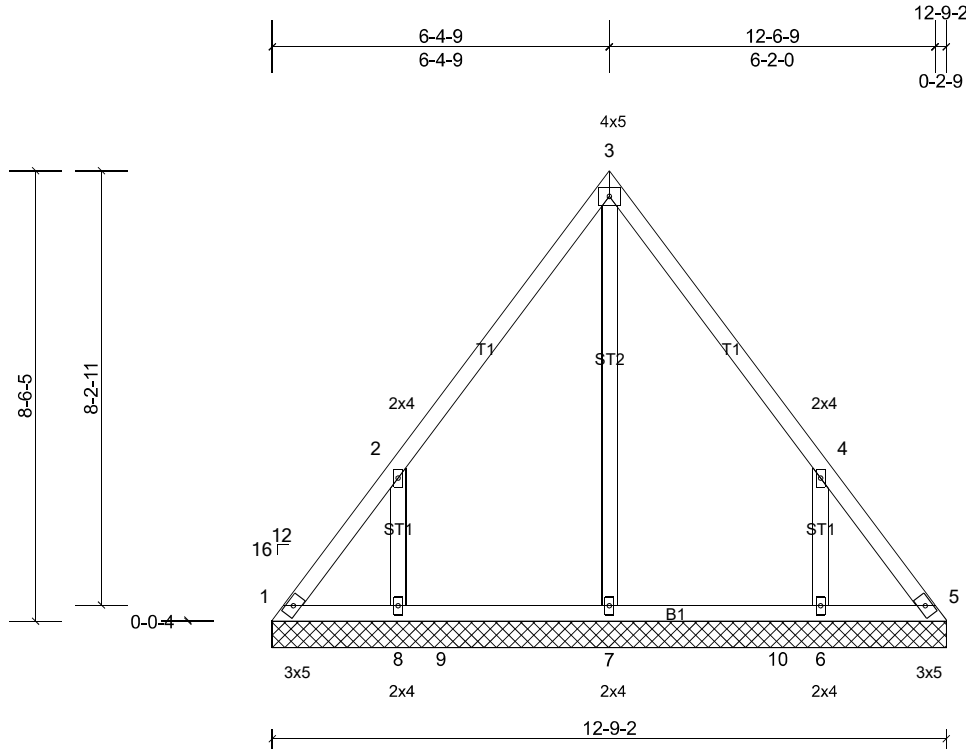
Job 20070044	Truss V4	Truss Type Valley	Qty 1	Ply 1	106 The Crossings Job Reference (optional)
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Scale = 1:43.6

Loading	(psf)	Spacing	2-0-0	CSI	0.23	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.18	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.14	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-SH								
BCDL	10.0										Weight: 69 lb	FT = 20%

**LUMBER**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
OTHERS 2x4 SP No.3 \*Except\* ST2:2x4 SP No.2

**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.

**REACTIONS** All bearings 12-9-2.  
(lb) - Max Horiz 1=-174 (LC 9)  
Max Uplift All uplift 100 (lb) or less at joint(s) 1, 5 except 6=-198 (LC 14), 8=-199 (LC 13)  
Max Grav All reactions 250 (lb) or less at joint(s) 1, 5 except 6=414 (LC 25), 7=332 (LC 27), 8=414 (LC 24)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 2-8=-412/378, 4-6=-412/378

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.33
  - 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 4-0-0 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.
  - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1, 5, 8, and 6. This connection is for uplift only and does not consider lateral forces.
  - 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.

**LOAD CASE(S)** Standard

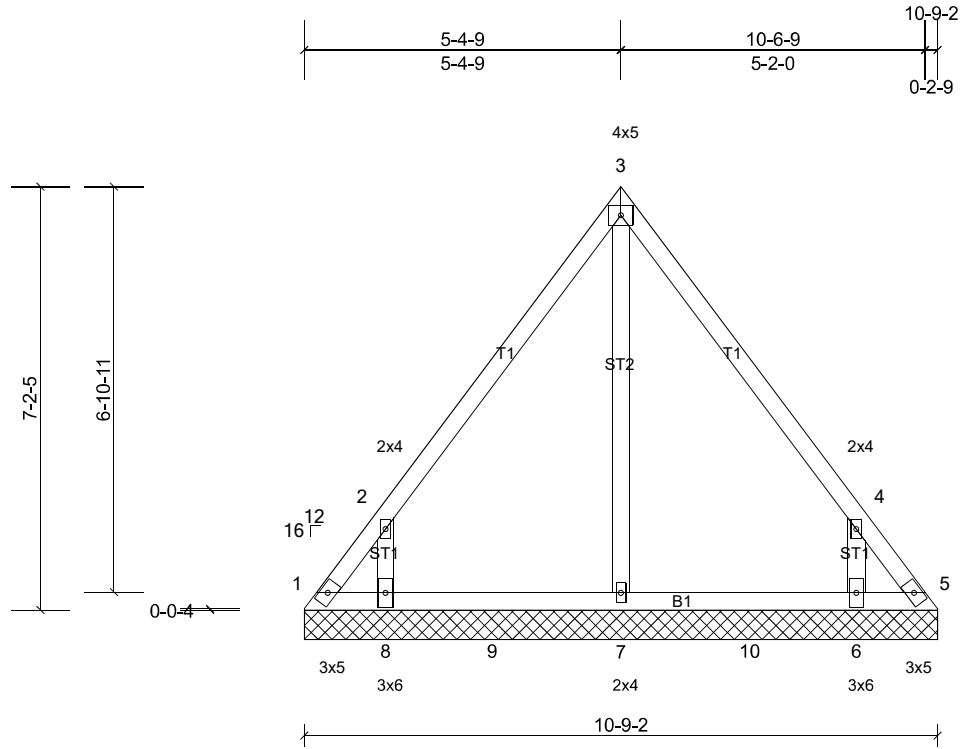
Job 20070044	Truss V5	Truss Type Valley	Qty 1	Ply 1	106 The Crossings Job Reference (optional)
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Scale = 1:39.2

Loading	(psf)	Spacing	2-0-0	CSI	0.26	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.15	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-SH								
BCDL	10.0										Weight: 55 lb	FT = 20%

**LUMBER**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
OTHERS 2x4 SP No.3 \*Except\* ST2:2x4 SP No.2

**BRACING**  
TOP CHORD  
BOT CHORD

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

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

**REACTIONS** All bearings 10'-9".  
(lb) - Max Horiz 1=-146 (LC 9)  
Max Uplift All uplift 100 (lb) or less at joint(s) except 1=-152 (LC 11),  
5=-133 (LC 12), 6=-206 (LC 14), 8=-206 (LC 13)  
Max Grav All reactions 250 (lb) or less at joint(s) 1, 5 except 6=406 (LC 25), 7=301 (LC 24), 8=406 (LC 24)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-279/221, 4-5=-279/221  
WEBS 2-8=-457/433, 4-6=-457/433

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.33
  - 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 4'-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.
  - One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1, 5, 8, and 6. This connection is for uplift only and does not consider lateral forces.
  - 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.

**LOAD CASE(S)** Standard

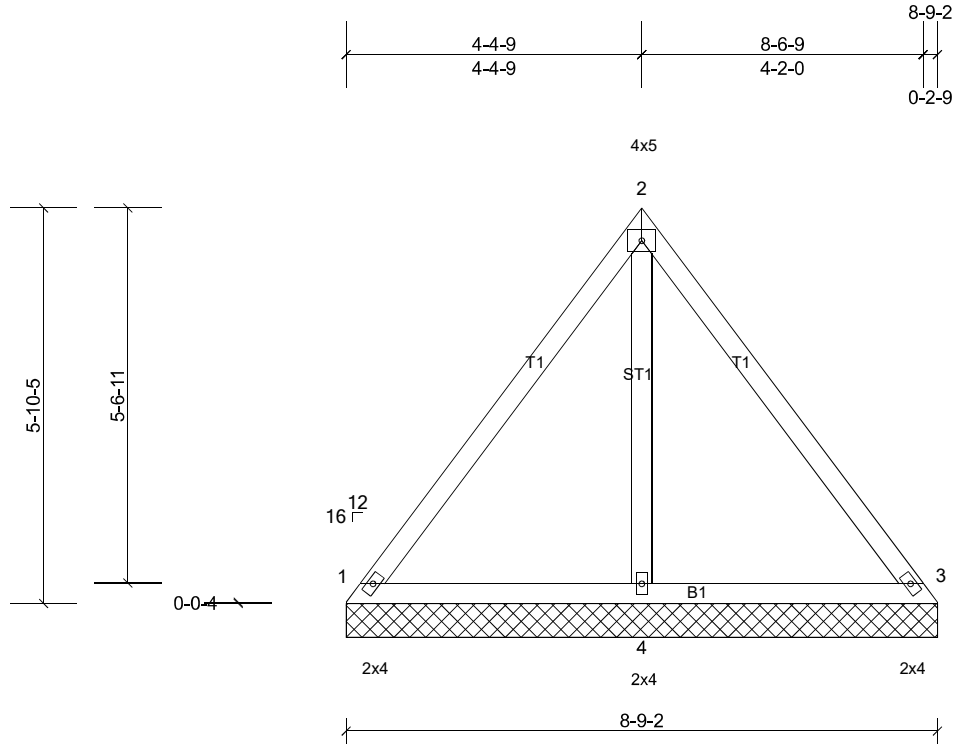
Job 20070044	Truss V6	Truss Type Valley	Qty 1	Ply 1	106 The Crossings Job Reference (optional)
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Scale = 1:34.1

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	0.48	Vert(LL)	n/a	-	n/a	999	244/190
Snow (Pf/Pg)	13.9/20.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999	
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	3	n/a	n/a	
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-P							
BCDL	10.0									Weight: 41 lb	FT = 20%

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

**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.

**REACTIONS** (lb/size) 1=173/8-9-2, (min. 0-1-8), 3=173/8-9-2, (min. 0-1-8),  
4=209/8-9-2, (min. 0-1-8)  
Max Horiz 1=117 (LC 12)  
Max Uplift 1=-30 (LC 14), 3=-23 (LC 13)  
Max Grav 1=210 (LC 2), 3=210 (LC 2), 4=236 (LC 2)

**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.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.33
- 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=13.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 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.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 3. This connection is for uplift only and does not consider lateral forces.
- 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.

**LOAD CASE(S)** Standard

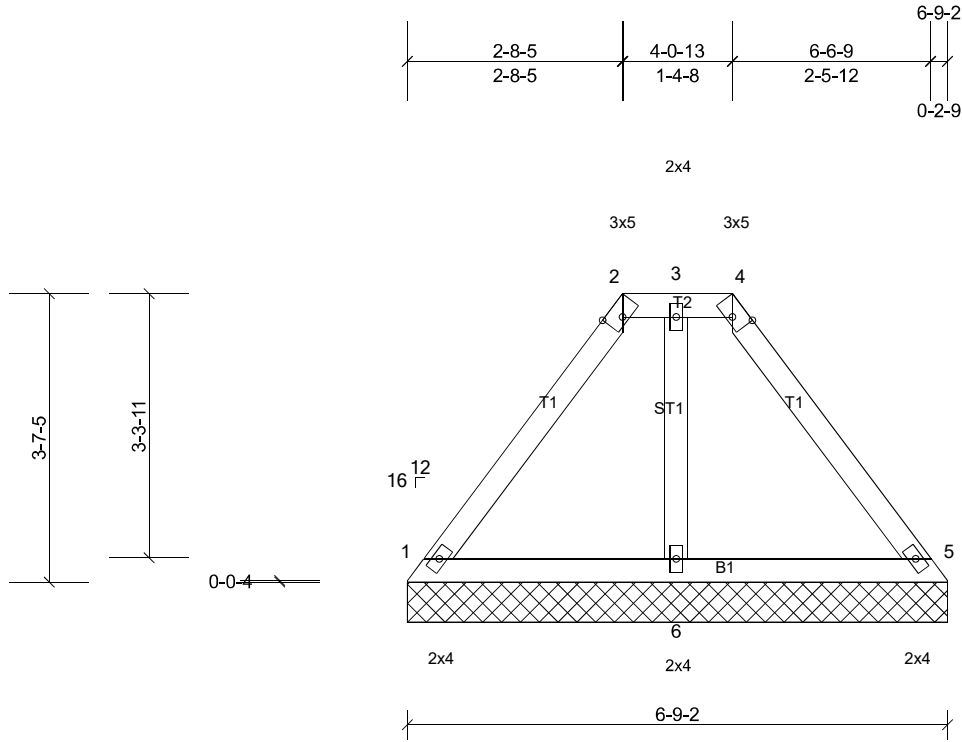
Job 20070044	Truss V7	Truss Type	Qty 1	Ply 1	106 The Crossings Job Reference (optional)
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Carter Components - Sanford, Sanford, NC, user

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Scale = 1:28.8

Plate Offsets (X, Y): [2:0-2-3,Edge], [4:0-2-3,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	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf/Pg)	18.9/20.0	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	5	n/a	n/a		
BCLL	0.0*	Code	IRC2015/TPI2014	Matrix-SH								
BCDL	10.0										Weight: 29 lb	FT = 20%

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

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

**REACTIONS** (lb/size) 1=154/6-9-2, (min. 0-1-8), 5=155/6-9-2, (min. 0-1-8), 6=125/6-9-2, (min. 0-1-8)  
Max Horiz 1=-71 (LC 9)  
Max Uplift 1=-33 (LC 14), 5=-30 (LC 14)  
Max Grav 1=185 (LC 2), 5=185 (LC 2), 6=133 (LC 28)

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.

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) 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=1.33
  - 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Pf=18.9 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
  - Provide adequate drainage to prevent water ponding.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 4-0-0 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.
  - One RT7A 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.
  - 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