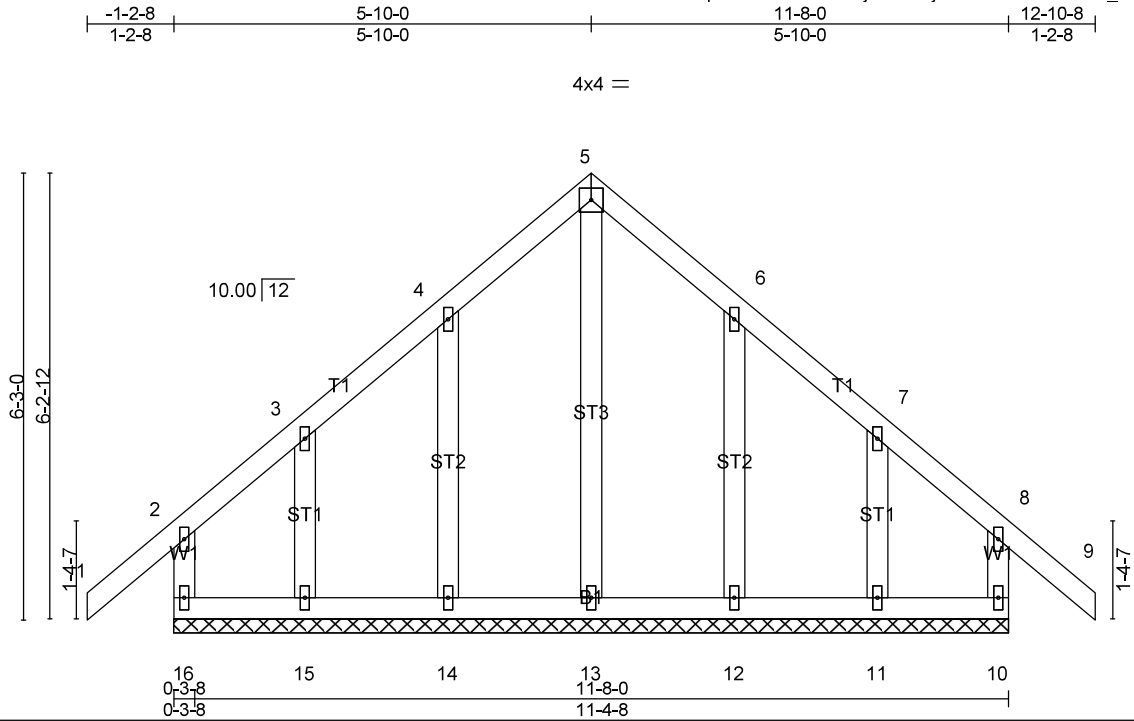


Job 28780	Truss G1	Truss Type Common Supported Gable	Qty 1	Ply 1	Vuncannon&Sons\Shane Cabe
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Tue Jul 8 09:42:11 2025 Page 1  
ID:43FmfUEpnBwxW36Q?RCfByzursR-1j?JUBdL1FzxUS2W1n\_595GeUIAtAsrEiX0EvIz\_ArA



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.13	Vert(LL)	-0.01	9	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	-0.01	9	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.10	Horz(CT)	-0.00	10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						Weight: 75 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 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 11-8-0.  
(lb) - Max Horz 16=135(LC 7)  
Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 15, 12, 11  
Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

**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=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=64ft; L=26ft; 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 requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 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) 16, 10, 14, 15, 12, 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.

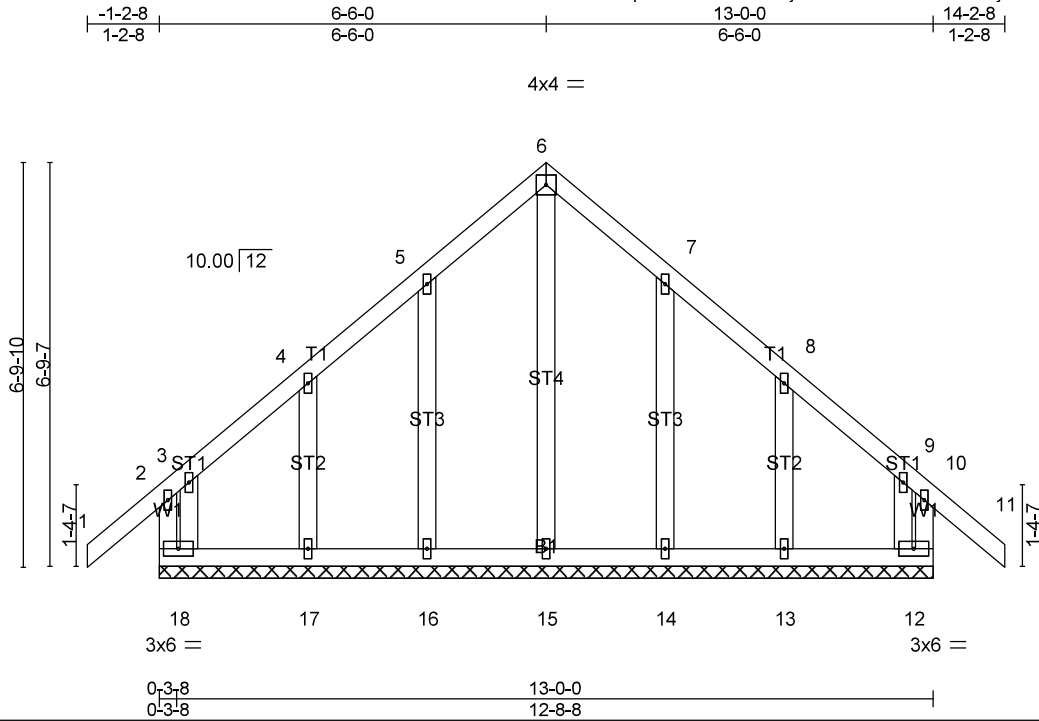
**LOAD CASE(S)** Standard

Job 28780	Truss G2	Truss Type Common Supported Gable	Qty 1	Ply 1	Vuncannon&Sons\Shane Cabe
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Tue Jul 8 09:42:12 2025 Page 1

ID:43FmfUEpnBwxW36Q?RCfByzursR-VwZhiXezoZ5o6cdjaVVKIjppE9WEvJpOwBmnRBz\_Ar9



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.13	Vert(LL)	-0.01	11	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	-0.01	11	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.12	Horz(CT)	-0.00	12	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						Weight: 88 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 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 13-0-0.

(lb) - Max Horz 18=144(LC 7)

Max Uplift All uplift 100 lb or less at joint(s) 18, 12, 16, 17, 14, 13

Max Grav All reactions 250 lb or less at joint(s) 18, 12, 15, 16, 17, 14, 13

**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=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=64ft; L=26ft; 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 requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 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) 18, 12, 16, 17, 14, 13.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job 28780	Truss G3	Truss Type GABLE	Qty 1	Ply 1	Vuncannon&Sons\Shane Cabe
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Tue Jul 8 09:42:13 2025 Page 1

ID:43FmfUEpnBwxW36Q?RCfByzursR-z673vsfcZsDfjCv8C1ZFWL?0ZsjemCX9rVL\_ez\_Ar8

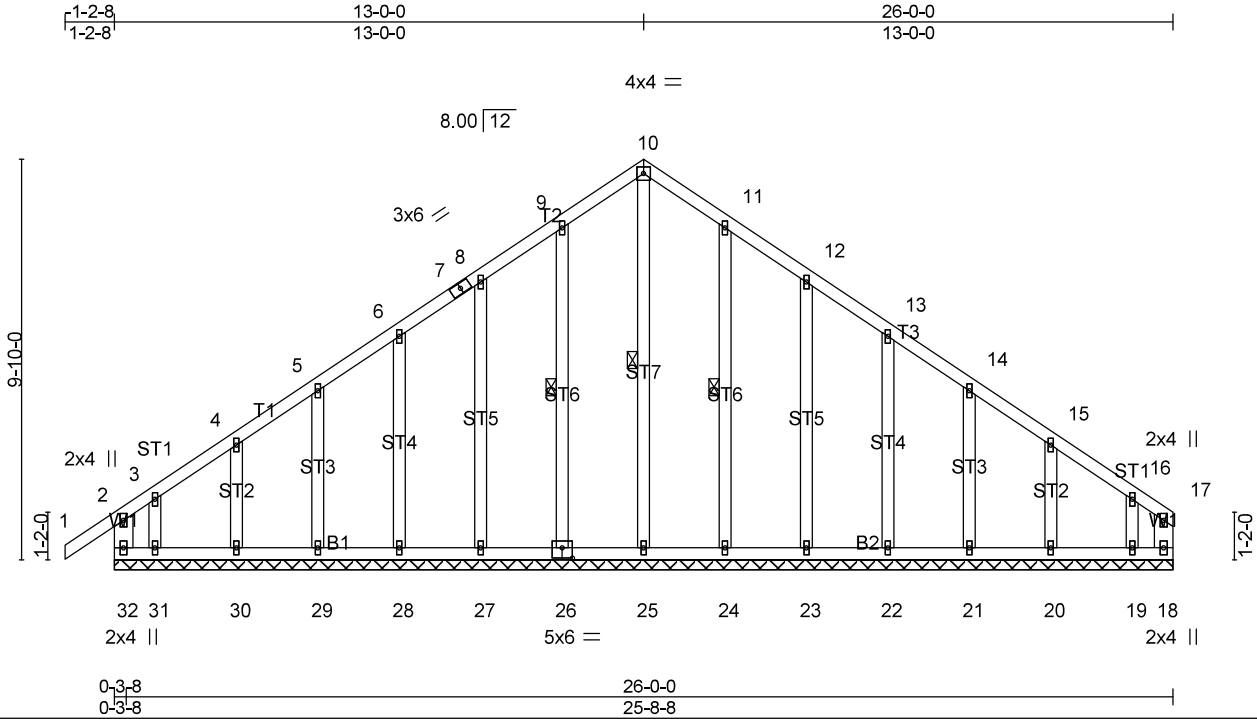


Plate Offsets (X,Y)-- [26:0-3-0,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.07	Vert(LL)	-0.00	1	n/r	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.04	Vert(CT)	-0.00	1	n/r		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.11	Horz(CT)	-0.00	18	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-R						
	Code IRC2018/TPI2014						Weight: 188 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 10-25, 9-26, 11-24

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

#### REACTIONS.

All bearings 26-0-0.  
(lb) - Max Horz 32=179(LC 7)  
Max Uplift All uplift 100 lb or less at joint(s) 26, 27, 28, 29, 30, 24, 23, 22, 21, 20, 19 except 32=-120(LC 6), 18=-123(LC 7), 31=-117(LC 5)  
Max Grav All reactions 250 lb or less at joint(s) 18, 25, 26, 27, 28, 29, 30, 31, 24, 23, 22, 21, 20, 19 except 32=278(LC 14)

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

#### NOTES-

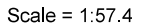
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=64ft; L=26ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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 requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 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) 26, 27, 28, 29, 30, 24, 23, 22, 21, 20, 19 except (jt=lb) 32=120, 18=123, 31=117.
- 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	Vuncannon&Sons\Shane Cabe
28780	G3	GABLE	1	1	Job Reference (optional)

LOAD CASE(S) Standard

8,430 s Jan 20 2021 MiTek Industries, Inc. Tue Jul 8 09:42:15 2025 Page 1  
ID:43FmfUEpnBwxW36Q?RCfByzursR-vFqKYgs5UUNz3LIGd31KxRLVMYD6giqc9\_S2Wz\_Ar6



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

Continued on page 2

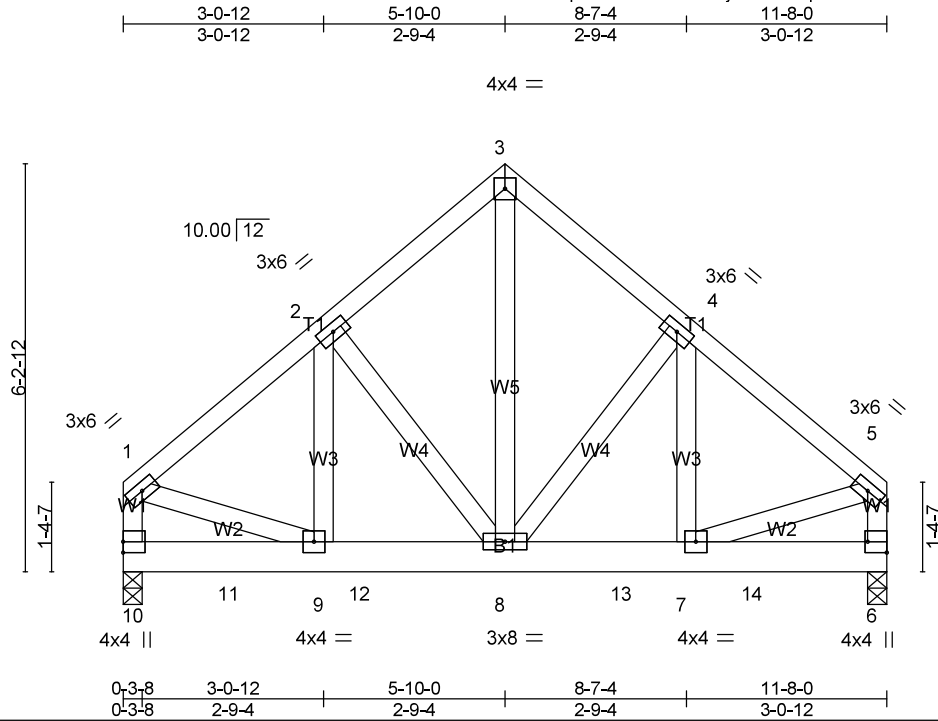
Job	Truss	Truss Type	Qty	Ply	Vuncannon&Sons\Shane Cabe
28780	G4	GABLE	1	1	Job Reference (optional)

**LOAD CASE(S)** Standard

Job 28780	Truss GR1	Truss Type Common Girder	Qty 1	Ply 2	Vuncannon&Sons\Shane Cabe
--------------	--------------	-----------------------------	----------	----------	---------------------------

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Tue Jul 8 09:42:16 2025 Page 1  
ID:43FmfUEpnBwxW36Q?RCfByzursR-OhpCYuhUsncEaDwUpKaGs9zSXmqMr0Hzrpk?azz\_Ar5



Scale = 1:35.2

Plate Offsets (X,Y)-- [6:Edge,0-3-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.37	Vert(LL)	-0.02	7-8	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.29	Vert(CT)	-0.04	7-8	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.54	Horz(CT)	0.01	6	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS	Wind(LL)	-0.00	8	>999		
	Code IRC2018/TPI2014						Weight: 181 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) 10=3034/0-3-8 (min. 0-1-13), 6=2873/0-3-8 (min. 0-1-11)  
Max Horz 10=-112(LC 6)

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

TOP CHORD 1-2=-2774/0, 2-3=-2207/0, 3-4=-2207/0, 4-5=-2794/0, 1-10=-2533/0, 5-6=-2561/0  
BOT CHORD 9-12=0/2080, 8-12=0/2080, 8-13=0/2096, 7-13=0/2096  
WEBS 3-8=0/2585, 4-8=-700/0, 4-7=0/794, 2-8=-675/0, 2-9=0/762, 1-9=0/2019, 5-7=0/2064

#### 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: 2x6 - 2 rows staggered at 0-9-0 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=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=64ft; L=26ft; 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.
- 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.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 999 lb down at 1-7-4, 999 lb down at 3-7-4, 999 lb down at 5-7-4, and 999 lb down at 7-7-4, and 999 lb down at 9-7-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Vuncannon&Sons\Shane Cabe
28780	GR1	Common Girder	1	2	Job Reference (optional)

**LOAD CASE(S)** Standard  
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-60, 3-5=-60, 6-10=-20  
Concentrated Loads (lb)  
Vert: 8=-999(F) 11=-999(F) 12=-999(F) 13=-999(F) 14=-999(F)

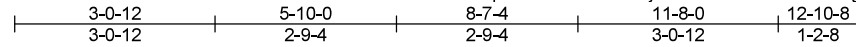


Job 28780	Truss T1	Truss Type Common	Qty 2	Ply 1	Vuncannon&Sons\Shane Cabe
Job Reference (optional)					

C&R Building Supply, Autryville NC

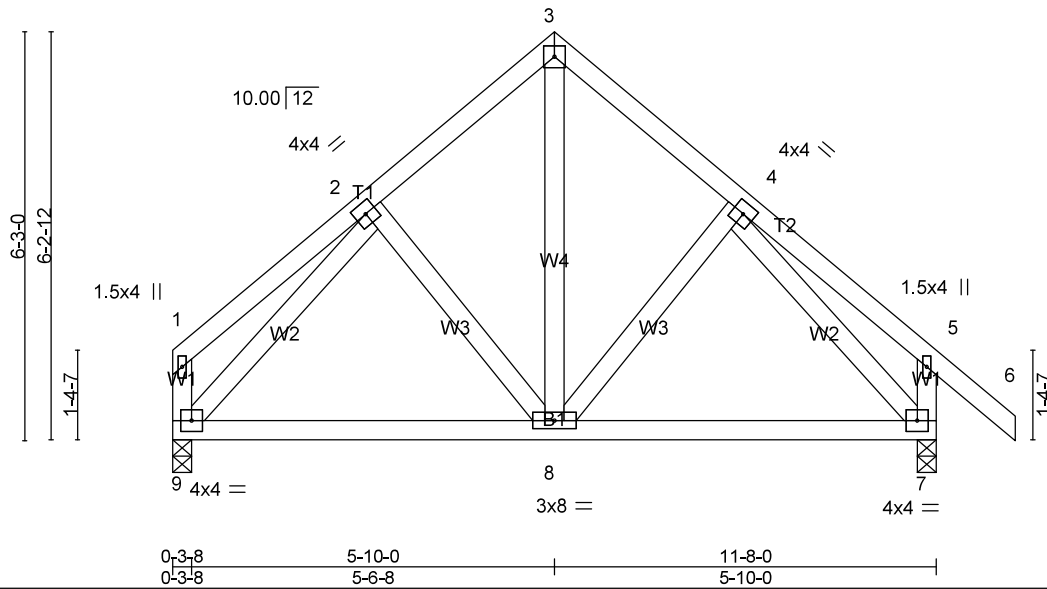
8.430 s Jan 20 2021 MiTek Industries, Inc. Tue Jul 8 09:42:17 2025 Page 1

ID:43FmfUEpnBwxW36Q?RCfByzursR-stMalE6d5k5CNVgN25VPMWfTABAAay74TUY7Pz\_Ar4



4x4 =

Scale = 1:35.2



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.20	Vert(LL)	-0.01	8-9	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	-0.03	7-8	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.12	Horz(CT)	0.00	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS	Wind(LL)	0.00	8	>999	240	Weight: 79 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E  
BOT CHORD 2x4 SP 2400F 2.0E  
WEBS 2x4 SP No.2 \*Except\*  
W1: 2x4 SP No.3

#### BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.  
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) 9=450/0-3-8 (min. 0-1-8), 7=541/0-3-8 (min. 0-1-8)  
Max Horz 9=128(LC 6)  
Max Uplift 7=19(LC 8)

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

TOP CHORD 2-3=-357/50, 3-4=-355/49  
BOT CHORD 8-9=0/310, 7-8=0/262  
WEBS 2-9=-342/0, 4-7=-361/0

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=64ft; L=26ft; 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 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.
- 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.

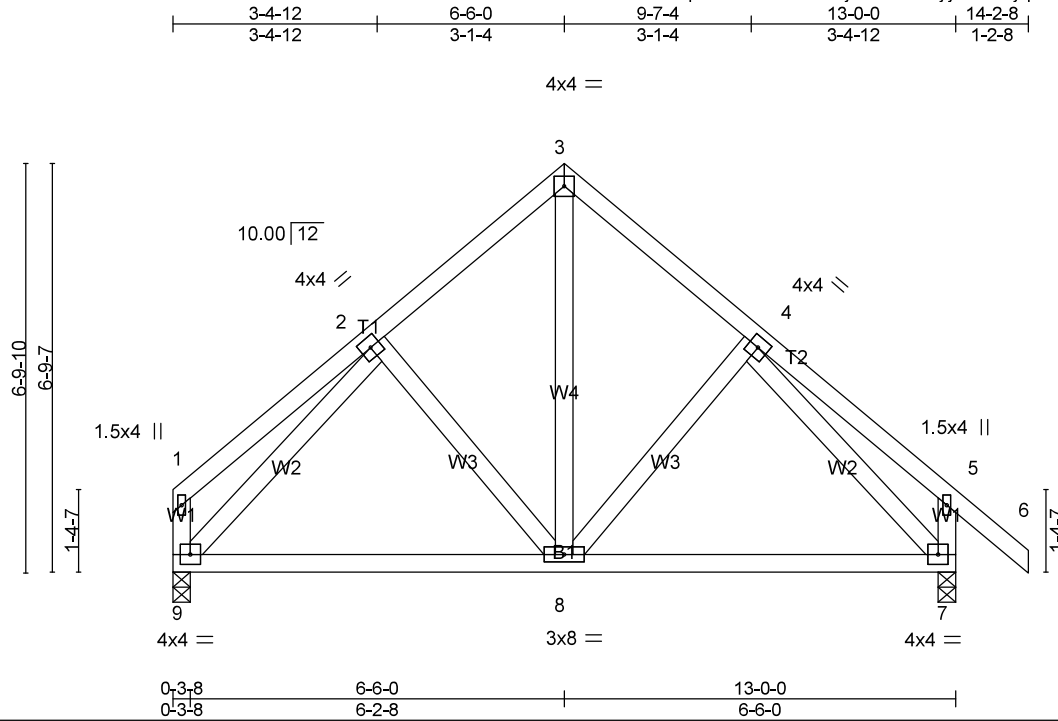
**LOAD CASE(S)** Standard

Job 28780	Truss T2	Truss Type Common	Qty 1	Ply 1	Vuncannon&Sons\Shane Cabe
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Tue Jul 8 09:42:18 2025 Page 1

ID:43FmfUEpnBwxW36Q?RCfByzursR-K4wyyaikoPSyqX4sxlclya3qoaXwJ0YGJ7D6frz\_Ar3



Scale = 1:38.3

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.25	Vert(LL)	-0.02	8-9	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.16	Vert(CT)	-0.05	7-8	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.17	Horz(CT)	0.00	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS	Wind(LL)	0.00	8	>999	240	Weight: 87 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E  
BOT CHORD 2x4 SP 2400F 2.0E  
WEBS 2x4 SP No.2 \*Except\*  
W1: 2x4 SP No.3

#### BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.  
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) 9=504/0-3-8 (min. 0-1-8), 7=594/0-3-8 (min. 0-1-8)  
Max Horz 9=138(LC 6)  
Max Uplift 7=18(LC 8)

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

TOP CHORD 2-3=-407/54, 3-4=-406/53  
BOT CHORD 8-9=0/355, 7-8=0/307  
WEBS 3-8=-22/286, 2-9=-384/0, 4-7=-401/0

#### NOTES-

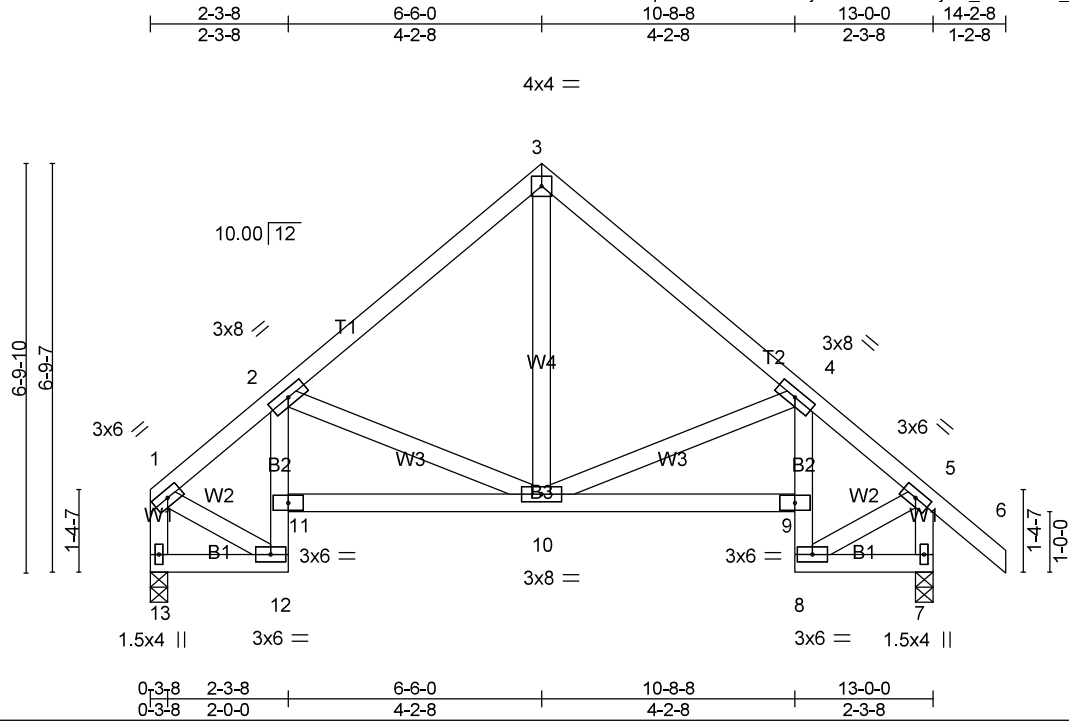
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=64ft; L=26ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 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.
- 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	Truss	Truss Type	Qty	Ply	Vuncannon&Sons\Shane Cabe
28780	T4	Roof Special	1	1	Job Reference (optional)

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Tue Jul 8 09:42:19 2025 Page 1



Scale = 1:38.3

<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 0.08	Vert(LL) -0.02 10-11 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.48	Vert(CT) -0.04 10-11 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.09	Horz(CT) 0.07 7 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS	Wind(LL) -0.01 10-11 >999 240	Weight: 84 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP 2400F 2.0E  
BOT CHORD 2x4 SP 2400F 2.0E \*Except\*  
B2: 2x4 SP No.2  
WEBS 2x4 SP No.2 \*Except\*  
W1: 2x4 SP No.3

## BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	Rigid ceiling directly applied.

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

**REACTIONS.** (lb/size) 13=504/0-3-8 (min. 0-1-8), 7=594/0-3-8 (min. 0-1-8)  
Max Horz 13=138(LC 6)  
Max Uplift 7=18(LC 8)

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

TOP CHORD 1-2=-485/7, 2-3=-497/24, 3-4=-496/24, 4-5=-474/14, 1-13=-544/0,  
5-7=-632/18

BOT CHORD    10-11=0/546, 9-10=0/456

WEBS 3-10=0/313, 1-12=0/370, 5-8=0/376

**NOTES-**

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

2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=64ft; L=26ft; 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" 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) 7.

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.

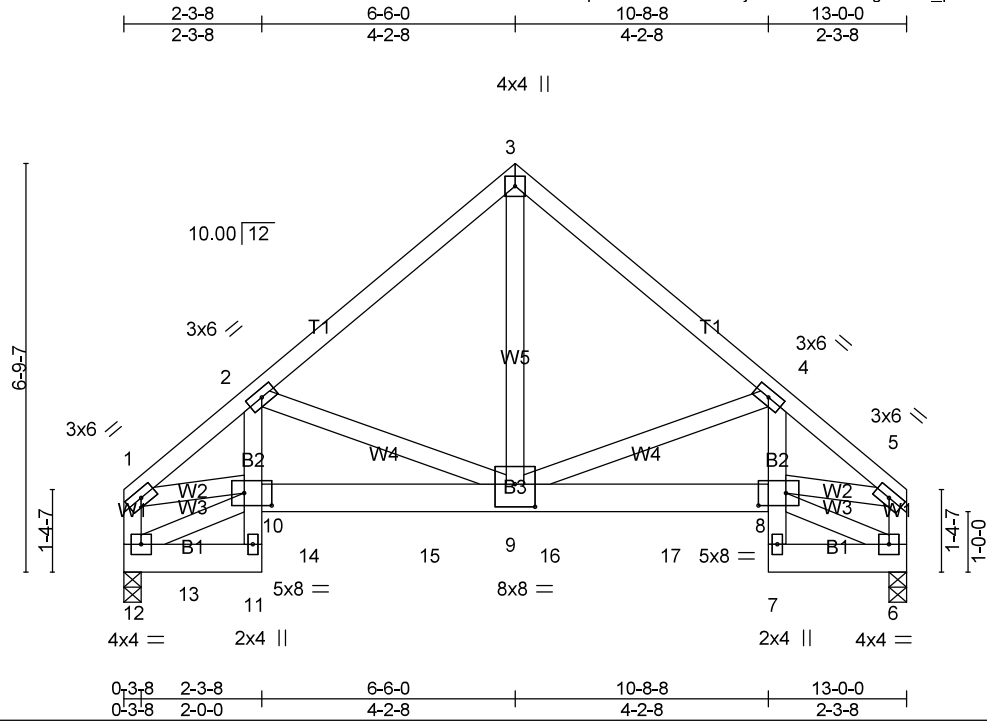
LOAD CASE(S) Standard

Job 28780	Truss T5	Truss Type Roof Special Girder	Qty 1	Ply 2	Vuncannon&Sons\Shane Cabe
C&R Building Supply, Autryville NC					Job Reference (optional)

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Tue Jul 8 09:42:21 2025 Page 1

ID:43FmfUEpnBwxV36Q?RCfByzursR-kec5bldgKEWh\_pRcuASZChK2nV7WHhi?4SmGAz\_Ar0



Scale = 1:38.3

Plate Offsets (X,Y)-- [8:0-5-8,0-2-8], [9:0-4-0,0-4-8], [10:0-5-8,0-2-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.32	Vert(LL)	-0.04	9-10	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.38	Vert(CT)	-0.07	9-10	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.46	Horz(CT)	0.05	6	n/a	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS	Wind(LL)	-0.01	9-10	>999	240		
	Code IRC2018/TPI2014							Weight: 194 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E  
 BOT CHORD 2x6 SP 2400F 2.0E \*Except\*  
 B2: 2x4 SP No.2  
 WEBS 2x4 SP No.2 \*Except\*  
 W1: 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, Except: 6-0-0 oc bracing: 7-8.

**REACTIONS.** (lb/size) 12=3744/0-3-8 (min. 0-1-9), 6=3296/0-3-8 (min. 0-1-8)  
 Max Horz 12=122(LC 6)

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

TOP CHORD 1-2=-4668/0, 2-3=-3217/0, 3-4=-3216/0, 4-5=-4782/0, 1-12=-3170/0, 5-6=-3245/0  
 BOT CHORD 10-11=0/455, 2-10=0/1307, 10-14=0/3677, 14-15=0/3677, 9-15=0/3677, 9-16=0/3744, 16-17=0/3744, 8-17=0/3744, 4-8=0/1405  
 WEBS 3-9=0/3752, 4-9=-1429/0, 2-9=-1358/0, 1-10=0/3402, 5-8=0/3542

#### 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: 2x6 - 2 rows staggered at 0-4-0 oc, 2x4 - 1 row at 0-9-0 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=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=64ft; L=26ft; 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.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Job	Truss	Truss Type	Qty	Ply	Vuncannon&Sons\Shane Cabe
28780	T5	Roof Special Girder	1	2	Job Reference (optional)

**NOTES-**

8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1000 lb down at 1-0-12, 1006 lb down at 3-0-12, 1006 lb down at 5-0-12, 1006 lb down at 7-0-12, and 1006 lb down at 9-0-12, and 999 lb down at 10-10-4 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: 1-3=-60, 3-5=-60, 11-12=-20, 8-10=-20, 6-7=-20

Concentrated Loads (lb)

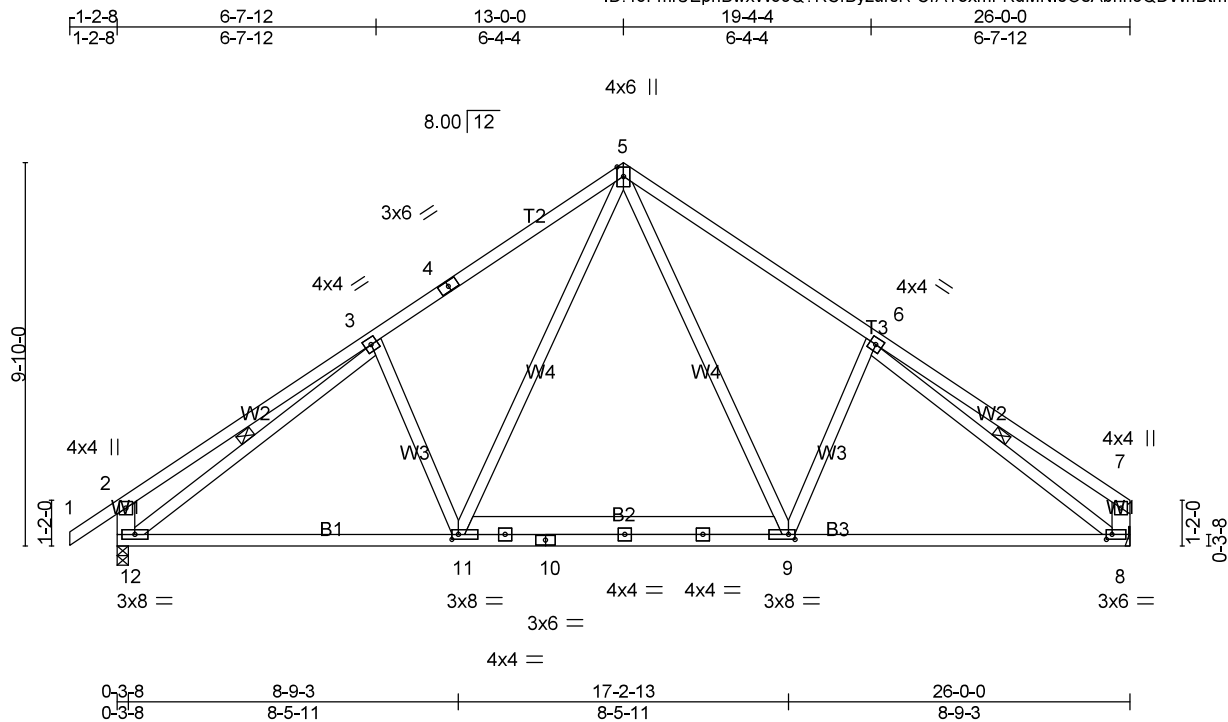
Vert: 8=-999(B) 13=-1000(B) 14=-1006(B) 15=-1006(B) 16=-1006(B) 17=-1006(B)

Job 28780	Truss T6	Truss Type Common	Qty 7	Ply 1	Vuncannon&Sons\Shane Cabe
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Tue Jul 8 09:42:22 2025 Page 1

ID:43FmfUEpnBwxW36Q?RCfByzursR-CrAToxmFRdMNI8OeAbhh6QDWhBtmFnNsDkBJocz\_Ar?



Scale = 1:59.1

Plate Offsets (X,Y)-- [8:0-1-12,0-1-8], [9:0-2-0,0-1-8], [11:0-2-0,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.20	Vert(LL)	-0.07	9-11	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.29	Vert(CT)	-0.14	8-9	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.30	Horz(CT)	0.03	8	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Wind(LL)	0.02	9-11	>999	240		
	Code IRC2018/TPI2014							Weight: 180 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E  
 BOT CHORD 2x4 SP 2400F 2.0E \*Except\*  
 B2: 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 W1: 2x6 SP No.1

#### BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.  
 BOT CHORD Rigid ceiling directly applied.  
 WEBS 1 Row at midpt 3-12, 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=1110/0-3-8 (min. 0-1-8), 8=1019/Mechanical  
 Max Horz 12=179(LC 7)  
 Max Uplift 12=-8(LC 8)  
 Max Grav 12=1123(LC 13), 8=1042(LC 14)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-433/79, 3-4=-1230/47, 4-5=-1135/86, 5-6=-1235/87, 6-7=-425/68,  
 2-12=-457/93, 7-8=-361/54  
 BOT CHORD 11-12=0/1104, 10-11=0/775, 9-10=0/783, 8-9=0/1013  
 WEBS 5-9=-7/572, 6-9=-274/122, 5-11=-6/563, 3-11=-264/121, 3-12=-1000/0,  
 6-8=-1010/0

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=64ft; L=26ft; 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 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.
- 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 28780	Truss T7	Truss Type Roof Special	Qty 4	Ply 1	Vuncannon&Sons\Shane Cabe
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Tue Jul 8 09:42:23 2025 Page 1

ID:43FmfUEpnBwxW36Q?RCfByzursR-g1kr0HmtCxUEwlyqkJCwfdmiXbCj\_E2?SOxtK3z\_Ar\_

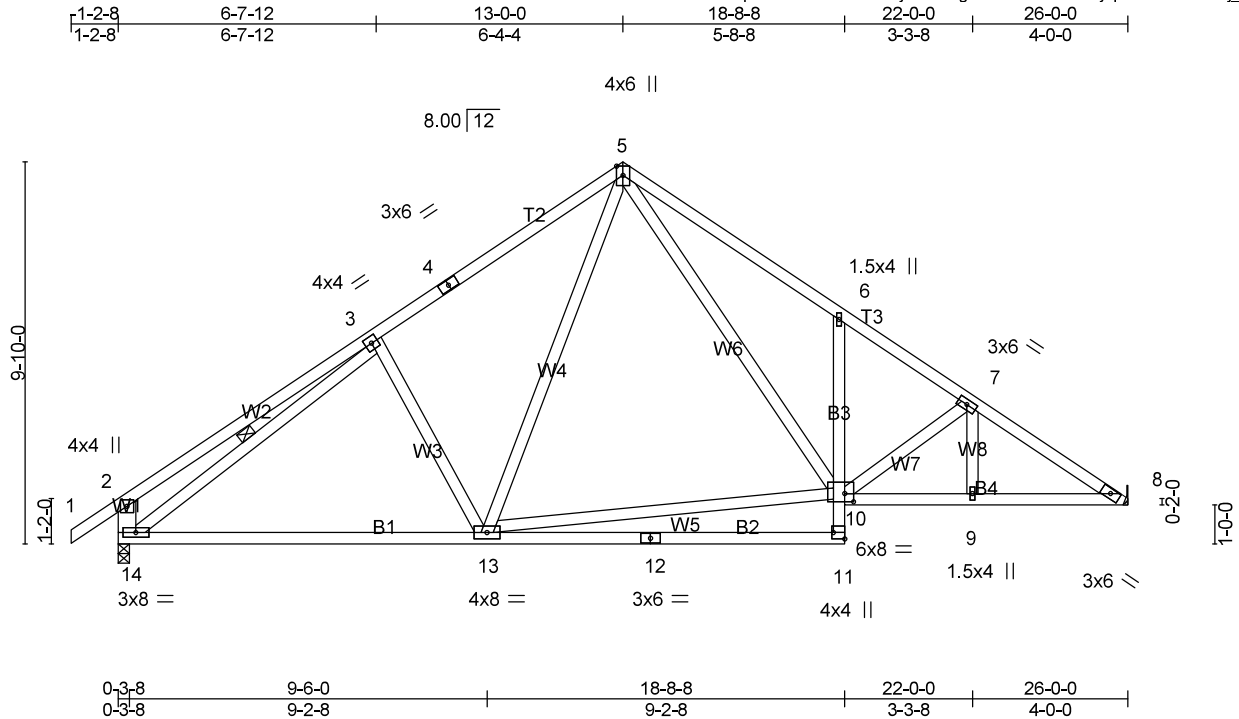


Plate Offsets (X,Y)-- [10:0-2-12,0-2-8], [11:Edge,0-3-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.19	Vert(LL)	-0.10 11-13	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.38	Vert(CT)	-0.23 11-13	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.28	Horz(CT)	0.04 8	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Wind(LL)	0.02 10	>999	240		
	Code IRC2018/TPI2014						Weight: 169 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E  
 BOT CHORD 2x4 SP 2400F 2.0E \*Except\*  
 B3: 2x4 SP No.2  
 WEBS 2x4 SP No.2 \*Except\*  
 W1: 2x6 SP No.1

#### BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.  
 BOT CHORD Rigid ceiling directly applied.  
 WEBS 1 Row at midpt 3-14

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

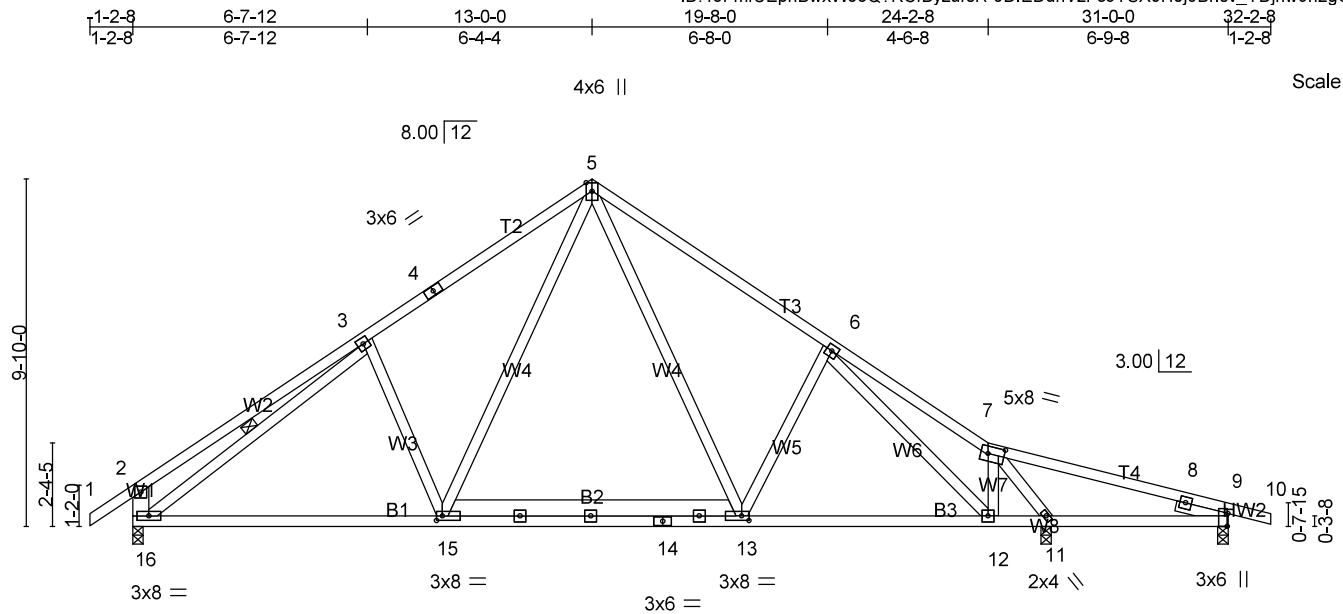
**REACTIONS.** (lb/size) 8=1026/Mechanical, 14=1117/0-3-8 (min. 0-1-8)  
 Max Horz 14=-167(LC 6)  
 Max Uplift 14=-8(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-438/72, 3-4=-1133/38, 4-5=-1021/77, 5-6=-1442/111, 6-7=-1414/19,  
 7-8=-1712/0, 2-14=-462/89  
 BOT CHORD 13-14=0/963, 6-10=-286/96, 9-10=0/1407, 8-9=0/1407  
 WEBS 3-13=-261/119, 5-13=0/430, 10-13=0/555, 5-10=-41/736, 7-10=-338/19,  
 3-14=-890/0

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=64ft; L=26ft; 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" between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14.
- 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



	0-3-8	8-9-3	17-2-13	24-2-8	25-10-4	31-0-0
	0-3-8	8-5-11	8-5-10	6-11-11	1-7-12	5-1-12
Plate Offsets (X,Y)--	[7:0-5-8,0-2-8], [9:0-4-6,Edge], [13:0-2-8,0-1-8], [15:0-2-0,0-1-8]					

<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc)	<b>I/defl</b>	<b>L/d</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.21	Vert(LL) -0.07 15-16	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.30	Vert(CT) -0.14 15-16	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.30	Horz(CT) 0.03 11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS	Wind(LL) 0.02 13-15	>999	240	Weight: 201 lb	FT = 20%

<b>LUMBER-</b> TOP CHORD 2x4 SP 2400F 2.0E BOT CHORD 2x4 SP 2400F 2.0E *Except* B2: 2x6 SP No.1 WEBS 2x4 SP No.2 *Except* W1: 2x6 SP No.1 SLIDER Right 2x4 SP No.3 -D 1-6-0	<b>BRACING-</b> TOP CHORD  BOT CHORD WEBS	Structural wood sheathing directly applied, except end verticals. Rigid ceiling directly applied. 1 Row at midpt 3-16 <div style="border: 1px solid black; padding: 5px; margin-top: 10px;">           MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.         </div>
---	---	---

**REACTIONS.** (lb/size) 11=1229/0-3-8 (min. 0-1-8), 9=274/0-3-8 (min. 0-1-8), 16=1117/0-3-8 (min. 0-1-8)  
Max Horz 16=-176(LC 6)  
Max Uplift 9=-38(LC 5), 16=-9(LC 8)  
Max Grav 11=1245(LC 14), 9=288(LC 20), 16=1128(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**TOP CHORD** 2-3=-438/80, 3-4=-1235/47, 4-5=-1142/86, 5-6=-1232/86, 6-7=-1084/54,  
2-16=-461/94  
**BOT CHORD** 15-16=0/1110, 14-15=0/790, 13-14=0/781, 12-13=0/1022, 11-12=0/860  
**WEBS** 3-15=-263/119, 5-15=-1/562, 5-13=-5/554, 6-13=-284/111, 6-12=-341/0,  
7-12=0/252, 7-11=-1343/0, 3-16=-998/0

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BC DL=6.0psf; h=20ft; B=64ft; L=31ft; 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 4x4 MT20 unless otherwise indicated.
- 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" between the bottom chord and any other members, with BC DL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 16.
- 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.
- 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.

LOAD CASE(S) Standard

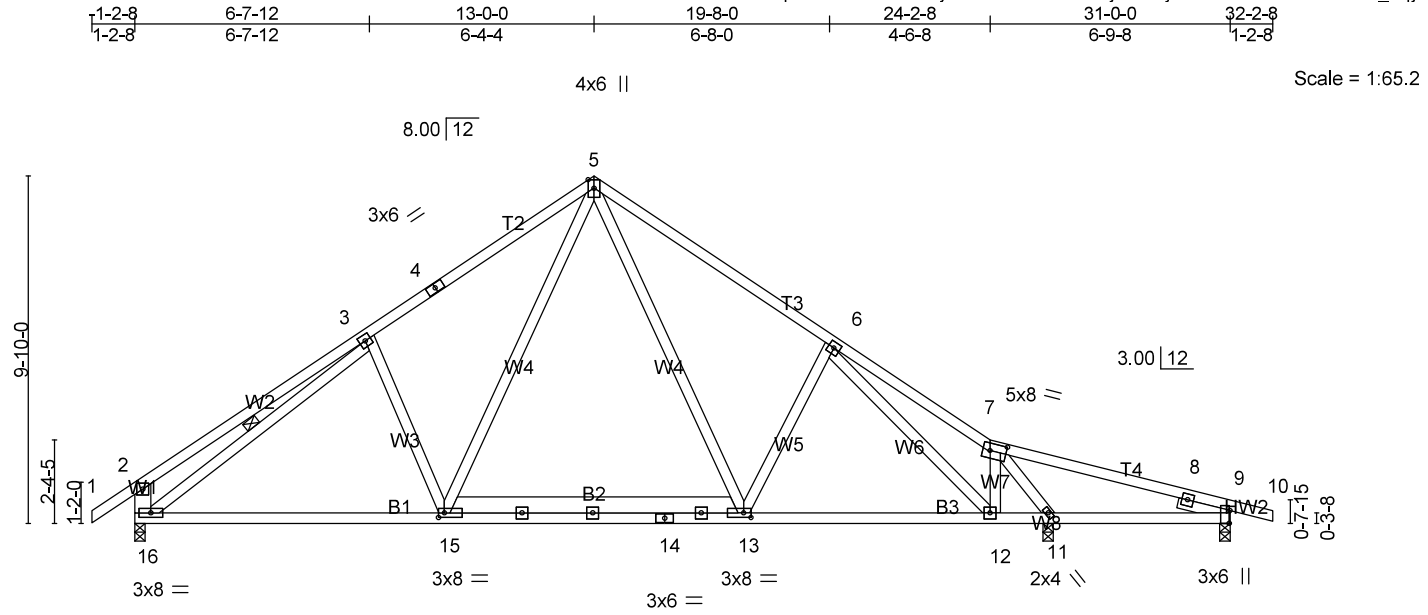


Job 28780	Truss T9	Truss Type Roof Special	Qty 7	Ply 1	Vuncannon&Sons\Shane Cabe
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Tue Jul 8 09:42:25 2025 Page 1

ID:43FmfUEpnBwxW36Q?RCfByzursR-dQrcQzo7kYkyAc6DrjEOk2r1fOuSS8AlwiQzOxz\_Aqy



0-3-8	8-9-3	17-2-13	24-2-8	25-10-4	31-0-0
0-3-8	8-5-11	8-5-10	6-11-11	1-7-12	5-1-12
Plate Offsets (X,Y)-- [7:0-5-8,0-2-8], [9:0-4-6,Edge], [13:0-2-8,0-1-8], [15:0-2-0,0-1-8]					

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.21	Vert(LL)	-0.07 15-16	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.30	Vert(CT)	-0.14 15-16	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.30	Horz(CT)	0.03 11	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Wind(LL)	0.02 13-15	>999	240		
	Code IRC2018/TPI2014						Weight: 201 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x4 SP 2400F 2.0E *Except*	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.2 *Except*	WEBS 1 Row at midpt 3-16
SLIDER Right 2x4 SP No.3 -D 1-6-0	
	MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 11=1229/0-3-8 (min. 0-1-8), 9=274/0-3-8 (min. 0-1-8), 16=1117/0-3-8 (min. 0-1-8)  
Max Horz 16=-176(LC 6)  
Max Uplift 9=-38(LC 5), 16=-9(LC 8)  
Max Grav 11=1245(LC 14), 9=288(LC 20), 16=1128(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-438/80, 3-4=-1235/47, 4-5=-1142/86, 5-6=-1232/86, 6-7=-1084/54, 2-16=-461/94  
BOT CHORD 15-16=0/1110, 14-15=0/790, 13-14=0/781, 12-13=0/1022, 11-12=0/860  
WEBS 3-15=-263/119, 5-15=-1/562, 5-13=-5/554, 6-13=-284/111, 6-12=-341/0, 7-12=0/252, 7-11=-1343/0, 3-16=-998/0

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=64ft; L=31ft; 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 4x4 MT20 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 16.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 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.

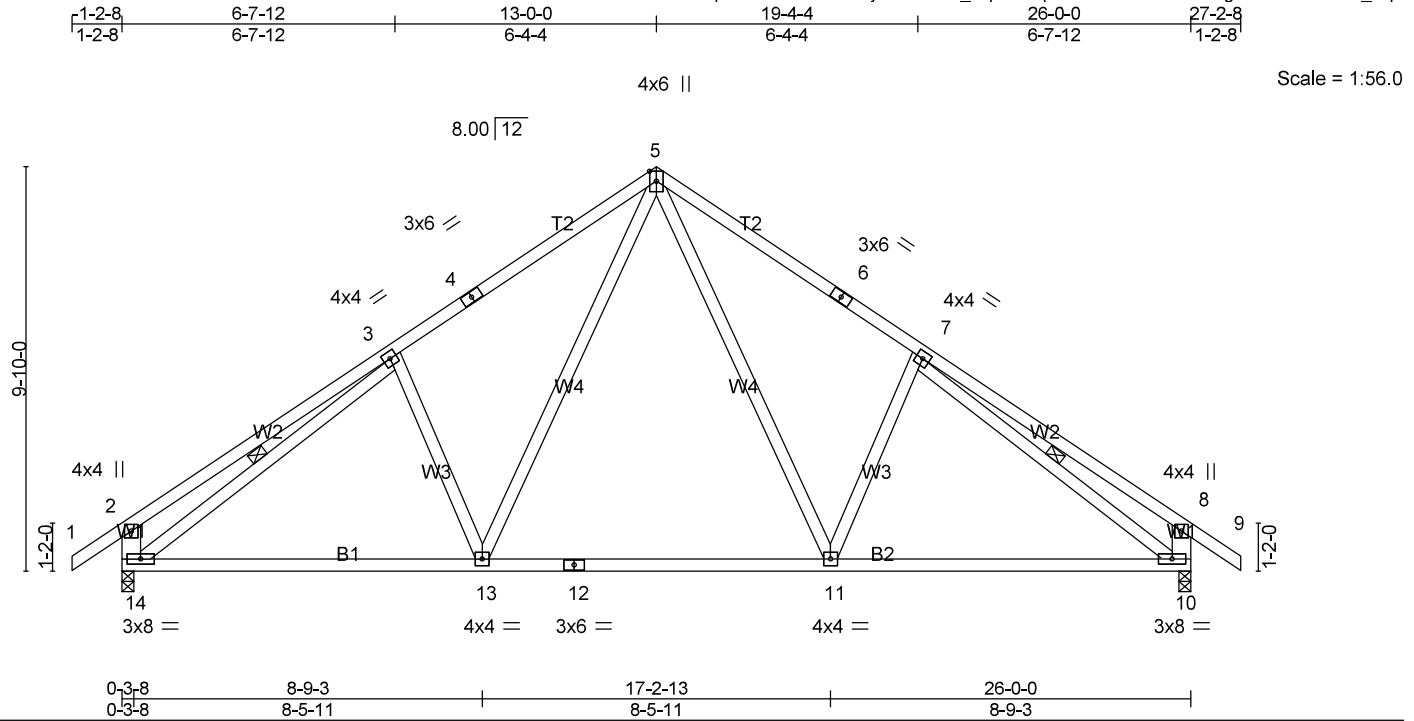
**LOAD CASE(S)** Standard

Job 28780	Truss T10	Truss Type Common	Qty 11	Ply 1	Vuncannon&Sons\Shane Cabe
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Tue Jul 8 09:42:26 2025 Page 1

ID:43FmfUEpnBwxW36Q?RCfByzursR-5cP\_eJpmVsspnlhPPRmdGGOCnoDgBbDR8M9XwNz\_Aqx



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2'-0"-0	TC 0.19	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.36	Vert(LL) -0.23 11-13 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.31	Vert(CT) -0.30 11-13 >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) 0.02 11-13 >999 240		
				Weight: 163 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E  
BOT CHORD 2x4 SP 2400F 2.0E  
WEBS 2x4 SP No.2 \*Except\*  
W1: 2x6 SP No.1

#### BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.  
BOT CHORD Rigid ceiling directly applied.  
WEBS 1 Row at midpt 3-14, 7-10

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

**REACTIONS.** (lb/size) 14=1108/0-3-8 (min. 0-1-8), 10=1108/0-3-8 (min. 0-1-8)

Max Horz 14=183(LC 7)  
Max Uplift 14=-8(LC 8), 10=-8(LC 8)  
Max Grav 14=1121(LC 13), 10=1121(LC 14)

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

TOP CHORD 2-3=-431/76, 3-4=-1241/48, 4-5=-1146/87, 5-6=-1146/87, 6-7=-1241/48,  
7-8=-431/76, 2-14=-458/92, 8-10=-458/92  
BOT CHORD 13-14=0/1120, 12-13=0/797, 11-12=0/797, 10-11=0/1023  
WEBS 5-11=-6/572, 7-11=-264/120, 5-13=-6/571, 3-13=-264/120, 3-14=-1041/0,  
7-10=-1041/0

#### NOTES-

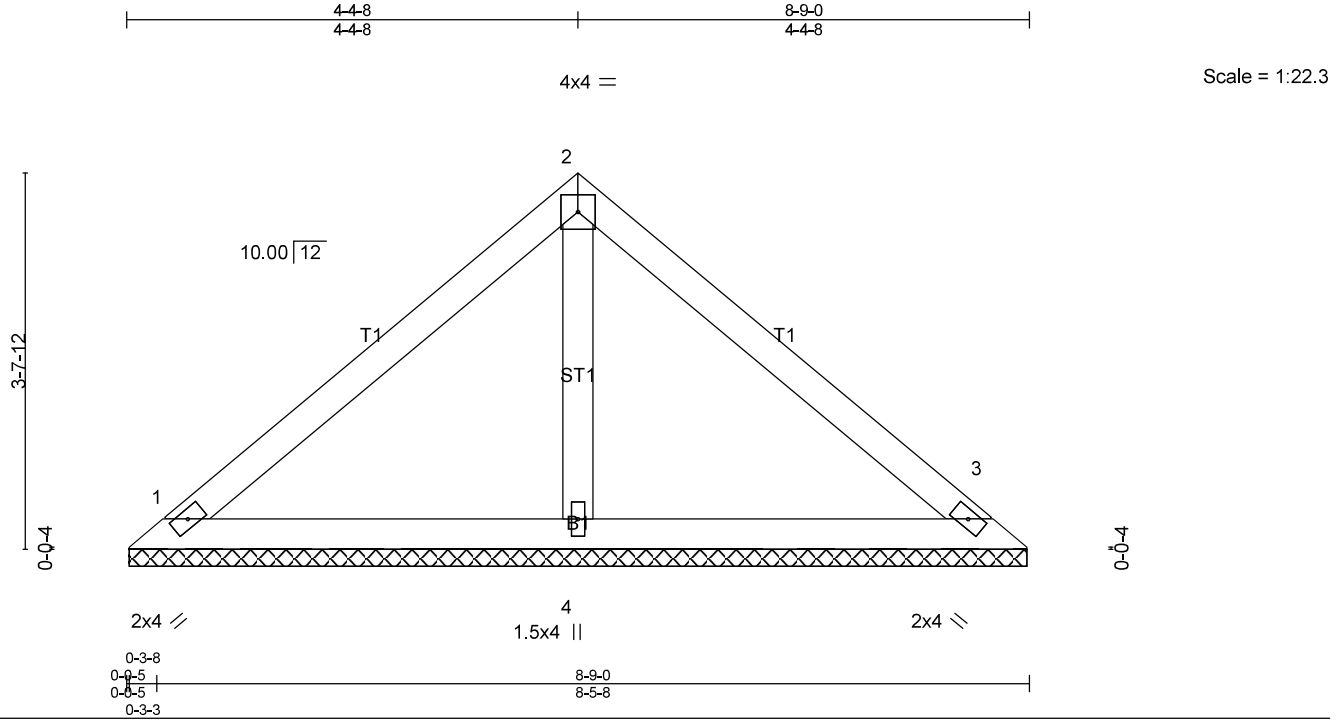
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=64ft; L=26ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; 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" between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 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.
- 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	Truss	Truss Type	Qty	Ply	Vuncannon&Sons\Shane Cabe
28780	V1	Valley	1	1	Job Reference (optional)

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Tue Jul 8 09:42:27 2025 Page 1  
ID:43FmfUEpnBwxW36Q?RCfByzursR-ZozMrfpOGA\_gPvGbz8HspTwNICc1w6hbN0v4Sqz\_Aqw



<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 0.14	Vert(LL) n/a - n/a 999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.16	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.04	Horz(CT) 0.00 3 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P		Weight: 33 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=188/8-8-6 (min. 0-1-8), 3=188/8-8-6 (min. 0-1-8), 4=259/8-8-6 (min. 0-1-8)  
Max Horz 1=-59(LC 6)  
Max Uplift 1=-17(LC 8), 3=-17(LC 8)

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

**NOTES-**

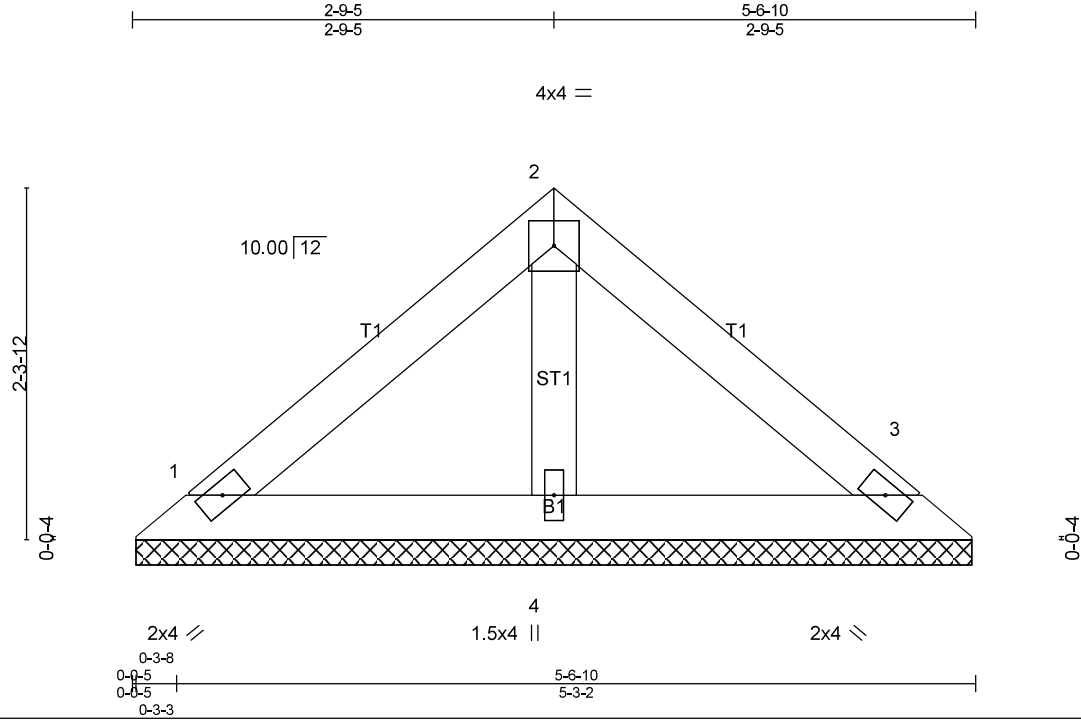
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BC DL=6.0psf; h=20ft; B=64ft; L=26ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right 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" 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 28780	Truss V2	Truss Type Valley	Qty 1	Ply 1	Vuncannon&Sons\Shane Cabe
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Tue Jul 8 09:42:28 2025 Page 1  
ID:43FmfUEpnBwxW36Q?RCfByzursR-1?Xk3?q01T6X13mWso5MhTaWc\_tfZJkcgee?Gz\_Aqv



LOADING (psf)	SPACING-		CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.05		Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.06		Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02		Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 20 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 5-6-10 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=112/5-6-0 (min. 0-1-8), 3=112/5-6-0 (min. 0-1-8), 4=155/5-6-0 (min. 0-1-8)  
Max Horz 1=35(LC 7)  
Max Uplift1=-10(LC 8), 3=-10(LC 8)

**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=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=64ft; L=26ft; 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 100 lb uplift at joint(s) 1, 3.
- 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.

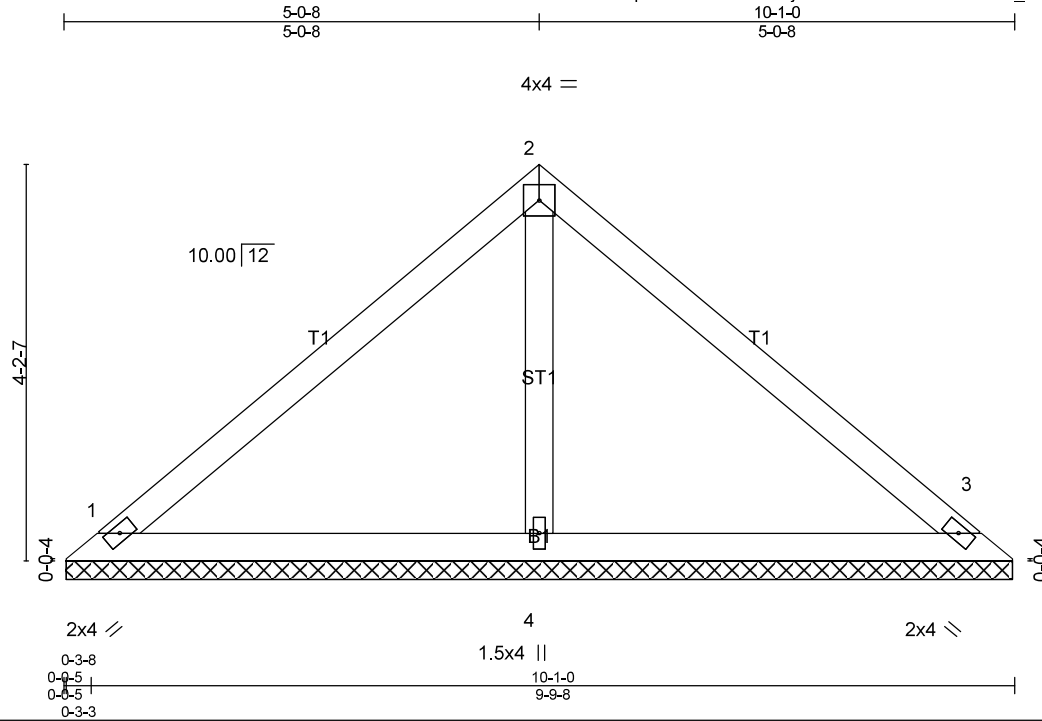
**LOAD CASE(S)** Standard

Job 28780	Truss V3	Truss Type Valley	Qty 1	Ply 1	Vuncannon&Sons\Shane Cabe
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Tue Jul 8 09:42:29 2025 Page 1

ID:43FmfUEpnBwxW36Q?RCfByzursR-VB56GLreonEOeDQ\_4ZJKuu0jj?HhO?ruqKOBXiz\_Aqu



Scale = 1:24.4

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.21	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 38 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" oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10'-0" oc bracing.

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

**REACTIONS.** (lb/size) 1=205/10'-0"-6 (min. 0'-1"-8), 3=205/10'-0"-6 (min. 0'-1"-8), 4=333/10'-0"-6 (min. 0'-1"-8)  
Max Horz 1=-69(LC 6)  
Max Uplift 1=-12(LC 8), 3=-12(LC 8)

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

#### NOTES-

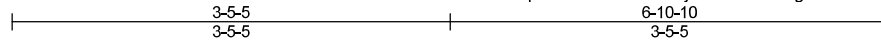
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=64ft; L=26ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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" 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, 3.
- 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 28780	Truss V4	Truss Type Valley	Qty 1	Ply 1	Vuncannon&Sons\Shane Cabe
Job Reference (optional)					

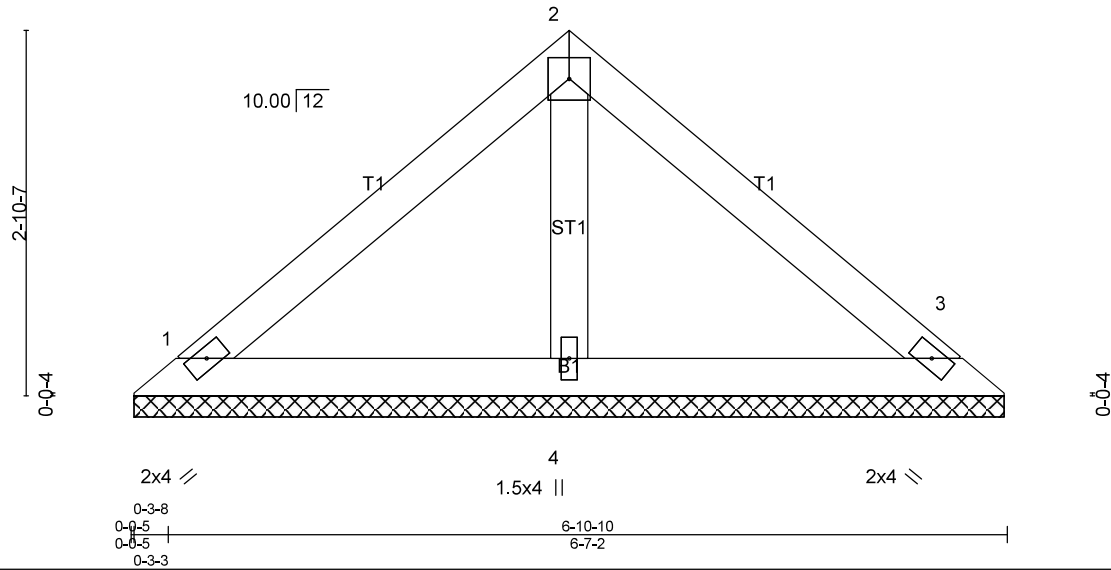
C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Tue Jul 8 09:42:30 2025 Page 1  
ID:43FmfUEpnBwxW36Q?RCfByzursR-zNfVUgsGZ5MFGN?AeHqZR6YvVPem7Tg13\_7k39z\_Aqt



4x4 =

Scale = 1:18.1



LOADING (psf)	SPACING-		CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	2-0-0	TC 0.08		Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.09		Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03		Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 25 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=144/6-10-0 (min. 0-1-8), 3=144/6-10-0 (min. 0-1-8), 4=198/6-10-0 (min. 0-1-8)  
Max Horz 1=45(LC 7)  
Max Uplift 1=13(LC 8), 3=13(LC 8)

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

#### NOTES-

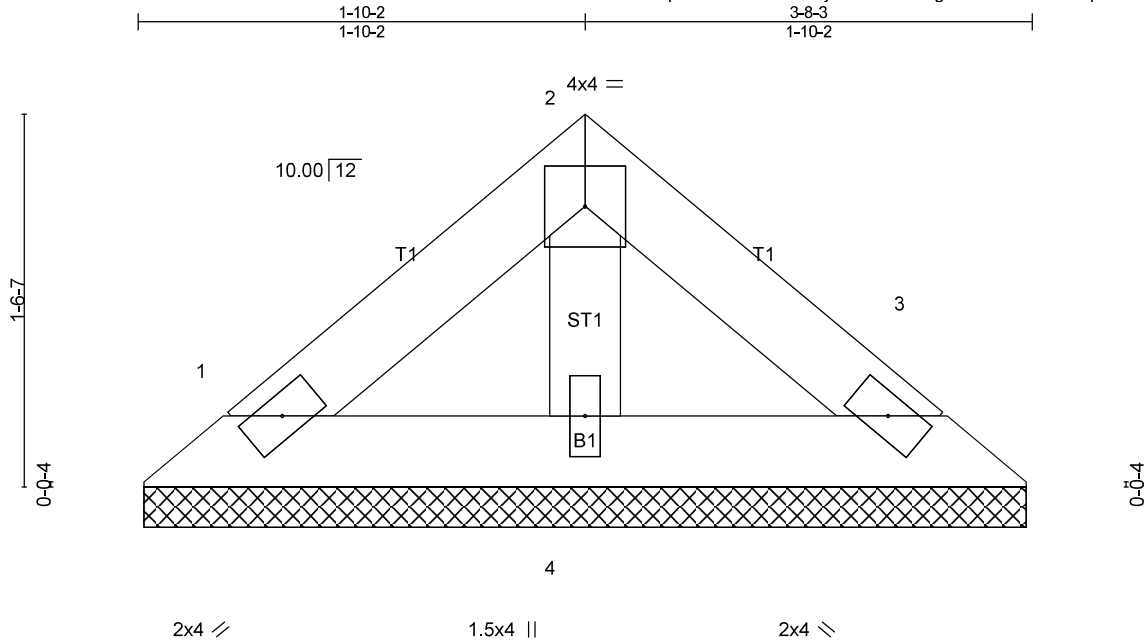
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=64ft; L=26ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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 100 lb uplift at joint(s) 1, 3.
- 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	Truss	Truss Type	Qty	Ply	Vuncannon&Sons\Shane Cabe
28780	V5	Valley	1	1	Job Reference (optional)

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Tue Jul 8 09:42:30 2025 Page 1



Scale = 1:9.5

0-0-50-3-8		0-0-50-3-3		3-8-3		3-4-11	
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d
TCLL 20.0	Plate Grip DOL	1.15	TC 0.02	Vert(LL)	n/a -	n/a	999
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	n/a -	n/a	999
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.01	Horz(CT)	0.00 3	n/a	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P				
				<b>PLATES</b>		<b>GRIP</b>	
				MT20		244/190	
				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 3-8-3 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=68/3-7-10 (min. 0-1-8), 3=68/3-7-10 (min. 0-1-8), 4=94/3-7-10 (min. 0-1-8)  
Max Horz 1=-21(LC 6)  
Max Uplift 1=-6(LC 8), 3=-6(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=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BC DL=6.0psf; h=20ft; B=64ft; L=26ft; 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" 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