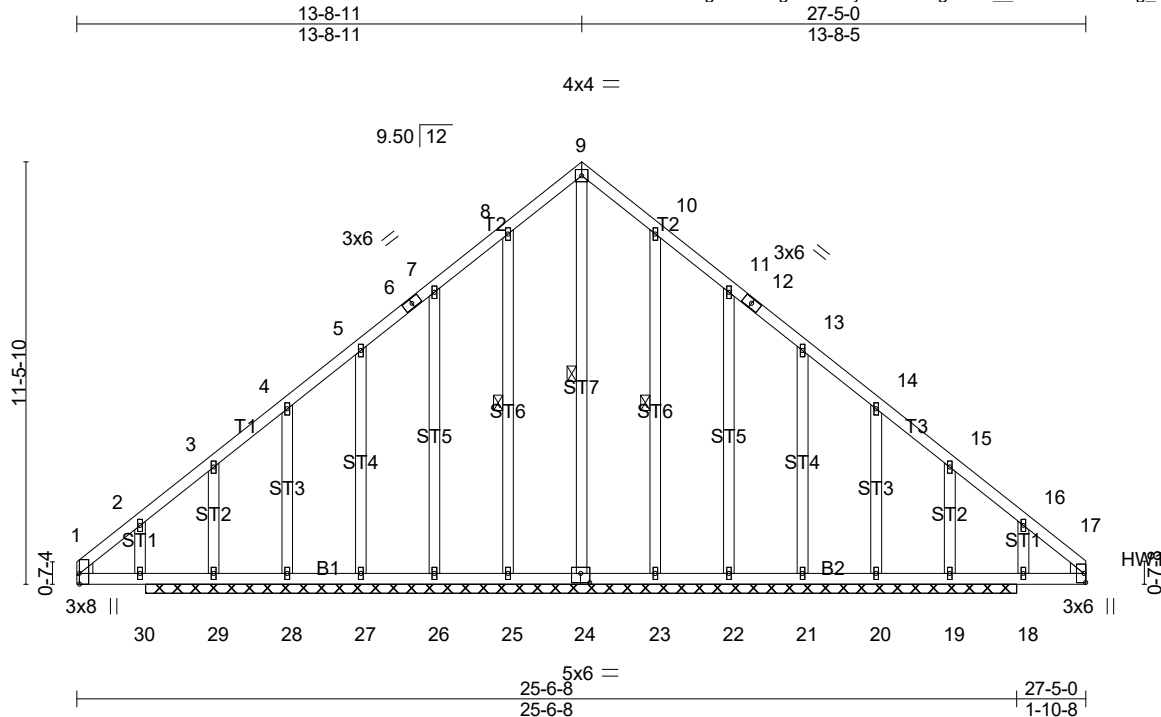


Job 27453	Truss G1	Truss Type Common Structural Gable	Qty 1	Ply 1	Freedpm Const\Wellons Realty\
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C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Jul 12 14:06:51 2023 Page 1

ID:wFt46ioPgwnXurZgnFdDKky93cZ-0Y1gDKG3\_e8cAO4z2B\viwg\_TXhpYwMxulz6mqyyob2



Scale = 1:62.6

Plate Offsets (X,Y)-- [1:0-3-8,Edge], [24:0-3-0,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0 Plate Grip DOL 1.15	TC 0.30	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.41	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.20	Horz(CT)	-0.01	19	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S					Weight: 207 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 10-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS 1 Row at midpt 9-24, 8-25, 10-23

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

**REACTIONS.** All bearings 23-8-0.  
 (lb) - Max Horz 29=-268(LC 6)  
 Max Uplift All uplift 100 lb or less at joint(s) 25, 26, 27, 23, 22, 21  
 except 28=-265(LC 7), 29=-168(LC 4), 20=-261(LC 6), 19=-164(LC 5)  
 Max Grav All reactions 250 lb or less at joint(s) 25, 26, 27, 23, 22, 21  
 except 24=358(LC 2), 28=359(LC 6), 29=485(LC 14), 20=358(LC 7),  
 19=479(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-89/264, 2-3=-48/270, 3-4=-125/273, 7-8=0/261, 8-9=0/312, 9-10=0/311,  
 10-11=0/260, 14-15=-123/271, 15-16=-48/268, 16-17=-90/264  
 WEBS 9-24=-327/0

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=27ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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 qualified building designer as per ANSI/TPI 1.
  - All plates are 1.5x4 MT20 unless otherwise indicated.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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) 25, 26, 27, 23, 22, 21 except (jt=lb) 28=265, 29=168, 20=261, 19=164.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedpm Const\Wellons Realty\
27453	G1	Common Structural Gable	1	1	Job Reference (optional)

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Jul 12 14:06:52 2023 Page 2  
 ID:wFt46ioPgwNXurZgnFdDKky93cZ-Vkb2Q4Ghllm?DKzHWllkF8D8Cx12HNc47PjflGyob1

**NOTES-**

9) Non Standard bearing condition. Review required.

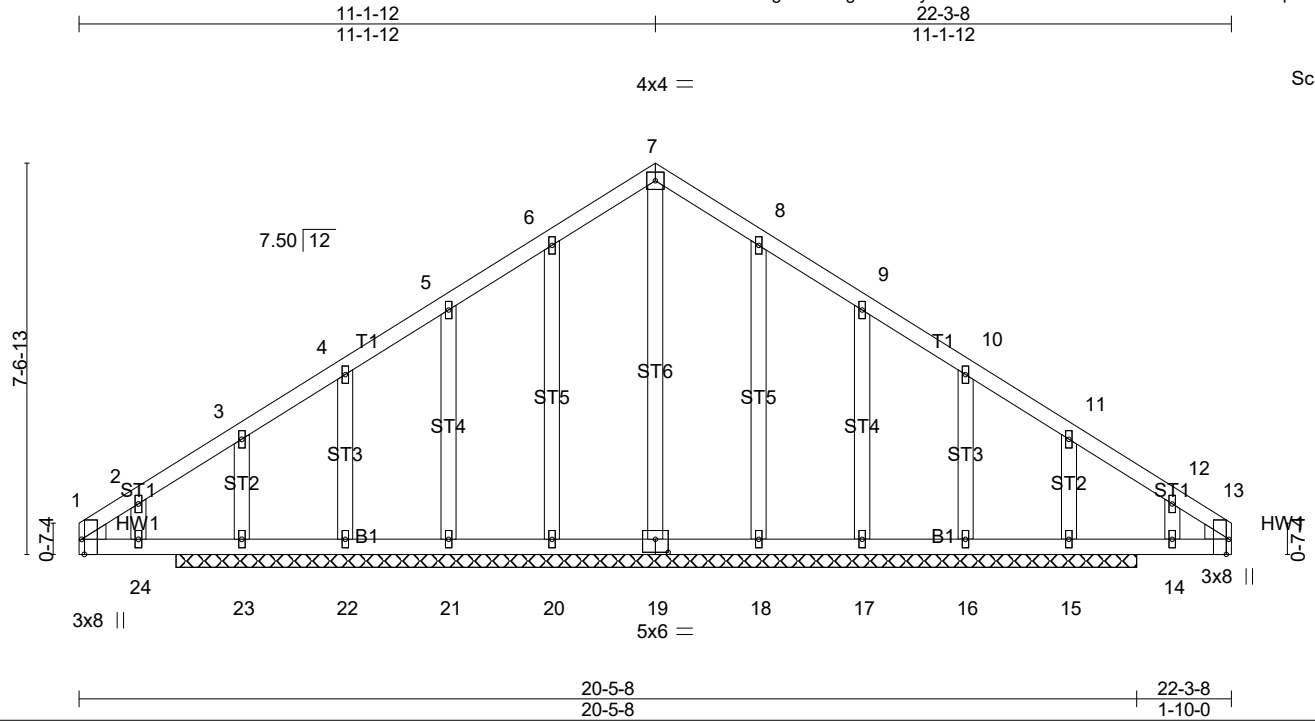
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job 27453	Truss G2	Truss Type Common Supported Gable	Qty 1	Ply 1	Freedpm Const\Wellons Realty\
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C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Jul 12 14:06:53 2023 Page 1  
ID:wFt46ioPgwNXurZgnFdDKky93cZ-zw9QeQHJWcusrUYT4TDzoLIK6LQU0ptDM3SDqiyjob0



Scale = 1:44.6

Plate Offsets (X,Y)-- [1:0-3-8,Edge], [13:0-3-8,Edge], [19:0-3-0,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.22	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.21	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.27	Horz(CT)	-0.00	15	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S						
	Code IRC2018/TPI2014						Weight: 133 lb	FT = 20%

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

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

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

**REACTIONS.** All bearings 18-7-0.  
(lb) - Max Horz 23=160(LC 7)  
Max Uplift All uplift 100 lb or less at joint(s) 20, 21, 22, 18, 17, 16, 15 except 23=-101(LC 8)  
Max Grav All reactions 250 lb or less at joint(s) 20, 21, 22, 18, 17, 16 except 19=334(LC 2), 23=366(LC 19), 15=366(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 7-19=-262/0

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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) All plates are 1.5x4 MT20 unless otherwise indicated.
  - 5) Gable studs spaced at 2-0-0 oc.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 21, 22, 18, 17, 16, 15 except (jt=lb) 23=101.
  - 9) Non Standard bearing condition. Review required.
  - 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

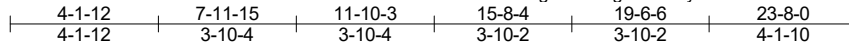
**LOAD CASE(S)** Standard

Job 27453	Truss GR1	Truss Type Common Girder	Qty 1	Ply 3	Freedpm Const(Wellons Realty) Job Reference (optional)
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8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Jul 12 14:06:55 2023 Page 1

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Scale: 3/16"=1'

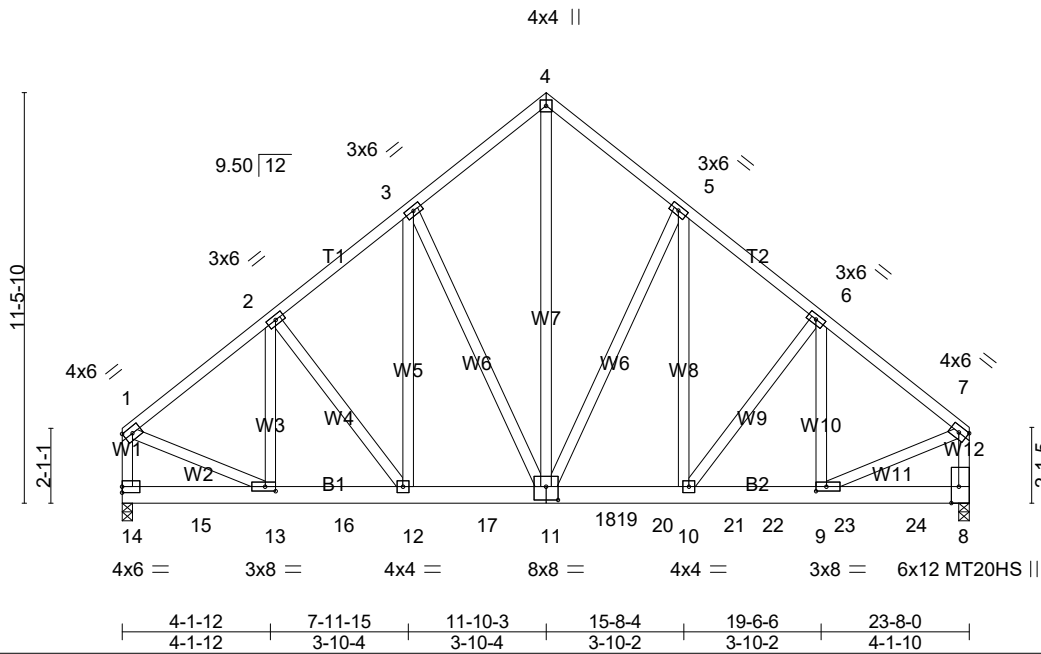


Plate Offsets (X,Y)-- [8:0-5-8,Edge], [9:0-3-8,0-1-8], [11:0-4-0,0-4-8], [13:0-3-8,0-1-8]

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.49	Vert(LL)	-0.06 11-12	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.40	Vert(CT)	-0.12 11-12	>999	240	MT20HS	187/143
BCLL 0.0 *	Lumber DOL 1.15	WB 0.82	Horz(CT)	0.02 8	n/a	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS	Wind(LL)	0.05 11-12	>999	240		
	Code IRC2018/TPI2014						Weight: 638 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x6 SP No.1  
 WEBS 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.** (lb/size) 14=6783/0-3-8 (min. 0-2-11), 8=6998/0-3-8 (min. 0-2-12)  
 Max Horz 14=281(LC 7)  
 Max Uplift 14=-495(LC 8), 8=-510(LC 8)

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

TOP CHORD 1-2=-6444/514, 2-3=-6198/559, 3-4=-5059/535, 4-5=-5059/535,  
 5-6=-6151/556, 6-7=-6424/513, 1-14=-6243/478, 7-8=-6247/479  
 BOT CHORD 14-15=-274/355, 13-15=-274/355, 13-16=-375/4991, 12-16=-375/4991,  
 12-17=-316/4799, 17-18=-316/4799, 11-18=-316/4799, 11-19=-261/4763,  
 19-20=-261/4763, 10-20=-261/4763, 10-21=-301/4975, 21-22=-301/4975,  
 9-22=-301/4975  
 WEBS 2-13=-214/285, 2-12=-344/101, 3-12=-177/2344, 3-11=-2051/257,  
 4-11=-580/5934, 5-11=-1972/251, 5-10=-170/2245, 6-10=-380/104,  
 6-9=-217/317, 1-13=-334/5297, 7-9=-333/5277

**NOTES-**

- 3-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: 2x6 - 2 rows staggered at 0-7-0 oc.  
 Webs 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 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.

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Job 27453	Truss GR1	Truss Type Common Girder	Qty 1	Ply <b>3</b>	Freedpm Const\Wellons Realty\ Job Reference (optional)
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8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Jul 12 14:06:55 2023 Page 2  
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**NOTES-**

- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=495, 8=510.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1083 lb down and 86 lb up at 2-0-12, 1083 lb down and 86 lb up at 4-0-12, 1083 lb down and 86 lb up at 6-0-12, 1083 lb down and 86 lb up at 8-0-12, 1083 lb down and 86 lb up at 10-0-12, 1083 lb down and 86 lb up at 12-0-12, 1083 lb down and 86 lb up at 14-0-12, 1083 lb down and 86 lb up at 16-0-12, 1083 lb down and 86 lb up at 18-0-12, and 1083 lb down and 86 lb up at 20-0-12, and 1083 lb down and 86 lb up at 22-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-4=-60, 4-7=-60, 8-14=-20

Concentrated Loads (lb)

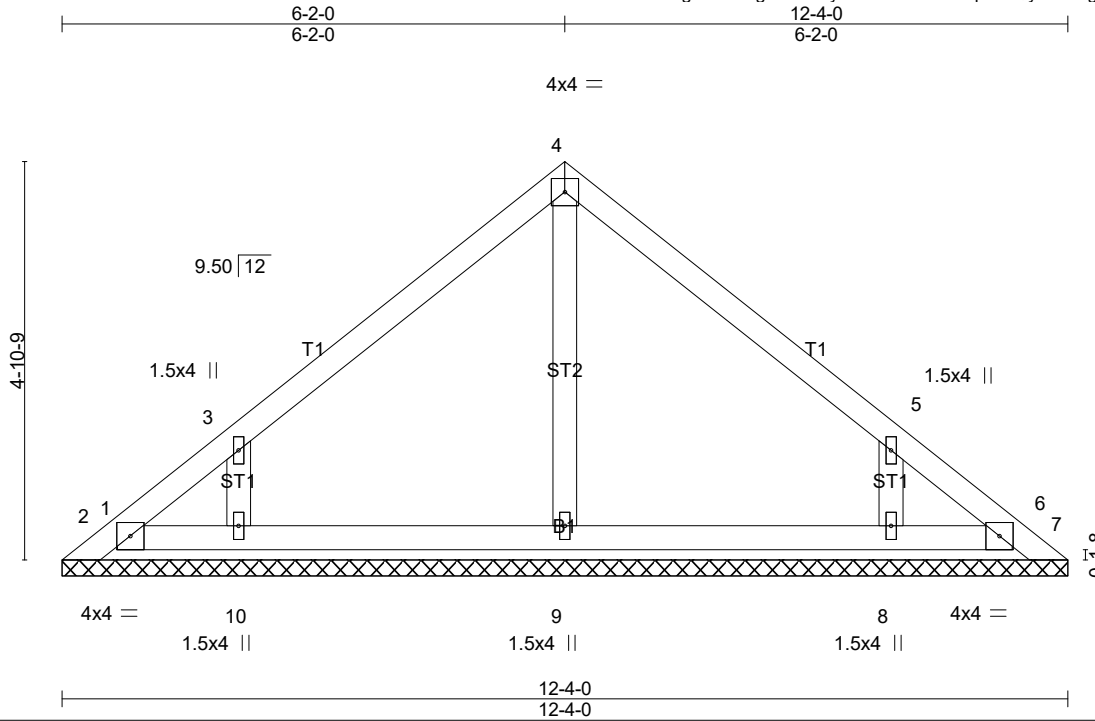
Vert: 13=-1083(F) 12=-1083(F) 11=-1083(F) 15=-1083(F) 16=-1083(F) 17=-1083(F) 20=-1083(F) 21=-1083(F) 22=-1083(F) 23=-1083(F) 24=-1083(F)

Job 27453	Truss PB1	Truss Type GABLE	Qty 2	Ply 1	Freedpm Const\Wellons Realty\
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C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Jul 12 14:06:56 2023 Page 1

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Scale = 1:28.3

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.08	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.12	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.06	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 7 n/a n/a		
	Code IRC2018/TPI2014			Weight: 49 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP 2400F 2.0E  
 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.  
 BOT CHORD 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 12-4-0.  
 (lb) - Max Horz 1=-111(LC 6)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 2, 6 except  
 10=-103(LC 8), 8=-103(LC 8)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 7, 2, 6, 9 except  
 10=329(LC 13), 8=327(LC 14)

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

WEBS 3-10=-263/144, 5-8=-261/144

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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 qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 2, 6 except (jt=lb) 10=103, 8=103.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

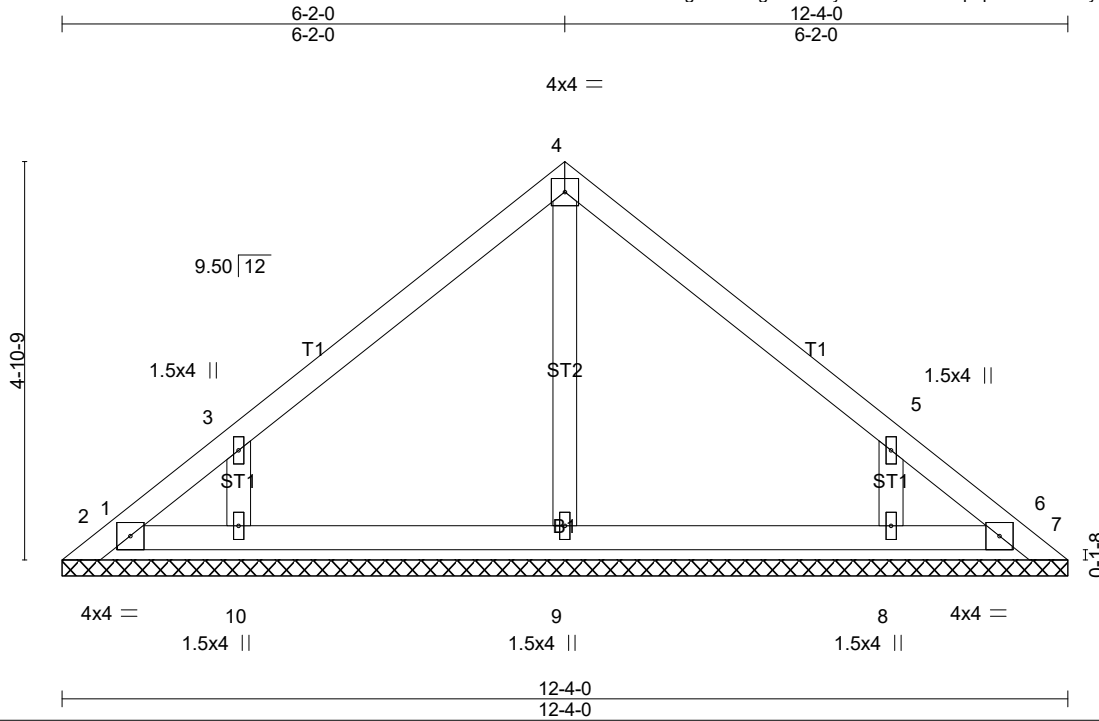
**LOAD CASE(S)** Standard

Job 27453	Truss PB2	Truss Type GABLE	Qty 27	Ply 1	Freedpm Const\Wellons Realty\
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C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Jul 12 14:06:57 2023 Page 1

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Scale = 1:28.3

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.08	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.12	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.06	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 7 n/a n/a		
	Code IRC2018/TPI2014			Weight: 49 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP 2400F 2.0E  
 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.  
 BOT CHORD 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 12-4-0.  
 (lb) - Max Horz 1=-111(LC 6)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 2, 6 except  
 10=-103(LC 8), 8=-103(LC 8)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 7, 2, 6, 9 except  
 10=329(LC 13), 8=327(LC 14)

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

WEBS 3-10=-263/144, 5-8=-261/144

**NOTES-**

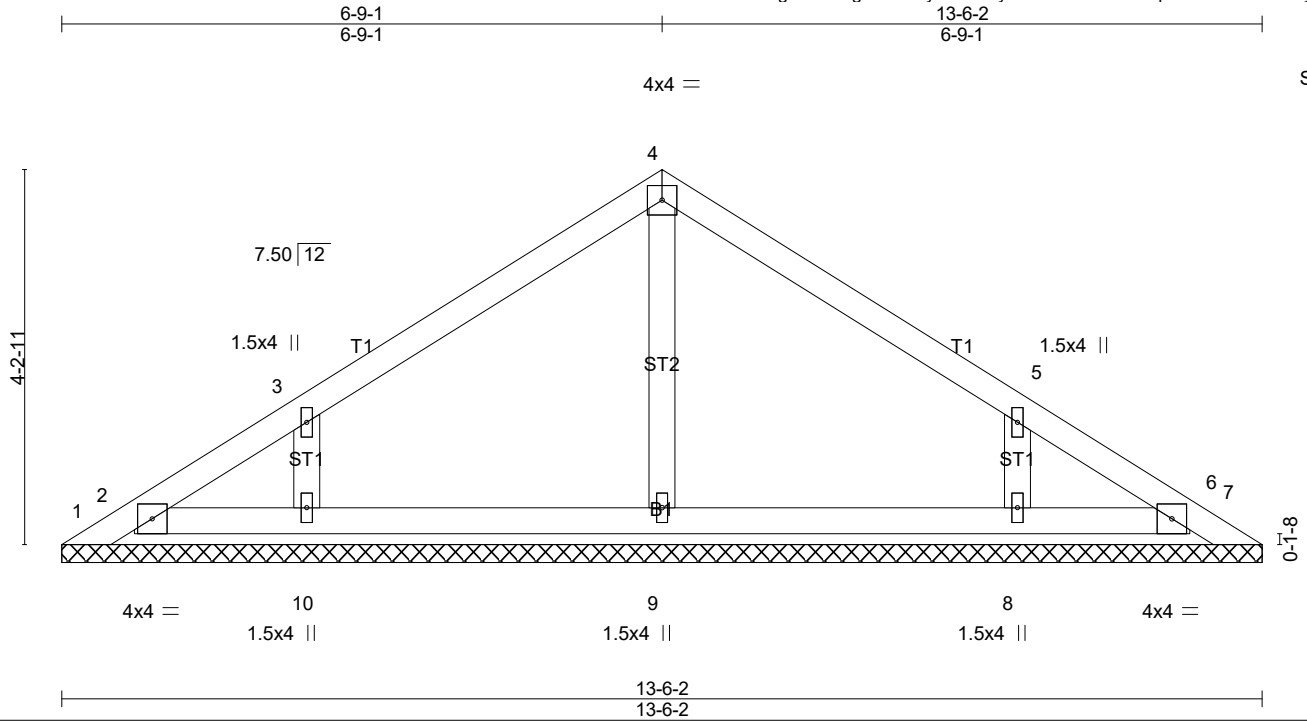
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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 qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 2, 6 except (jt=lb) 10=103, 8=103.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard

Job 27453	Truss PB3	Truss Type GABLE	Qty 1	Ply 1	Freedpm Const\Wellons Realty\
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C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Jul 12 14:06:58 2023 Page 1  
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.08	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.12	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.06	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 7 n/a n/a		
	Code IRC2018/TPI2014			Weight: 50 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP 2400F 2.0E  
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.  
BOT CHORD 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 13-6-2.  
(lb) - Max Horz 1=89(LC 7)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 10, 8  
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 2, 6 except  
9=263(LC 1), 10=306(LC 13), 8=305(LC 14)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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 4-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 10, 8.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard



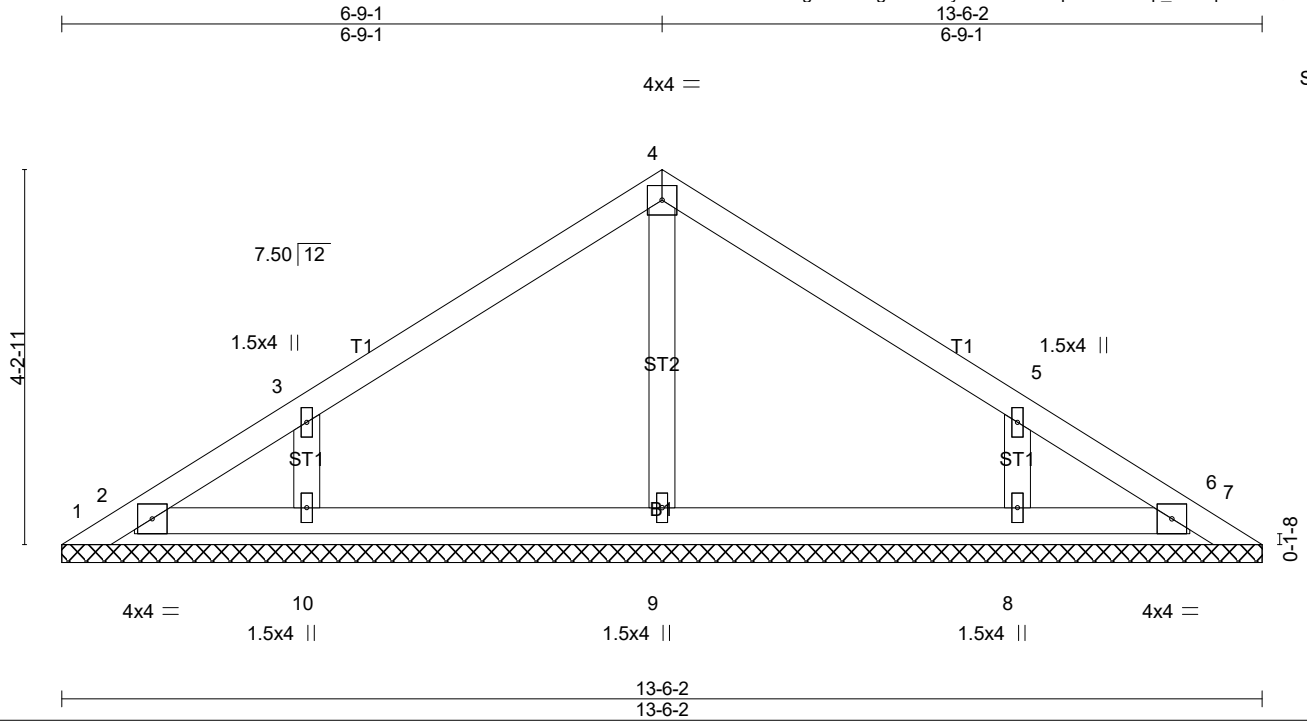


Job 27453	Truss PB5	Truss Type GABLE	Qty 1	Ply 2	Freedpm Const\Wellons Realty\
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C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Jul 12 14:07:00 2023 Page 1

ID:wFt46ioPgwnXurZgnFdDKky93cZ-GG436pNislnsBZap\_RrcaqYaB9sQ91PFzef5Zoyyoav



Scale = 1:25.9

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.04	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.06	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.02	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 7 n/a n/a		
	Code IRC2018/TPI2014			Weight: 99 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP 2400F 2.0E  
 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.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

All bearings 13-6-2.  
 (lb) - Max Horz 1=89(LC 7)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 10, 8  
 Max Grav All reactions 250 lb or less at joint(s) 1, 7, 2, 6 except 9=263(LC 1), 10=306(LC 13), 8=305(LC 14)

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

**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: 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 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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 qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 10, 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

Continued on page 2

Job 27453	Truss PB5	Truss Type GABLE	Qty 1	Ply <b>2</b>	Freedpm Const\Wellons Realty\ Job Reference (optional)
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8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Jul 12 14:07:00 2023 Page 2  
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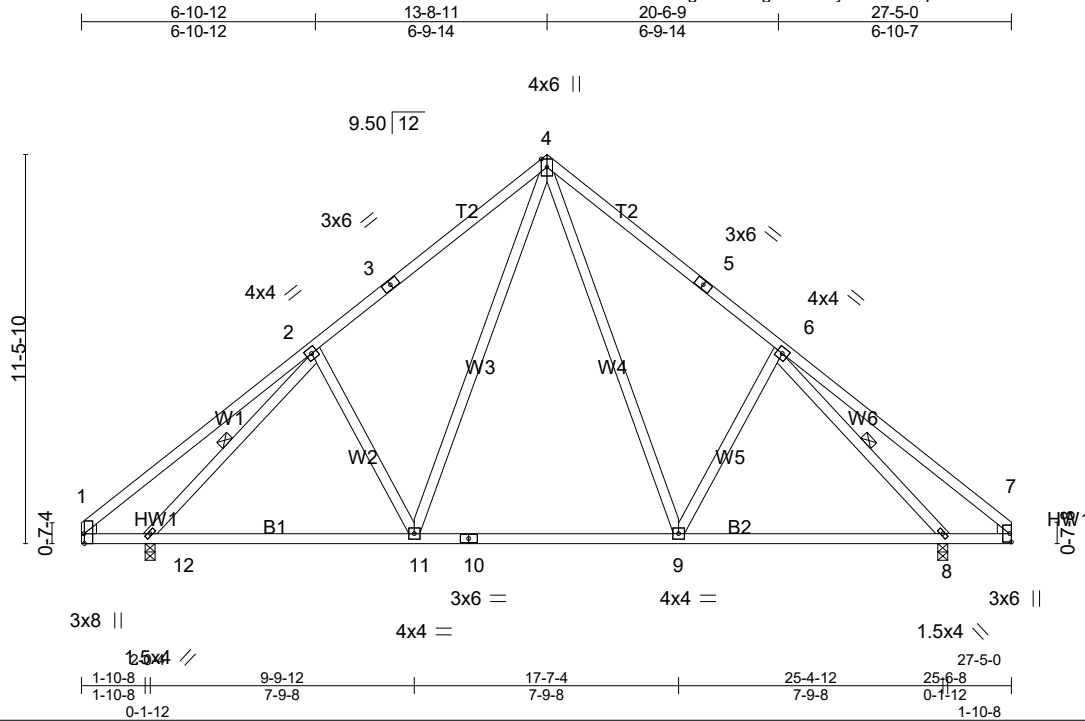
**LOAD CASE(S)** Standard

Job 27453	Truss T1	Truss Type Common	Qty 2	Ply 1	Freedpm Const\Wellons Realty\ Job Reference (optional)
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ID:wFt46ioPgwNXurZgnFdDKky93cZ-CfCqXVOzON1aQtKc6st4FFdtszT9dsiYQy8Behyyoat



Scale = 1:67.9

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

<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.22	Vert(LL) -0.16 9-11 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.30	Vert(CT) -0.21 9-11 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.36	Horz(CT) 0.02 8 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS	Wind(LL) 0.03 9-11 >999 240	Weight: 169 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP 2400F 2.0E  
 BOT CHORD 2x4 SP 2400F 2.0E  
 WEBS 2x4 SP No.3  
 WEDGE  
 Left: 2x4 SP No.3 , Right: 2x4 SP No.3

**BRACING-**

TOP CHORD Structural wood sheathing directly applied.  
 BOT CHORD Rigid ceiling directly applied.  
 WEBS 1 Row at midtr 2-12, 6-8

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

**REACTIONS.** (lb/size) 12=1097/0-3-8 (min. 0-1-8), 8=1097/0-3-8 (min. 0-1-8)  
 Max Horz 12=-262(LC 6)  
 Max Uplift 12=-127(LC 8), 8=-83(LC 8)

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

TOP CHORD 2-3=-972/182, 3-4=-856/229, 4-5=-853/230, 5-6=-970/183  
 BOT CHORD 11-12=-31/866, 10-11=0/629, 9-10=0/629, 8-9=-5/714  
 WEBS 4-11=-69/464, 4-9=-74/461, 2-12=-1111/129, 6-8=-1112/105

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=27ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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) 8 except (jt=lb) 12=127.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

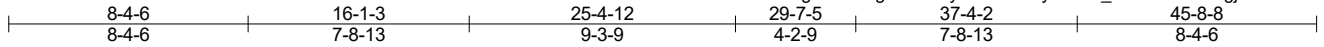
**LOAD CASE(S)** Standard

Job 27453	Truss T2	Truss Type GABLE	Qty 1	Ply 1	Freedpm Const(Wellons Realty)
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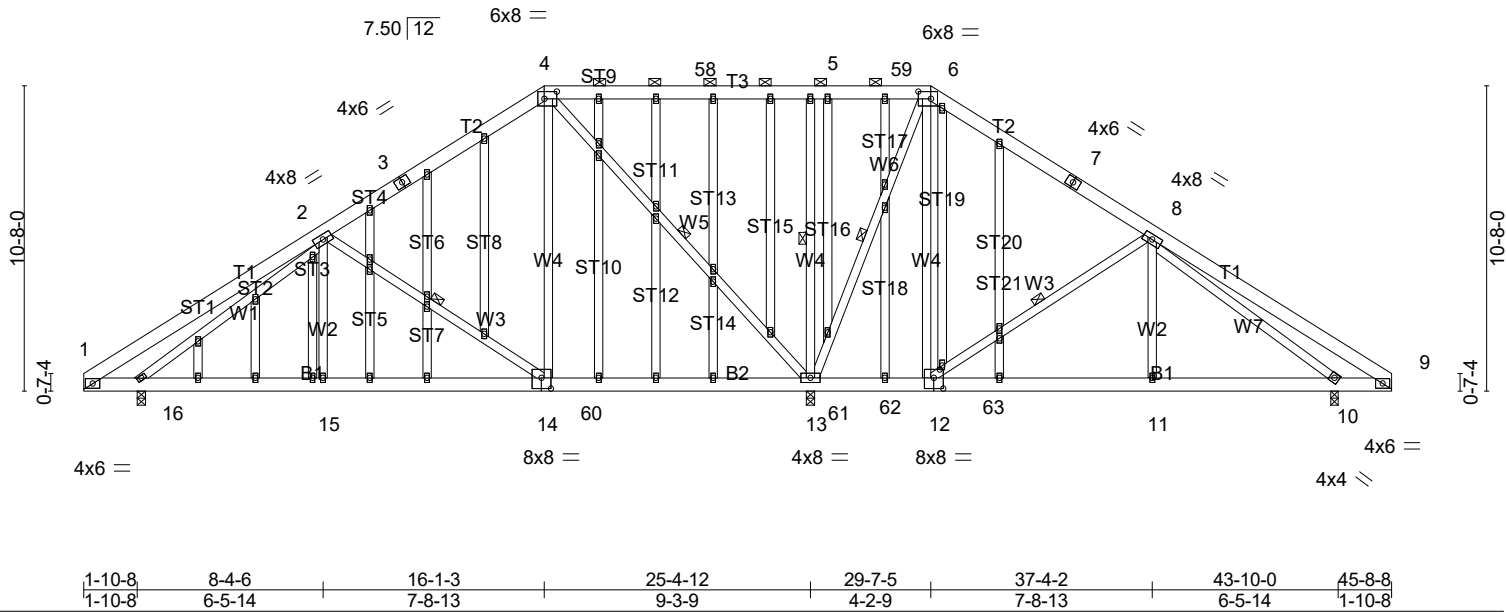


Plate Offsets (X,Y)-- [4:0-5-4,0-3-0], [6:0-5-4,0-3-0], [12:0-4-0,0-4-8], [14:0-4-0,0-4-8], [50:0-1-10,0-1-0]

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.34	Vert(LL)	-0.09 13-14	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.31	Vert(CT)	-0.13 13-14	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.98	Horz(CT)	0.02 10	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Wind(LL)	0.02 14-15	>999	240		
	Code IRC2018/TPI2014						Weight: 523 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.3  
 OTHERS 2x4 SP No.3

**BRACING-**

TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (10-0-0 max.): 4-6.  
 BOT CHORD Rigid ceiling directly applied.  
 WEBS 1 Row at midpt 2-14, 4-13, 5-13, 6-13, 8-12

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

**REACTIONS.** (lb/size) 13=1997/0-3-8 (min. 0-2-8), 16=951/0-3-8 (min. 0-1-8), 10=709/0-3-0 (min. 0-1-8)  
 Max Horz 16=-237(LC 6)  
 Max Uplift 13=-159(LC 8), 16=-111(LC 8), 10=-51(LC 8)  
 Max Grav 13=2106(LC 13), 16=982(LC 19), 10=748(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-307/59, 2-3=-603/105, 3-4=-502/150, 4-58=0/274, 5-58=0/274,  
 5-59=0/274, 6-59=0/274  
 BOT CHORD 15-16=-29/872, 14-15=-28/873, 14-60=0/509, 60-61=0/509, 13-61=0/509,  
 11-12=0/479, 10-11=0/478  
 WEBS 2-15=0/255, 2-14=-435/140, 4-14=0/570, 4-13=-1037/75, 5-13=-502/129,  
 6-13=-709/65, 6-12=-23/409, 8-12=-558/148, 8-11=0/300, 2-16=-786/50,  
 8-10=-512/2

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=46ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedpm Const\Wellons Realty\
27453	T2	GABLE	1	1	Job Reference (optional)

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**NOTES-**

- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10 except (jt=lb) 13=159, 16=111.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 12) 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 27453	Truss T3	Truss Type Piggyback Base	Qty 2	Ply 1	Freedpm Const(Wellons Realty)
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8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Jul 12 14:07:05 2023 Page 1

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Scale = 1:80.5

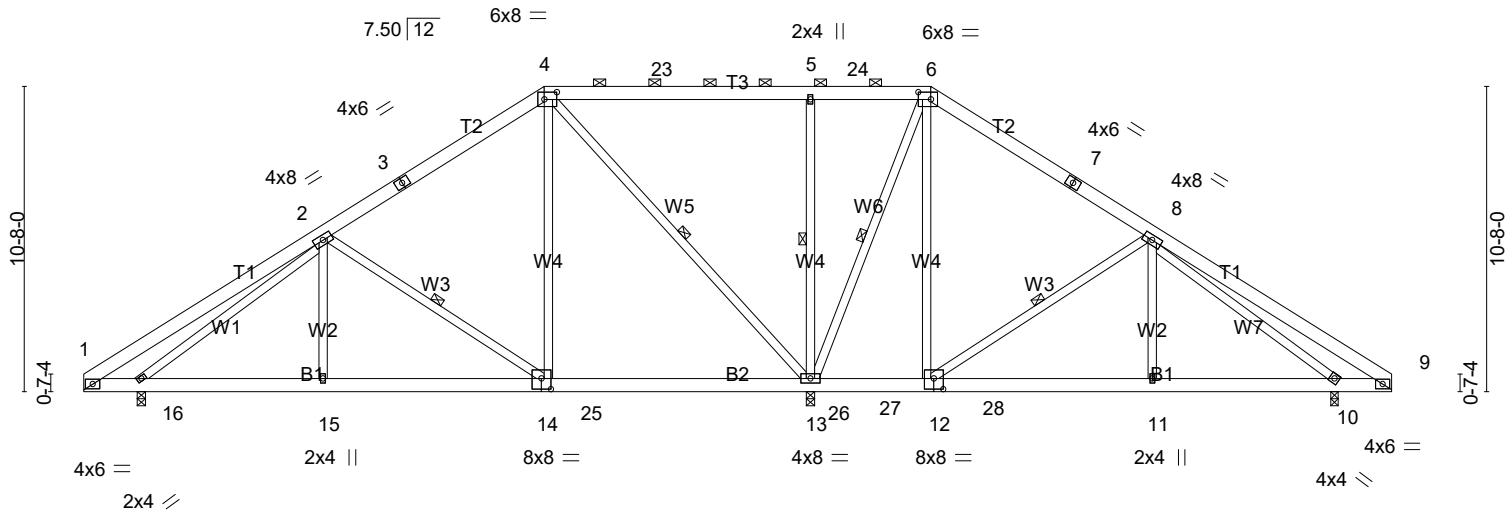


Plate Offsets (X,Y)-- [4:0-5-4,0-3-0], [6:0-5-4,0-3-0], [12:0-4-0,0-4-8], [14:0-4-0,0-4-8]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.34	Vert(LL)	-0.09 13-14	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.31	Vert(CT)	-0.13 13-14	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.98	Horz(CT)	0.02 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS	Wind(LL)	0.02 14-15	>999	240	Weight: 372 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.3

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (10-0-0 max.): 4-6.  
 Rigid ceiling directly applied.  
 BOT CHORD  
 WEBS 1 Row at midpt 2-14, 4-13, 5-13, 6-13, 8-12

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

**REACTIONS.** (lb/size) 13=1997/0-3-8 (min. 0-2-8), 16=951/0-3-8 (min. 0-1-8), 10=709/0-3-0 (min. 0-1-8)  
 Max Horz 16=-237(LC 6)  
 Max Uplift 13=-159(LC 8), 16=-111(LC 8), 10=-51(LC 8)  
 Max Grav 13=2106(LC 13), 16=982(LC 19), 10=748(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-307/59, 2-3=-603/105, 3-4=-502/150, 4-23=0/274, 5-23=0/274,  
 5-24=0/274, 6-24=0/274  
 BOT CHORD 15-16=-29/872, 14-15=-28/873, 14-25=0/509, 25-26=0/509, 13-26=0/509,  
 11-12=0/479, 10-11=0/478  
 WEBS 2-15=0/255, 2-14=-435/140, 4-14=0/570, 4-13=-1037/75, 5-13=-502/129,  
 6-13=-709/65, 6-12=-23/409, 8-12=-558/148, 8-11=0/300, 2-16=-786/50,  
 8-10=-512/2

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=46ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10 except (jt=lb) 13=159, 16=111.
  - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedpm Const\Wellons Realty\
27453	T3	Piggyback Base	2	1	Job Reference (optional)

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**NOTES-**

- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 9) 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

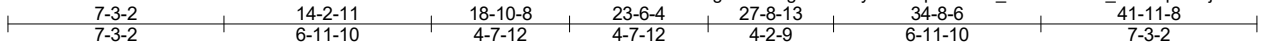


Job 27453	Truss T4	Truss Type Piggyback Base Girder	Qty 1	Ply 2	Freedpm Const(Wellons Realty)
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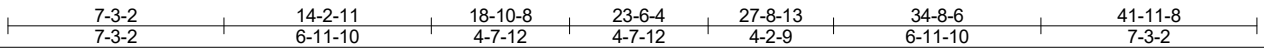
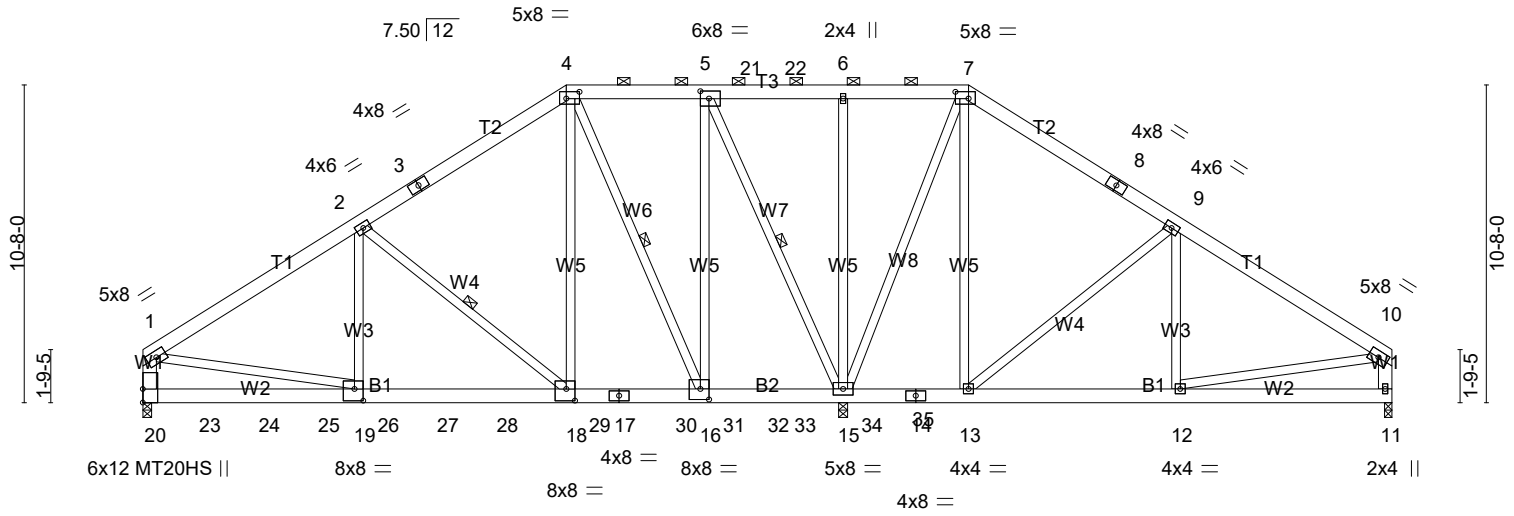


Plate Offsets (X,Y)-- [4:0-5-4,0-2-12], [5:0-3-8,0-3-0], [7:0-5-4,0-2-12], [16:0-3-8,0-4-4], [18:0-3-8,0-4-12], [19:0-3-8,0-4-12]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.48	Vert(LL)	-0.14 18-19	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.74	Vert(CT)	-0.29 18-19	>969	240	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.85	Horz(CT)	0.03 11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS	Wind(LL)	0.11 18-19	>999	240		
								Weight: 763 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 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 (6-0-0 max.): 4-7.
BOT CHORD 2x6 SP 2400F 2.0E *Except*	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 13-15.
B2: 2x6 SP No.1	WEBS 1 Row at midpt 2-18, 4-16, 5-15
WEBS 2x4 SP No.3 *Except*	
W5,W2: 2x4 SP No.2, W7: 2x4 SP 2400F 2.0E	
W1: 2x6 SP No.1	

**REACTIONS.** (lb/size) 20=6448/0-3-8 (min. 0-2-11), 15=8050/0-3-8 (req. 0-4-12), 11=459/0-3-0 (min. 0-1-8)  
 Max Horz 20=-253(LC 6)  
 Max Uplift 20=-452(LC 8), 15=-600(LC 8), 11=-144(LC 27)  
 Max Grav 20=6466(LC 19), 15=8050(LC 1), 11=633(LC 14)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-7435/561, 2-3=-4514/389, 3-4=-4404/430, 4-5=-2330/301, 5-21=0/369,  
 21-22=0/369, 6-22=0/369, 6-7=0/369, 7-8=-170/310, 8-9=-276/269,  
 9-10=-675/226, 1-20=-5157/400, 10-11=-567/174  
 BOT CHORD 20-23=-261/1118, 23-24=-261/1118, 24-25=-261/1118, 19-25=-261/1118,  
 19-26=-424/6198, 26-27=-424/6198, 27-28=-424/6198, 28-29=-424/6198,  
 18-29=-424/6198, 17-18=-231/3796, 17-30=-231/3796, 30-31=-231/3796,  
 16-31=-231/3796, 16-32=-195/2330, 32-33=-195/2330, 33-34=-195/2330,  
 15-34=-195/2330, 12-13=-77/456  
 WEBS 2-19=-161/3212, 2-18=-3204/332, 4-18=-359/5256, 4-16=-3558/261,  
 5-16=-344/5553, 5-15=-6433/471, 6-15=-314/78, 7-15=-702/129,  
 7-13=-162/459, 9-13=-588/146, 9-12=0/313, 1-19=-299/5280, 10-12=-63/351

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc.  
 Webs 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.

Continued on page 2

Job 27453	Truss T4	Truss Type Piggyback Base Girder	Qty 1	Ply 2	Freedpm Const\Wellons Realty\ Job Reference (optional)
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C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Jul 12 14:07:08 2023 Page 2  
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**NOTES-**

- 4) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=42ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) Provide adequate drainage to prevent water ponding.
- 6) All plates are MT20 plates unless otherwise indicated.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) WARNING: Required bearing size at joint(s) 15 greater than input bearing size.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 20=452, 15=600, 11=144.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1058 lb down and 83 lb up at 2-0-12, 1058 lb down and 83 lb up at 4-0-12, 1058 lb down and 83 lb up at 6-0-12, 1058 lb down and 83 lb up at 8-0-12, 1058 lb down and 83 lb up at 10-0-12, 1058 lb down and 83 lb up at 12-0-12, 1058 lb down and 83 lb up at 14-0-12, 1058 lb down and 83 lb up at 16-0-12, 1058 lb down and 83 lb up at 18-0-12, and 1058 lb down and 83 lb up at 20-0-12, and 1058 lb down and 83 lb up at 22-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 1-4=-60, 4-7=-60, 7-10=-60, 11-20=-20
  - Concentrated Loads (lb)
    - Vert: 17=-1058(B) 23=-1058(B) 24=-1058(B) 25=-1058(B) 26=-1058(B) 27=-1058(B) 28=-1058(B) 29=-1058(B) 30=-1058(B) 32=-1058(B) 33=-1058(B)

Job 27453	Truss T5	Truss Type GABLE	Qty 1	Ply 1	Freedpm Const(Wellons Realty)
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C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Jul 12 14:07:09 2023 Page 1

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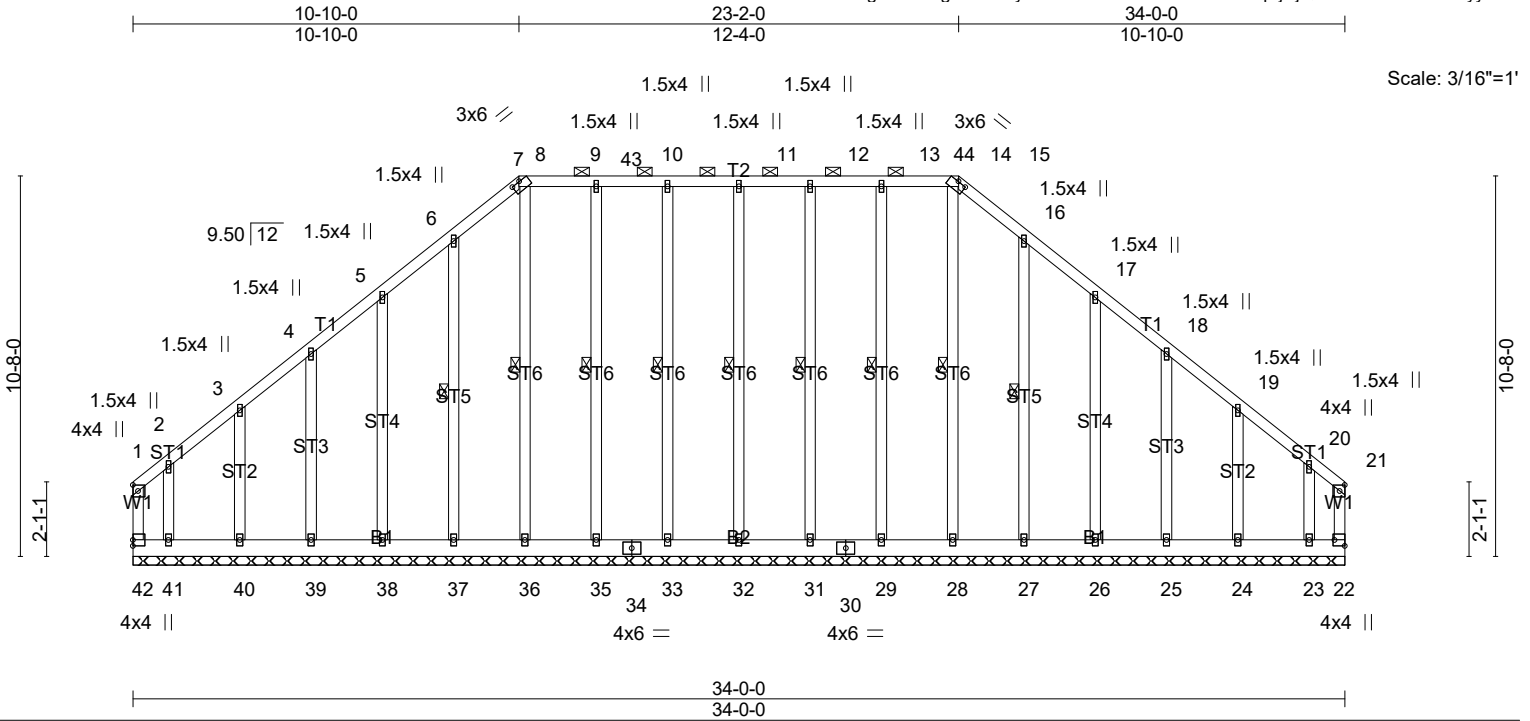


Plate Offsets (X,Y)-- [7:0-3-0,0-0-2], [15:0-3-0,0-0-2], [22:Edge,0-3-8]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.41	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.13	Horz(CT)	-0.00	22	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R					Weight: 326 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP 2400F 2.0E  
BOT CHORD 2x6 SP No.1  
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, and 2-0-0 oc purlins (6-0-0 max.): 7-15.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 11-32, 10-33, 9-35, 8-36, 6-37, 12-31, 13-29, 14-28, 16-27

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

**REACTIONS.** All bearings 34-0-0.  
(lb) - Max Horz 42=-275(LC 6)  
Max Uplift All uplift 100 lb or less at joint(s) 32, 33, 35, 37, 38, 39, 40, 31, 29, 27, 26, 25, 24 except 42=-368(LC 6), 22=-340(LC 7), 41=-272(LC 7), 23=-250(LC 6)  
Max Grav All reactions 250 lb or less at joint(s) 32, 33, 35, 36, 37, 38, 39, 40, 31, 29, 28, 27, 26, 25, 24 except 42=391(LC 7), 22=363(LC 6), 41=418(LC 6), 23=396(LC 7)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 5-6=-85/256, 6-7=-69/305, 7-8=-29/261, 8-9=-29/261, 9-43=-29/261, 10-43=-29/261, 10-11=-29/261, 11-12=-29/261, 12-44=-29/261, 13-44=-29/261, 13-14=-29/261, 14-15=-29/261, 15-16=-60/305, 16-17=-76/256

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=34ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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 qualified building designer as per ANSI/TPI 1.
  - Provide adequate drainage to prevent water ponding.
  - 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).

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedpm Const\Wellons Realty\
27453	T5	GABLE	1	1	Job Reference (optional)

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8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Jul 12 14:07:10 2023 Page 2  
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**NOTES-**

- 8) Gable studs spaced at 2-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 32, 33, 35, 37, 38, 39, 40, 31, 29, 27, 26, 25, 24 except (jt=lb) 42=368, 22=340, 41=272, 23=250.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

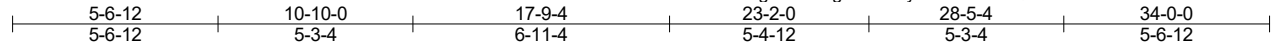
**LOAD CASE(S)** Standard

Job 27453	Truss T6	Truss Type Piggyback Base	Qty 10	Ply 1	Freedpm Const(Wellons Realty) Job Reference (optional)
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8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Jul 12 14:07:11 2023 Page 1

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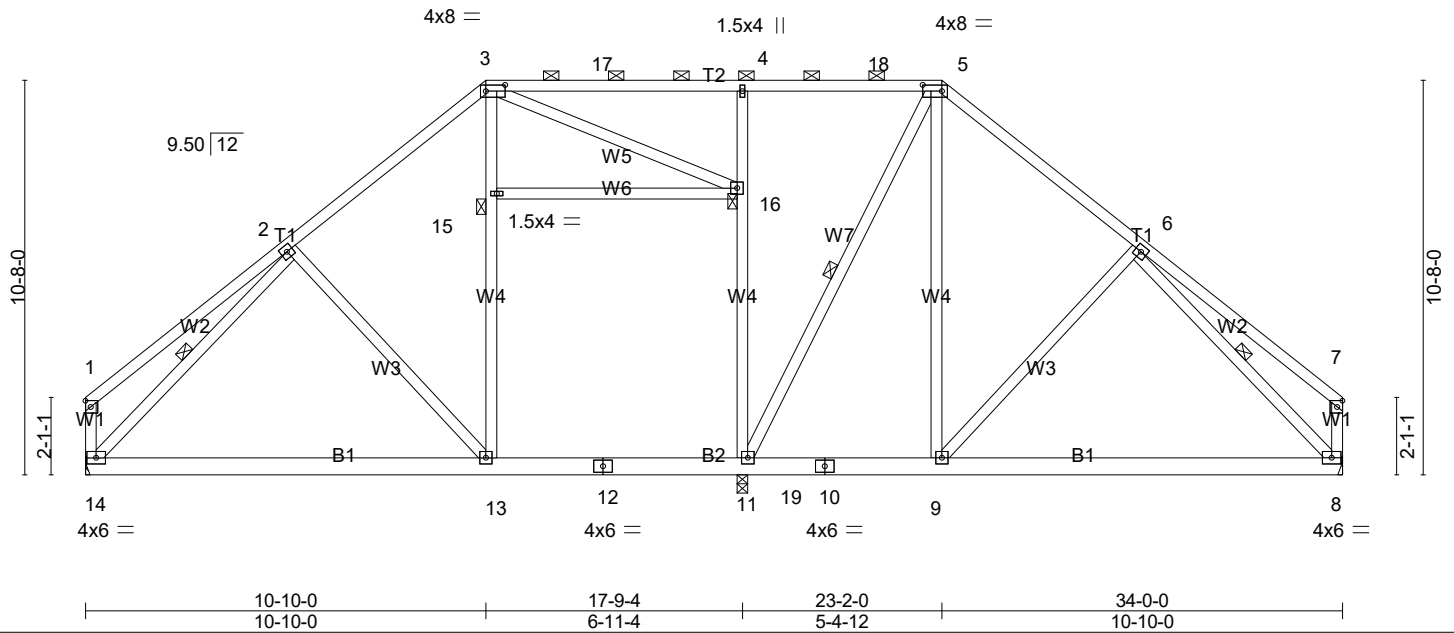


Plate Offsets (X,Y)-- [3:0-6-4,0-2-0], [5:0-6-4,0-2-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.72	Vert(LL)	-0.09 13-14	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.33	Vert(CT)	-0.20 13-14	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.38	Horz(CT)	0.02 8	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Wind(LL)	0.03 13-14	>999	240		
	Code IRC2018/TPI2014						Weight: 270 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP 2400F 2.0E  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.3

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-5. Rigid ceiling directly applied.  
 BOT CHORD  
 WEBS 1 Row at midpt 5-11, 2-14, 6-8  
 JOINTS 1 Brace at Jt(s): 15, 16

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

**REACTIONS.** (lb/size) 11=517/0-3-8 (min. 0-1-8), 14=1102/Mechanical, 8=1078/Mechanical  
 Max Horz 14=-275(LC 6)  
 Max Uplift 11=-127(LC 4), 14=-66(LC 8), 8=-63(LC 8)  
 Max Grav 11=762(LC 14), 14=1163(LC 13), 8=1078(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-297/111, 2-3=-1133/175, 3-17=-821/181, 4-17=-821/181, 4-18=-831/182, 5-18=-831/182, 5-6=-1053/172, 6-7=-283/108, 1-14=-286/96, 7-8=-276/94  
 BOT CHORD 13-14=-101/1000, 12-13=-18/912, 11-12=-18/912, 11-19=0/818, 10-19=0/818, 9-10=0/818, 8-9=0/803  
 WEBS 13-15=0/378, 3-15=0/379, 11-16=-442/116, 4-16=-428/116, 5-9=0/367, 2-14=-1026/37, 6-8=-1035/37

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=34ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) All plates are 4x4 MT20 unless otherwise indicated.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
  - 7) Refer to girder(s) for truss to truss connections.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 8 except (it=lb) 11=127.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedpm Const\Wellons Realty\
27453	T6	Piggyback Base	10	1	Job Reference (optional)

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8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Jul 12 14:07:11 2023 Page 2  
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**NOTES-**

- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 11) 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 27453	Truss T7	Truss Type Piggyback Base	Qty 1	Ply 1	Freedpm Const\Wellons Realty\
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C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Jul 12 14:07:12 2023 Page 1

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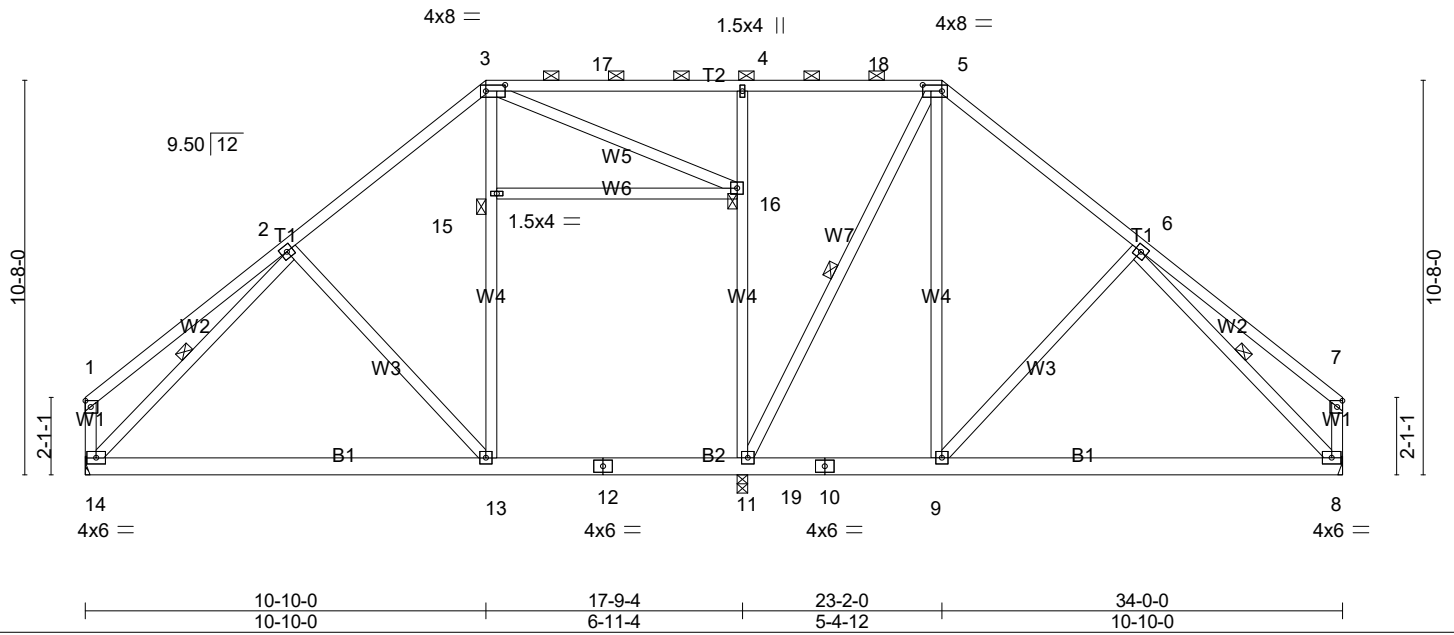


Plate Offsets (X,Y)-- [3:0-6-4,0-2-0], [5:0-6-4,0-2-0]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.72	Vert(LL)	-0.09 13-14	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.33	Vert(CT)	-0.20 13-14	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.38	Horz(CT)	0.02 8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS	Wind(LL)	0.03 13-14	>999	240	Weight: 270 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP 2400F 2.0E  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.3

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-5. Rigid ceiling directly applied.  
 BOT CHORD  
 WEBS 1 Row at midpt 5-11, 2-14, 6-8  
 JOINTS 1 Brace at Jt(s): 15, 16

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

**REACTIONS.** (lb/size) 11=517/0-3-8 (min. 0-1-8), 14=1102/Mechanical, 8=1078/Mechanical  
 Max Horz 14=-275(LC 6)  
 Max Uplift 11=-127(LC 4), 14=-66(LC 8), 8=-63(LC 8)  
 Max Grav 11=762(LC 14), 14=1163(LC 13), 8=1078(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-297/111, 2-3=-1133/175, 3-17=-821/181, 4-17=-821/181, 4-18=-831/182, 5-18=-831/182, 5-6=-1053/172, 6-7=-283/108, 1-14=-286/96, 7-8=-276/94  
 BOT CHORD 13-14=-101/1000, 12-13=-18/912, 11-12=-18/912, 11-19=0/818, 10-19=0/818, 9-10=0/818, 8-9=0/803  
 WEBS 13-15=0/378, 3-15=0/379, 11-16=-442/116, 4-16=-428/116, 5-9=0/367, 2-14=-1026/37, 6-8=-1035/37

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=34ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) All plates are 4x4 MT20 unless otherwise indicated.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
  - 7) Refer to girder(s) for truss to truss connections.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 8 except (it=lb) 11=127.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedpm Const\Wellons Realty\
27453	T7	Piggyback Base	1	1	Job Reference (optional)

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8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Jul 12 14:07:12 2023 Page 2  
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**NOTES-**

- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 11) 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

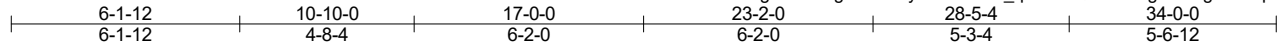


Job 27453	Truss T8	Truss Type Piggyback Base	Qty 1	Ply 1	Freedpm Const(Wellons Realty)
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C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Jul 12 14:07:13 2023 Page 1

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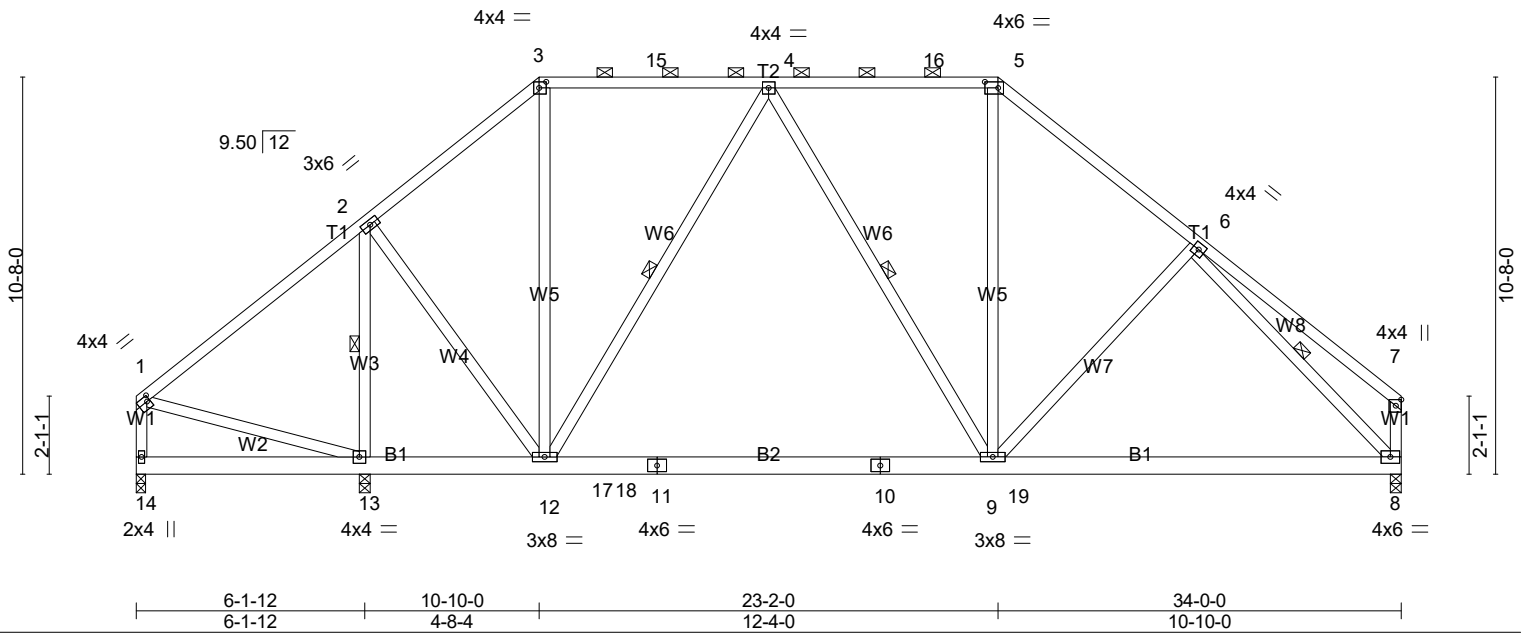


Plate Offsets (X,Y)-- [1:0-1-0,0-1-12], [3:0-2-4,0-2-0], [5:0-4-4,0-2-0]

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.57	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.51	Vert(LL) -0.25 9-12 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.41	Vert(CT) -0.35 9-12 >941 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.02 8 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.02 9-12 >999 240	Weight: 260 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP 2400F 2.0E  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.3

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-5.  
 Rigid ceiling directly applied.  
 BOT CHORD  
 WEBS 1 Row at midpt 2-13, 4-12, 4-9, 6-8

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

**REACTIONS.** (lb/size) 14=343/0-3-0 (min. 0-1-8), 13=1224/0-3-8 (min. 0-1-9), 8=1131/0-3-8 (min. 0-1-8)  
 Max Horz 14=-275(LC 6)  
 Max Uplift 14=-8(LC 8), 13=-118(LC 8), 8=-83(LC 8)  
 Max Grav 14=351(LC 19), 13=1332(LC 13), 8=1195(LC 14)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-288/55, 2-3=-841/179, 3-15=-606/175, 4-15=-606/175, 4-16=-908/195,  
 5-16=-908/195, 5-6=-1217/193, 1-14=-293/42, 7-8=-255/100  
 BOT CHORD 13-14=-244/306, 13-17=-142/250, 12-17=-142/250, 12-18=-20/886,  
 11-18=-20/886, 10-11=-20/886, 10-19=-20/886, 9-19=-20/886, 8-9=-9/869  
 WEBS 2-13=-1324/138, 2-12=0/801, 3-12=-15/253, 4-12=-530/88, 5-9=-11/403,  
 6-8=-1168/49

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=34ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 8 except (jt=lb) 13=118.
  - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedpm Const\Wellons Realty\
27453	T8	Piggyback Base	1	1	Job Reference (optional)

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Jul 12 14:07:13 2023 Page 2  
ID:wFt46ioPgwNXurZgnFdDKKy93cZ-NmM\_qGXsolQ0EZ4JFgafbZagePAPipVAyAlHXYyoi

**NOTES-**

- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard



Job	Truss	Truss Type	Qty	Ply	Freedpm Const\Wellons Realty\
27453	T9	Piggyback Base	8	1	Job Reference (optional)

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Jul 12 14:07:14 2023 Page 2  
ID:wF46ioPgwNXurZgnFdDKky93cZ-rzwM2bXUZ3YtsjVpN5u8m7rHpXoRGjJBq2q3\_yyoah

**NOTES-**

- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard



Job	Truss	Truss Type	Qty	Ply	Freedpm Const\Wellons Realty\
27453	T10	Piggyback Base	1	1	Job Reference (optional)

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Jul 12 14:07:15 2023 Page 2  
 ID:wFt46ioPgwNXurZgnFdDKky93cZ-J9UkFyY7KMgkUsEiN4c7h\_g01Cs1AjzTPUnNbRyyoag

**NOTES-**

- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

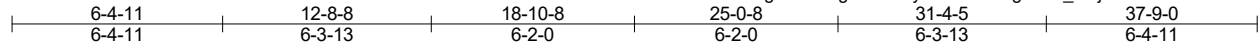
**LOAD CASE(S)** Standard

Job 27453	Truss T11	Truss Type Piggyback Base	Qty 6	Ply 1	Freedpm Const(Wellons Realty)
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C&R Building Supply, Autryville NC

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ID:wFt46ioPgwnXurZgnFdDKky93cZ-GYcVgdaNs\_wsJAN4UUVebmPIR40X2ecrtoGUGjyjoae



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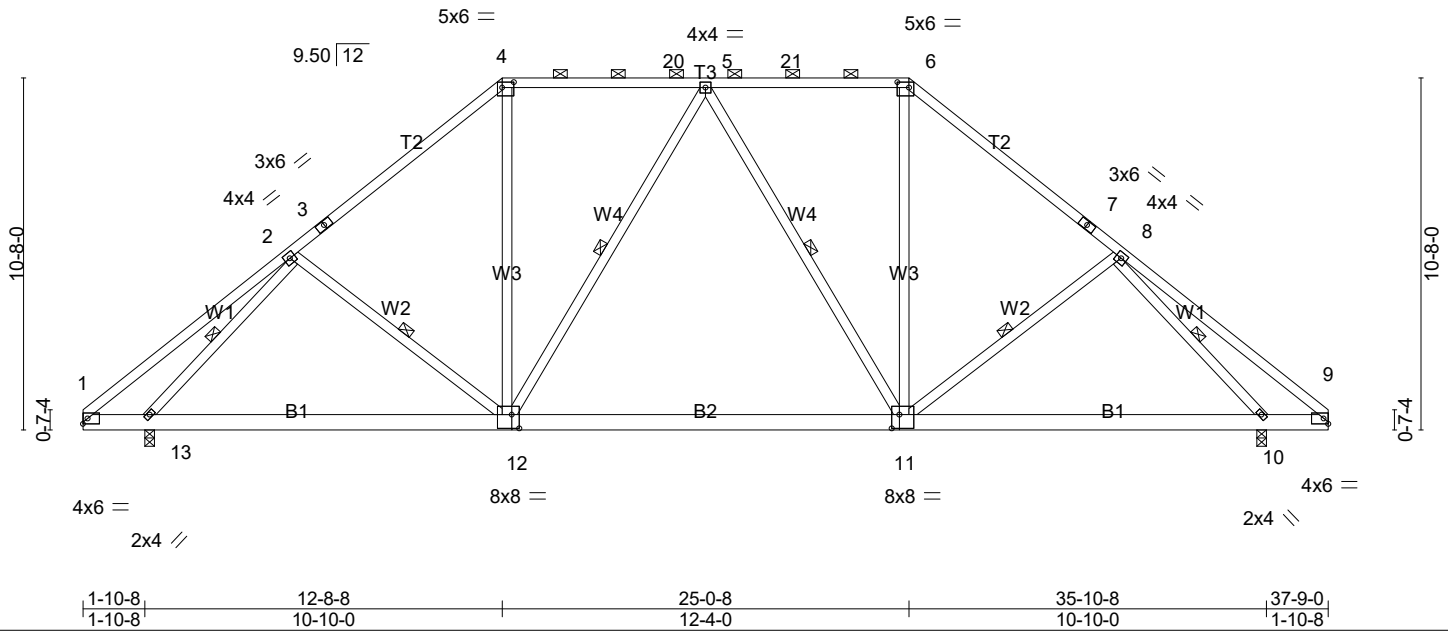


Plate Offsets (X,Y)-- [4:0-4-4,0-2-0], [6:0-4-4,0-2-0], [11:0-2-12,0-5-0], [12:0-2-12,0-5-0]

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.22	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.53	Vert(LL) -0.27 11-12 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.46	Vert(CT) -0.37 11-12 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.03 10 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.04 11-12 >999 240	Weight: 262 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP 2400F 2.0E  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.3

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (6-0-0 max.): 4-6.  
 Rigid ceiling directly applied.  
 BOT CHORD 1 Row at midpt 2-12, 5-12, 5-11, 8-11, 2-13, 8-10  
 WEBS

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

**REACTIONS.** (lb/size) 13=1510/0-3-8 (min. 0-1-13), 10=1510/0-3-8 (min. 0-1-13)  
 Max Horz 13=-254(LC 6)  
 Max Uplift 13=-157(LC 8), 10=-116(LC 8)  
 Max Grav 13=1549(LC 13), 10=1549(LC 14)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-263/67, 2-3=-1538/169, 3-4=-1432/213, 4-20=-1161/220,  
 5-20=-1161/220, 5-21=-1161/221, 6-21=-1161/221, 6-7=-1432/215,  
 7-8=-1538/171, 8-9=-263/67  
 BOT CHORD 12-13=-61/1263, 11-12=0/1297, 10-11=-46/1072  
 WEBS 4-12=-6/588, 5-12=-311/92, 5-11=-311/92, 6-11=-8/587, 2-13=-1618/234,  
 8-10=-1618/212

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=38ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=157, 10=116.
  - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedpm Const\Wellons Realty\
27453	T11	Piggyback Base	6	1	Job Reference (optional)

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Jul 12 14:07:17 2023 Page 2  
ID:wFt46ioPgwnXurZgnFdDKky93cZ-GYcVgdaNs\_wSjAN4UVebmPIR40X2ecrtoGUgJyyoae

**NOTES-**

- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 9) 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

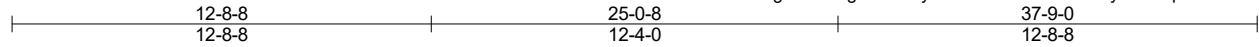


Job 27453	Truss T12	Truss Type GABLE	Qty 1	Ply 1	Freedpm Const(Wellons Realty)
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C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Jul 12 14:07:18 2023 Page 1

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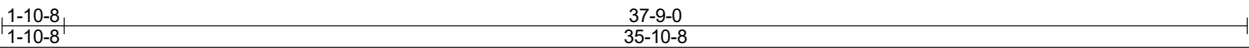
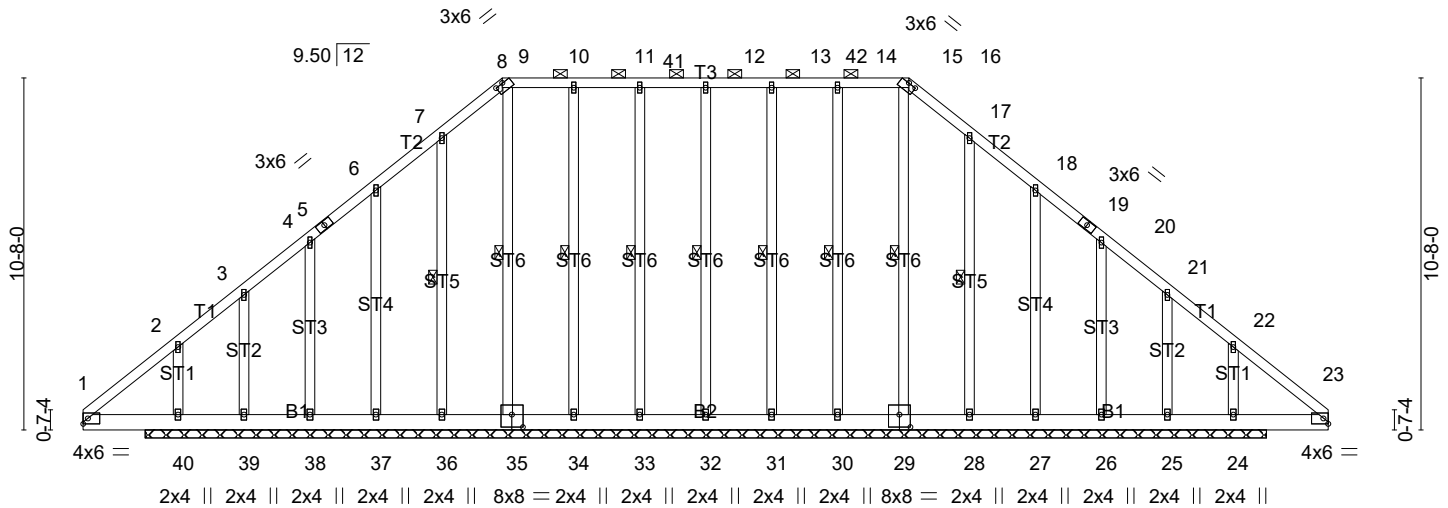


Plate Offsets (X,Y)-- [8:0-3-0,0-0-2], [16:0-3-0,0-0-2], [29:0-4-0,0-4-8], [35:0-4-0,0-4-8]

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.07	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.15	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.13	Horz(CT)	-0.00	24	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 338 lb	FT = 20%
	Code IRC2018/TPI2014							

**LUMBER-**  
 TOP CHORD 2x4 SP 2400F 2.0E  
 BOT CHORD 2x6 SP No.1  
 OTHERS 2x4 SP No.3

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 10-0-0 oc purlins, except 2-0-0 oc purlins (10-0-0 max.): 8-16.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS 1 Row at midpt 12-32, 11-33, 10-34, 9-35, 7-36, 13-31, 14-30, 15-29, 17-28

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

**REACTIONS.** All bearings 34-0-0.  
 (lb) - Max Horz 40=259(LC 7)  
 Max Uplift All uplift 100 lb or less at joint(s) 32, 33, 34, 36, 37, 38, 31, 30, 28, 27, 26 except 39=-207(LC 7), 40=-159(LC 4), 25=-190(LC 6), 24=-149(LC 5)  
 Max Grav All reactions 250 lb or less at joint(s) 32, 33, 34, 36, 37, 38, 31, 30, 28, 27, 26 except 35=261(LC 13), 39=337(LC 6), 40=419(LC 14), 29=256(LC 14), 25=321(LC 7), 24=405(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 7-8=-6/282, 16-17=0/281

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=38ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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 1.5x4 MT20 unless otherwise indicated.
  - 6) Gable studs spaced at 2-0-0 oc.
  - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedpm Const\Wellons Realty\
27453	T12	GABLE	1	1	Job Reference (optional)

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8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Jul 12 14:07:18 2023 Page 2  
 ID:wFt46ioPgwNXurZgnFdDKky93cZ-kkAtuzb?dH2JLKyH2DAqlcleCQzFN8Bv6S01Clyoad

**NOTES-**

- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 32, 33, 34, 36, 37, 38, 31, 30, 28, 27, 26 except (jt=lb) 39=207, 40=159, 25=190, 24=149.
- 10) Non Standard bearing condition. Review required.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

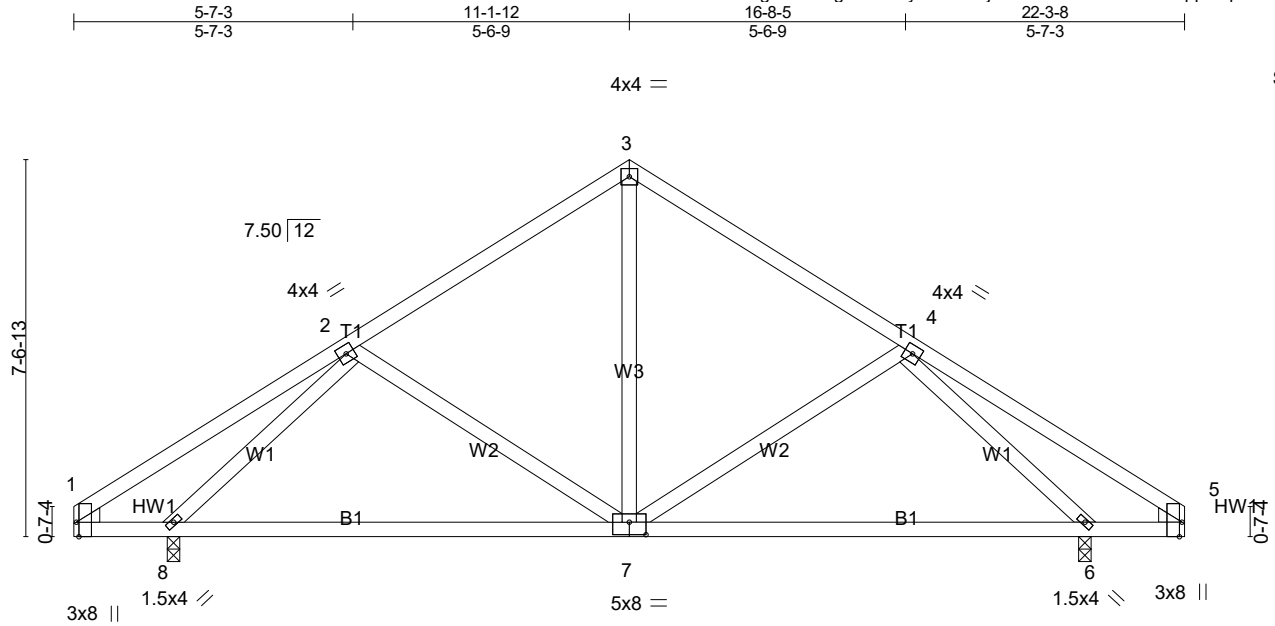
**LOAD CASE(S)** Standard

Job 27453	Truss T13	Truss Type Common	Qty 1	Ply 1	Freedpm Const\Wellons Realty\
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C&R Building Supply, Autryville NC

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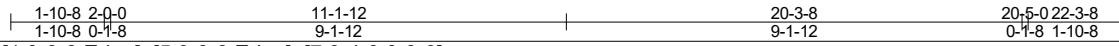


Plate Offsets (X,Y)-- [1:0-3-8,Edge], [5:0-3-8,Edge], [7:0-4-0,0-3-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.31	Vert(LL)	-0.08	7-8	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.32	Vert(CT)	-0.16	7-8	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.44	Horz(CT)	0.01	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS	Wind(LL)	0.01	7	>999	240	Weight: 119 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP 2400F 2.0E  
 WEBS 2x4 SP No.3  
 WEDGE  
 Left: 2x4 SP No.3 , Right: 2x4 SP No.3

**BRACING-**

TOP CHORD Structural wood sheathing directly applied.  
 BOT CHORD Rigid ceiling directly applied.

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

**REACTIONS.** (lb/size) 8=892/0-3-0 (min. 0-1-8), 6=892/0-3-0 (min. 0-1-8)  
 Max Horz 8=-154(LC 6)  
 Max Uplift 8=-111(LC 8), 6=-67(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-675/118, 3-4=-675/118  
 BOT CHORD 7-8=-23/616, 6-7=-29/575  
 WEBS 3-7=-9/376, 2-8=-832/177, 4-6=-832/150

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) V<sub>asd</sub>=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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) 6 except (jt=lb) 8=111.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

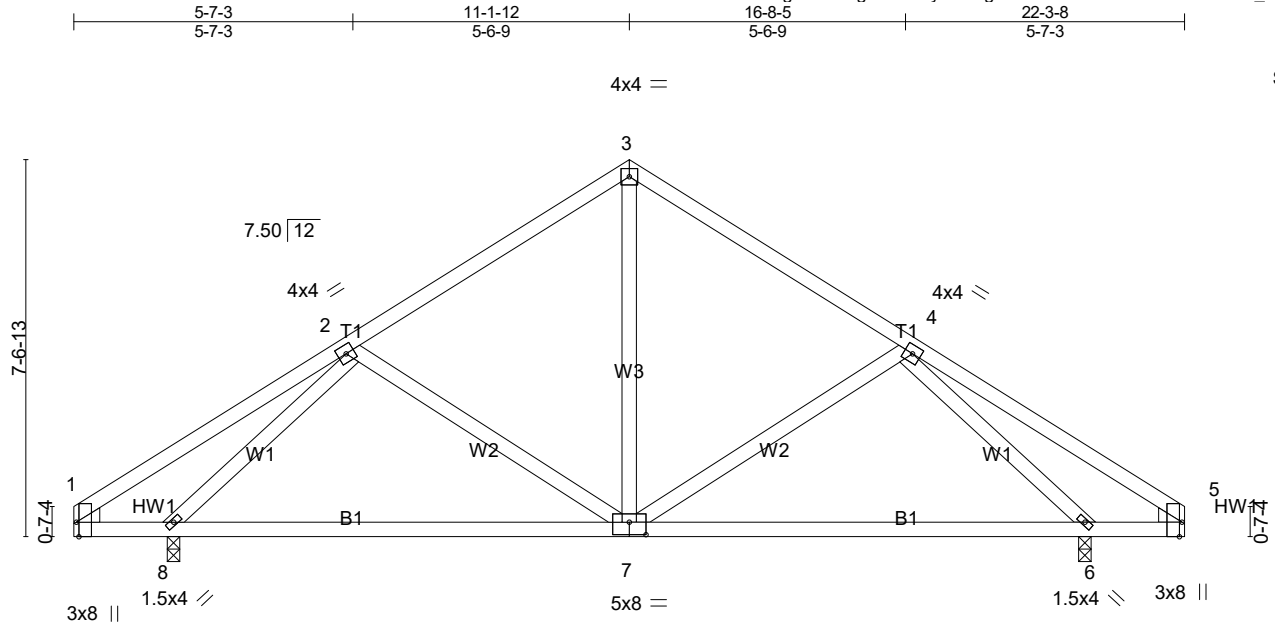
**LOAD CASE(S)** Standard

Job 27453	Truss T14	Truss Type Common	Qty 1	Ply 1	Freedpm Const\Wellons Realty\
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C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Jul 12 14:07:20 2023 Page 1

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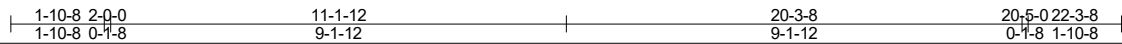


Plate Offsets (X,Y)-- [1:0-3-8,Edge], [5:0-3-8,Edge], [7:0-4-0,0-3-0]

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0 Plate Grip DOL 1.15	TC 0.31	Vert(LL)	-0.08 7-8	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.32	Vert(CT)	-0.16 7-8	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.44	Horz(CT)	0.01 6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS	Wind(LL)	0.01 7	>999	240	Weight: 119 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP 2400F 2.0E  
 WEBS 2x4 SP No.3  
 WEDGE  
 Left: 2x4 SP No.3 , Right: 2x4 SP No.3

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied.  
 BOT CHORD Rigid ceiling directly applied.

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

**REACTIONS.** (lb/size) 8=892/0-3-0 (min. 0-1-8), 6=892/0-3-0 (min. 0-1-8)  
 Max Horz 8=-154(LC 6)  
 Max Uplift 8=-111(LC 8), 6=-67(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-675/118, 3-4=-675/118  
 BOT CHORD 7-8=-23/616, 6-7=-29/575  
 WEBS 3-7=-9/376, 2-8=-832/177, 4-6=-832/150

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) V<sub>asd</sub>=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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) 6 except (jt=lb) 8=111.
  - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard



Job 27453	Truss V2	Truss Type Valley	Qty 1	Ply 1	Freedpm Const\Wellons Realty\
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C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Jul 12 14:07:22 2023 Page 1  
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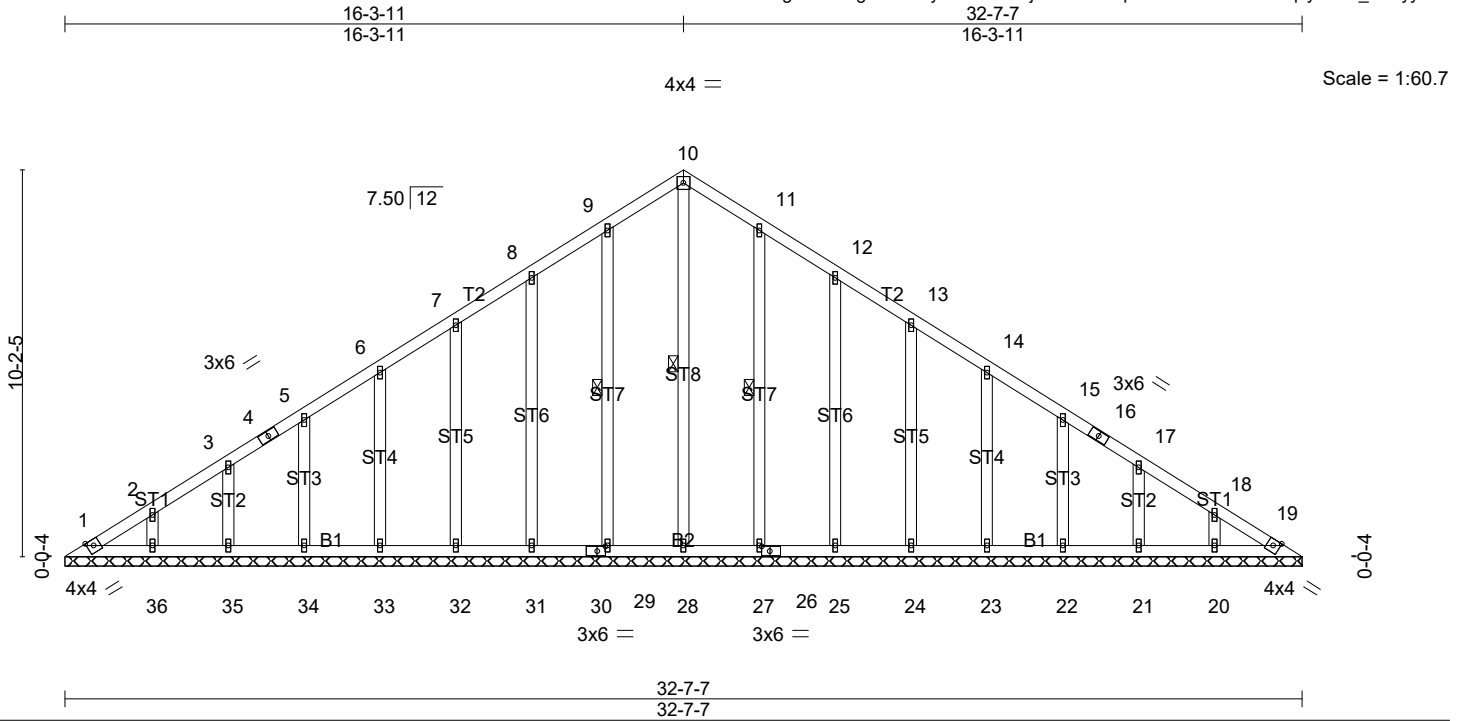


Plate Offsets (X,Y)-- [26:0-2-9,0-1-8], [30:0-2-9,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0 Plate Grip DOL 1.15	TC 0.02	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.13	Horz(CT)	0.01	19	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S					Weight: 215 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP 2400F 2.0E  
 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.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 10-28, 9-29, 11-27

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

**REACTIONS.** All bearings 32-7-7.  
 (lb) - Max Horz 1=223(LC 7)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 29, 31, 32, 33, 34, 35, 36, 27, 25, 24, 23, 22, 21, 20, 19  
 Max Grav All reactions 250 lb or less at joint(s) 1, 28, 29, 31, 32, 33, 34, 35, 36, 27, 25, 24, 23, 22, 21, 20, 19

**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 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=33ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - All plates are 1.5x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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) 1, 29, 31, 32, 33, 34, 35, 36, 27, 25, 24, 23, 22, 21, 20, 19.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job 27453	Truss V3	Truss Type Valley	Qty 1	Ply 1	Freedpm Const\Wellons Realty\
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8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Jul 12 14:07:24 2023 Page 1

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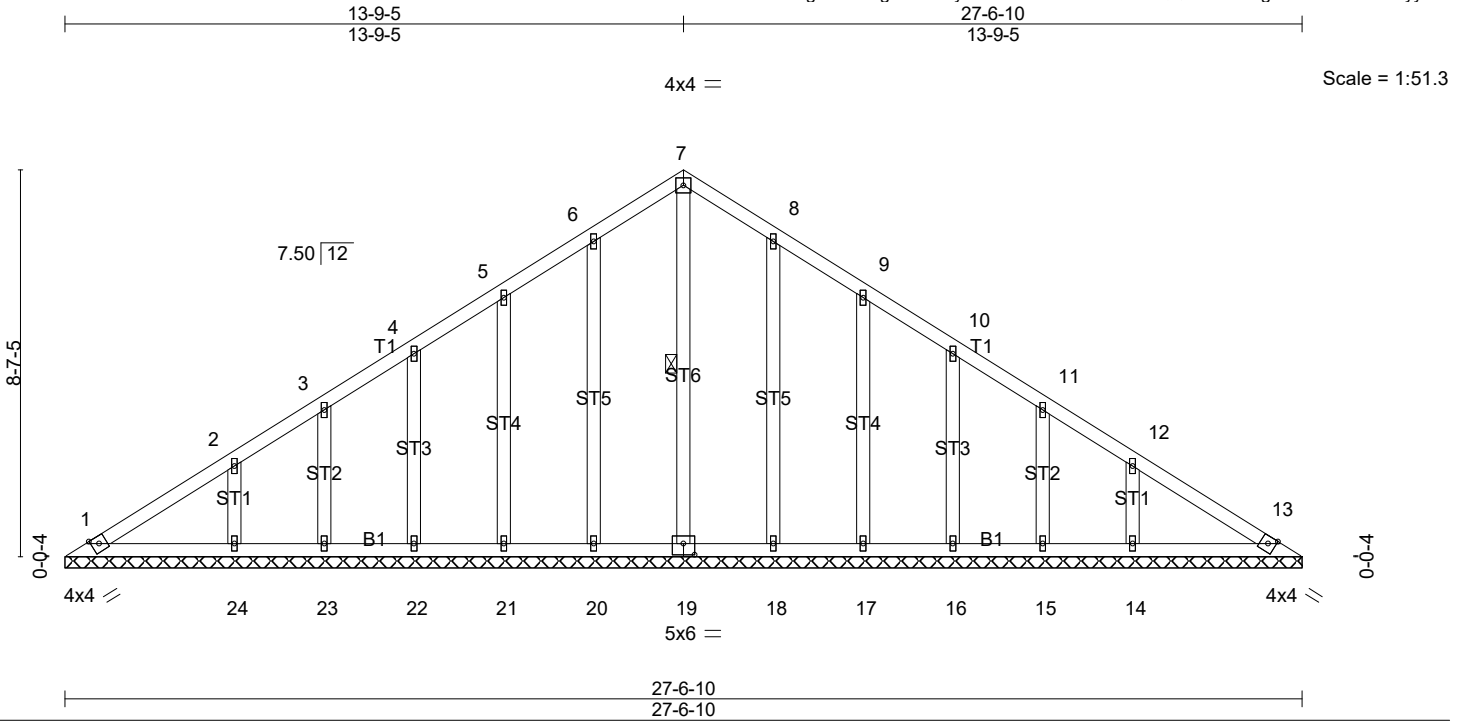


Plate Offsets (X,Y)-- [19:0-3-0,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0 Plate Grip DOL 1.15	TC 0.06	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.08	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.13	Horz(CT)	0.00	13	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S					Weight: 163 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP 2400F 2.0E  
 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.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 7-19

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

**REACTIONS.** All bearings 27-6-10.  
 (lb) - Max Horz 1=-185(LC 6)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 20, 21, 22, 23, 24, 18, 17, 16, 15, 14  
 Max Grav All reactions 250 lb or less at joint(s) 1, 13, 19, 20, 21, 22, 23, 18, 17, 16, 15 except 24=273(LC 13), 14=273(LC 14)

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=27ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) All plates are 1.5x4 MT20 unless otherwise indicated.
  - 4) Gable requires continuous bottom chord bearing.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 20, 21, 22, 23, 24, 18, 17, 16, 15, 14.
  - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

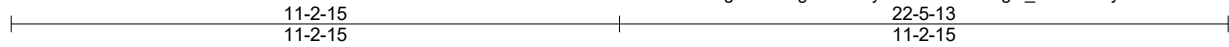
**LOAD CASE(S)** Standard

Job 27453	Truss V4	Truss Type Valley	Qty 1	Ply 1	Freedpm Const\Wellons Realty\
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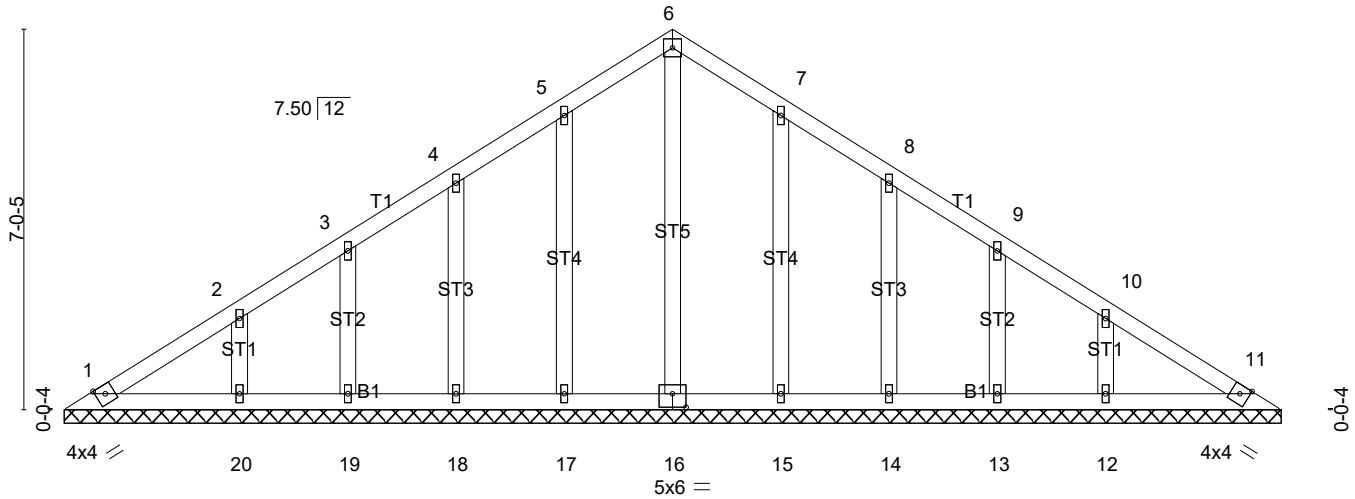
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4x4 =

Scale = 1:42.6



22-5-13  
22-5-13

Plate Offsets (X,Y)-- [16:0-3-0,0-3-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.04	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 0.08	Horz(CT)	0.00	11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 120 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP 2400F 2.0E  
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.  
BOT CHORD 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 22-5-13.  
(lb) - Max Horz 1=148(LC 7)  
Max Uplift All uplift 100 lb or less at joint(s) 17, 18, 19, 20, 15, 14, 13, 12  
Max Grav All reactions 250 lb or less at joint(s) 1, 11, 16, 17, 18, 19, 20, 15, 14, 13, 12

**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 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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, 18, 19, 20, 15, 14, 13, 12.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

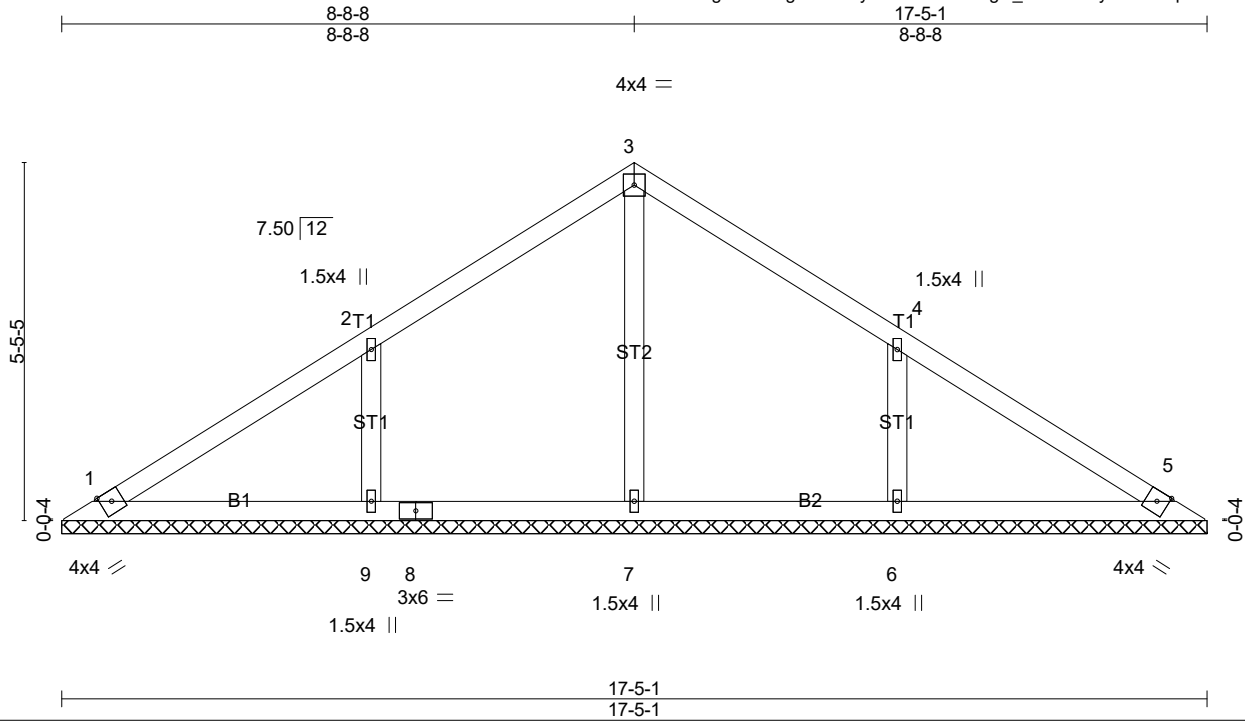


Job 27453	Truss V5	Truss Type Valley	Qty 1	Ply 1	Freedpm Const\Wellons Realty\
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.11	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.14	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.08	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 5 n/a n/a		
	Code IRC2018/TPI2014			Weight: 69 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP 2400F 2.0E  
 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.  
 BOT CHORD 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 17-5-1.  
 (lb) - Max Horz 1=-113(LC 6)  
 Max Uplift All uplift 100 lb or less at joint(s) 9, 6  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except  
 9=402(LC 13), 6=402(LC 14)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-9=-302/140, 4-6=-302/140

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 6.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

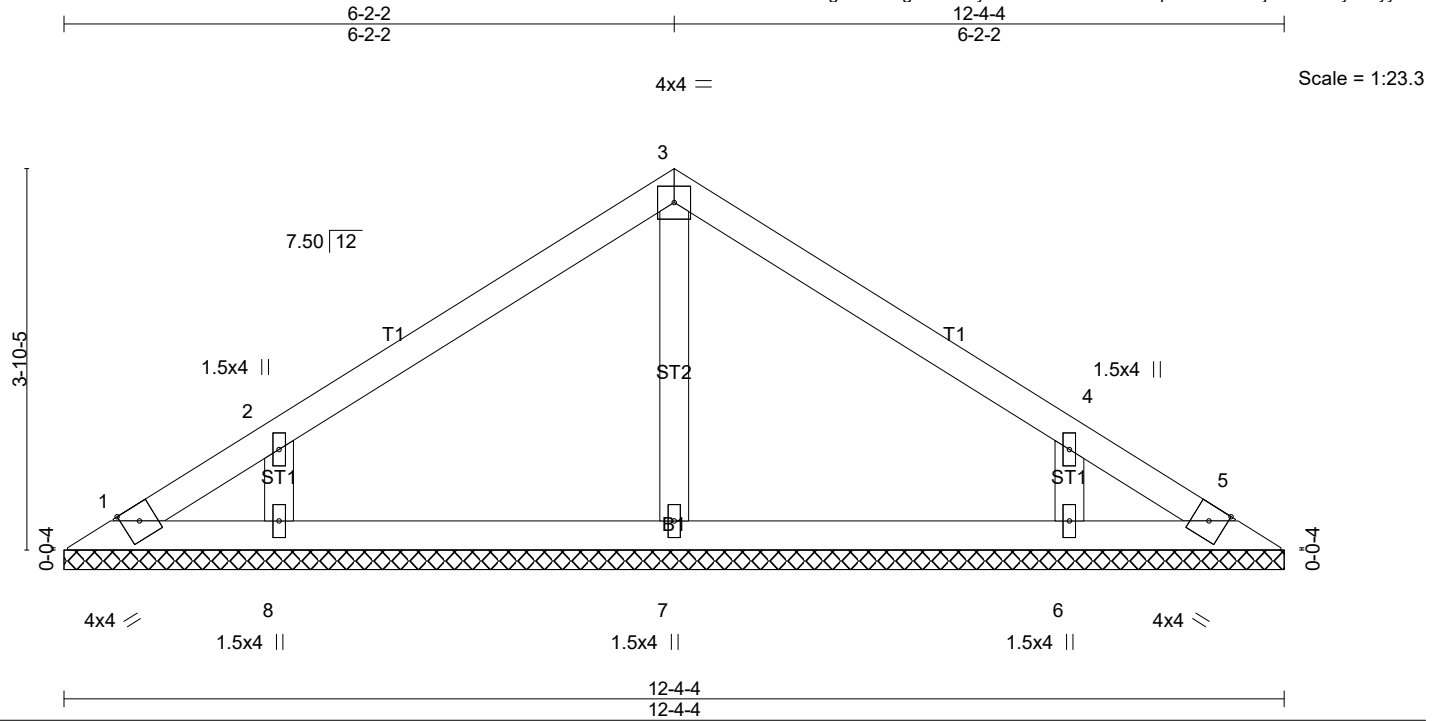
**LOAD CASE(S)** Standard

Job 27453	Truss V6	Truss Type Valley	Qty 1	Ply 1	Freedpm Const\Wellons Realty\
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.08	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.12	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.05	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 5 n/a n/a		
	Code IRC2018/TPI2014			Weight: 45 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP 2400F 2.0E  
 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.  
 BOT CHORD 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 12-4-4.  
 (lb) - Max Horz 1=-78(LC 6)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 8, 6  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=265(LC 1),  
 8=299(LC 13), 6=299(LC 14)

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Gable requires continuous bottom chord bearing.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 8, 6.
  - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

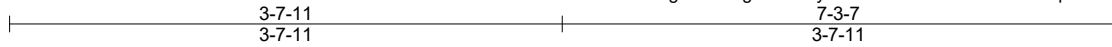
**LOAD CASE(S)** Standard

Job 27453	Truss V7	Truss Type Valley	Qty 1	Ply 1	Freedpm Const\Wellons Realty\
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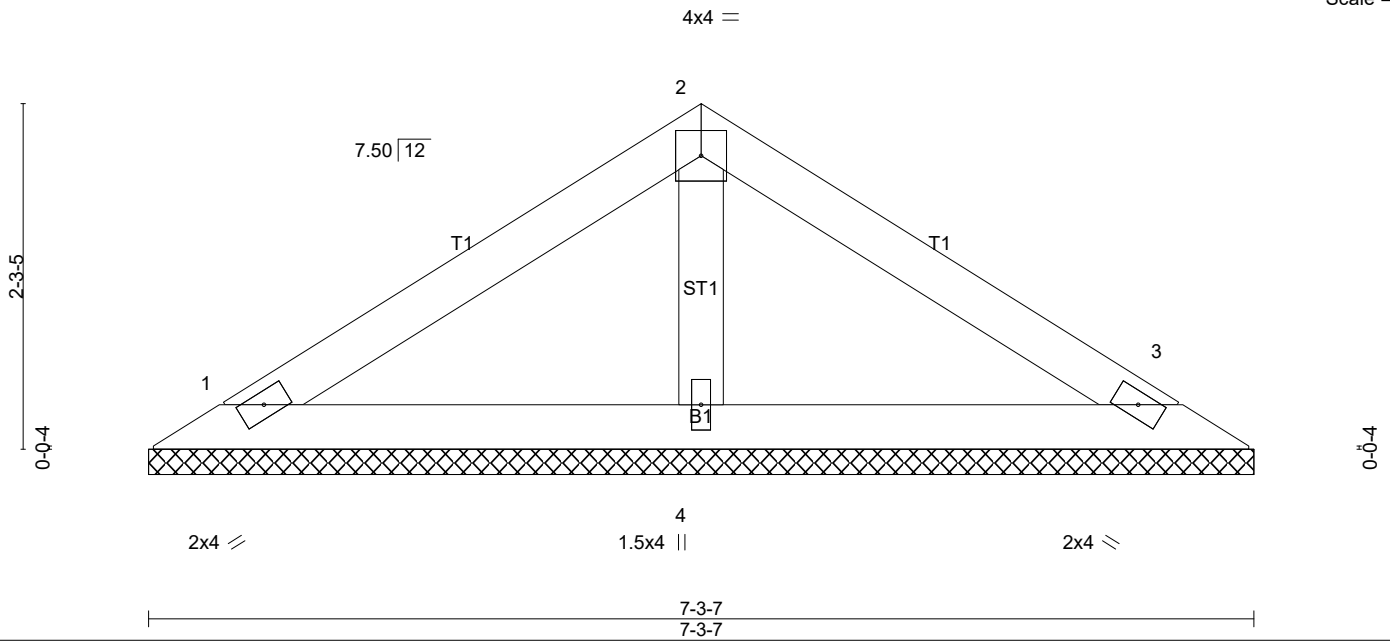
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Scale = 1:15.2



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.08	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.10	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.03	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2018/TPI2014			Weight: 24 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP 2400F 2.0E  
 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.  
 BOT CHORD 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=136/7-3-7 (min. 0-1-8), 3=136/7-3-7 (min. 0-1-8), 4=229/7-3-7 (min. 0-1-8)  
 Max Horz 1=-43(LC 6)  
 Max Uplift 1=-27(LC 8), 3=-27(LC 8)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

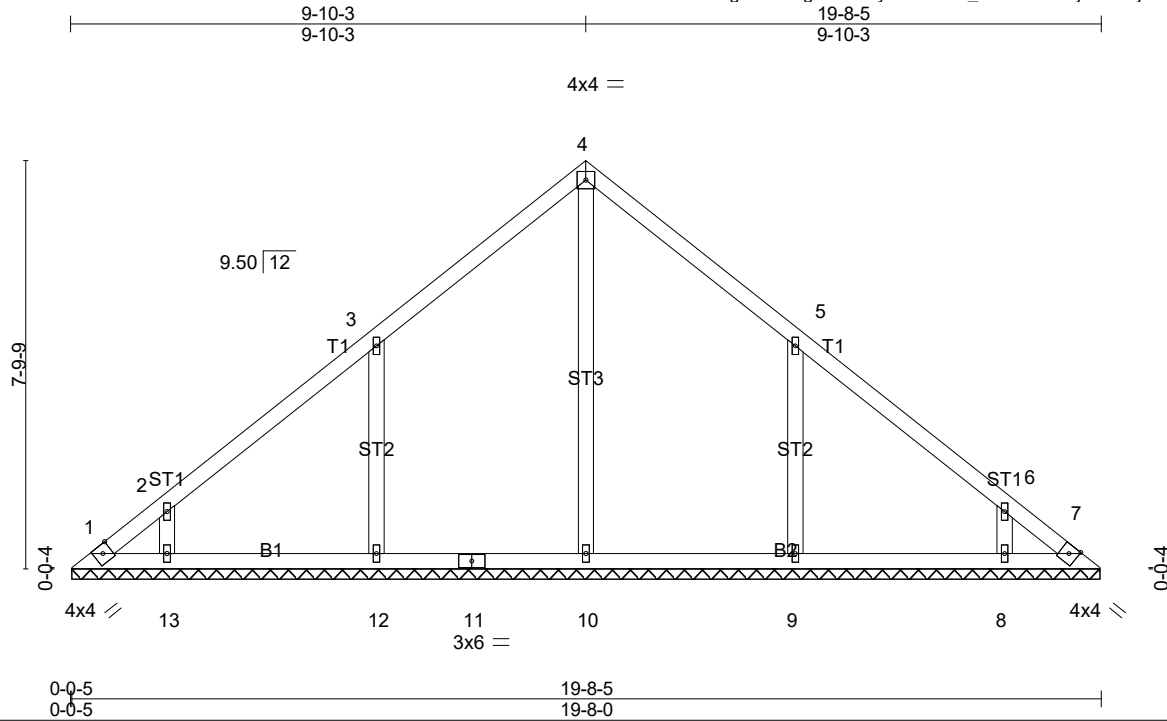
**LOAD CASE(S)** Standard

Job 27453	Truss V8	Truss Type Valley	Qty 1	Ply 1	Freedpm Const\Wellons Realty\
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Scale = 1:44.0

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.09	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.19	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.16	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 7 n/a n/a		
	Code IRC2018/TPI2014			Weight: 91 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP 2400F 2.0E  
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.  
BOT CHORD 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 19-7-11.  
(lb) - Max Horz 1=-176(LC 6)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 13, 8 except  
12=-111(LC 8), 9=-111(LC 8)  
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=365(LC  
13), 12=433(LC 13), 13=267(LC 13), 9=433(LC 14), 8=267(LC 14)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 3-12=-292/160, 5-9=-291/160

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - All plates are 1.5x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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) 1, 7, 13, 8 except (jt=lb) 12=111, 9=111.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

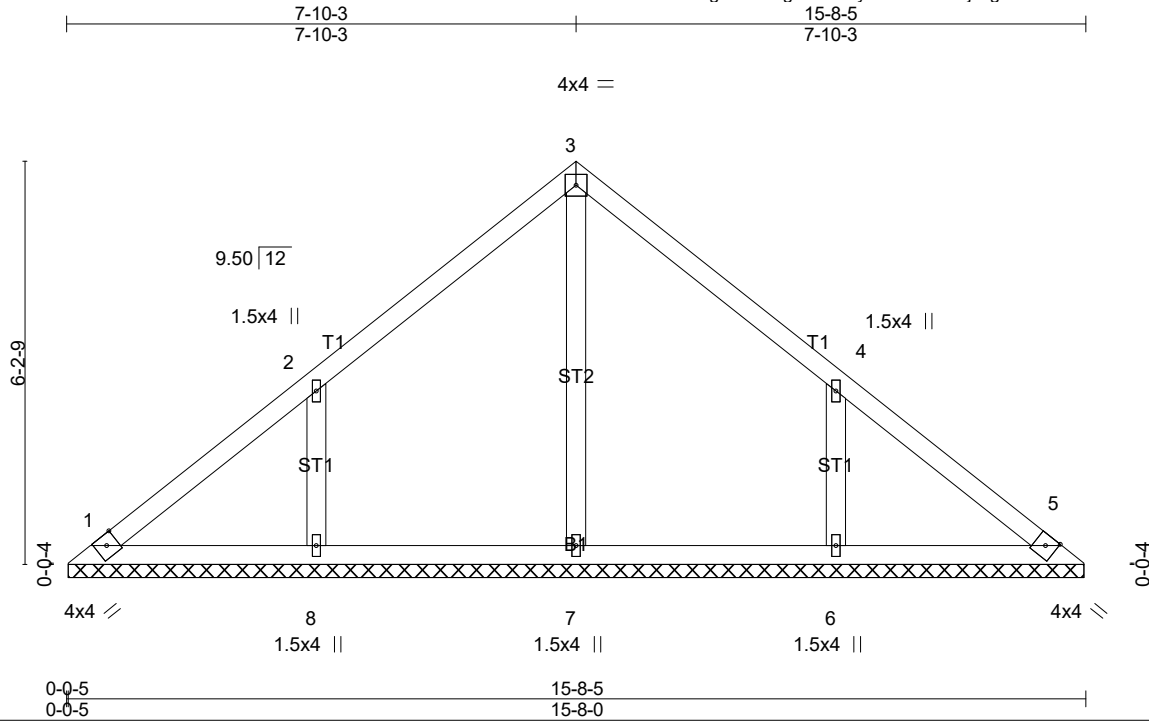
**LOAD CASE(S)** Standard

Job 27453	Truss V9	Truss Type Valley	Qty 1	Ply 1	Freedpm Const\Wellons Realty\
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.09	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.11	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.10	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 5 n/a n/a		
	Code IRC2018/TPI2014			Weight: 67 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP 2400F 2.0E  
 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.  
 BOT CHORD 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 15-7-11.  
 (lb) - Max Horz 1=138(LC 7)  
 Max Uplift All uplift 100 lb or less at joint(s) except 8=-112(LC 8),  
 6=-112(LC 8)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except  
 8=376(LC 13), 6=375(LC 14)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-8=-289/157, 4-6=-289/157

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 112 lb uplift at joint 8 and 112 lb uplift at joint 6.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

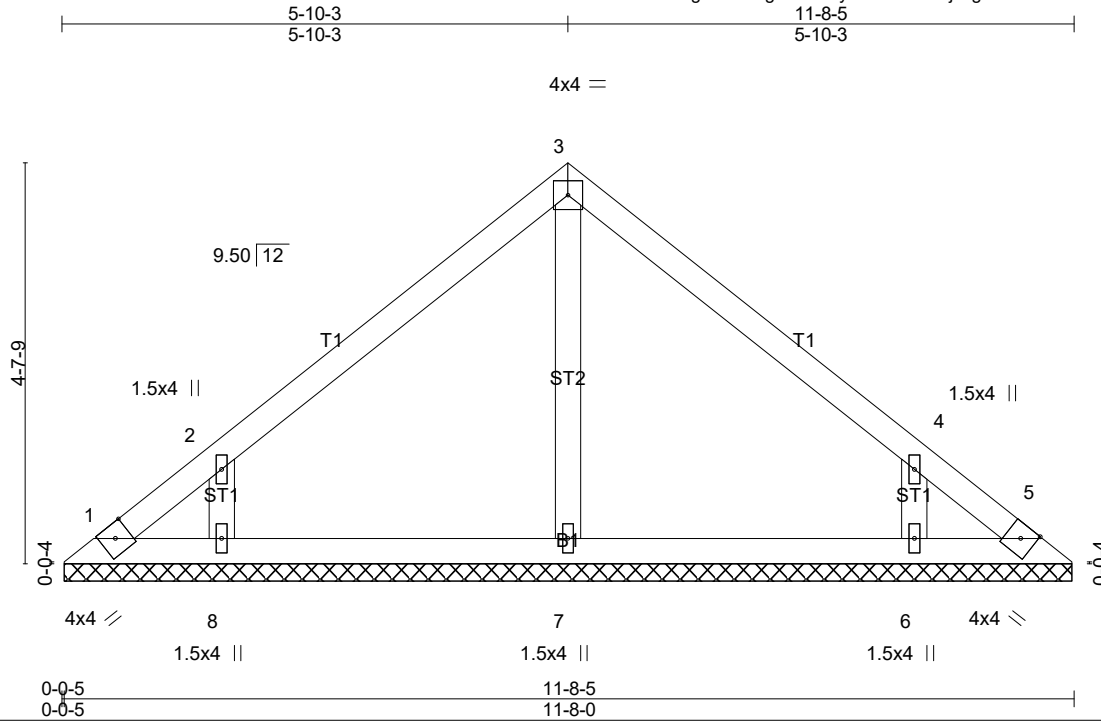
**LOAD CASE(S)** Standard

Job 27453	Truss V10	Truss Type Valley	Qty 1	Ply 1	Freedpm Const\Wellons Realty\
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Scale = 1:26.6

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 47 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP 2400F 2.0E  
 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.  
 BOT CHORD 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 11-7-11.  
 (lb) - Max Horz 1=-101(LC 6)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 8, 6  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except  
 8=316(LC 13), 6=315(LC 14)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-8=-254/140, 4-6=-254/140

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Gable requires continuous bottom chord bearing.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 8, 6.
  - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

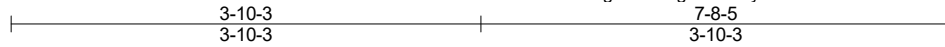
**LOAD CASE(S)** Standard

Job 27453	Truss V11	Truss Type Valley	Qty 1	Ply 1	Freedpm Const\Wellons Realty\
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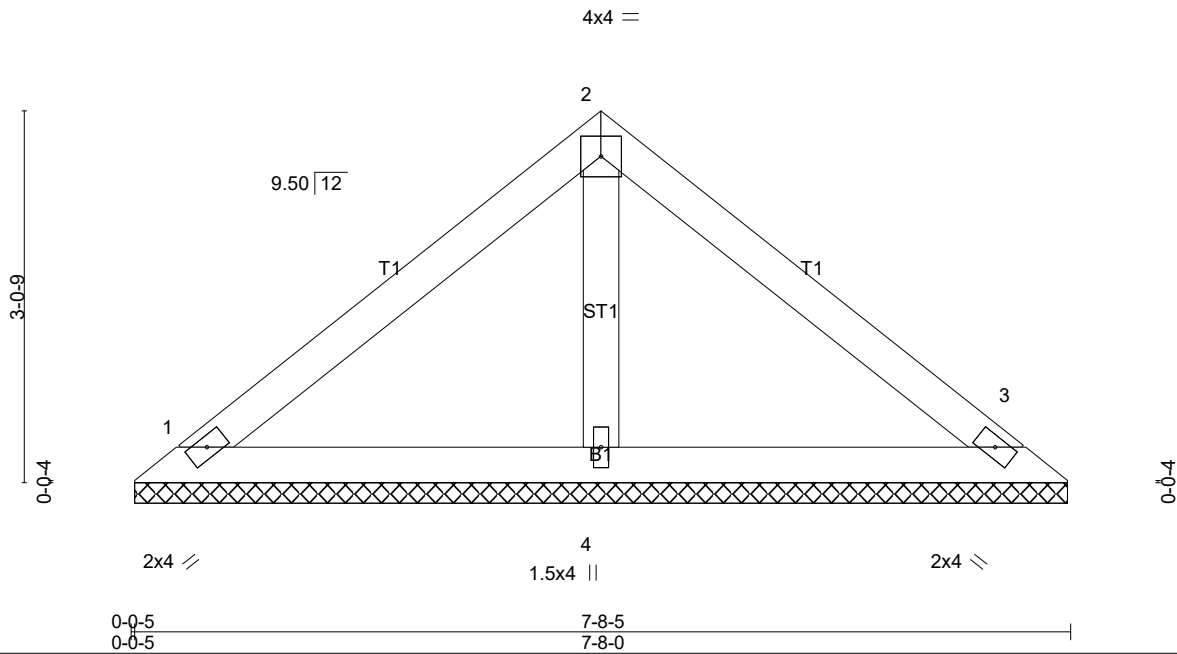
C&R Building Supply, Autryville NC

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Scale = 1:18.9



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.10	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.12	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.03	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2018/TPI2014			Weight: 28 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP 2400F 2.0E  
 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.  
 BOT CHORD 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=160/7-7-11 (min. 0-1-8), 3=160/7-7-11 (min. 0-1-8), 4=229/7-7-11 (min. 0-1-8)  
 Max Horz 1=64(LC 7)  
 Max Uplift 1=-34(LC 8), 3=-34(LC 8)

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

**NOTES-**

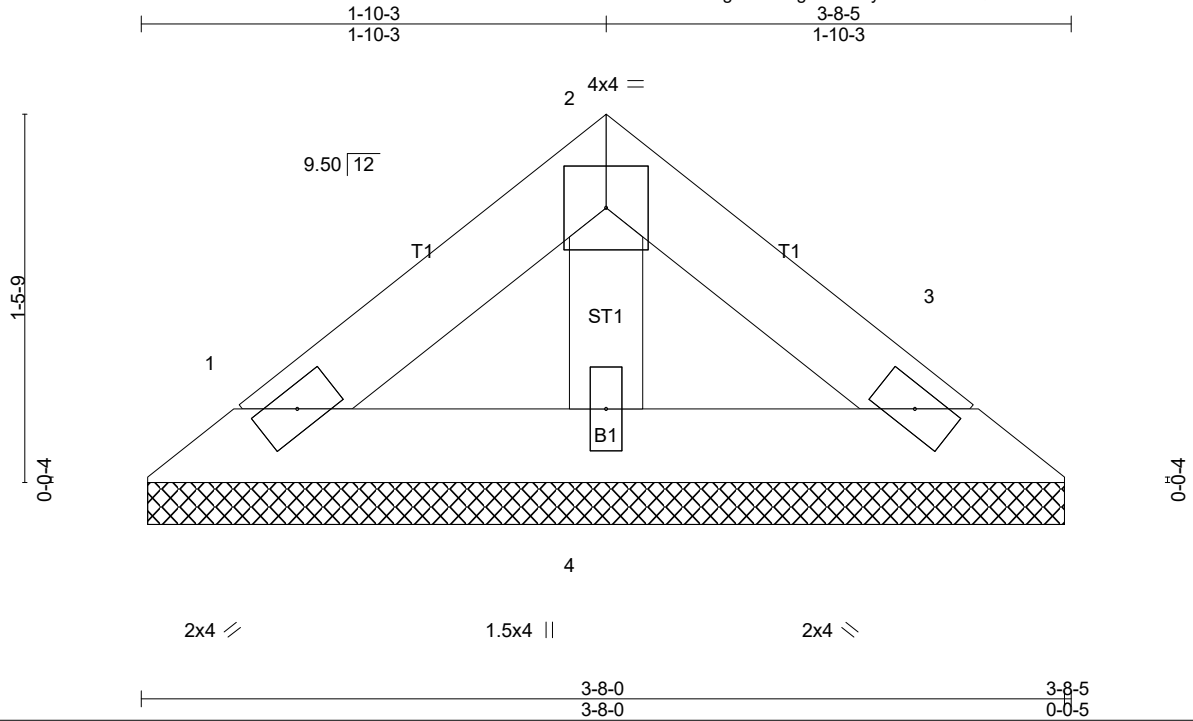
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job 27453	Truss V12	Truss Type Valley	Qty 1	Ply 1	Freedpm Const\Wellons Realty\
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C&R Building Supply, Autryville NC

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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.02	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.02	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.01	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2018/TPI2014			Weight: 12 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP 2400F 2.0E  
BOT CHORD 2x4 SP No.2  
OTHERS 2x4 SP No.3

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 3-8-5 oc purlins.  
BOT CHORD 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=67/3-7-11 (min. 0-1-8), 3=67/3-7-11 (min. 0-1-8), 4=95/3-7-11 (min. 0-1-8)  
Max Horz 1=27(LC 7)  
Max Uplift 1=14(LC 8), 3=14(LC 8)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=140mph (3-second gust) Vasd=111mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard