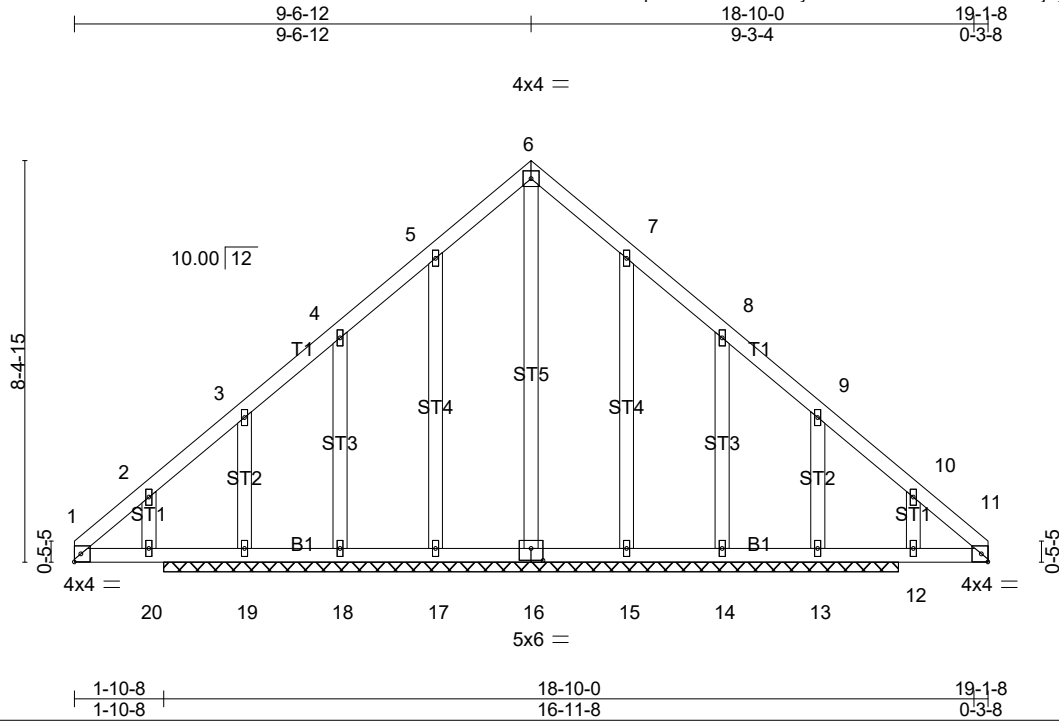


Job 28602	Truss G1	Truss Type Common Supported Gable	Qty 1	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:36:49 2025 Page 1
ID:43FmfUEpnBwxW36Q?RCfByzursR-S5ra9EOHs0J1HSnUEjU_otJWtwv1keO5Gchb_4zUjwi



Scale: 1/4"=1'

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.11	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.12	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.38	Horz(CT)	-0.00	13	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S						
	Code IRC2018/TPI2014						Weight: 122 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP 2400F 2.0E
OTHERS 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 15-4-8.
(lb) - Max Horz 19=-142(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 17, 19, 15, 13 except
18=-105(LC 7), 14=-104(LC 6)
Max Grav All reactions 250 lb or less at joint(s) 17, 18, 15, 14 except
16=366(LC 2), 19=402(LC 19), 13=402(LC 20)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 6-16=-306/0

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=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.
- 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) 17, 19, 15, 13 except (jt=lb) 18=105, 14=104.
- Non Standard bearing condition. Review required.
- 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 28602	Truss GR1	Truss Type Common Girder	Qty 1	Ply 2	Freedom Const\Gina McKinney
--------------	--------------	-----------------------------	----------	----------	-----------------------------

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:36:50 2025 Page 1

ID:43FmfUEpnBwxW36Q?RCfByzursR-xHPzMaOvdKRuvbMgoQ?DL4sfWJAKT?nEVGR8WWzUjwh

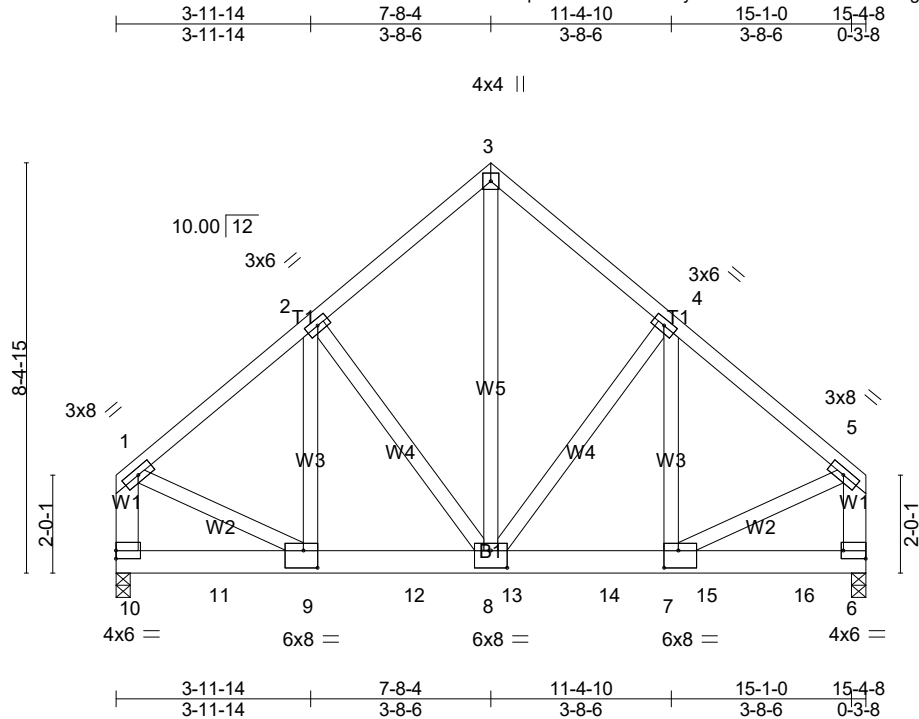


Plate Offsets (X,Y)-- [6:Edge,0-2-0], [7:0-3-8,0-4-4], [8:0-4-0,0-4-4], [9:0-3-8,0-4-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.18	Vert(LL)	-0.03	7-8	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.44	Vert(CT)	-0.07	7-8	>999	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.76	Horz(CT)	0.01	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS	Wind(LL)	-0.01	8	>999	240	Weight: 254 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.3 *Except*
W1: 2x6 SP No.1

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=4393/0-3-8 (min. 0-2-9), 6=4783/0-3-8 (min. 0-2-13)
Max Horz 10=-155(LC 6)

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

TOP CHORD 1-2=-3835/0, 2-3=-3116/0, 3-4=-3116/0, 4-5=-3868/0, 1-10=-3782/0, 5-6=-3797/0
BOT CHORD 10-11=-79/310, 9-11=-79/310, 9-12=0/2887, 8-12=0/2887, 8-13=0/2912, 13-14=0/2912, 7-14=0/2912, 7-15=0/268, 15-16=0/268, 6-16=0/268
WEBS 3-8=0/3665, 4-8=-969/0, 4-7=0/1079, 2-8=-927/0, 2-9=0/1024, 1-9=0/2938, 5-7=0/2924

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, 2x6 - 2 rows staggered 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=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
- 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	Freedom Const\Gina McKinney
28602	GR1	Common Girder	1	2	Job Reference (optional)

NOTES-

8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1140 lb down at 2-0-12, 1140 lb down at 4-0-12, 1140 lb down at 6-0-12, 1140 lb down at 8-0-12, 1140 lb down at 10-0-12, and 1140 lb down at 12-0-12, and 1140 lb down at 14-0-12 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: 1-3=-60, 3-5=-60, 6-10=-20

Concentrated Loads (lb)

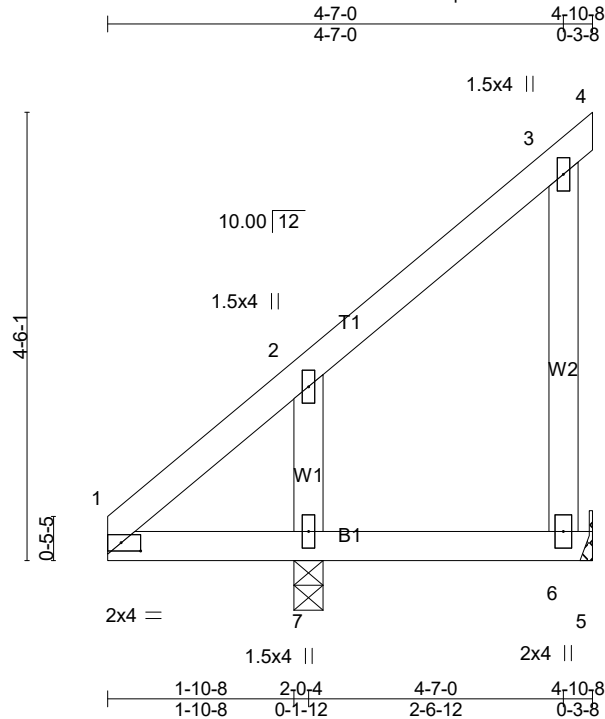
Vert: 9=-1140(B) 11=-1140(B) 12=-1140(B) 13=-1140(B) 14=-1140(B) 15=-1140(B) 16=-1140(B)

Job 28602	Truss J1	Truss Type Jack-Open	Qty 4	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:36:51 2025 Page 1

ID:43FmfUEpnBwxW36Q?RCfByzursR-PUzLawPXOeZIXltM8WStlOq7jaYCdCOjwAh3zzUjwg



Scale = 1:23.2

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

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	2-0-0	TC 0.19	Vert(LL)	-0.00	6-7	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	0.00	6-7	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00		n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 25 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied.
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) 7=327/0-3-8 (min. 0-1-8), 6=51/Mechanical
Max Horz 7=89(LC 8)
Max Uplift 6=-58(LC 8)
Max Grav 7=327(LC 1), 6=84(LC 13)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * 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.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6.
- 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.

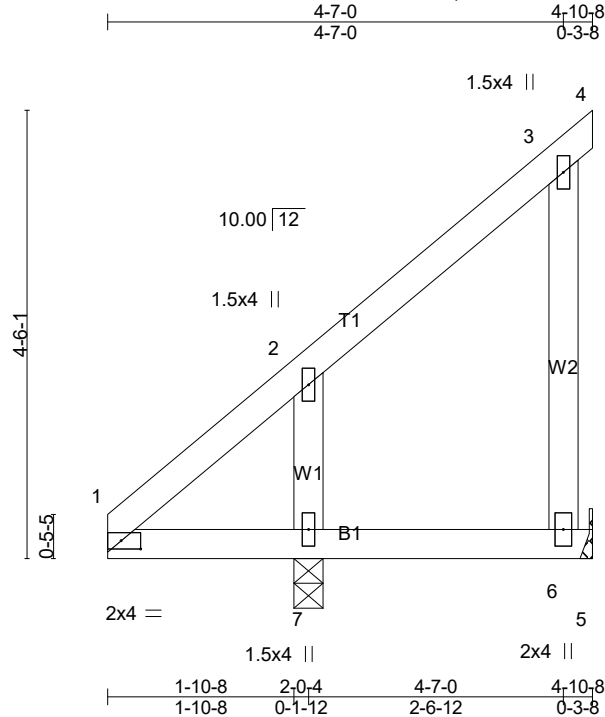
LOAD CASE(S) Standard

Job 28602	Truss J2	Truss Type Jack-Open	Qty 1	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:36:52 2025 Page 1

ID:43FmfUEpnBwxW36Q?RCfByzursR-igXjnGQA9xhc8vV3wr1hQVx?s7wnx4RXyawFbPzUjwf



Scale = 1:23.2

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

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.19	Vert(LL)	-0.00	6-7	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	0.00	6-7	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00		n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 25 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied.
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) 7=327/0-3-8 (min. 0-1-8), 6=51/Mechanical
Max Horz 7=89(LC 8)
Max Uplift 6=-58(LC 8)
Max Grav 7=327(LC 1), 6=84(LC 13)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * 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.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6.
- 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.

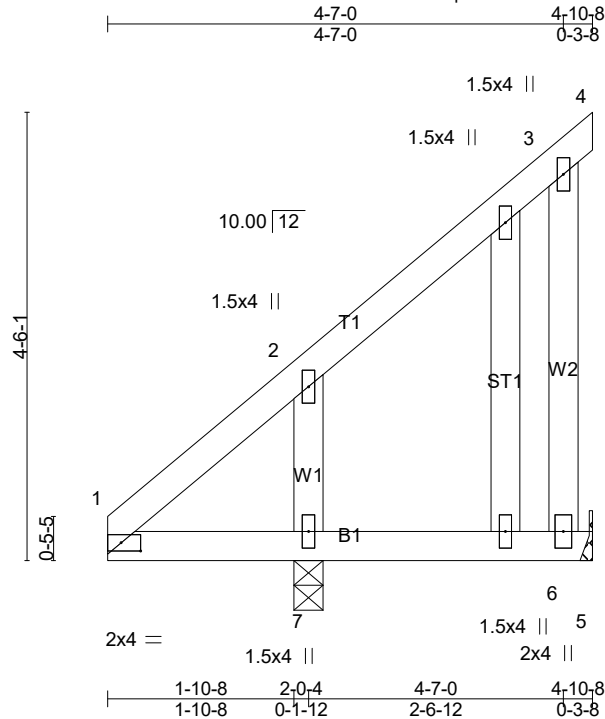
LOAD CASE(S) Standard

Job 28602	Truss M1	Truss Type GABLE	Qty 1	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:36:52 2025 Page 1

ID:43FmfUEpnBwxW36Q?RCfByzursR-igXjnGQA9xhc8vV3wr1hQVx?s7wnx4RXyawFbPzUjwf



Scale = 1:23.2

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

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	2-0-0	TC 0.19	Vert(LL)	-0.00	6-7	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	0.00	6-7	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00		n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 30 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.
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) 7=327/0-3-8 (min. 0-1-8), 6=51/Mechanical
Max Horz 7=89(LC 8)
Max Uplift 6=-58(LC 8)
Max Grav 7=327(LC 1), 6=84(LC 13)

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

NOTES-

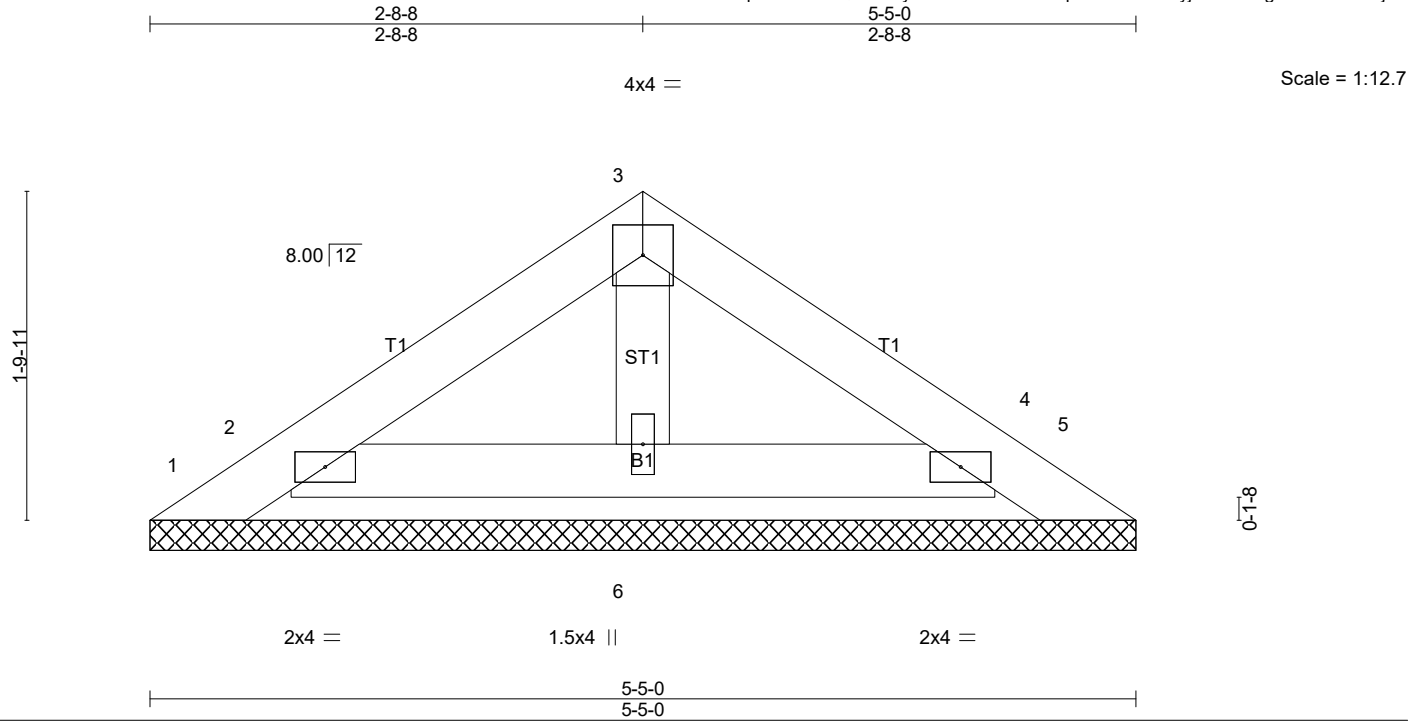
- 1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for 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.
- 3) Gable studs spaced at 2-0-0 oc.
- 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) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6.
- 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.
- 9) 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	Freedom Const\Gina McKinney
28602	PB1	GABLE	1	1	Job Reference (optional)

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:36:53 2025 Page 1
ID:43FmfUjEpnBwxW36Q?RCfByzrsR-Ls55?cRowFpSm34FTZYwyjTCAXHHgX8hBEfo7rzUjwe
5-5-0
2-8-8



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 0.02	Vert(LL) n/a - n/a 999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.01	Horz(CT) 0.00 5 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P		Weight: 17 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 5-5-0 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 5-5-0.

(lb) - Max Horz 1=-27(LC 6)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 2, 4

Max Grav All reactions 250 lb or less at joint(s) 1, 5, 2, 4, 6

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=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) Gable requires continuous bottom chord bearing.
- 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.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 2, 4.
- 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.

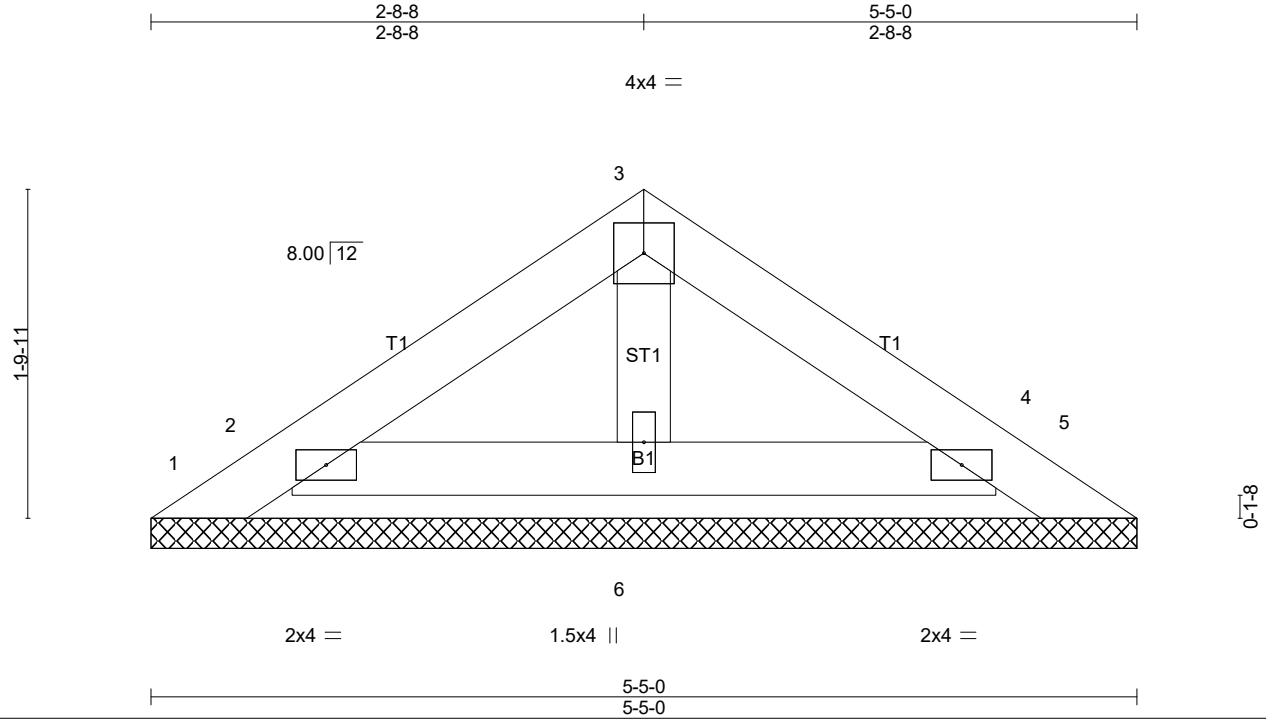
LOAD CASE(S) Standard

Job 28602	Truss PB2	Truss Type GABLE	Qty 10	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:36:54 2025 Page 1

ID:43FmfUEpnBwxW36Q?RCfByzursR-p3fTCySQhZxJODfS1G39Vw0NwxdWP_OqQuPMfzUjwd



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 0.02	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.01	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 17 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 5-5-0 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 5-5-0.
(lb) - Max Horz 1=-27(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 2, 4
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 2, 4, 6

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

NOTES-

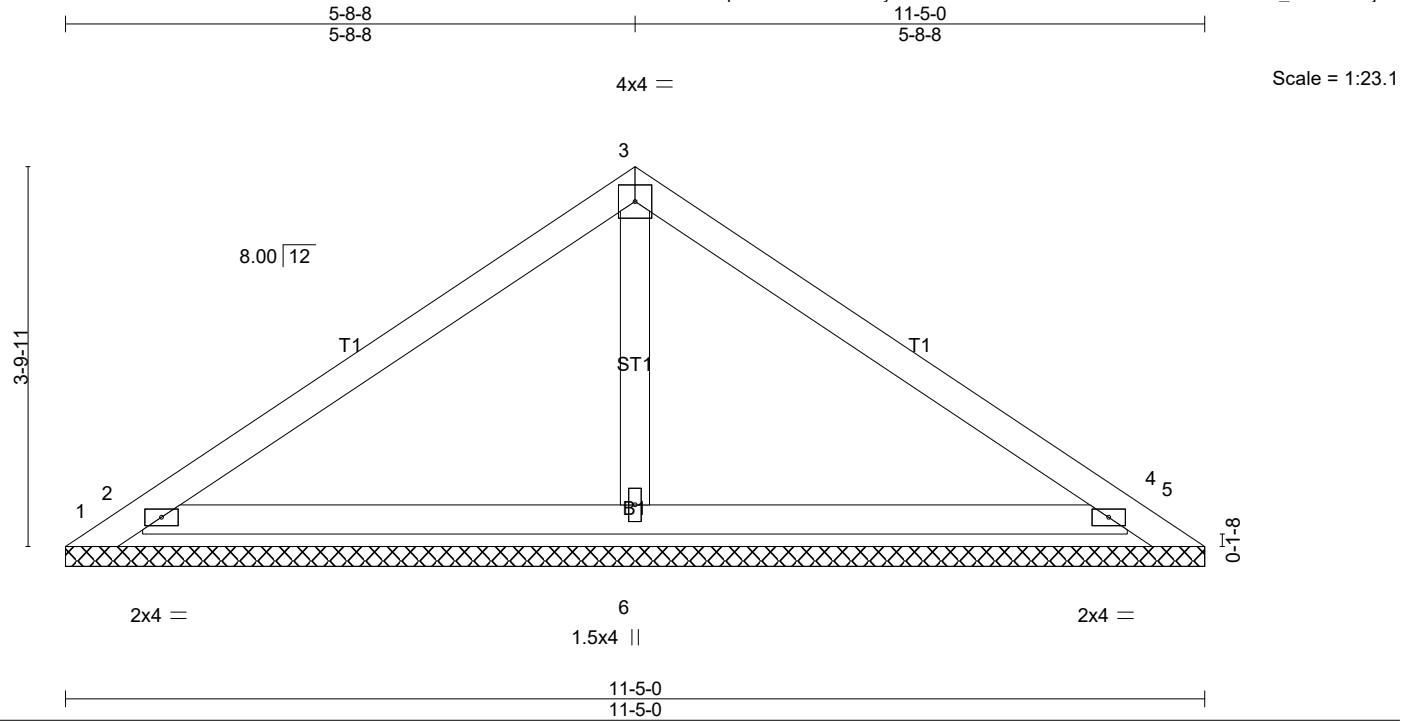
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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 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) 1, 5, 2, 4.
- 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 28602	Truss PB3	Truss Type GABLE	Qty 24	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:36:55 2025 Page 1
ID:43FmfUEpnBwxW36Q?RCfByzursR-HFDrQIS2Ss3A?NEebzbO28ZWxKw48Rz_eY8vCkzUjwc



LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	2-0-0	TC 0.16	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 0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 40 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 11-5-0.
(lb) - Max Horz 1=60(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 2, 4 except 1=298(LC 13),
5=286(LC 20)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 2=558(LC
19), 4=558(LC 20), 6=325(LC 1)

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

NOTES-

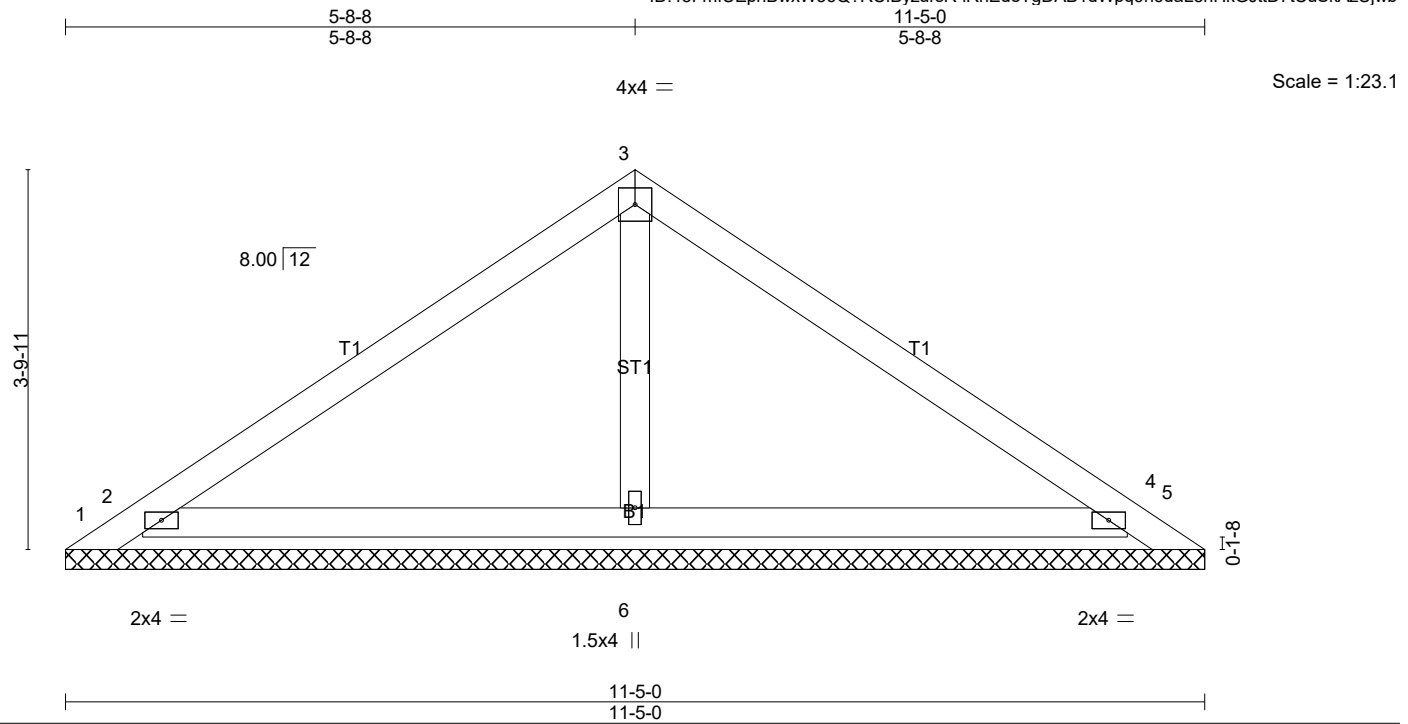
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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) 2, 4 except (jt=lb) 1=298, 5=286.
- 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 28602	Truss PB4	Truss Type GABLE	Qty 1	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:36:56 2025 Page 1
ID:43FmfUEpnBwxW36Q?RCfByzursR-IRnEdeTgDAB1dWpq9h6daL5hHkGJttD7tCuSkAzUjwb



LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	2-0-0	TC 0.16	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 0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 40 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
BOT CHORD

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

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

REACTIONS.

All bearings 11-5-0.
(lb) - Max Horz 1=60(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 2, 4 except 1=-298(LC 13),
5=-286(LC 20)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 2=558(LC 19), 4=558(LC 20), 6=325(LC 1)

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

NOTES-

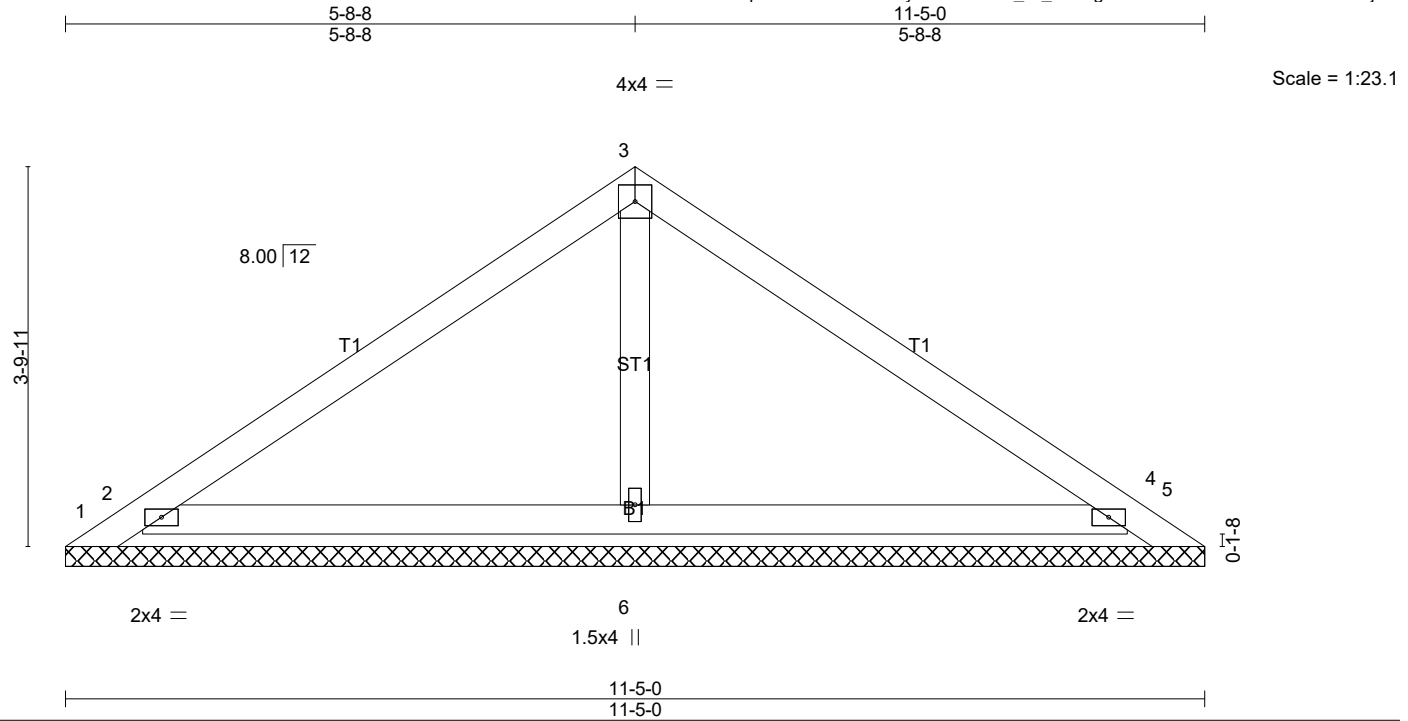
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; 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) 2, 4 except (jt=lb) 1=298, 5=286.
- 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 28602	Truss PB5	Truss Type GABLE	Qty 1	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:36:57 2025 Page 1
ID:43FmfUEpnBwxW36Q?RCfByzursR-DeKcr_UI_UJuFgO1iOds7Zes18cYcKTG6sd0GczUjwa



LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	2-0-0	TC 0.16	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 0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 40 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 11-5-0.
(lb) - Max Horz 1=60(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 2, 4 except 1=-298(LC 13),
5=-286(LC 20)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 2=558(LC 19), 4=558(LC 20), 6=325(LC 1)

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

NOTES-

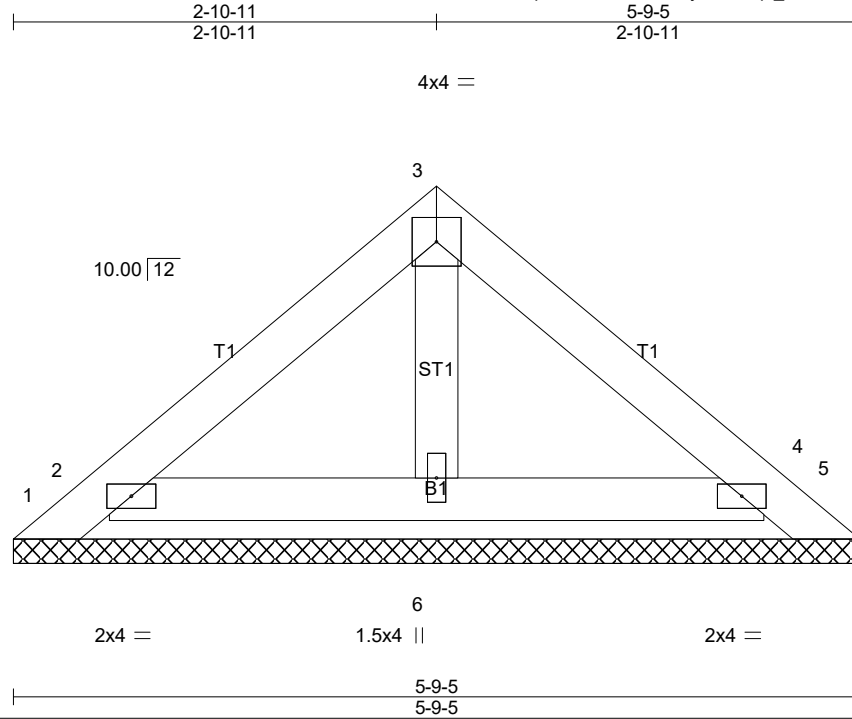
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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) 2, 4 except (jt=lb) 1=298, 5=286.
- 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 28602	Truss PB6	Truss Type GABLE	Qty 1	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:36:58 2025 Page 1
ID:43FmfUEpnBwxW36Q?RCfByzursR-iqu_2JVWlnSlsqzDG685fmB3mY?GLnMQKWZNo3zUjwZ



Scale = 1:15.7

LOADING (psf)	SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	2-0-0	TC 0.03		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 0.02		Horz(CT)	0.00	5	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 5-9-5 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. All bearings 5-9-5.
(lb) - Max Horz 1=39(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 2, 4
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 2, 4, 6

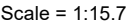
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

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=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 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) 1, 5, 2, 4.
- 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

C&R Building Supply, Autryville NC 8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:36:58 2025 Page 1
ID:43FmfUEpnBwxW36Q?RCfByzursR-iqu_2JVwlnSlsqzDG685fmB3mY?GLnMQKWNZo3zUjwZ



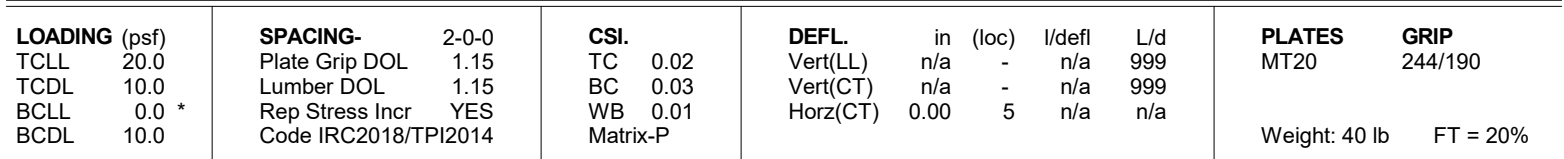
LUMBER- TOP CHORD 2x4 SP 2400F 2.0E BOT CHORD 2x4 SP No.2 OTHERS 2x4 SP No.3	BRACING- TOP CHORD BOT CHORD	Structural wood sheathing directly applied or 5-9-5 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing. MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.
--	---	--

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

- 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=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 2'-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" 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, 5, 2, 4.
- 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

C&R Building Supply, Autryville NC 8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:36:59 2025 Page 1
ID:43FmfUEpnBwxW36Q?RCfByzursR-A0SMFvZW5acU_YPqpfKC_jEmuLy4EkZZA67LvUjwY



REACTIONS. All bearings 5-9-5.
(lb) - Max Horz 1=39(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 2, 4
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 2, 4, 6

NOTES-

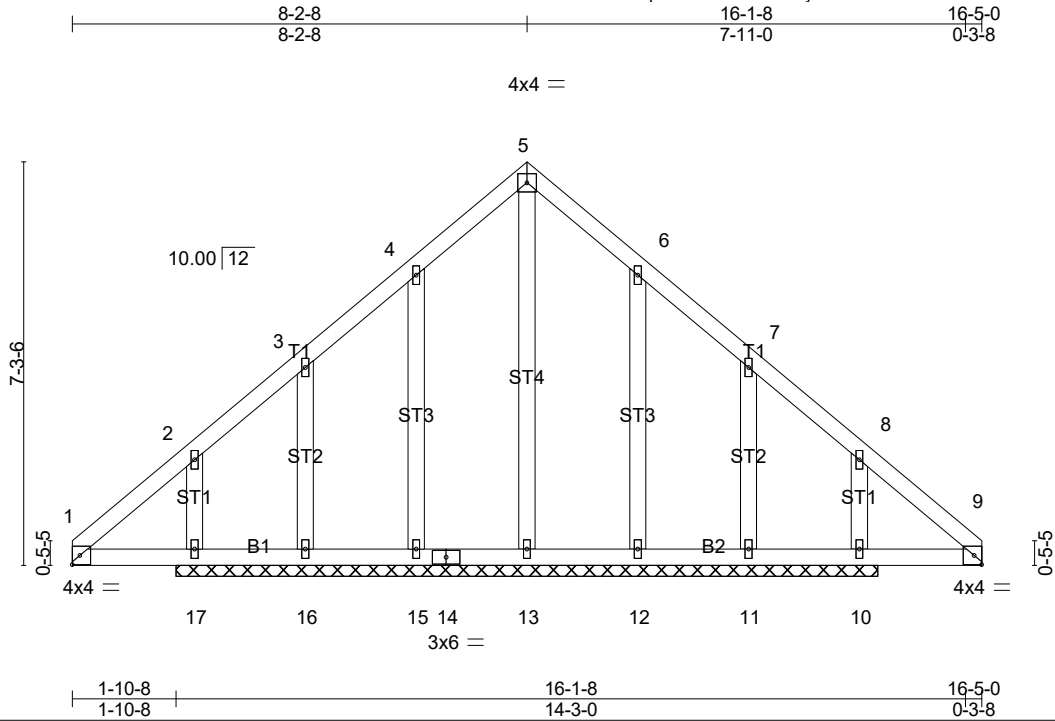
- LOAD CASE(S) Standard

Job 28602	Truss SG1	Truss Type GABLE	Qty 1	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:00 2025 Page 1

ID:43FmfUEpnBwxW36Q?RCfByzursR-eD0KT?WBHPIT687cOXAZIBGNILeUpetjoqsgtzUjwX



Scale = 1:41.6

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 0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.21	Horz(CT)	-0.00	10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 97 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 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 12-8-0.

(lb) - Max Horz 17=-122(LC 6)

Max Uplift All uplift 100 lb or less at joint(s) 15, 16, 17, 12, 11, 10

Max Grav All reactions 250 lb or less at joint(s) 15, 16, 12, 11 except
13=296(LC 2), 17=252(LC 19), 10=252(LC 20)

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=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.
- 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) 15, 16, 17, 12, 11, 10.
- Non Standard bearing condition. Review required.
- 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.

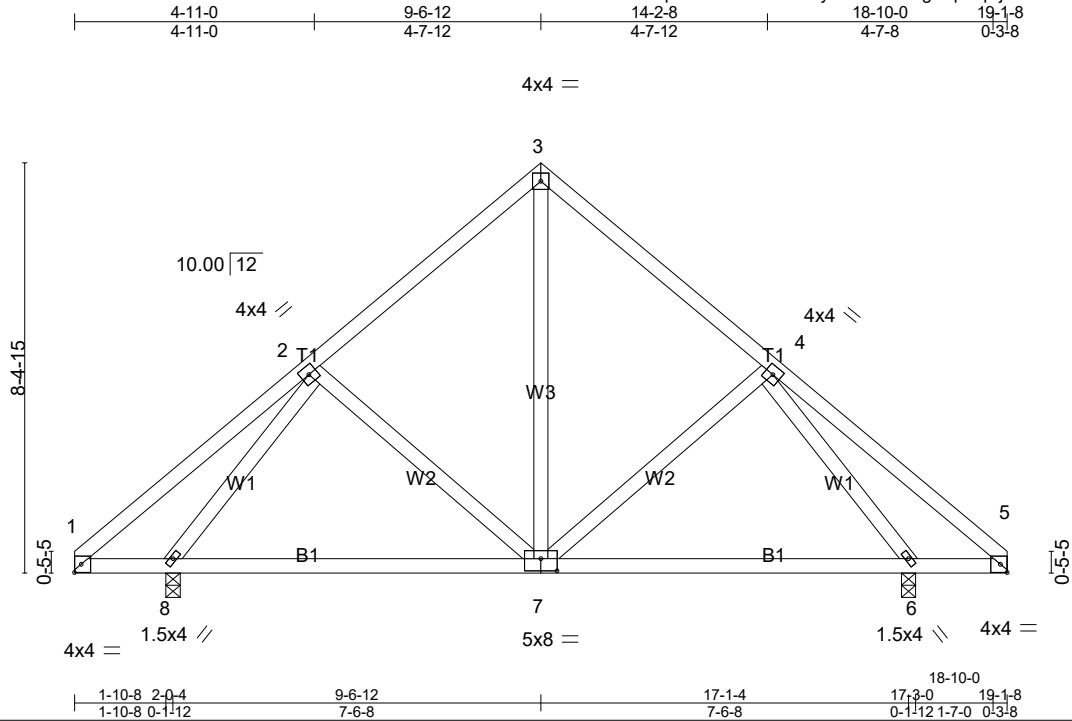
LOAD CASE(S) Standard

Job 28602	Truss T1	Truss Type Common	Qty 4	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:01 2025 Page 1

ID:43FmfUEpnBwxW36Q?RCfByzursR-6Pa7gLP1qKjllhoxEioHPpZilzaY39s1UbDPOzUjwW



Scale = 1:47.2

Plate Offsets (X,Y)-- [7:0-4-0,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.12	Vert(LL)	-0.04	7-8	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.20	Vert(CT)	-0.07	7-8	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.33	Horz(CT)	0.01	6	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Wind(LL)	0.01	7	>999	240		
	Code IRC2018/TPI2014							Weight: 110 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E
 BOT CHORD 2x4 SP 2400F 2.0E
 WEBS 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=765/0-3-8 (min. 0-1-8), 6=765/0-3-8 (min. 0-1-8)
 Max Horz 8=-140(LC 6)
 Max Uplift 8=-15(LC 8)

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

TOP CHORD 2-3=-479/64, 3-4=-479/64
 BOT CHORD 7-8=-5/383, 6-7=0/333
 WEBS 3-7=-15/294, 2-8=-666/62, 4-6=-666/40

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=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
- 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) 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.
- 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.

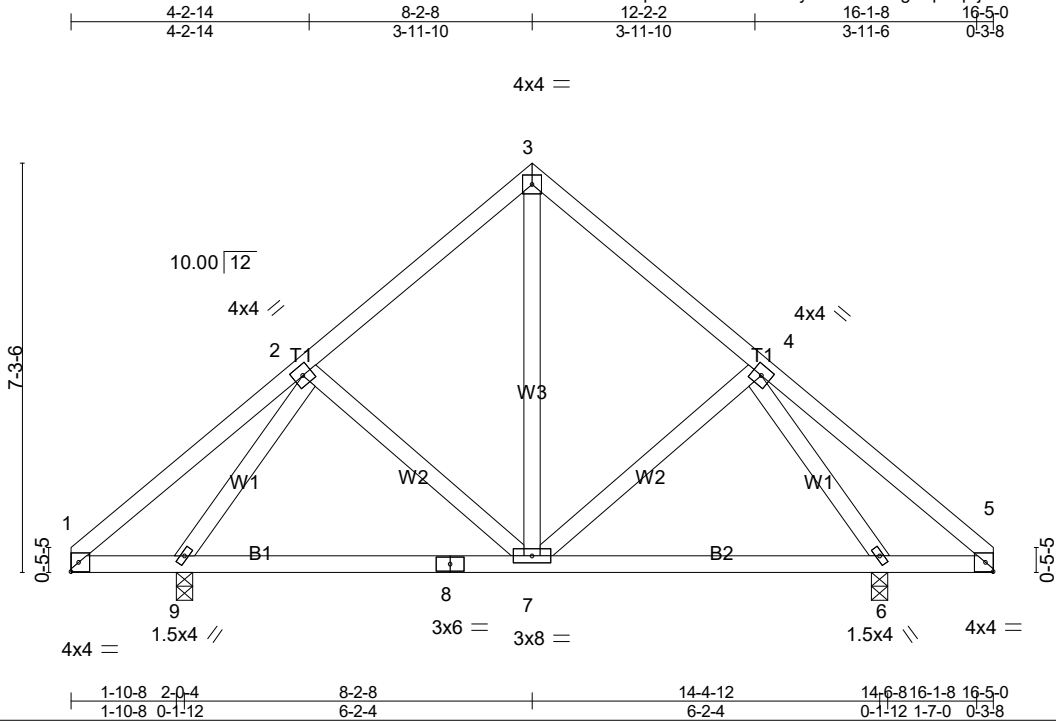
LOAD CASE(S) Standard

Job 28602	Truss T2	Truss Type Common	Qty 1	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:01 2025 Page 1

ID:43FmfUEpnBwxW36Q?RCfByzursR-6Pa7gLXp1iqKjIhoxEioHPpXML_dY58s1UbDPOzUjwv



Scale = 1:41.0

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 0.20	Vert(LL)	-0.02	7-9	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	-0.04	7-9	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.21	Horz(CT)	0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS	Wind(LL)	0.00	7	>999	240	Weight: 94 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP 2400F 2.0E
WEBS 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) 9=657/0-3-8 (min. 0-1-8), 6=657/0-3-8 (min. 0-1-8)
Max Horz 9=-120(LC 6)
Max Uplift 9=-18(LC 8)

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

TOP CHORD 2-3=-374/56, 3-4=-374/56
BOT CHORD 8-9=-11/285, 7-8=-11/285
WEBS 2-9=-566/48, 4-6=-566/27

NOTES-

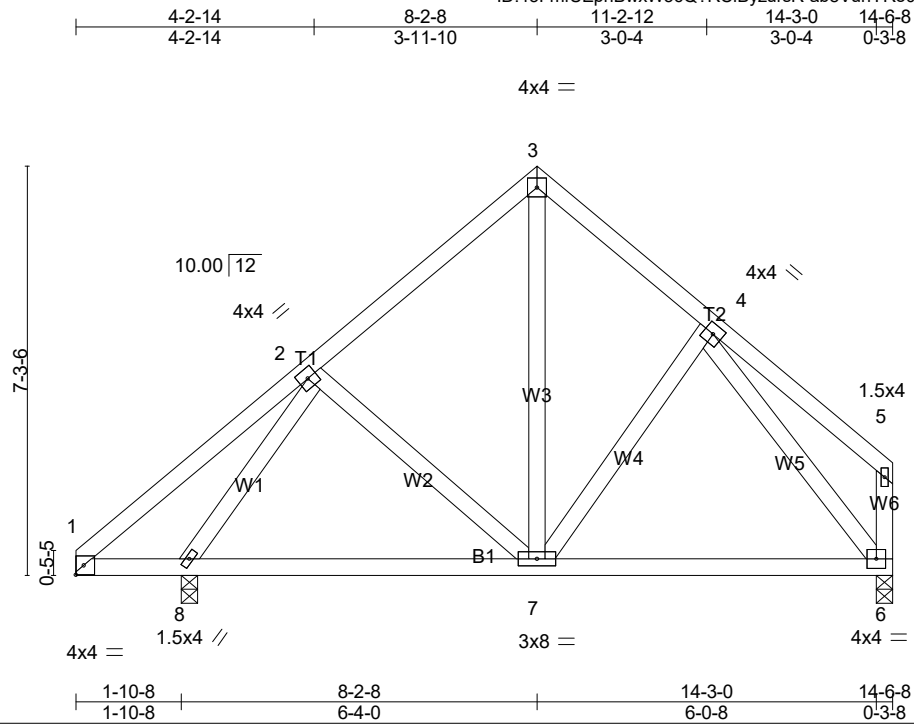
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right 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) 9.
- 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 28602	Truss T3	Truss Type Common	Qty 5	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:02 2025 Page 1
ID:43FmfUEpnBwxW36Q?RCfByzursR-ab8VuhYRo0yBLRG_VyD1qcLie9KiHYJ?F8LnxqzUjwV



LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	2-0-0	TC 0.23	Vert(LL)	-0.02	6-7	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	-0.04	6-7	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.21	Horz(CT)	0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS	Wind(LL)	0.00	7	>999	240	Weight: 91 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP 2400F 2.0E
WEBS 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) 8=664/0-3-8 (min. 0-1-8), 6=487/0-3-8 (min. 0-1-8)
Max Horz 8=140(LC 7)
Max Uplift 8=-17(LC 8)

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

TOP CHORD 2-3=-385/55, 3-4=-360/60
BOT CHORD 7-8=-41/287, 6-7=0/257
WEBS 2-8=-579/48, 4-6=-379/0

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=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
- 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) 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.
- 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.

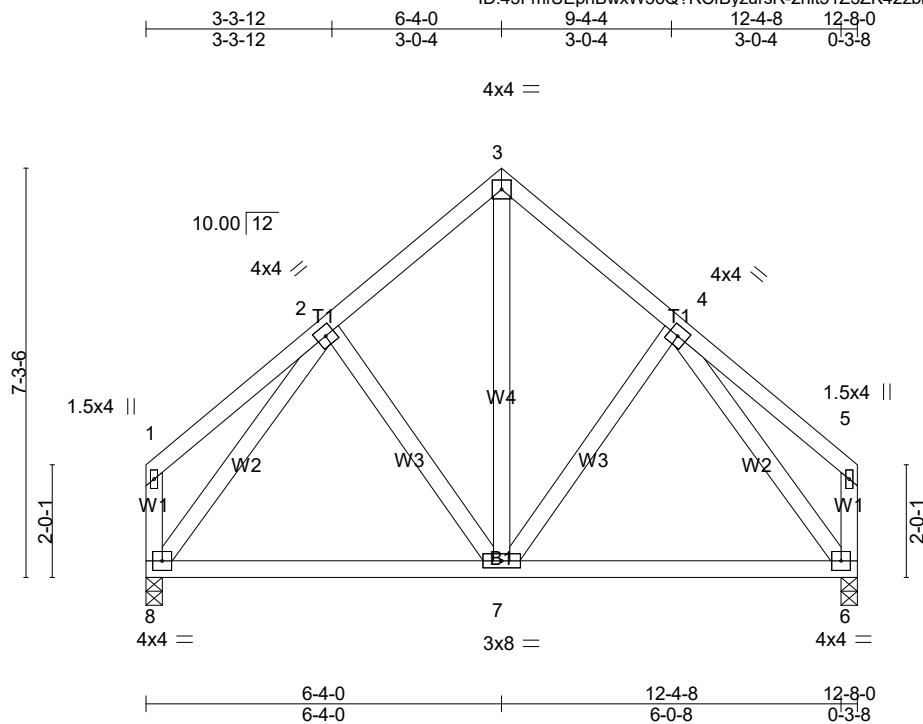
LOAD CASE(S) Standard

Job 28602	Truss T4	Truss Type Common	Qty 1	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:03 2025 Page 1

ID:43FmfUEpnBwxW36Q?RCfByzursR-2nit51Z3ZK42zbrA3fkGMqutVZgp0?W9Uo4KUGzUjwU



Scale = 1:41.0

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.23	Vert(LL)	-0.02	7-8	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	-0.04	7-8	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.21	Horz(CT)	0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS	Wind(LL)	0.00	7	>999	240	Weight: 88 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP 2400F 2.0E
WEBS 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) 8=495/0-3-8 (min. 0-1-8), 6=495/0-3-8 (min. 0-1-8)
Max Horz 8=-137(LC 6)

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

TOP CHORD 2-3=-369/63, 3-4=-369/63
BOT CHORD 7-8=-23/299, 6-7=0/265
WEBS 3-7=-37/252, 2-8=-389/0, 4-6=-389/0

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=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
- 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.
- 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 28602	Truss T5	Truss Type Piggyback Base	Qty 2	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:04 2025 Page 1

ID:43FmfUEpnBwxW36Q?RCfByzursR-W_FFJNZhKdCvblQNdMFVv1R3yz_RILGljSqt0jzUjwT

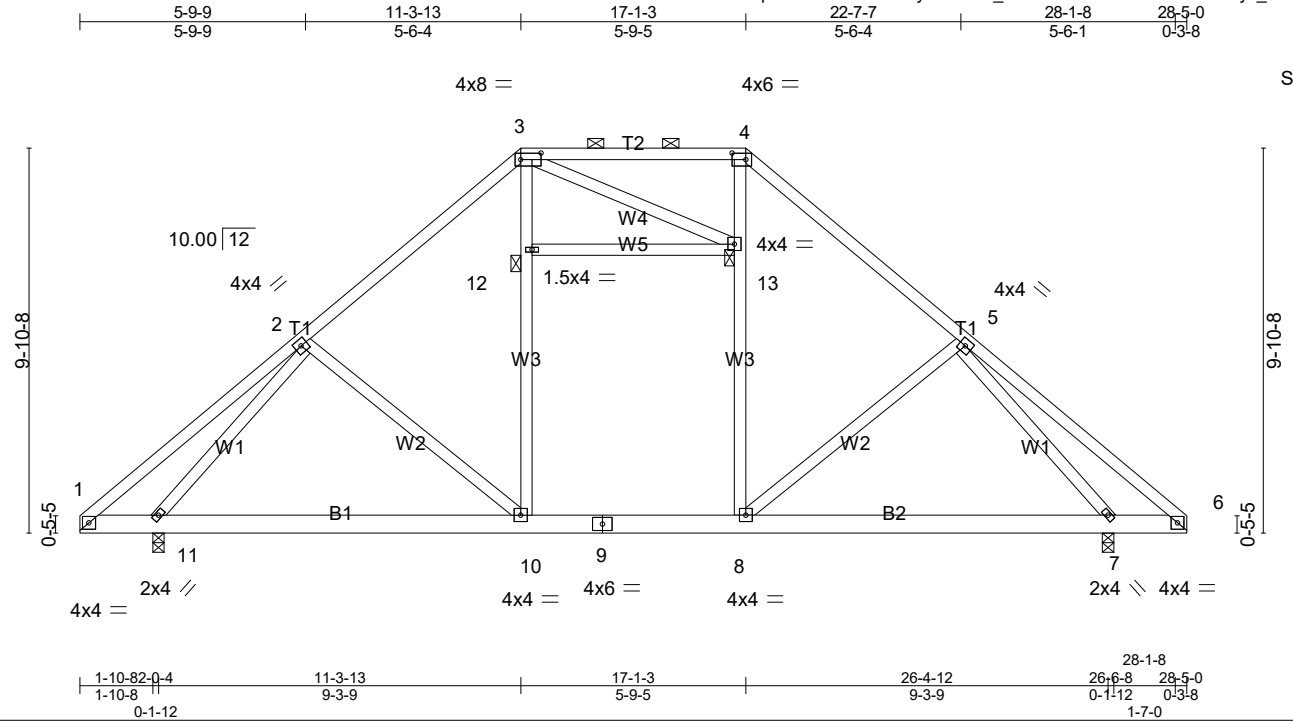


Plate Offsets (X,Y)-- [3:0-6-4,0-2-0], [4:0-4-4,0-2-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.18	Vert(LL)	-0.07 7-8	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.26	Vert(CT)	-0.10 7-8	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.69	Horz(CT)	0.01 7	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Wind(LL)	-0.06 10-11	>999	240		
	Code IRC2018/TPI2014						Weight: 201 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E
 BOT CHORD 2x6 SP No.1
 WEBS 2x4 SP No.3 *Except*
 W3: 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except
 2-0-0 oc purlins (6-0-0 max.): 3-4.
 BOT CHORD Rigid ceiling directly applied.
 JOINTS 1 Brace at Jt(s): 12, 13

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

REACTIONS. (lb/size) 11=1137/0-3-8 (min. 0-1-8), 7=1137/0-3-8 (min. 0-1-8)
 Max Horz 11=171(LC 7)
 Max Uplift 11=-4(LC 8)

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

TOP CHORD 2-3=-933/71, 3-4=-667/86, 4-5=-933/71
 BOT CHORD 10-11=0/776, 9-10=0/693, 8-9=0/693, 7-8=0/668
 WEBS 10-12=0/281, 3-12=0/282, 8-13=0/281, 4-13=0/281, 2-11=-993/81,
 5-7=-992/61

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=45ft; L=28ft; 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) 11.
- 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.
- 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 28602	Truss T6	Truss Type Piggyback Base	Qty 5	Ply 1	Freedom Const\Gina McKinney
--------------	-------------	------------------------------	----------	----------	-----------------------------

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:04 2025 Page 1

ID:43FmfUEpnbWxW36Q?RCfByzursR-W_FFJNZhKdCvblQNdMFVv1R3pz_QlJRljSqt0jzUjwT

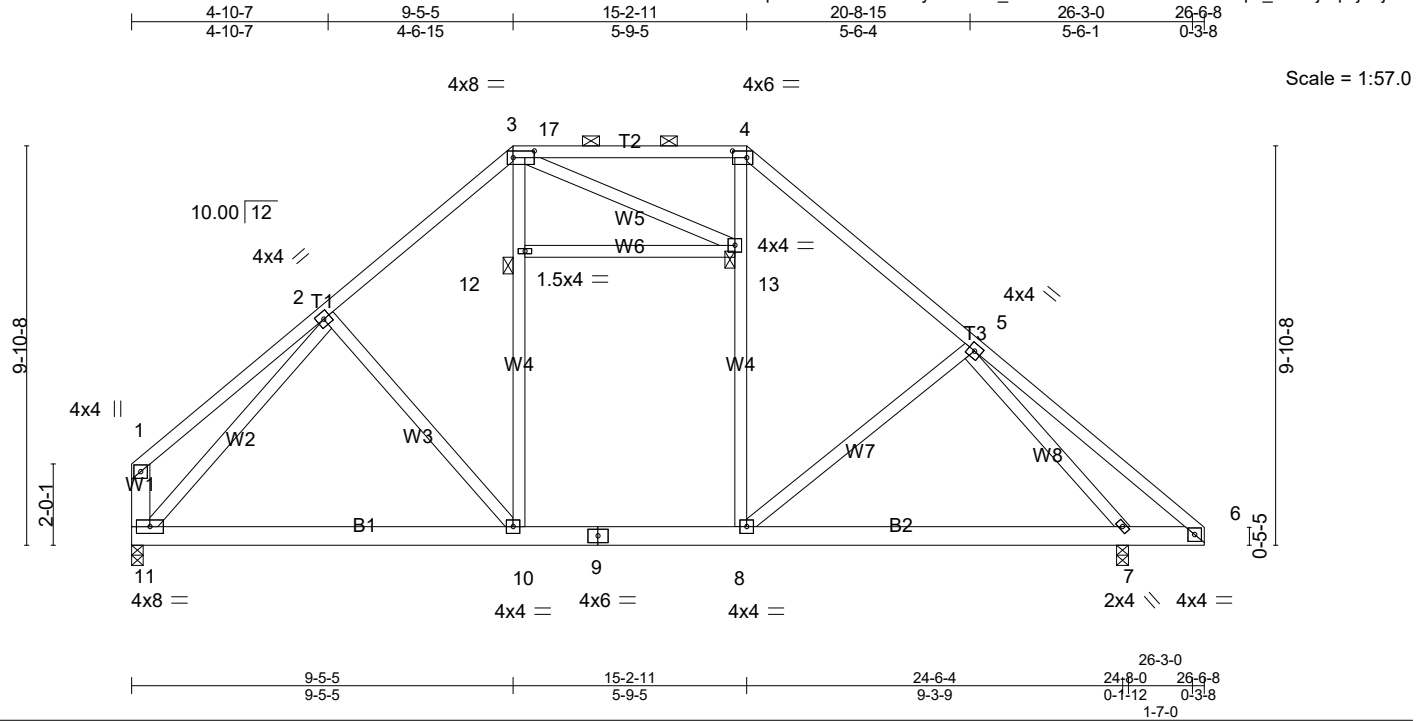


Plate Offsets (X,Y)-- [3:0-6-4,0-2-0], [4:0-4-4,0-2-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.19	Vert(LL)	-0.07	7-8	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.26	Vert(CT)	-0.11	7-8	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.81	Horz(CT)	0.01	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS	Wind(LL)	-0.06	10-11	>999	240	Weight: 198 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E
 BOT CHORD 2x6 SP No.1
 WEBS 2x4 SP No.3 *Except*
 W4: 2x4 SP No.2, W1: 2x6 SP No.1

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
 BOT CHORD Rigid ceiling directly applied.
 JOINTS 1 Brace at Jt(s): 12, 13

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

REACTIONS. (lb/size) 11=974/0-3-8 (min. 0-1-8), 7=1131/0-3-8 (min. 0-1-8)
 Max Horz 11=-188(LC 6)
 Max Grav 11=974(LC 23), 7=1131(LC 1)

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

TOP CHORD 1-2=-279/56, 2-3=-899/79, 3-17=-660/87, 4-17=-660/87, 4-5=-922/72,
 1-11=-259/43
 BOT CHORD 10-11=0/746, 9-10=0/685, 8-9=0/685, 7-8=0/663
 WEBS 10-12=0/284, 3-12=0/285, 8-13=0/276, 4-13=0/277, 2-11=-871/0,
 5-7=-977/61

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=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
- Provide adequate drainage to prevent water ponding.
- 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.
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

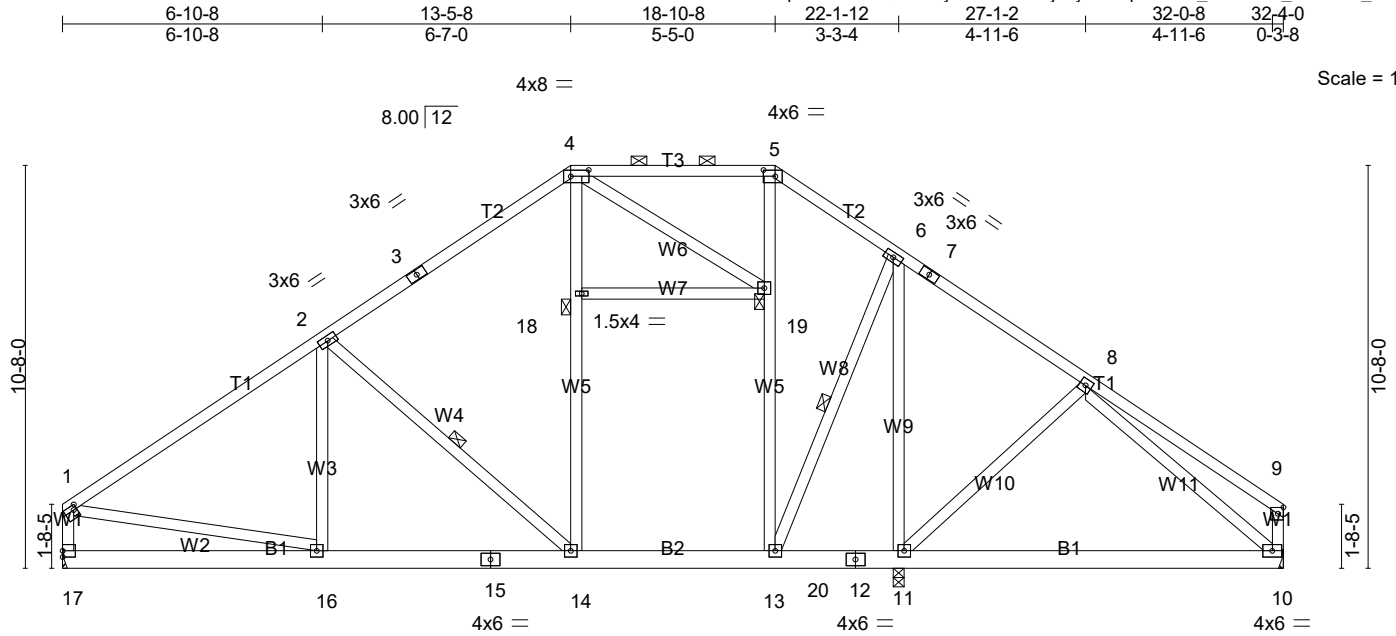
LOAD CASE(S) Standard

Job 28602	Truss T7	Truss Type Piggyback Base	Qty 8	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:06 2025 Page 1

ID:43FmfUEpnBwxW36Q?RCfByzursR-TMN0j2bysFSq3alknHz_SWHQmf_DCebAIJ_4bzUjwR



6-10-8 6-10-8	13-5-8 6-7-0	18-10-8 5-5-0	22-1-12 3-3-4	27-1-2 4-11-6	32-0-8 4-11-6	32-4-0 0-3-8
Plate Offsets (X,Y)-- [1:0-1-0,0-1-8], [4:0-5-12,0-2-0], [5:0-3-12,0-2-0]						

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.63	Vert(LL)	-0.07 14-16	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.32	Vert(CT)	-0.15 14-16	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.89	Horz(CT)	0.02 10	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Wind(LL)	0.04 14-16	>999	240		
	Code IRC2018/TPI2014						Weight: 255 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.): 4-5.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 2-14, 6-13
JOINTS 1 Brace at Jt(s): 18, 19

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

REACTIONS. (lb/size) 17=1160/Mechanical, 11=387/0-3-8 (min. 0-1-8), 10=1016/Mechanical
Max Horz 17=-188(LC 6)
Max Uplift 11=-37(LC 4)
Max Grav 17=1160(LC 1), 11=622(LC 22), 10=1016(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1404/12, 2-3=-1128/39, 3-4=-1025/78, 4-5=-844/93, 5-6=-1060/96,
6-7=-967/42, 7-8=-1085/12, 8-9=-269/44, 1-17=-1097/5
BOT CHORD 16-17=-129/280, 15-16=0/1204, 14-15=0/1204, 13-14=0/913, 13-20=0/874,
12-20=0/874, 11-12=0/874, 10-11=0/886
WEBS 2-14=-376/67, 14-18=0/336, 4-18=0/336, 13-19=-14/299, 5-19=-12/330,
6-11=-372/68, 1-16=0/951, 8-10=-1013/0

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=32ft; 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) 11.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedom Const\Gina McKinney
28602	T7	Piggyback Base	8	1	Job Reference (optional)

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 28602	Truss T8	Truss Type Piggyback Base	Qty 2	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:07 2025 Page 1

ID:43FmfUEpnBwxW36Q?RCfByzursR-xZxOxOcadYaTSD9yIVoDXg3SCA?lyf11PP2Yd1zUjwQ

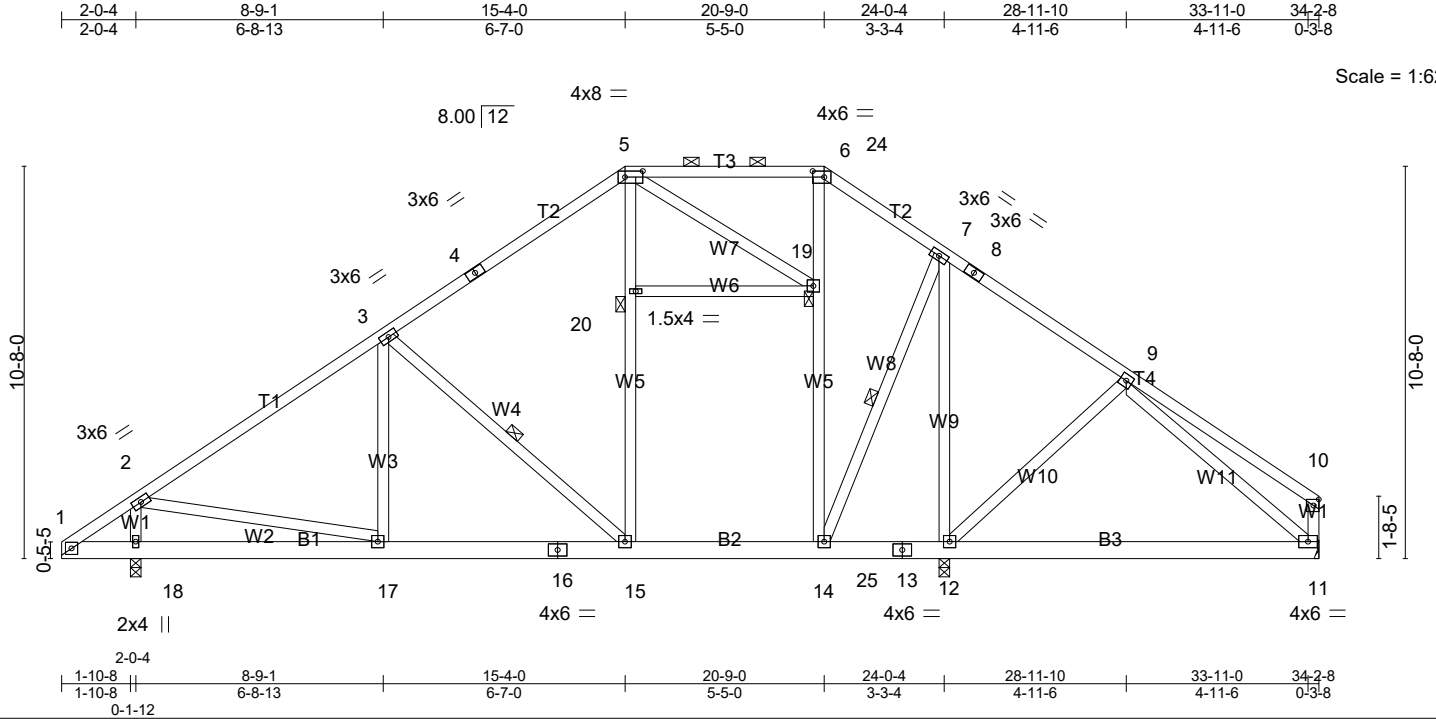


Plate Offsets (X,Y)-- [5:0-5-12,0-2-0], [6:0-3-12,0-2-0]

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 0.63	Vert(LL)	-0.07 15-17	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.31	Vert(CT)	-0.15 15-17	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.88	Horz(CT)	0.02 11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS	Wind(LL)	0.04 15-17	>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 end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 3-15, 7-14
JOINTS 1 Brace at Jt(s): 19, 20

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

REACTIONS. (lb/size) 12=393/0-3-8 (min. 0-1-8), 11=1007/Mechanical, 18=1325/0-3-8 (min. 0-1-9)
Max Horz 18=191(LC 7)
Max Uplift 12=-33(LC 4)
Max Grav 12=623(LC 22), 11=1007(LC 1), 18=1325(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1380/9, 3-4=-1117/35, 4-5=-1014/75, 5-24=-836/90, 6-24=-836/90,
6-7=-1050/93, 7-8=-957/39, 8-9=-1074/8, 9-10=-269/44
BOT CHORD 16-17=0/1181, 15-16=0/1181, 14-15=0/905, 14-25=0/866, 13-25=0/866,
12-13=0/866, 11-12=0/878
WEBS 3-15=-356/65, 15-20=0/330, 5-20=0/331, 14-19=-12/295, 6-19=-11/325,
7-12=-372/65, 2-18=-1206/71, 2-17=0/979, 9-11=-1003/0

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; 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) 12.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedom Const\Gina McKinney
28602	T8	Piggyback Base	2	1	Job Reference (optional)

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

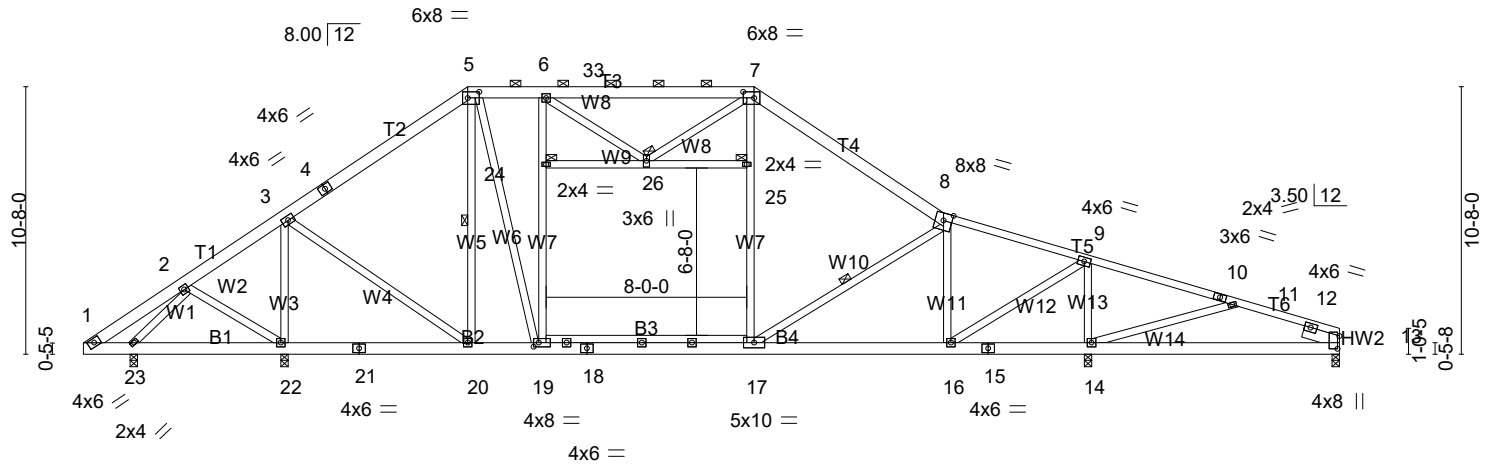
Job 28602	Truss T9	Truss Type Piggyback Base	Qty 1	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:08 2025 Page 1
ID:43FmfUEpnBwxW36Q?RCfByzursR-PIVm8kcCOsiK3Mk8sCKS3tbiLaLbh9wue3o59UzUjwP

4-1-14	8-0-4	15-4-0	18-5-8	26-9-0	34-3-11	40-0-11	45-9-12	50-1-0	51-9-8
4-1-14	3-10-6	7-3-12	3-1-8	8-3-8	7-6-11	5-9-1	5-9-1	4-3-4	1-8-8

Scale = 1:91.9



1-10-8	8-0-4	15-4-0	18-5-8	26-9-0	34-3-11	40-0-12	50-1-0	51-9-8
1-10-8	6-1-12	7-3-12	3-1-8	8-3-8	7-6-11	5-9-1	10-0-4	1-8-8
Plate Offsets (X,Y)-- [5:0-5-8,0-3-0], [7:0-5-4,0-3-0], [13:0-6-3,0-0-14], [19:0-2-8,0-2-0]								

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.28	Vert(LL)	-0.07 17-19	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.31	Vert(CT)	-0.12 17-19	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.65	Horz(CT)	0.02 14	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Wind(LL)	0.03 17	>999	240		
	Code IRC2018/TPI2014						Weight: 408 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1 *Except*
T6,T5: 2x4 SP 2400F 2.0E
BOT CHORD 2x6 SP No.1 *Except*
B3: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
W7: 2x4 SP No.2
SLIDER Right 2x6 SP No.1 -D 1-6-0

BRACING-

TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (6-0-0 max.): 5-7.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-20, 8-17
JOINTS 1 Brace at Jt(s): 24, 25, 26

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

REACTIONS.

All bearings 0-3-8.
(lb) - Max Horz 23=-174(LC 6)
Max Grav All reactions 250 lb or less at joint(s) 13 except 22=1479(LC 13), 14=1971(LC 20), 23=629(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-492/21, 3-4=-1164/10, 4-5=-1058/55, 5-6=-1057/70, 6-33=-1069/68, 7-33=-1069/68, 7-8=-1355/42, 8-9=-1033/0, 9-10=-47/527, 10-11=-56/436, 12-13=-528/0
BOT CHORD 22-23=0/302, 21-22=0/379, 20-21=0/379, 19-20=0/853, 18-19=0/1022, 17-18=0/1043, 16-17=0/968, 15-16=-456/88, 14-15=-456/88
WEBS 3-22=-1298/62, 3-20=0/805, 5-20=-391/11, 5-19=0/781, 19-24=-460/46, 6-24=-459/45, 17-25=0/347, 7-25=0/349, 8-16=-800/56, 9-16=0/1629, 9-14=-1605/59, 11-14=-597/65, 2-23=-540/4

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=45ft; L=50ft; 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
- Provide adequate drainage to prevent water ponding.
- 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.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedom Const\Gina McKinney
28602	T9	Piggyback Base	1	1	Job Reference (optional)

NOTES-

- 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.
- 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 28602	Truss T10	Truss Type Piggyback Base	Qty 14	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:09 2025 Page 1

ID:43FmfUEpnBwxW36Q?RCfByzursR-bx38M4dq9AqBhWJKPwrhc58t5_huQc41sjXehwzUjwO

4-1-14	8-0-4	15-4-0	18-5-8	26-9-0	34-3-11	40-0-11	45-9-12	51-9-8	52-1-0
4-1-14	3-10-6	7-3-12	3-1-8	8-3-8	7-6-11	5-9-1	5-9-1	5-11-12	0-3-8

Scale: 1/8"=1'

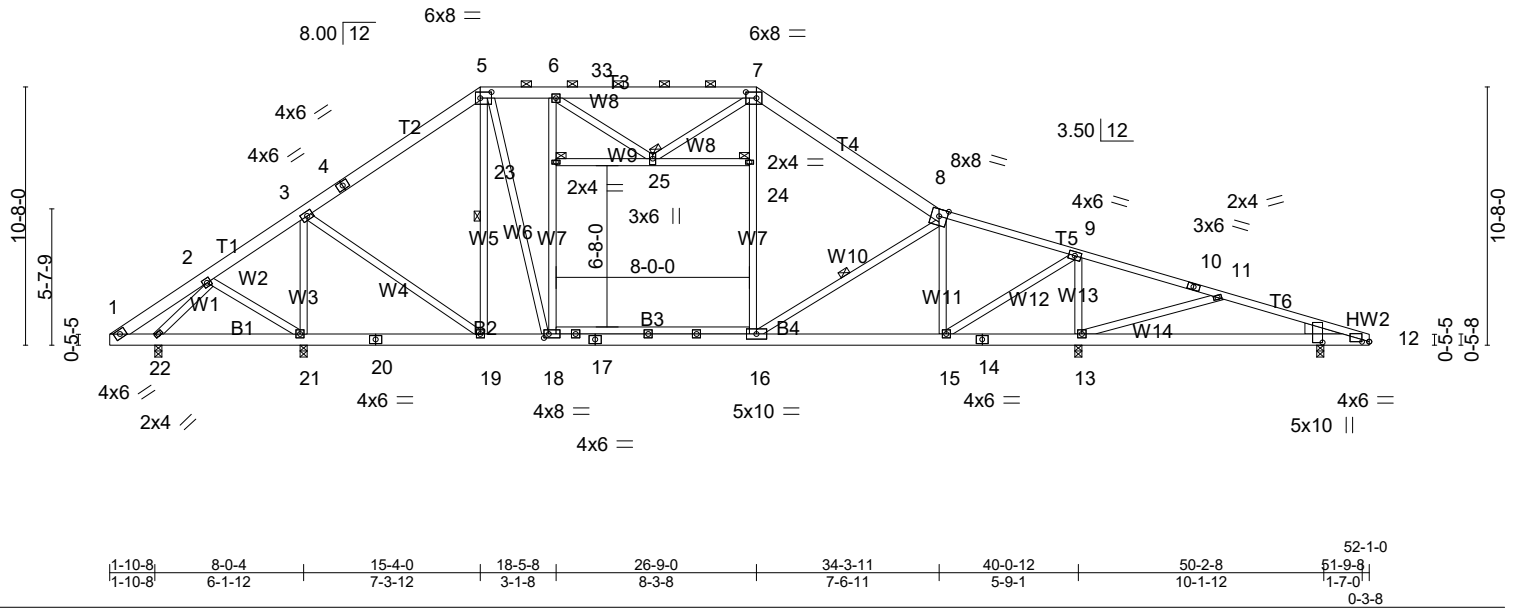


Plate Offsets (X,Y)-- [5:0-5-8,0-3-0], [7:0-5-4,0-3-0], [12:0-0-7,1-11-2], [12:0-3-9,0-0-1], [18:0-2-8,0-2-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.28	Vert(LL)	-0.07 16-18	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.30	Vert(CT)	-0.12 16-18	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.66	Horz(CT)	0.02 13	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Wind(LL)	0.03 16	>999	240		
	Code IRC2018/TPI2014						Weight: 416 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1 *Except*
T5,T6: 2x4 SP 2400F 2.0E
BOT CHORD 2x6 SP No.1 *Except*
B3: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
W7: 2x4 SP No.2

WEDGE
Right: 2x6 SP No.1

BRACING-

TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (6-0-0 max.): 5-7.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-19, 8-16
JOINTS 1 Brace at Jt(s): 23, 24, 25

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

REACTIONS.

All bearings 0-3-8.
(lb) - Max Horz 22=-179(LC 6)
Max Grav All reactions 250 lb or less at joint(s) except 21=1488(LC 13),
13=1972(LC 20), 22=618(LC 1), 12=376(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-482/26, 3-4=-1158/11, 4-5=-1052/55, 5-6=-1052/70, 6-33=-1063/68,
7-33=-1063/68, 7-8=-1348/42, 8-9=-1017/0, 9-10=-50/562, 10-11=-59/471
BOT CHORD 21-22=0/293, 20-21=0/367, 19-20=0/367, 18-19=0/849, 17-18=0/1018,
16-17=0/1038, 15-16=0/955, 14-15=-488/104, 13-14=-488/104
WEBS 3-21=-1305/61, 3-19=0/807, 5-19=-393/9, 5-18=0/778, 18-23=-459/45,
6-23=-457/45, 16-24=0/347, 7-24=0/348, 8-15=-806/57, 9-15=0/1642,
9-13=-1621/61, 11-13=-566/70, 2-22=-532/5

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=45ft; L=52ft; 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
- Provide adequate drainage to prevent water ponding.
- 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.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedom Const\Gina McKinney
28602	T10	Piggyback Base	14	1	Job Reference (optional)

NOTES-

- 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.
- 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 28602	Truss T11	Truss Type ROOF TRUSS	Qty 2	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

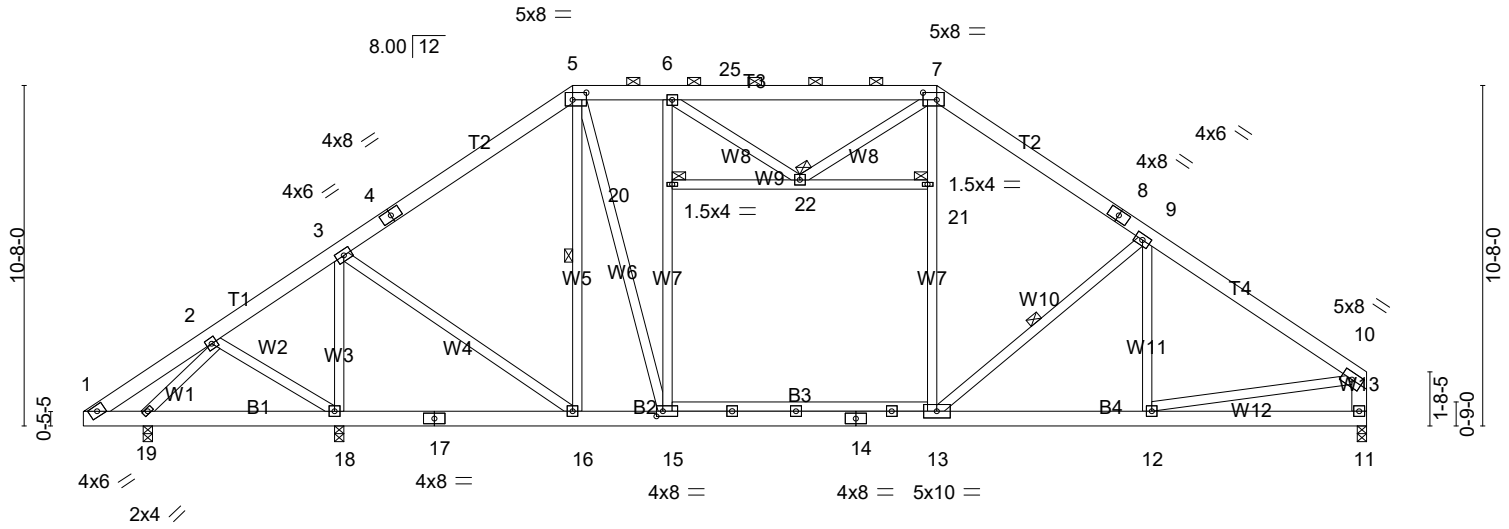
C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:11 2025 Page 1

ID:43FmfUEpnBwxW36Q?RCfByzursR-pkBvnmf4hn4vwqSjXLt9hWDDVnNOuWhKK10ImpzUjwM

4-1-14	8-0-4	15-4-0	18-5-8	26-9-0	33-4-0	39-11-0	40-2-8
4-1-14	3-10-6	7-3-12	3-1-8	8-3-8	6-7-0	6-7-0	0-3-8

Scale = 1:72.2



1-10-8	8-0-4	15-4-0	18-5-8	26-9-0	33-4-0	39-11-0	40-2-8
1-10-8	6-1-12	7-3-12	3-1-8	8-3-8	6-7-0	6-7-0	0-3-8

Plate Offsets (X,Y)-- [5:0-5-4,0-2-12], [7:0-5-4,0-2-12], [15:0-2-8,0-2-0]

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 0.29	Vert(LL)	-0.07 13-15	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.30	Vert(CT)	-0.13 12-13	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.65	Horz(CT)	0.02 11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS	Wind(LL)	0.03 12-13	>999	240		
								Weight: 362 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1 *Except*
 B3: 2x4 SP No.2
 WEBS 2x4 SP No.3 *Except*
 W7,W9: 2x4 SP No.2, W13: 2x6 SP No.1

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-7.
 BOT CHORD Rigid ceiling directly applied.
 WEBS 1 Row at midpt 5-16, 9-13
 JOINTS 1 Brace at Jt(s): 20, 21, 22

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

REACTIONS. (lb/size) 18=1068/0-3-8 (min. 0-1-11), 11=1395/0-3-8 (min. 0-1-12), 19=812/0-3-8 (min. 0-1-8)
 Max Horz 19=192(LC 7)
 Max Grav 18=1408(LC 14), 11=1467(LC 15), 19=812(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-772/5, 3-4=-1398/0, 4-5=-1292/40, 5-6=-1294/55, 6-25=-1344/30,
 7-25=-1344/30, 7-8=-1549/31, 8-9=-1641/0, 9-10=-1821/0, 10-11=-1385/0
 BOT CHORD 18-19=0/459, 17-18=0/606, 16-17=0/606, 15-16=0/1012, 14-15=0/1234,
 13-14=0/1234, 12-13=0/1402
 WEBS 3-18=-1266/33, 3-16=0/809, 5-16=-347/17, 5-15=0/867, 15-20=-528/29,
 6-20=-511/38, 13-21=0/454, 7-21=0/472, 9-13=-282/74, 2-19=-769/13,
 10-12=0/1190

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=45ft; L=40ft; 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) 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) Ceiling dead load (5.0 psf) on member(s). 20-22, 21-22
- 8) Bottom chord live load (25.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 13-15

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedom Const\Gina McKinney
28602	T11	ROOF TRUSS	2	1	Job Reference (optional)

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.
12) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

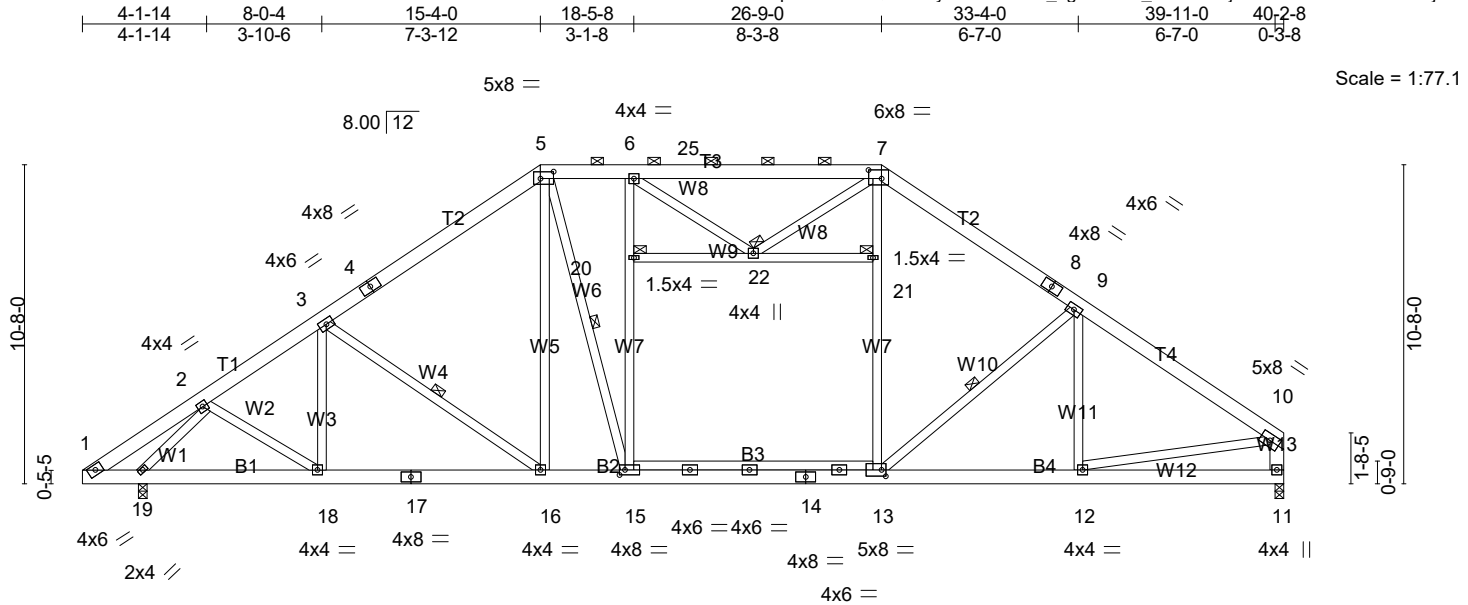
LOAD CASE(S) Standard

Job 28602	Truss T12	Truss Type ROOF TRUSS	Qty 3	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:12 2025 Page 1

ID:43FmfUjEpnBwxW36Q?RCfByzursR-HWkH_6giS5CmY_1v52OOEjmNCBdOd?hUZhmJfZUjwL



1-10-8 1-10-8	8-0-4 6-1-12	15-4-0 7-3-12	18-5-8 3-1-8	26-9-0 8-3-8	33-4-0 6-7-0	39-11-0 6-7-0	40-2-8 0-3-8
Plate Offsets (X,Y)-- [5:0-5-4,0-2-12], [7:0-5-4,0-3-8], [13:0-1-12,0-2-8], [15:0-2-4,0-2-0]							

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 0.36	Vert(LL)	-0.20 15-16	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.70	Vert(CT)	-0.30 15-16	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.54	Horz(CT)	0.04 11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS	Wind(LL)	0.06 15-16	>999	240	Weight: 362 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1 *Except*
 B3: 2x4 SP No.2
 WEBS 2x4 SP No.3 *Except*
 W7,W9: 2x4 SP No.2, W13: 2x6 SP No.1

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-9-8 max.): 5-7.
 BOT CHORD Rigid ceiling directly applied.
 WEBS 1 Row at midpt 3-16, 5-15, 9-13
 JOINTS 1 Brace at Jt(s): 20, 21, 22

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

REACTIONS. (lb/size) 11=1569/0-3-8 (min. 0-1-15), 19=1705/0-3-8 (min. 0-2-1)
 Max Horz 19=192(LC 7)
 Max Grav 11=1630(LC 15), 19=1735(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2005/0, 3-4=-1908/0, 4-5=-1806/25, 5-6=-1575/45, 6-25=-1617/21,
 7-25=-1617/21, 7-8=-1772/22, 8-9=-1937/0, 9-10=-2023/0, 10-11=-1529/0
 BOT CHORD 18-19=0/1376, 17-18=0/1761, 16-17=0/1761, 15-16=0/1579, 14-15=0/1607,
 13-14=0/1607, 12-13=0/1568, 11-12=0/288
 WEBS 2-18=0/479, 3-16=-253/68, 5-16=0/519, 5-15=-82/495, 15-20=-428/50,
 6-20=-411/59, 13-21=0/521, 7-21=0/538, 9-12=-275/57, 2-19=-1783/0,
 10-12=0/1311

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=45ft; L=40ft; 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
- Provide adequate drainage to prevent water ponding.
- 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.
- Ceiling dead load (5.0 psf) on member(s). 20-22, 21-22
- Bottom chord live load (25.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 13-15
- 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	Freedom Const\Gina McKinney
28602	T12	ROOF TRUSS	3	1	Job Reference (optional)

- NOTES-**
- 9) 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.
 - 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - 11) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

LOAD CASE(S) Standard

Job 28602	Truss T13	Truss Type ROOF TRUSS	Qty 2	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:14 2025 Page 1

ID:43FmfUEpnBwxW36Q?RCfByzursR-Evs1Pohz_iTUnHBICTQsJ8rji?JS5v4n0?FPN7zUjwJ

42-1-0
0-3-8
Scale = 1:73.6

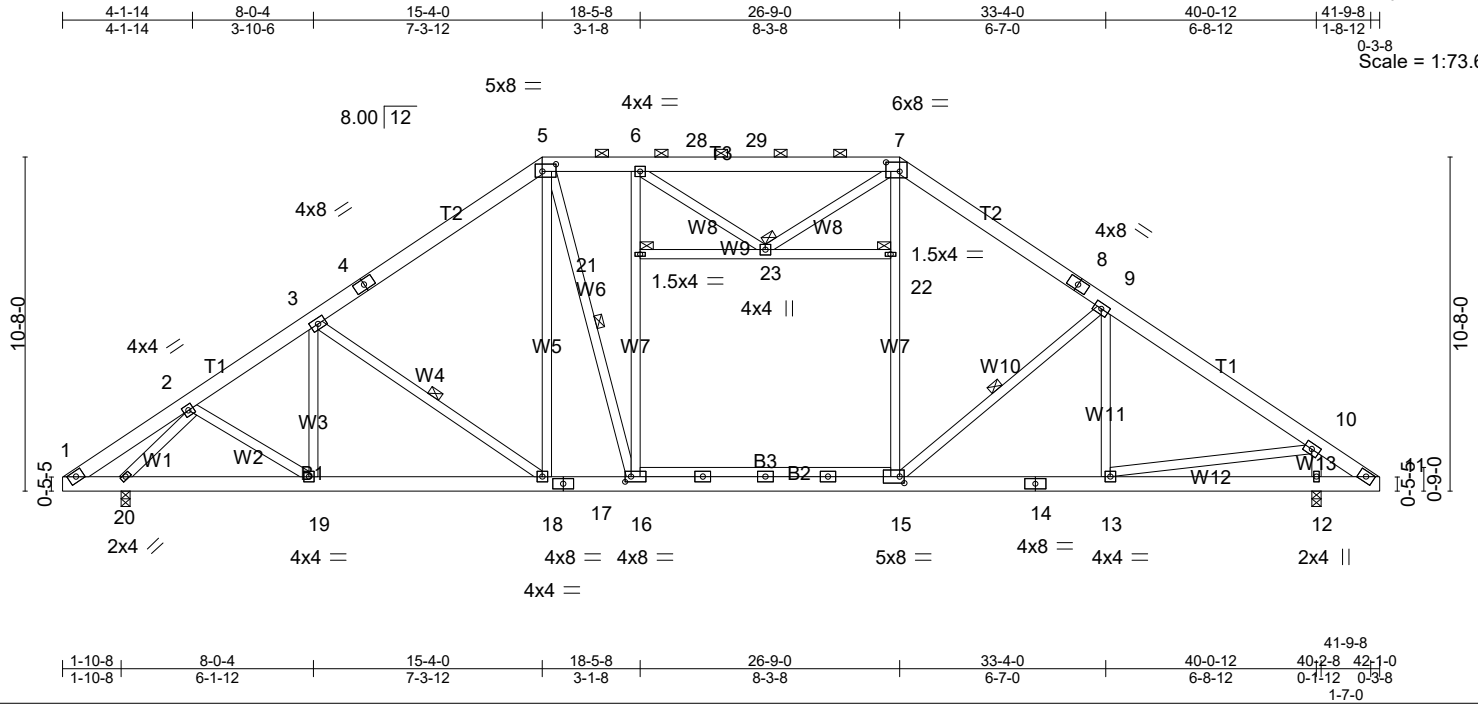


Plate Offsets (X,Y)-- [5:0-5-4,0-2-12], [7:0-5-4,0-3-8], [15:0-1-12,0-2-8], [16:0-2-4,0-2-0]

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 0.36	Vert(LL)	-0.20 16-18	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.60	Vert(CT)	-0.30 16-18	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.54	Horz(CT)	0.04 12	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS	Wind(LL)	-0.06 16-18	>999	240	Weight: 370 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1 *Except*
B3: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
W7,W9: 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (5-9-8 max.): 5-7.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 3-18, 5-16, 9-15
JOINTS 1 Brace at Jt(s): 21, 22, 23

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

REACTIONS. (lb/size) 12=1730/0-3-8 (min. 0-2-1), 20=1705/0-3-8 (min. 0-2-1)
Max Horz 20=-180(LC 6)
Max Grav 12=1764(LC 15), 20=1737(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2007/0, 3-4=-1909/0, 4-5=-1808/25, 5-6=-1577/45, 6-28=-1618/21,
28-29=-1618/21, 7-29=-1618/21, 7-8=-1773/21, 8-9=-1938/0, 9-10=-2028/0,
10-11=-274/0
BOT CHORD 19-20=0/1380, 18-19=0/1766, 17-18=0/1583, 16-17=0/1583, 15-16=0/1610,
14-15=0/1575, 13-14=0/1575, 12-13=0/274, 11-12=0/274
WEBS 2-19=0/480, 3-18=-253/68, 5-18=0/518, 5-16=-83/496, 16-21=-428/51,
6-21=-410/60, 15-22=0/521, 7-22=0/538, 9-13=-275/53, 10-13=0/1327,
10-12=-1520/34, 2-20=-1785/0

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=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
- Provide adequate drainage to prevent water ponding.
- All plates are 4x6 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.
- Ceiling dead load (5.0 psf) on member(s). 21-23, 22-23
- Bottom chord live load (25.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 15-16

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedom Const\Gina McKinney
28602	T13	ROOF TRUSS	2	1	Job Reference (optional)

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.
- 12) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Freedom Const\Gina McKinney
28602	TG1	PIGGYBACK BASE GIRDE	1	2	

C&R Building Supply, Autryville NC
8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:17 2025 Page 1

ID:43FmfUjEpnBwxW36Q?RCfByzursR-eUYA1pjrGdr3elwttb_ZxnTE0CKII9RDizT4zSzUjwG
17-1-3 21-8-1 26-3-0 26-6-8
2-10-11 4-6-15 4-6-15 0-3-8

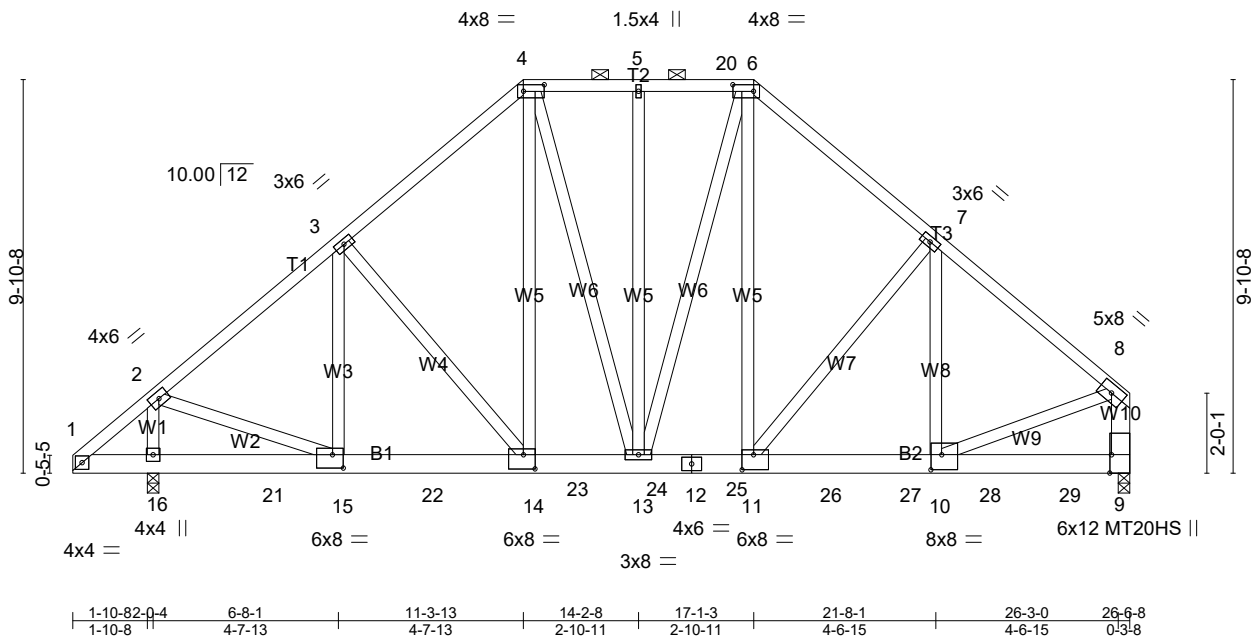


Plate Offsets (X,Y)-- [4:0-6-4,0-2-0], [6:0-6-4,0-2-0], [9:0-5-8,Edge], [10:0-3-4,0-4-8], [11:0-3-8,0-4-8], [14:0-3-8,0-4-4], [15:0-3-4,0-4-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	1-6-0	TC 0.35	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.69	Vert(LL) -0.08 14-15 >999 360	MT20HS	187/143
BCLL 0.0 *	Lumber DOL 1.15	WB 0.95	Vert(CT) -0.15 14-15 >999 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS	Horz(CT) 0.03 9 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.02 15-16 >999 240	Weight: 472 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-11-3 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-6.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* W10: 2x6 SP No.1	

REACTIONS. (lb/size) 16=5715/0-3-8 (min. 0-3-6), 9=6510/0-3-8 (min. 0-3-4)
Max Horz 16=141(LC 33)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-391/61, 2-3=-5804/0, 3-4=-5321/0, 4-5=-4270/0, 5-20=-4270/0, 6-20=-4270/0, 6-7=-5360/0, 7-8=-6095/0, 8-9=-5610/0
BOT CHORD 1-16=-32/284, 16-21=-166/373, 15-21=-166/373, 15-22=0/4404, 22-23=0/4404, 14-23=0/4404, 14-24=0/4056, 13-24=0/4056, 13-25=0/4089, 12-25=0/4089, 11-12=0/4089, 11-26=0/4628, 26-27=0/4628, 10-27=0/4628, 10-28=0/338, 28-29=0/338, 9-29=0/338
WEBS 2-16=-5103/0, 2-15=0/4395, 3-15=-156/587, 3-14=-612/124, 4-14=0/2498, 4-13=0/795, 6-13=0/684, 6-11=0/2632, 7-11=-916/0, 7-10=0/986, 8-10=0/4594

- 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, 2x6 - 2 rows staggered 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=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
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - Bearing capacity is increased by the plate at joint(s) 9. Plate must be within 1/4 in of bearing surface.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedom Const\Gina McKinney
28602	TG1	PIGGYBACK BASE GIRDE	1	2	Job Reference (optional)

- NOTES-**
- 9) * 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.
 - 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 697 lb down and 287 lb up at 4-11-4, 1001 lb down at 6-11-4, 1001 lb down at 8-11-4, 1001 lb down at 10-11-4, 1001 lb down at 12-11-4, 1001 lb down at 14-11-4, 1001 lb down at 16-11-4, 1001 lb down at 18-11-4, 1001 lb down at 20-11-4, and 992 lb down at 22-11-4, and 992 lb down at 24-11-4 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: 1-4=-45, 4-6=-45, 6-8=-45, 9-17=-15
 - Concentrated Loads (lb)
 - Vert: 15=-1001(F) 11=-1001(F) 21=-655(F) 22=-1001(F) 23=-1001(F) 24=-1001(F) 25=-1001(F) 26=-1001(F) 27=-1001(F) 28=-992(F) 29=-992(F)

Job 28602	Truss TG2	Truss Type GABLE	Qty 1	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:19 2025 Page 1

ID:43FmfUEpnBwxW36Q?RCfByzursR-asfwSVI5oE5mu33F?0010CYdg05tm7vWAHyA2LzUjwE

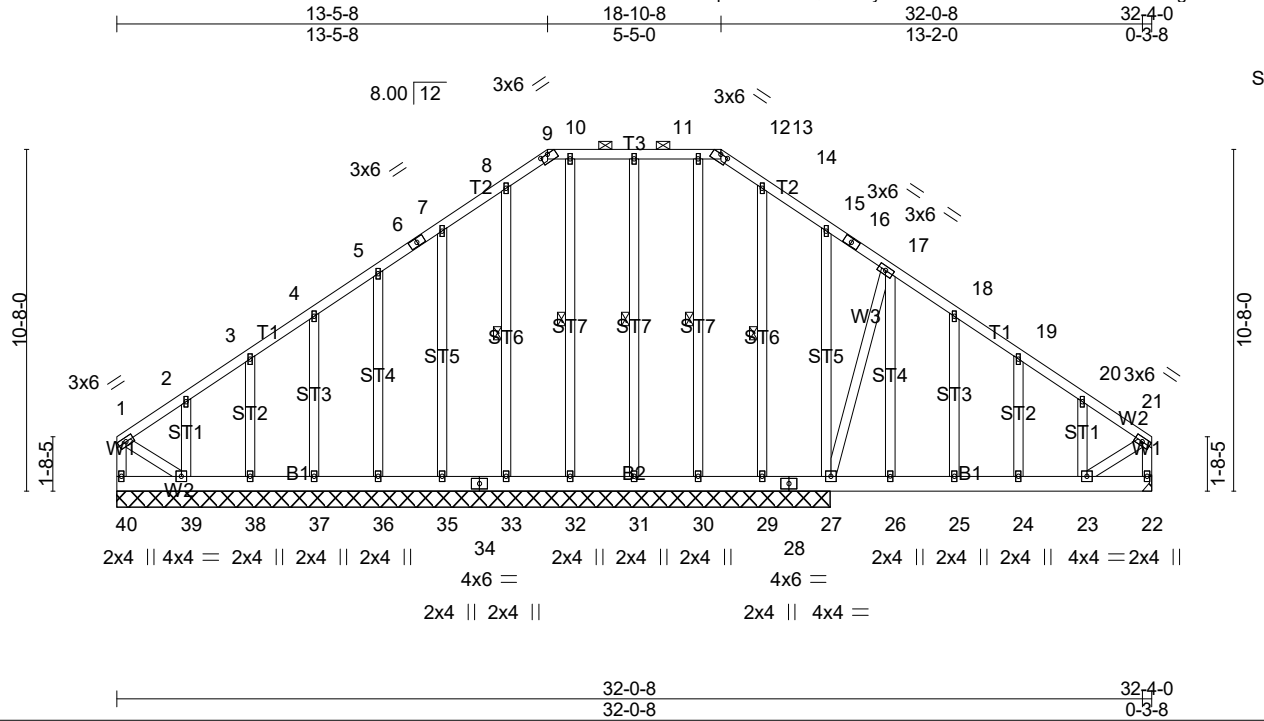


Plate Offsets (X,Y)-- [9:0-3-0,0-0-2], [13:0-3-0,0-0-2]

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.15	Vert(LL)	-0.04	24	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.26	Vert(CT)	-0.07	24	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.70	Horz(CT)	-0.01	40	n/a	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-S	Wind(LL)	0.06	24	>999	240		
	Code IRC2018/TPI2014							Weight: 299 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.): 9-13.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 11-31, 10-32, 8-33, 12-30, 14-29

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

REACTIONS.

All bearings 22-3-8 except (jt=length) 22=Mechanical.
(lb) - Max Horz 22=-188(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 31, 32, 33, 35, 36, 37, 38, 30, 29 except 40=-101(LC 6), 22=-272(LC 8), 39=-122(LC 31), 27=-177(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 31, 32, 33, 35, 36, 37, 38, 39, 30, 29 except 40=464(LC 39), 22=763(LC 39), 27=627(LC 39)

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

TOP CHORD 1-2=-386/126, 2-3=-381/117, 3-4=-370/133, 4-5=-361/169, 5-6=-350/191, 6-7=-301/203, 7-8=-350/246, 8-9=-303/244, 9-10=-253/229, 10-11=-253/229, 11-12=-253/229, 12-13=-253/229, 13-14=-299/244, 14-15=-312/242, 15-16=-316/222, 16-17=-350/210, 17-18=-499/249, 18-19=-532/229, 19-20=-539/201, 20-21=-530/168, 1-40=-442/115, 21-22=-599/171
BOT CHORD 38-39=-127/310, 37-38=-127/310, 36-37=-127/310, 35-36=-127/310, 34-35=-127/310, 33-34=-127/310, 32-33=-127/310, 31-32=-127/310, 30-31=-127/310, 29-30=-127/310, 28-29=-127/310, 27-28=-127/310, 26-27=-160/525, 25-26=-160/525, 24-25=-160/525, 23-24=-160/525
WEBS 17-26=-229/570, 21-23=-111/479, 17-27=-754/295, 1-39=-138/357

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=45ft; L=32ft; 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.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedom Const\Gina McKinney
28602	TG2	GABLE	1	1	Job Reference (optional)

NOTES-

- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are 1.5x4 MT20 unless otherwise indicated.
- 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * 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.
- 10) Refer to girder(s) for truss to truss connections.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 31, 32, 33, 35, 36, 37, 38, 30, 29 except (jt=lb) 40=101, 22=272, 39=122, 27=177.
- 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.
- 14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 71 lb down and 77 lb up at 23-11-4, 71 lb down and 77 lb up at 25-11-4, 71 lb down and 77 lb up at 27-11-4, and 71 lb down and 77 lb up at 29-11-4, and 75 lb down and 71 lb up at 32-2-4 on bottom chord.
The design/selection of such connection device(s) is the responsibility of others.
- 15) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

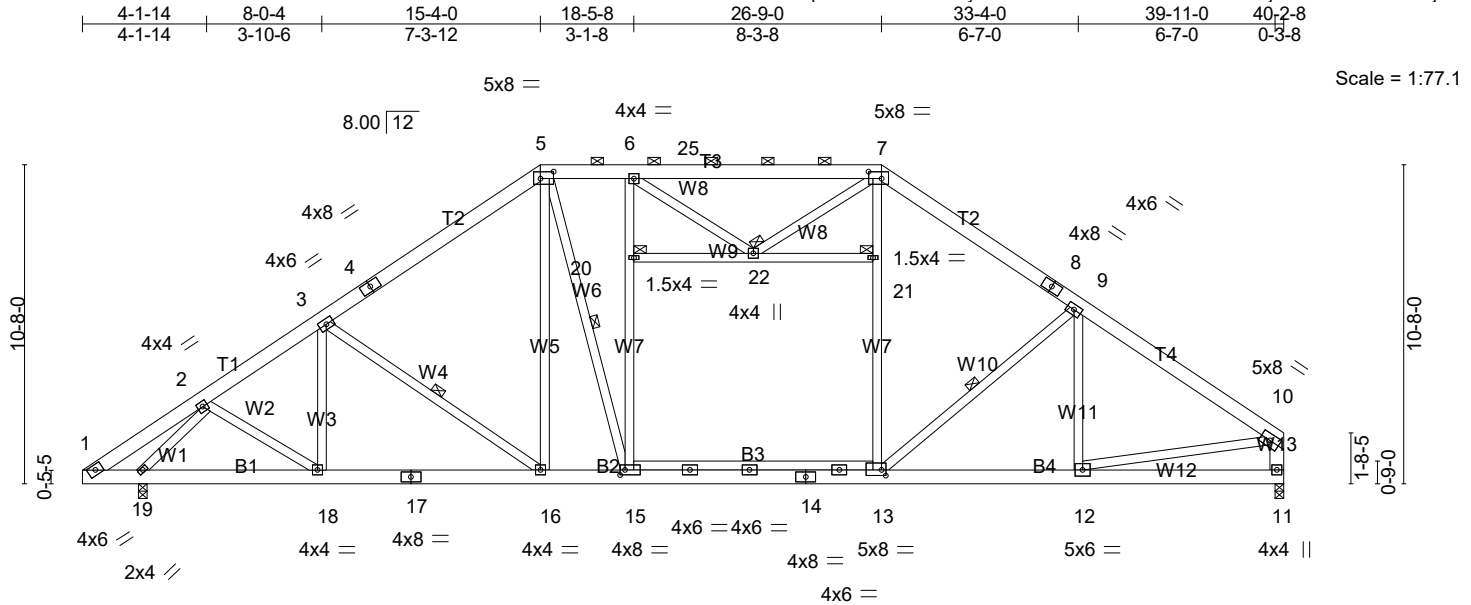
- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-9=-60, 9-13=-60, 13-21=-60, 22-40=-20
 - Concentrated Loads (lb)
 - Vert: 22=-39(B) 26=-31(B) 25=-31(B) 24=-31(B) 23=-31(B)

Job 28602	Truss TG3	Truss Type ROOF TRUSS	Qty 1	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:20 2025 Page 1

ID:43FmfUjEpnBwxW36Q?RCfByzursR-23DlfrmkZYDdVCeSZkXGYP5jSPHuVbTfOxikanzUjwD



1-10-8 1-10-8	8-0-4 6-1-12	15-4-0 7-3-12	18-5-8 3-1-8	26-9-0 8-3-8	33-4-0 6-7-0	39-11-0 6-7-0	40-2-8 0-3-8
Plate Offsets (X,Y)-- [5:0-5-4,0-2-12], [7:0-5-4,0-2-12], [13:0-1-12,0-2-4], [15:0-2-0,0-2-0]							

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 0.47	Vert(LL)	-0.23	15	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.92	Vert(CT)	-0.34	15-16	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.61	Horz(CT)	0.04	11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS	Wind(LL)	0.07	15-16	>999	240		
									Weight: 362 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1 *Except*
 B3: 2x4 SP No.2
 WEBS 2x4 SP No.3 *Except*
 W7,W9: 2x4 SP No.2, W13: 2x6 SP No.1

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-3-3 oc purlins, except end verticals, and 2-0-0 oc purlins (5-3-11 max.): 5-7.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 3-16, 5-15, 9-13
 JOINTS 1 Brace at Jt(s): 20, 21, 22

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

REACTIONS. (lb/size) 11=1569/0-3-8 (min. 0-2-1), 19=1705/0-3-8 (min. 0-2-2)
 Max Horz 19=192(LC 7)
 Max Grav 11=1731(LC 15), 19=1821(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2126/0, 3-4=-2045/0, 4-5=-1940/25, 5-6=-1713/45, 6-25=-1755/21,
 7-25=-1755/21, 7-8=-1943/22, 8-9=-2108/0, 9-10=-2158/0, 10-11=-1631/0
 BOT CHORD 18-19=0/1446, 17-18=0/1866, 16-17=0/1866, 15-16=0/1689, 14-15=0/1741,
 13-14=0/1741, 12-13=0/1687
 WEBS 2-18=0/518, 3-16=-263/71, 5-16=0/553, 5-15=-83/587, 15-20=-445/48,
 6-20=-428/58, 13-21=0/635, 7-21=0/652, 9-12=-332/60, 2-19=-1881/0,
 10-12=0/1500

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=45ft; L=40ft; 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
- Provide adequate drainage to prevent water ponding.
- 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.
- Ceiling dead load (5.0 psf) on member(s). 20-22, 21-22
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 13-15
- 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	Freedom Const\Gina McKinney
28602	TG3	ROOF TRUSS	1	1	Job Reference (optional)

NOTES-
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

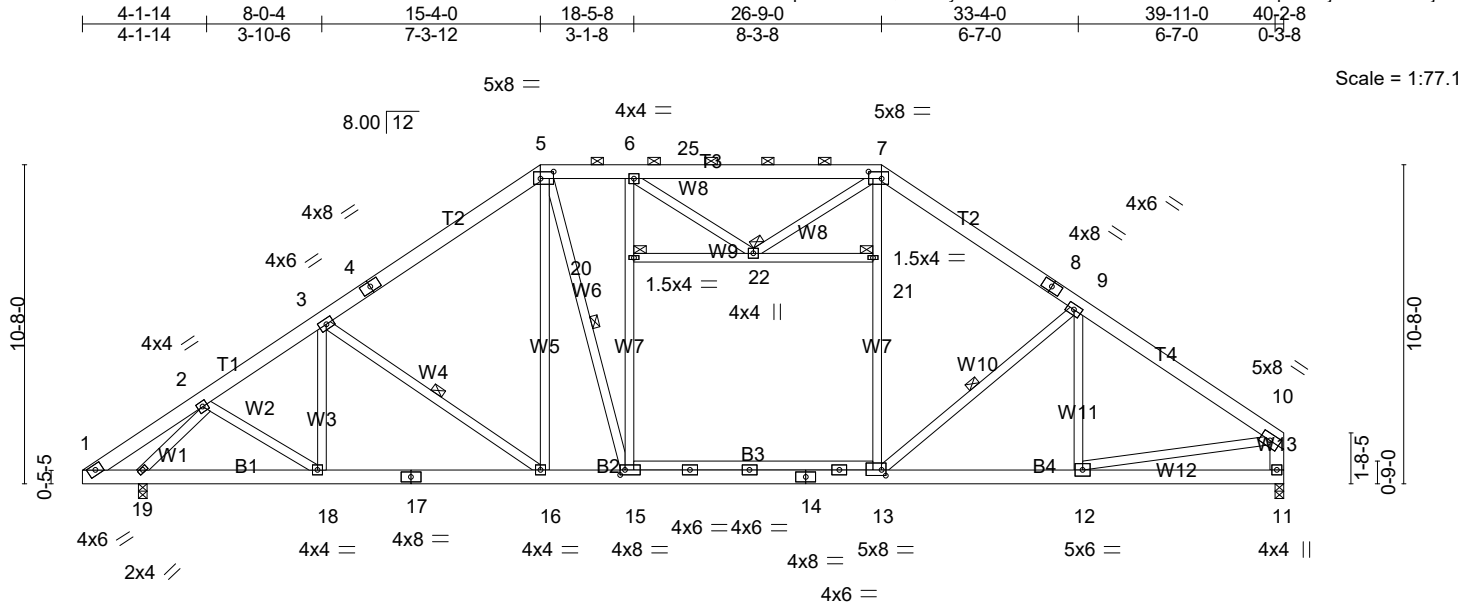
LOAD CASE(S) Standard

Job 28602	Truss TG4	Truss Type ROOF TRUSS	Qty 1	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:21 2025 Page 1

ID:43FmfUEpnBwxW36Q?RCfByzursR-WFhntBnMkrLU7MDe6R2V5detCpd7E2jodbRH6DzUjwC



Scale = 1:77.1

1-10-8	8-0-4	15-4-0	18-5-8	26-9-0	33-4-0	39-11-0	40-2-8
1-10-8	6-1-12	7-3-12	3-1-8	8-3-8	6-7-0	6-7-0	0-3-8
Plate Offsets (X,Y)-- [5:0-5-4,0-2-12], [7:0-5-4,0-2-12], [13:0-1-12,0-2-4], [15:0-2-0,0-2-0]							

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 0.47	Vert(LL)	-0.23	15	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.92	Vert(CT)	-0.34	15-16	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.61	Horz(CT)	0.04	11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS	Wind(LL)	0.07	15-16	>999	240		
									Weight: 362 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1 *Except*
 B3: 2x4 SP No.2
 WEBS 2x4 SP No.3 *Except*
 W7,W9: 2x4 SP No.2, W13: 2x6 SP No.1

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-3-3 oc purlins, except end verticals, and 2-0-0 oc purlins (5-3-11 max.): 5-7.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 3-16, 5-15, 9-13
 JOINTS 1 Brace at Jt(s): 20, 21, 22

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

REACTIONS. (lb/size) 11=1569/0-3-8 (min. 0-2-1), 19=1705/0-3-8 (min. 0-2-2)
 Max Horz 19=192(LC 7)
 Max Grav 11=1731(LC 15), 19=1821(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2126/0, 3-4=-2045/0, 4-5=-1940/25, 5-6=-1713/45, 6-25=-1755/21,
 7-25=-1755/21, 7-8=-1943/22, 8-9=-2108/0, 9-10=-2158/0, 10-11=-1631/0
 BOT CHORD 18-19=0/1446, 17-18=0/1866, 16-17=0/1866, 15-16=0/1689, 14-15=0/1741,
 13-14=0/1741, 12-13=0/1687
 WEBS 2-18=0/518, 3-16=-263/71, 5-16=0/553, 5-15=-83/587, 15-20=-445/48,
 6-20=-428/58, 13-21=0/635, 7-21=0/652, 9-12=-332/60, 2-19=-1881/0,
 10-12=0/1500

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=45ft; L=40ft; 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
- Provide adequate drainage to prevent water ponding.
- 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.
- Ceiling dead load (5.0 psf) on member(s). 20-22, 21-22
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 13-15
- 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	Freedom Const\Gina McKinney
28602	TG4	ROOF TRUSS	1	1	Job Reference (optional)

NOTES-
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

LOAD CASE(S) Standard

Job 28602	Truss TGE1	Truss Type GABLE	Qty 1	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:22 2025 Page 1

ID:43FmfUEpnBwxW36Q?RCfByzursR-?RL34Xn_59TLiWoqg8akeqA9UDA0zdtysFBqgzUjwB

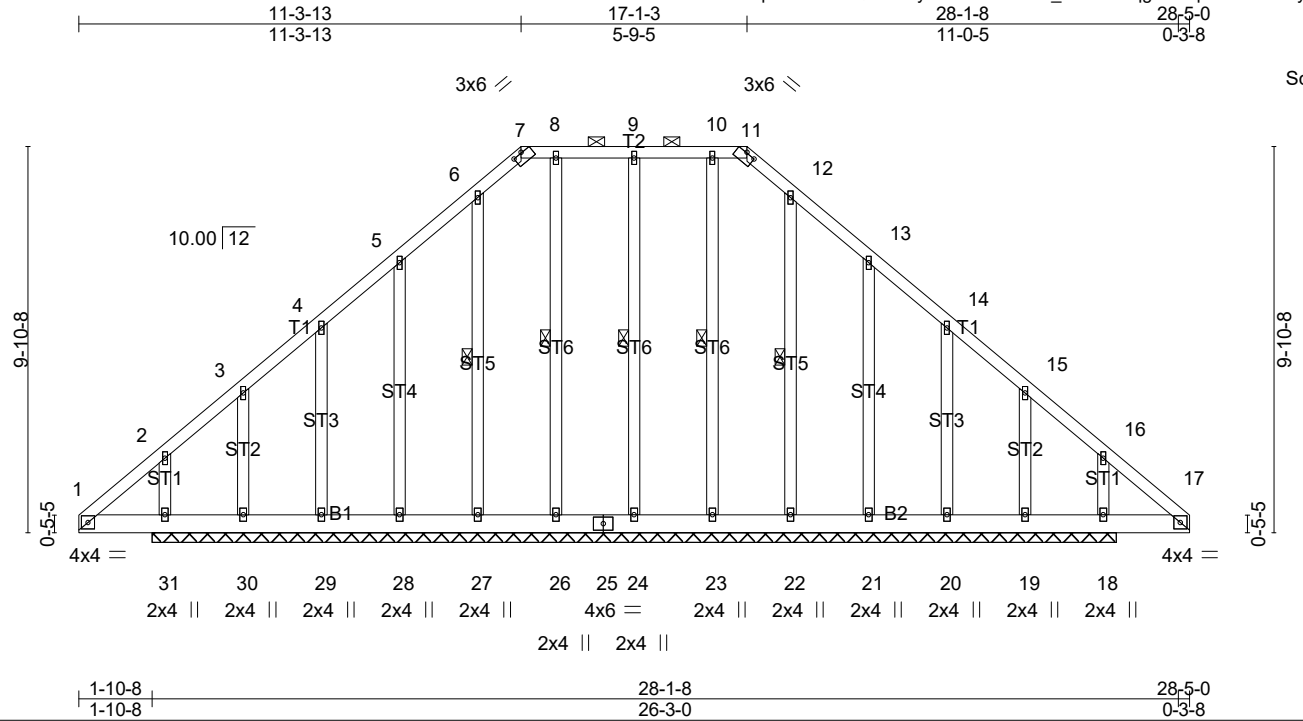


Plate Offsets (X,Y)-- [7:0-3-0,0-0-4], [11:0-3-0,0-0-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.05	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.08	Vert(CT)	n/a	-	n/a		
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-S						
	Code IRC2018/TPI2014						Weight: 233 lb	FT = 20%

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.): 7-11.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 9-24, 8-26, 6-27, 10-23, 12-22

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

REACTIONS.

All bearings 24-8-0.
(lb) - Max Horz 31=-172(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 24, 28, 29, 31, 21, 20, 19, 18 except 30=-103(LC 5)
Max Grav All reactions 250 lb or less at joint(s) 24, 26, 27, 28, 29, 30, 23, 22, 21, 20, 19 except 31=320(LC 14), 18=309(LC 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=45ft; L=28ft; 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 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) 24, 28, 29, 31, 21, 20, 19, 18 except (jt=lb) 30=103.
- Non Standard bearing condition. Review required.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedom Const\Gina McKinney
28602	TGE1	GABLE	1	1	Job Reference (optional)

NOTES-
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 28602	Truss TGE2	Truss Type GABLE	Qty 1	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

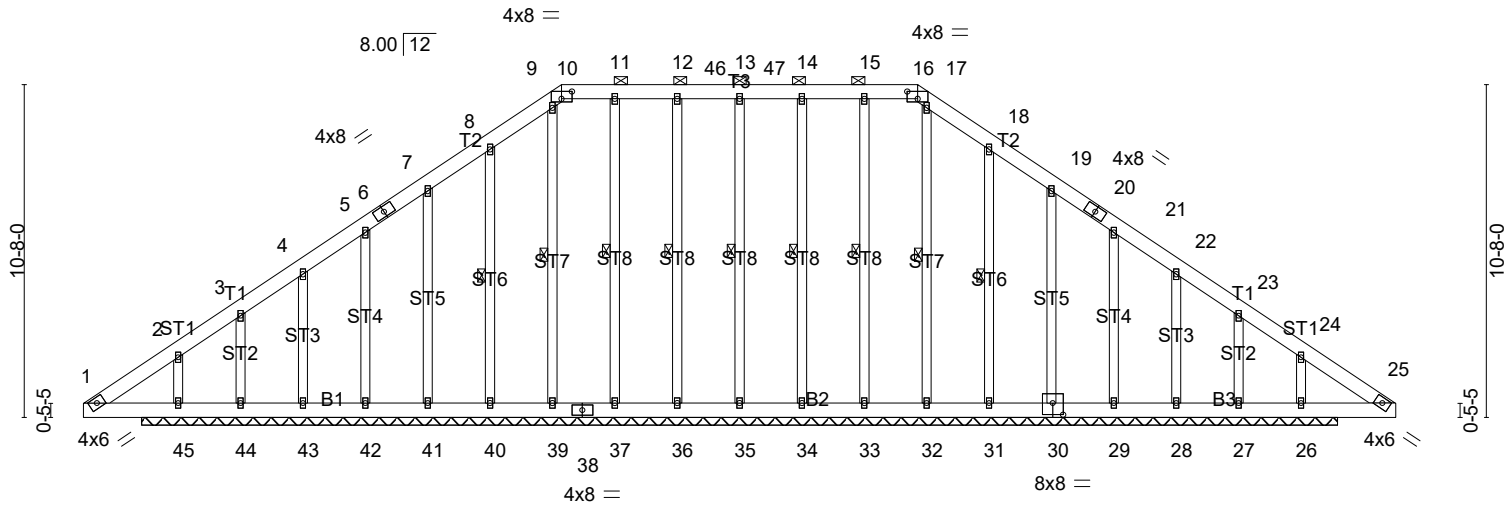
C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:24 2025 Page 1

ID:43FmfUEpnBwxW36Q?RCfByzursR-xqTpVCpEdmj3_qyDoZcCjFGUP1szRXDFJZgxjYzUjw9

15-4-0	26-9-0	41-9-8	42-1-0
15-4-0	11-5-0	15-0-8	0-3-8

Scale = 1:73.9



1-10-8	41-9-8	42-1-0
1-10-8	39-11-0	0-3-8

Plate Offsets (X,Y)-- [10:0-4-0,0-2-13], [16:0-4-0,0-2-13], [30:0-4-0,0-4-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.09	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.08	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.12	Horz(CT)	-0.00	26	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S						
	Code IRC2018/TPI2014						Weight: 399 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1
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.): 10-16.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 13-35, 12-36, 11-37, 9-39, 8-40, 14-34, 15-33, 17-32, 18-31

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

REACTIONS.

All bearings 38-4-0.
(lb) - Max Horz 45=180(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 40, 41, 42, 43, 45, 31, 30, 29, 28, 27, 26 except 44=105(LC 7)
Max Grav All reactions 250 lb or less at joint(s) 35, 36, 37, 40, 41, 42, 43, 44, 34, 33, 32, 31, 30, 29, 28, 27 except 39=253(LC 14), 45=370(LC 15), 26=367(LC 21)

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=45ft; L=42ft; 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 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) 40, 41, 42, 43, 45, 31, 30, 29, 28, 27, 26 except (jt=lb) 44=105.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedom Const\Gina McKinney
28602	TGE2	GABLE	1	1	Job Reference (optional)

NOTES-
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.
13) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

LOAD CASE(S) Standard

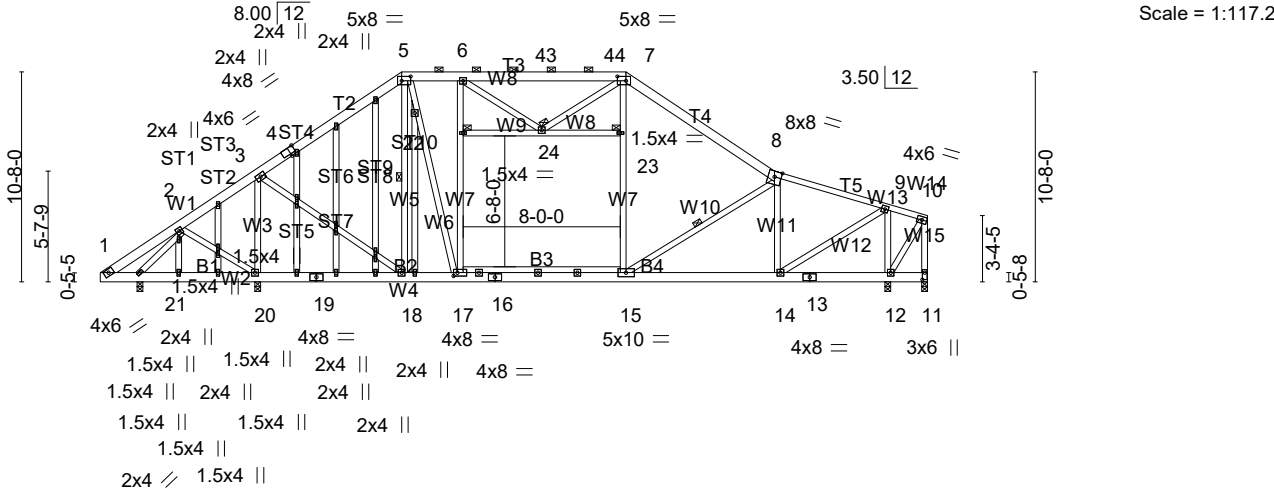
Job	Truss	Truss Type	Qty	Ply	Freedom Const\Gina McKinney
28602	TSGE1	GABLE	1	1	Job Reference (optional)

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:26 2025 Page 1

ID:43FmfUEpnbW36Q?RCfByzursR-tDbawuqU9OznD76bv_egogLnRqTVvITynt92oRzUjw7

4-1-14	8-0-4	15-4-0	18-5-8	26-9-0	34-3-11	40-0-11	42-1-0	51-9-8
4-1-14	3-10-6	7-3-12	3-1-8	8-3-8	7-6-11	5-9-1	2-0-5	9-8-8



1-10-8	8-0-4	15-4-0	18-5-8	26-9-0	34-3-11	40-0-12	42-1-0	51-9-8
1-10-8	6-1-12	7-3-12	3-1-8	8-3-8	7-6-11	5-9-1	2-0-4	9-8-8

Plate Offsets (X,Y)-- [4:0-3-4,Edge], [5:0-5-8,0-2-12], [7:0-5-4,0-2-12], [11:0-4-4,0-1-8], [17:0-2-4,0-2-0]

LOADING (psf)	SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0		TC 0.31		Vert(LL)	-0.07	15-17	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15		BC 0.33		Vert(CT)	-0.12	15-17	>999	240		
BCLL 0.0 *	Lumber DOL 1.15		WB 0.64		Horz(CT)	0.02	12	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES		Matrix-AS		Wind(LL)	0.03	14-15	>999	240		
	Code IRC2018/TPI2014									Weight: 426 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1 *Except* T5: 2x4 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-7.
BOT CHORD 2x6 SP No.1 *Except* B3: 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.3 *Except* W7: 2x4 SP No.2	WEBS 1 Row at midpt 5-18, 8-15
OTHERS 2x4 SP No.3	JOINTS 1 Brace at Jt(s): 22, 23, 24
	MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 20=1142/0-3-8 (min. 0-1-11), 12=2107/0-3-8 (min. 0-2-9), 11=-583/0-3-8 (min. 0-1-8),
21=682/0-3-8 (min. 0-1-8)
Max Horz 21=193(LC 7)
Max Uplift 11=-656(LC 20), 21=-6(LC 8)
Max Grav 20=1443(LC 13), 12=2165(LC 20), 21=682(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-567/24, 3-4=-1210/26, 4-5=-1104/70, 5-6=-1101/85, 6-43=-1114/83,
43-44=-1114/83, 7-44=-1114/83, 7-8=-1411/60, 8-9=-1148/18, 9-10=0/354,
10-11=0/587
BOT CHORD 20-21=-3/346, 19-20=0/444, 18-19=0/444, 17-18=0/878, 16-17=0/1059,
15-16=0/1081, 14-15=0/1069, 13-14=-316/28, 12-13=-316/28
WEBS 3-20=-1272/50, 3-18=0/803, 5-18=-386/13, 5-17=0/802, 17-22=-469/48,
6-22=-468/48, 15-23=0/348, 7-23=0/350, 8-14=-761/51, 9-14=0/1580,
9-12=-1513/3, 2-21=-601/26, 10-12=-555/0

- 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=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
 - 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 4x4 MT20 unless otherwise indicated.
 - Gable studs spaced at 2-0-0 oc.

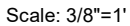
Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedom Const\Gina McKinney
28602	TSGE1	GABLE	1	1	Job Reference (optional)

- NOTES-**
- 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" between the bottom chord and any other members, with BCDL = 10.0psf.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 21 except (jt=lb) 11=656.
 - 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

C&R Building Supply, Autryville NC 8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:27 2025 Page 1
ID:43FmfUEpnBwxW36Q?RCfByzursR-Lp8y7Er7wh5erHhoT9vLuu_DEtXeuUh?XubKtZUjw6



LUMBER- TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 OTHERS 2x4 SP No.3	BRACING- TOP CHORD BOT CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing. MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.
--	---	--

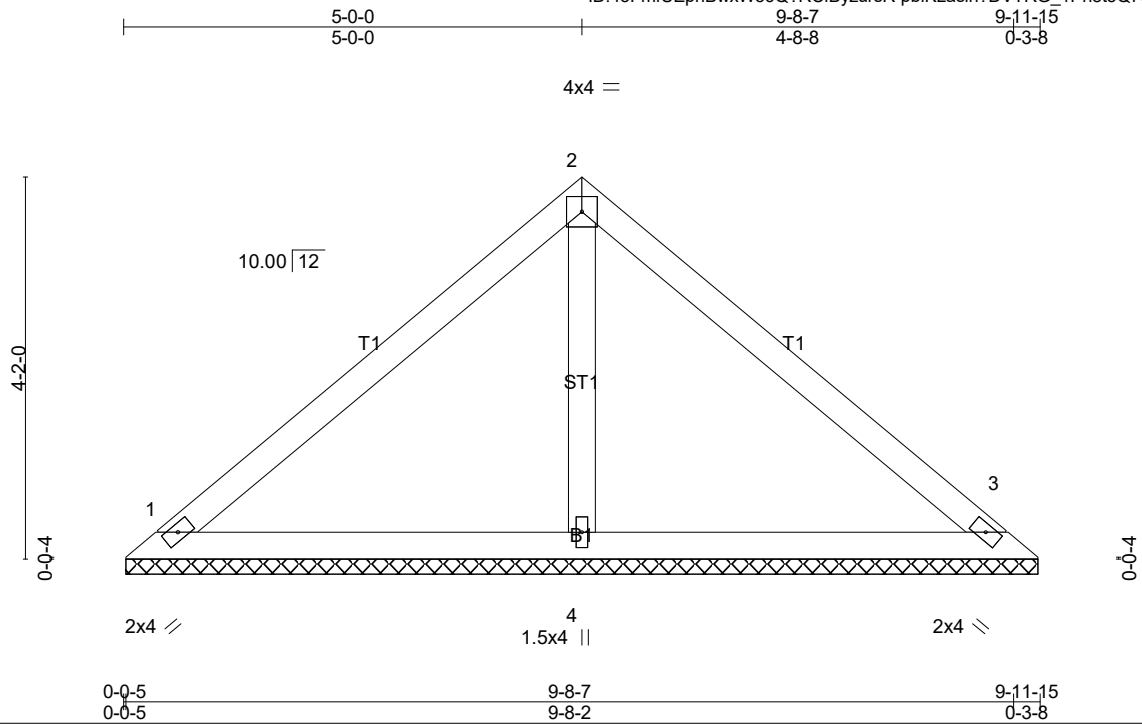
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

LOAD CASE(S) Standard

Job 28602	Truss V2	Truss Type Valley	Qty 1	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:28 2025 Page 1
ID:43FmfUEpnBwxW36Q?RCfByzursR-pbiKLaslh?DVTRG_1Ph8t5Q70eBkNL_qEAe9sJzUjw5



Scale = 1:25.1

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.30	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 No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
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=195/9-11-5 (min. 0-1-8), 3=195/9-11-5 (min. 0-1-8), 4=346/9-11-5 (min. 0-1-8)
Max Horz 1=67(LC 7)
Max Uplift 1=-9(LC 8), 3=-9(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=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 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 28602	Truss V3	Truss Type Valley	Qty 1	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

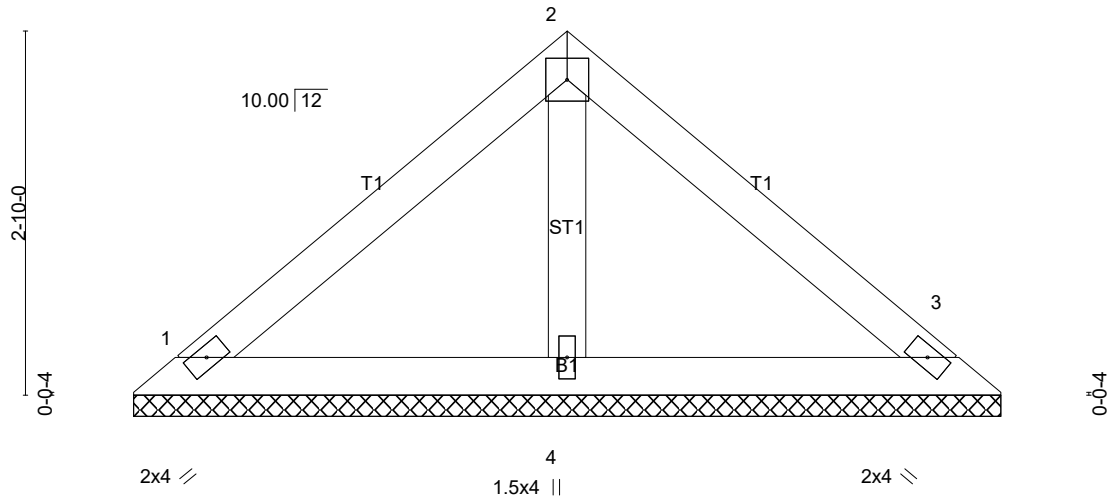
C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:28 2025 Page 1
ID:43FmfUEpnBwxW36Q?RCfByzursR-pbiKLash?DVTRG_1Ph8t5Q96eDeNMbqEAe9sJzUjw5

3-4-12	6-6-1	6-9-9
3-4-12	3-1-4	0-3-8

4x4 =

Scale = 1:17.9



0-0-5	6-6-1	6-9-9
0-0-5	6-5-12	0-3-8

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	2-0-0	TC 0.17	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 No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
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=137/6-8-15 (min. 0-1-8), 3=137/6-8-15 (min. 0-1-8), 4=204/6-8-15 (min. 0-1-8)
Max Horz 1=44(LC 7)
Max Uplift 1=11(LC 8), 3=11(LC 8)

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

NOTES-

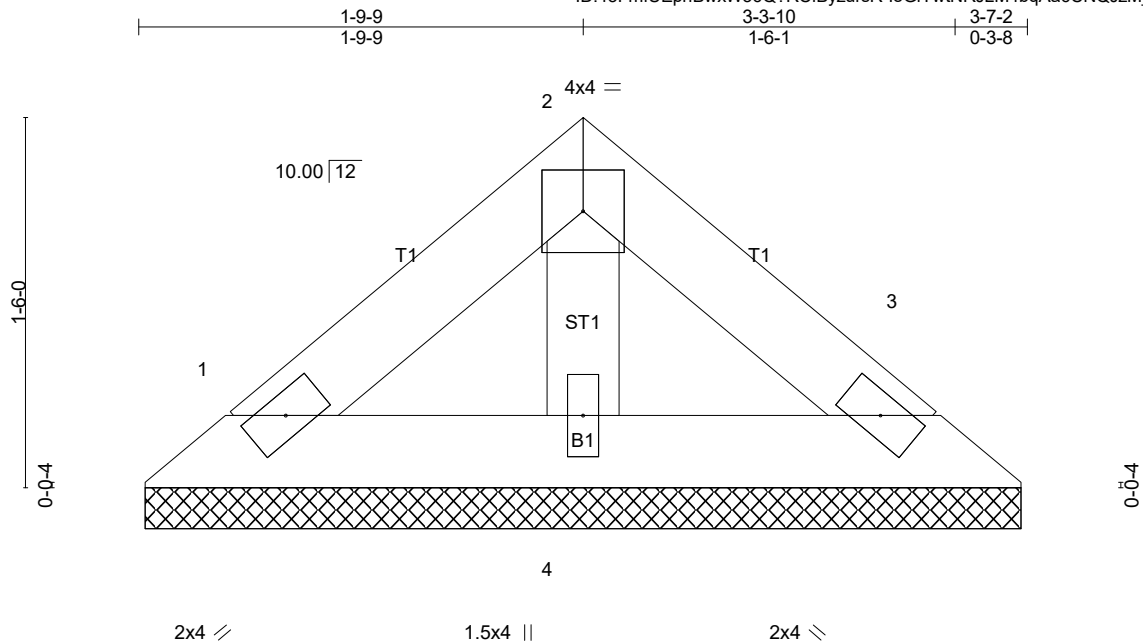
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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 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 28602	Truss V4	Truss Type Valley	Qty 1	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:29 2025 Page 1
ID:43FmfUEpnBwxW36Q?RCfByzursR-loGiYwtNRJLM4bqAa6CNQJzM_2a_6p6_TqNiOmzUjw4



Scale = 1:9.3

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	2-0-0	TC 0.03	Vert(LL)	n/a	-	n/a	999	MT20	244/190
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						Weight: 12 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-7-2 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=64/3-6-9 (min. 0-1-8), 3=64/3-6-9 (min. 0-1-8), 4=95/3-6-9 (min. 0-1-8)
Max Horz 1=-20(LC 6)
Max Uplift 1=-5(LC 8), 3=-5(LC 8)

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

NOTES-

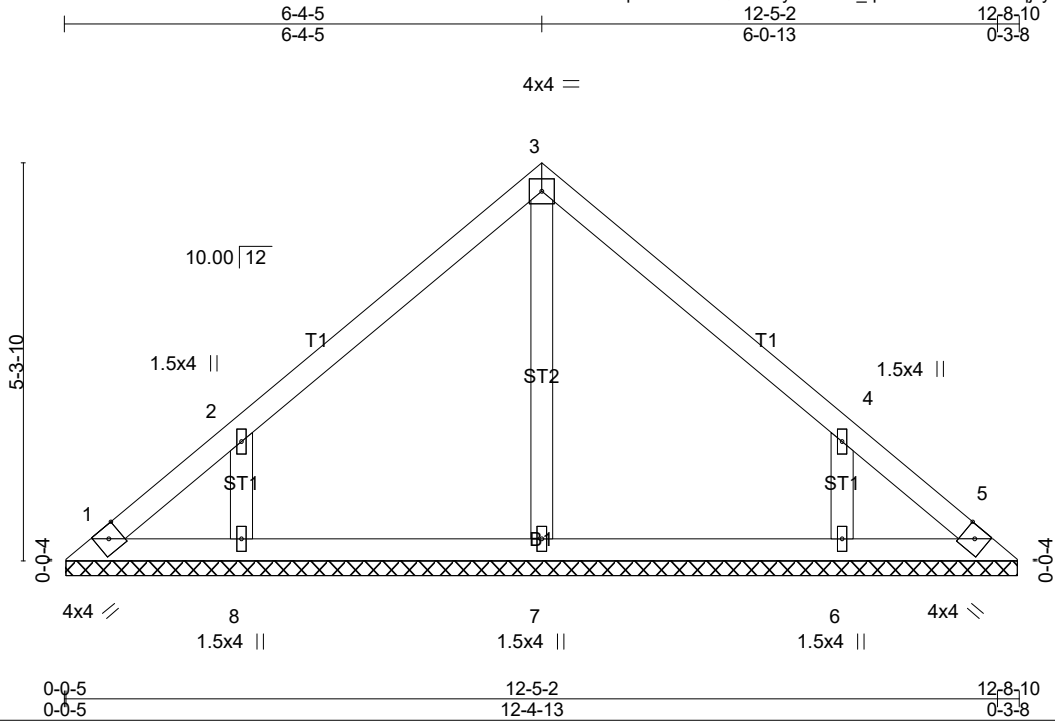
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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 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 28602	Truss V5	Truss Type Valley	Qty 1	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:30 2025 Page 1
ID:43FmfUEpnBwxW36Q?RCfByzursR-m_q4mGt?CcUDilPN8qjcyWWWURvdrFI7hU7GxCzUjw3



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 0.18	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 0.08	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 53 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
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 12-8-1.
(lb) - Max Horz 1=-87(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 1, 8, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except
8=304(LC 13), 6=304(LC 14)

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

NOTES-

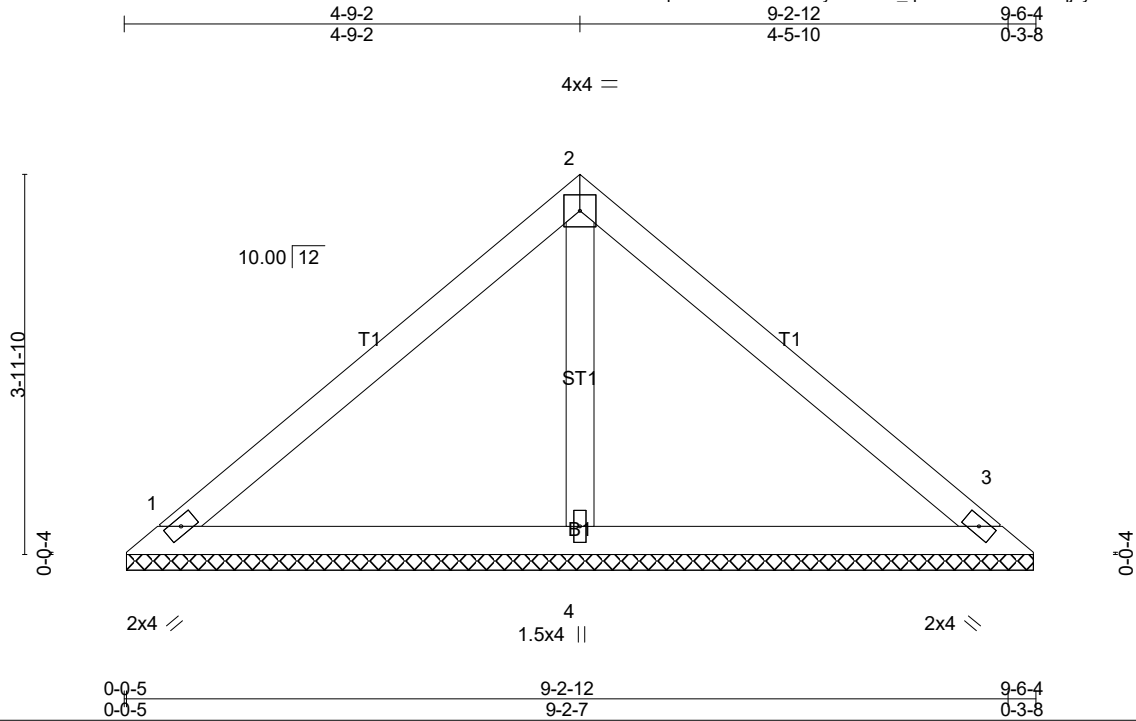
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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 100 lb uplift at joint(s) 1, 8, 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 28602	Truss V6	Truss Type Valley	Qty 1	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:30 2025 Page 1
ID:43FmfUEpnBwxW36Q?RCfByzursR-m_q4mGt?CcUDilPN8qjcyWWT1RtXrGb7hU7GxCzUjw3



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	n/a	MT20	244/190		
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	n/a				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							
								Weight: 36 lb		FT = 20%	

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
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=185/9-5-10 (min. 0-1-8), 3=185/9-5-10 (min. 0-1-8), 4=328/9-5-10 (min. 0-1-8)
Max Horz 1=64(LC 7)
Max Uplift 1=-8(LC 8), 3=-8(LC 8)

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

NOTES-

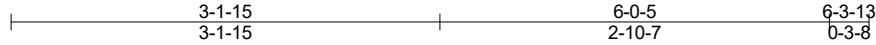
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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 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 28602	Truss V7	Truss Type Valley	Qty 1	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

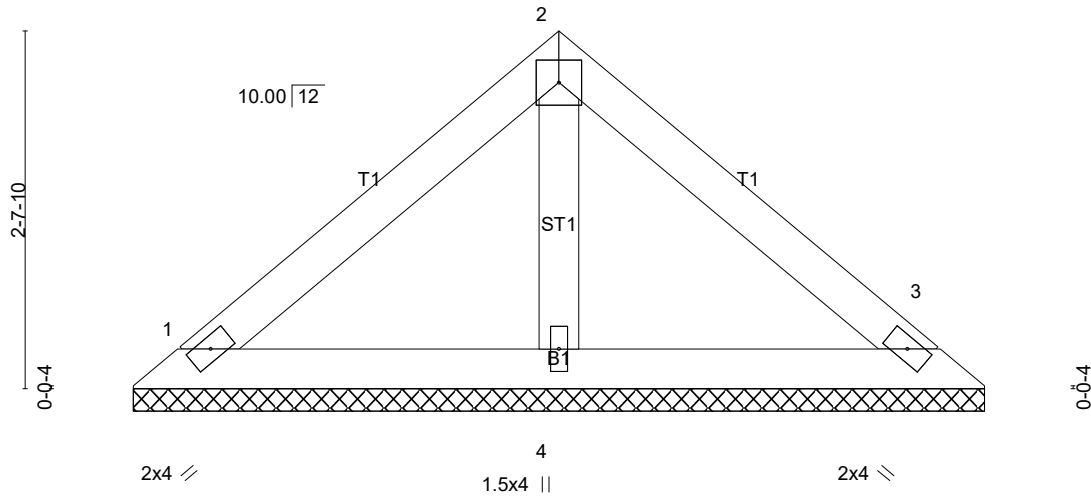
C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:31 2025 Page 1
ID:43FmfUEpnBwxW36Q?RCfByzursR-EAOTzoudzwc3Kv_ZIXErVk2gorFZajNHw8spTezUjw2



4x4 =

Scale = 1:17.0



LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	2-0-0	TC 0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.08	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: 23 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
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=127/6-3-4 (min. 0-1-8), 3=127/6-3-4 (min. 0-1-8), 4=188/6-3-4 (min. 0-1-8)
Max Horz 1=40(LC 7)
Max Uplift 1=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=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 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.

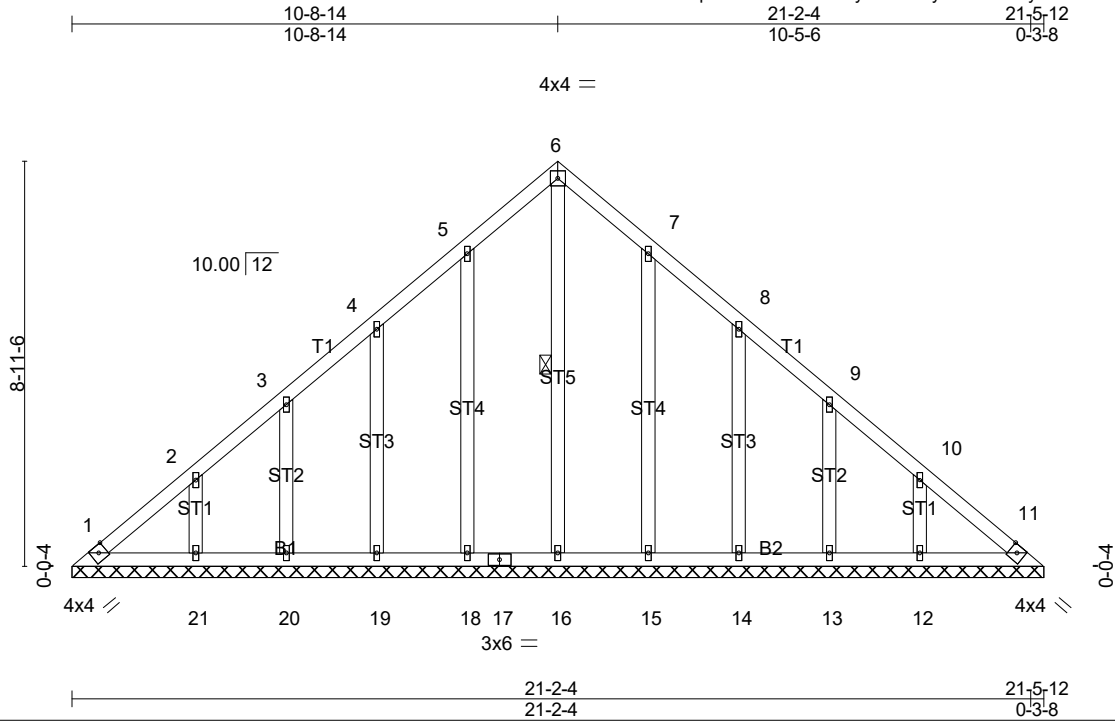
LOAD CASE(S) Standard

Job 28602	Truss V8	Truss Type GABLE	Qty 1	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:32 2025 Page 1

ID:43FmfUEpnBwxW36Q?RCfByzursR-iNyrBxvFkEkwy2ZIGFI42xbtjFbJJ98Q9ocM?5zUjw1



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.06	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.12	Vert(CT) n/a - n/a 999		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT) 0.00 11 n/a n/a		
Weight: 135 lb FT = 20%					

LUMBER-

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

BRACING-

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

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

REACTIONS.

All bearings 21-5-12.
(lb) - Max Horz 1=151(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 1, 18, 19, 20, 21, 15, 14, 13, 12
Max Grav All reactions 250 lb or less at joint(s) 1, 11, 16, 18, 19, 20, 21, 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=120mph (3-second gust) Vasd=95mph; 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, 18, 19, 20, 21, 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.

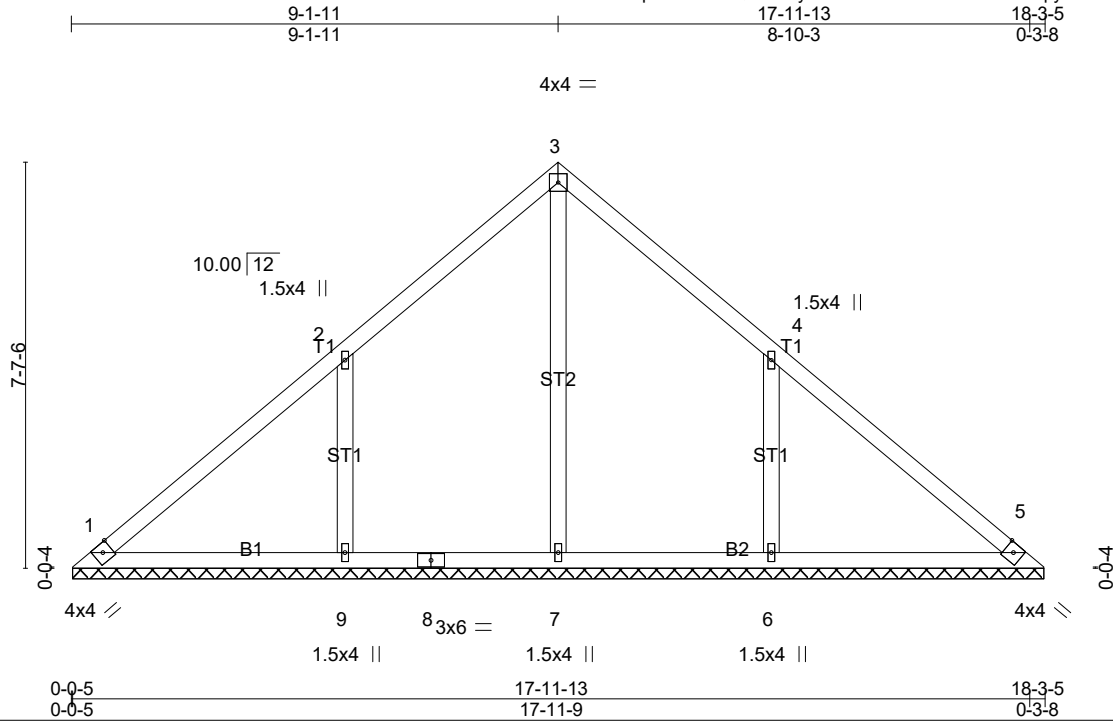
LOAD CASE(S) Standard

Job 28602	Truss V9	Truss Type Valley	Qty 1	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:33 2025 Page 1

ID:43FmfUEpnBwxW36Q?RCfByzursR-AZWDOHwuVXsnZC8xpyGJa98_2fvQ2a5aOSLwYXzUjw0



Scale = 1:43.2

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.28	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.18	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.14	Vert(CT) n/a - n/a 999		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT) 0.00 5 n/a n/a		
				Weight: 82 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6'-0" 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.

All bearings 18'-2"-12'.
(lb) - Max Horz 1=128(LC 7)
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 except 7=330(LC 13), 9=492(LC 13), 6=492(LC 14)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-323/128, 4-6=-323/128

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=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" 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, 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.

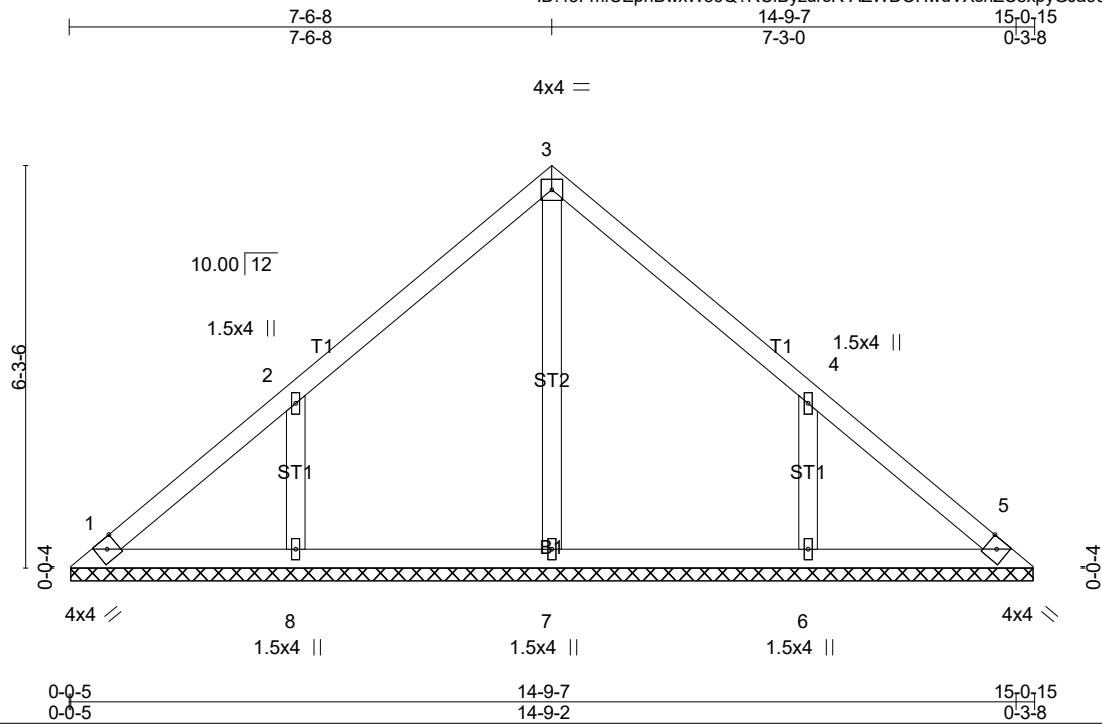
LOAD CASE(S) Standard

Job 28602	Truss V10	Truss Type Valley	Qty 1	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:33 2025 Page 1

ID:43FmfUEpnBwxW36Q?RCfByzursR-AZWDOHwuVXsnZC8xpyGJa980ZfwV2bbaOSLwYXzUjw0



Scale = 1:36.0

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.19	Vert(LL) n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.11	Vert(CT) n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.11	Horz(CT) 0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S					Weight: 66 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
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 15-0-5.
(lb) - Max Horz 1=105(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 8, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except
8=346(LC 13), 6=346(LC 14)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-263/104, 4-6=-263/104

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=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 100 lb uplift at joint(s) 8, 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.

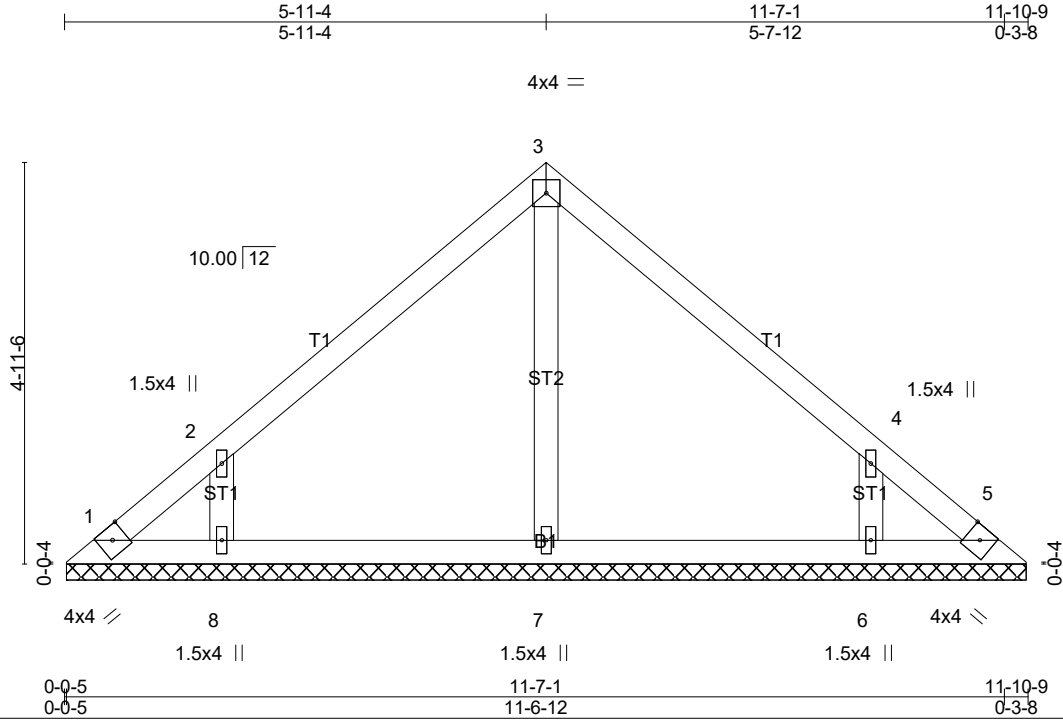
LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Freedom Const\Gina McKinney
28602	V11	Valley	1	1	Job Reference (optional)

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:34 2025 Page 1

ID:43FmfUEpnBwxW36Q?RCfByzursR-el3bcdxWGr_eBMj8NgnY7MgBJ3GYn2Sjc65T4zzUjw?



Scale = 1:28.4

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 0.19	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 0.07	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 49 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
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 11-9-15.

(lb) - Max Horz 1=-81(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=301(LC 13), 6=301(LC 14)

FORCES.

5. (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; 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" 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.

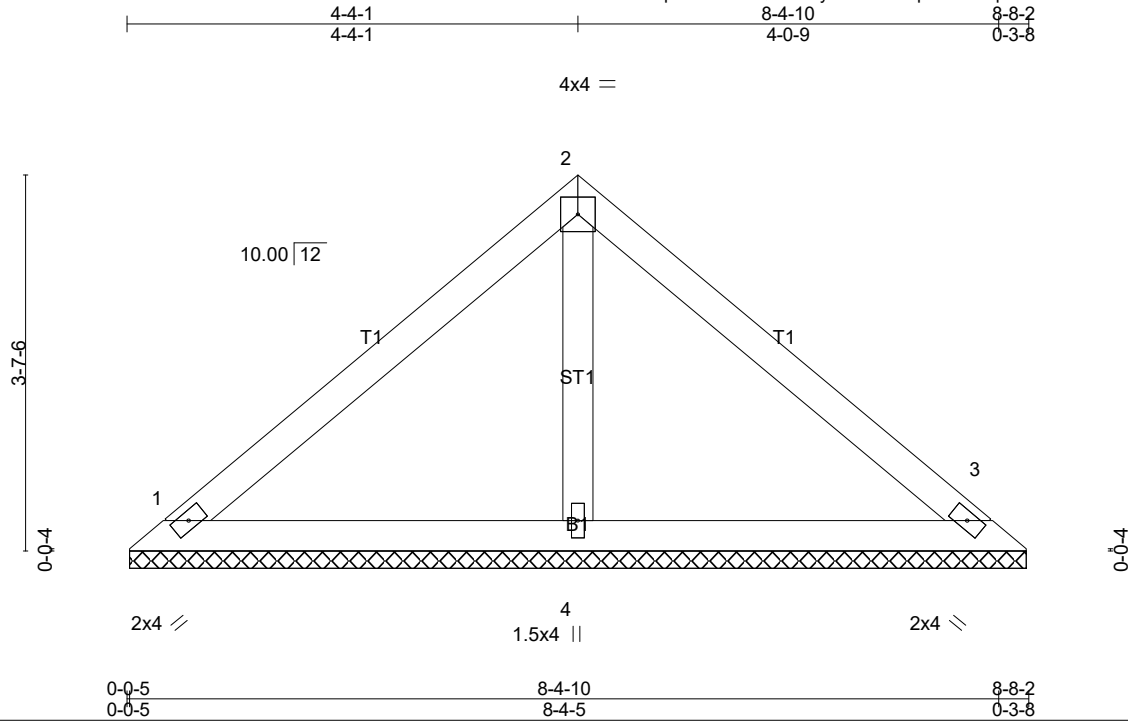
LOAD CASE(S) Standard

Job 28602	Truss V12	Truss Type Valley	Qty 1	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:35 2025 Page 1

ID:43FmfUEpnBwxW36Q?RCfByzursR-6xdzpzx8196VpWIKxNJnfaDKESbFWW3srmq0cQzUjw_



LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	2-0-0	TC 0.30	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 0.05	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 No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
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=181/8-7-9 (min. 0-1-8), 3=181/8-7-9 (min. 0-1-8), 4=268/8-7-9 (min. 0-1-8)
Max Horz 1=-58(LC 6)
Max Uplift 1=-15(LC 8), 3=-15(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=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 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.

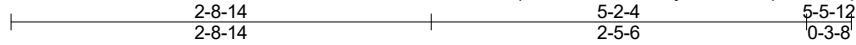
LOAD CASE(S) Standard

Job 28602	Truss V13	Truss Type Valley	Qty 1	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

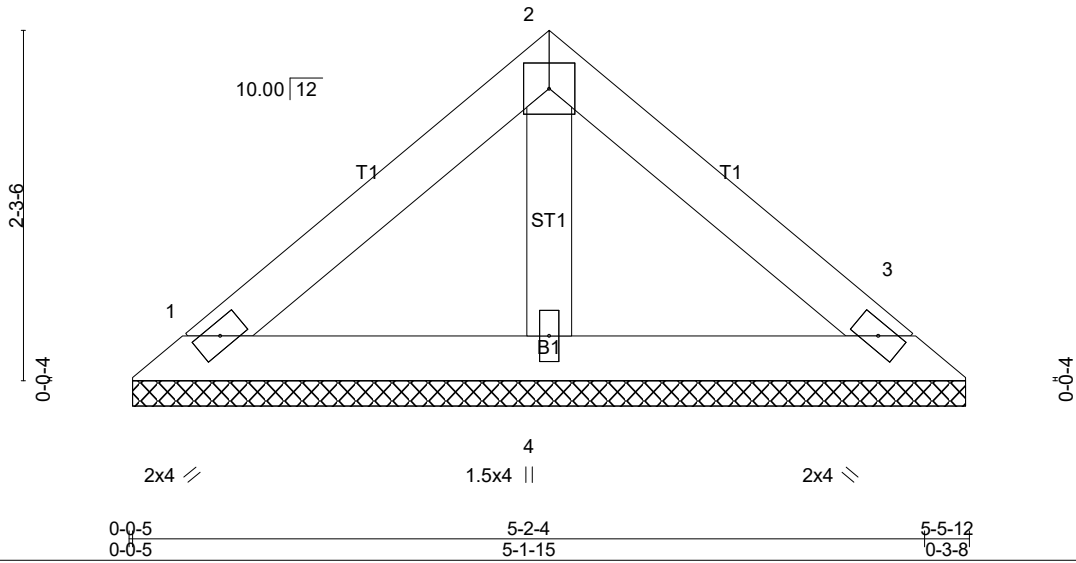
8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:35 2025 Page 1

ID:43FmfUEpnBwxW36Q?RCfByzursR-6xdzpzx8196VpWIKxNJnfaDNRSdrWWSSrmq0cQzUjw_



4x4 =

Scale = 1:15.0



LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	2-0-0	TC 0.10	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 No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-5-12 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=107/5-5-2 (min. 0-1-8), 3=107/5-5-2 (min. 0-1-8), 4=159/5-5-2 (min. 0-1-8)
Max Horz 1=-34(LC 6)
Max Uplift 1=-9(LC 8), 3=-9(LC 8)

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

NOTES-

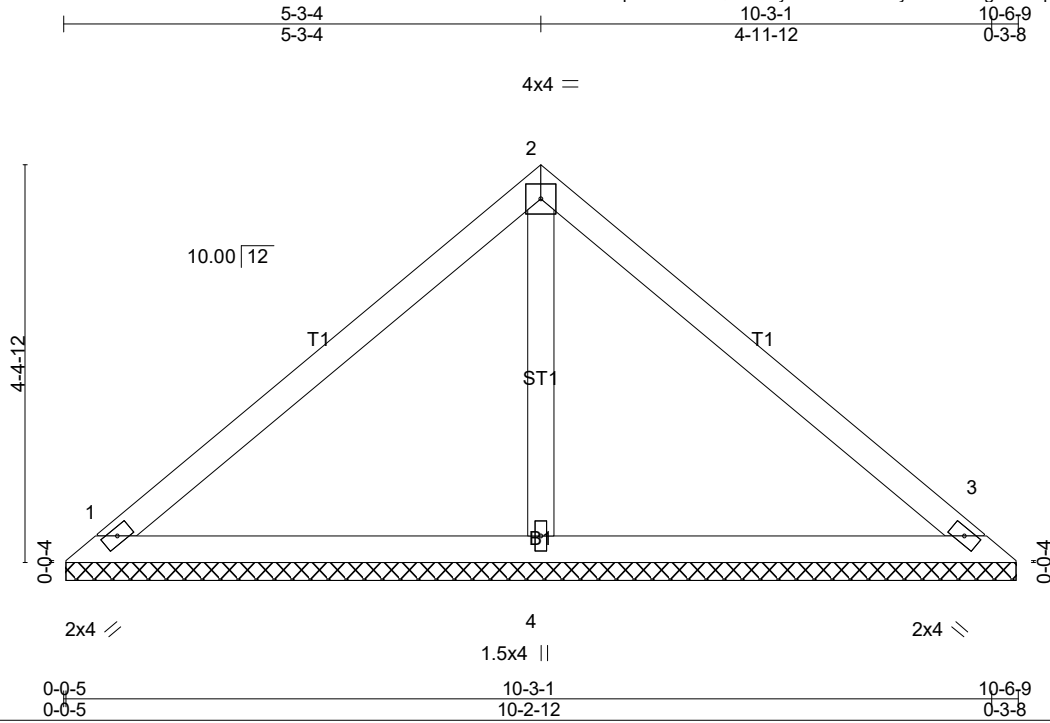
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; 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 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 28602	Truss V14	Truss Type Valley	Qty 1	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:36 2025 Page 1
ID:43FmfUEpnBwxW36Q?RCfByzursR-a8BL0JymoSEMqgtWV5q0CnIUNswCFyp04Qaa7szUjvz



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.34	Vert(LL) n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.24	Vert(CT) n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.08	Horz(CT) 0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S					Weight: 40 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
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=206/10-5-15 (min. 0-1-8), 3=206/10-5-15 (min. 0-1-8), 4=367/10-5-15 (min. 0-1-8)
Max Horz 1=-71(LC 6)
Max Uplift 1=-9(LC 8), 3=-9(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=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 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.

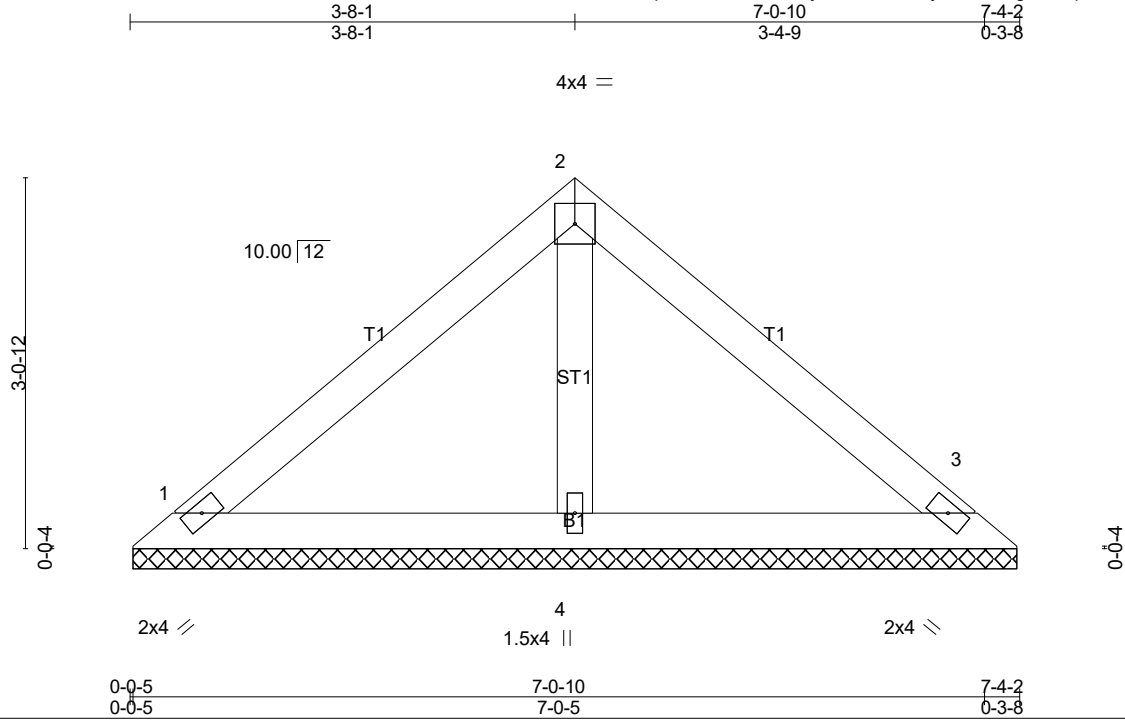
LOAD CASE(S) Standard

Job 28602	Truss V15	Truss Type Valley	Qty 1	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:36 2025 Page 1

ID:43FmfUEpnBwxW36Q?RCfByzursR-a8BL0JymoSEMqgtWV5q0CnlWYsyFFzW04Qaa7szUjvz



LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	2-0-0	TC 0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.11	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: 27 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
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=150/7-3-9 (min. 0-1-8), 3=150/7-3-9 (min. 0-1-8), 4=223/7-3-9 (min. 0-1-8)
Max Horz 1=-48(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=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 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.

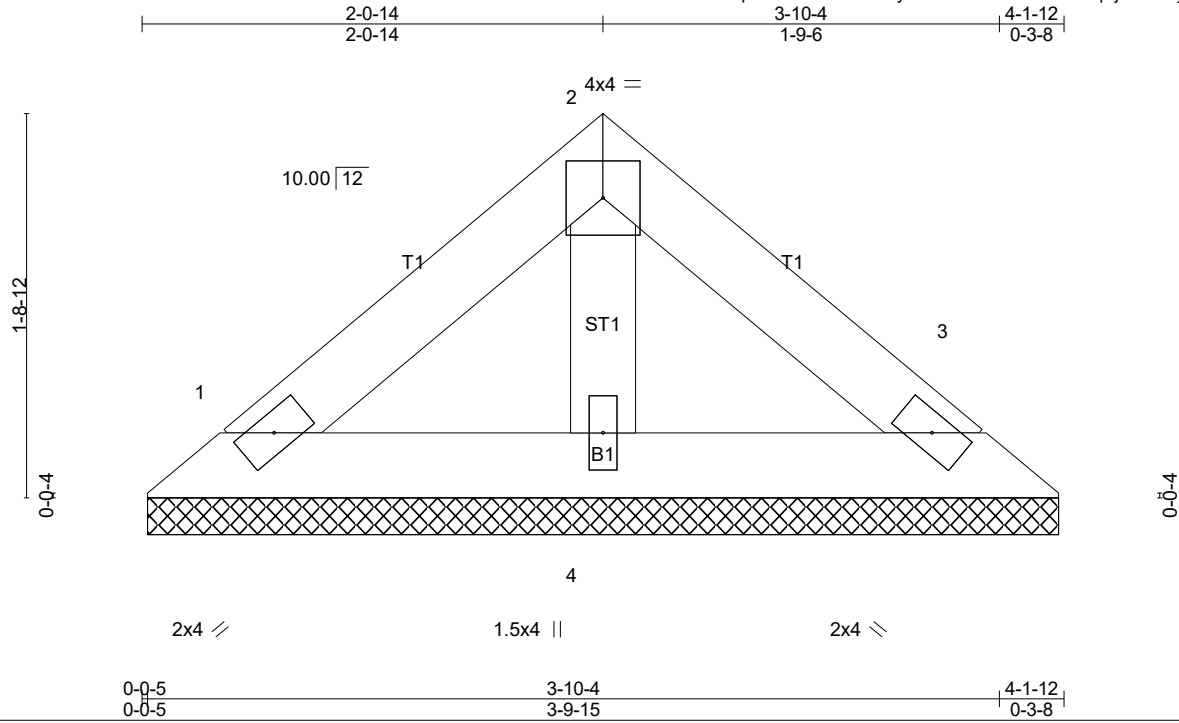
LOAD CASE(S) Standard

Job 28602	Truss V16	Truss Type Valley	Qty 1	Ply 1	Freedom Const\Gina McKinney
Job Reference (optional)					

C&R Building Supply, Autryville NC

8.430 s Jan 20 2021 MiTek Industries, Inc. Wed Apr 2 15:37:37 2025 Page 1

ID:43FmfUEpnBwxW36Q?RCfByzursR-3KikEfzOZmMD2qSj2oLFI?IjGJk_Q19I4J7glzUjvy



Scale = 1:10.4

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/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 0.03	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						Weight: 14 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-1-12 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=77/4-1-2 (min. 0-1-8), 3=77/4-1-2 (min. 0-1-8), 4=114/4-1-2 (min. 0-1-8)

Max Horz 1=-24(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-

- 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=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 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