

Job <b>28567</b>	Truss <b>G1</b>	Truss Type <b>GABLE</b>	Qty <b>1</b>	Ply <b>1</b>	Freedom Const\Isreal Benavidez
Job Reference (optional)					

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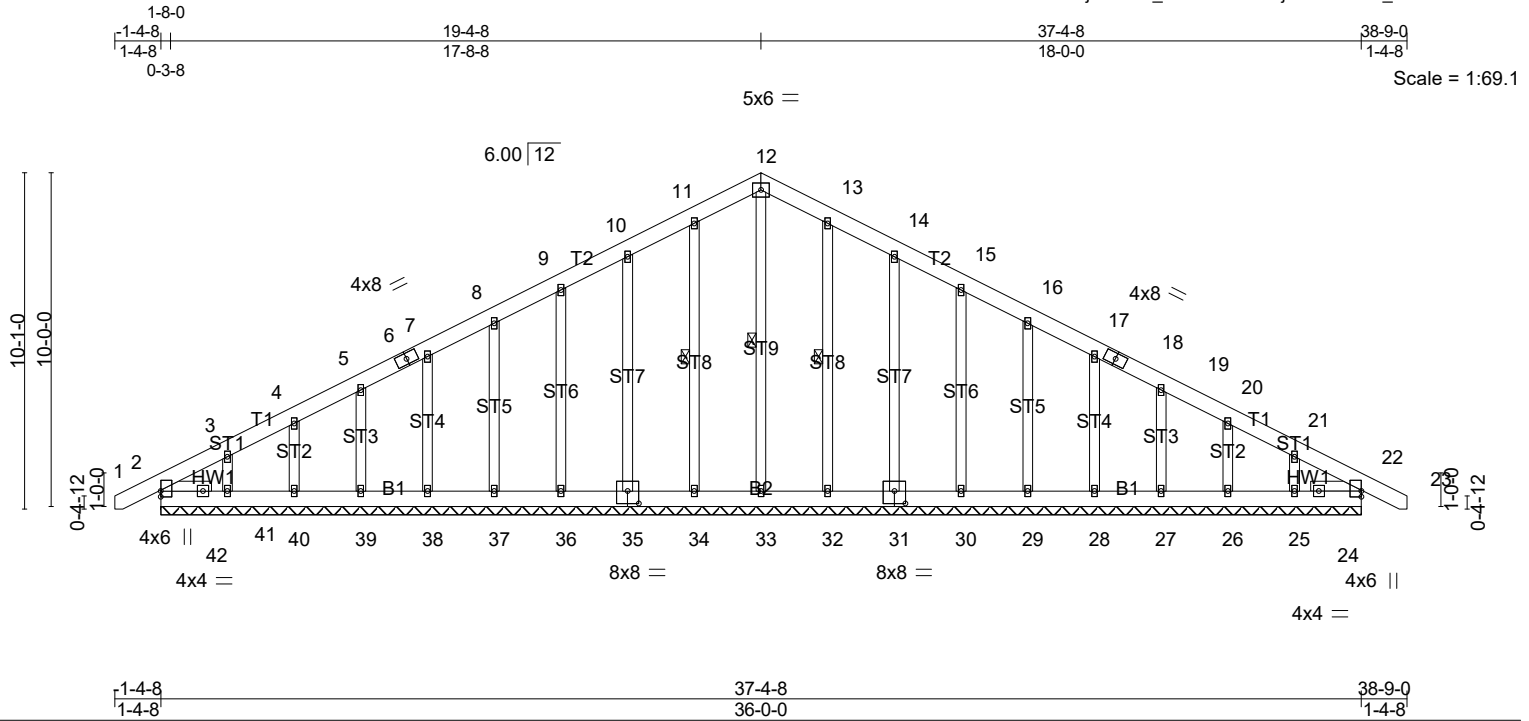


Plate Offsets (X,Y)-- [31:0-4-0,0-4-8], [35:0-4-0,0-4-8]

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 0.03	Vert(LL)	-0.00	22	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	23	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.13	Horz(CT)	0.00	22	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 314 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 OTHERS 2x4 SP No.3  
 SLIDER Left 2x4 SP No.3 -D 1-6-4, Right 2x4 SP No.3 -D 1-6-4

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6'-0" oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10'-0" oc bracing.  
 WEBS 1 Row at midpt 12-33, 11-34, 13-32

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

**REACTIONS.**

All bearings 36'-0-0.  
 (lb) - Max Horz 2=-136(LC 6)  
 Max Uplift All uplift 100 lb or less at joint(s) 35, 36, 37, 38, 39, 40, 41, 31, 30, 29, 28, 27, 26, 25  
 Max Grav All reactions 250 lb or less at joint(s) 2, 22, 33, 34, 35, 36, 37, 38, 39, 40, 41, 32, 31, 30, 29, 28, 27, 26, 25

**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 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2'-0" oc.
- This truss has been designed for a 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) 35, 36, 37, 38, 39, 40, 41, 31, 30, 29, 28, 27, 26, 25.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedom Const\Isreal Benavidez
28567	G1	GABLE	1	1	Job Reference (optional)

**LOAD CASE(S)** Standard

Job	Truss	Truss Type	Qty	Ply	Freedom Const\Isreal Benavidez
28567	G2	GABLE	1	1	Job Reference (optional)

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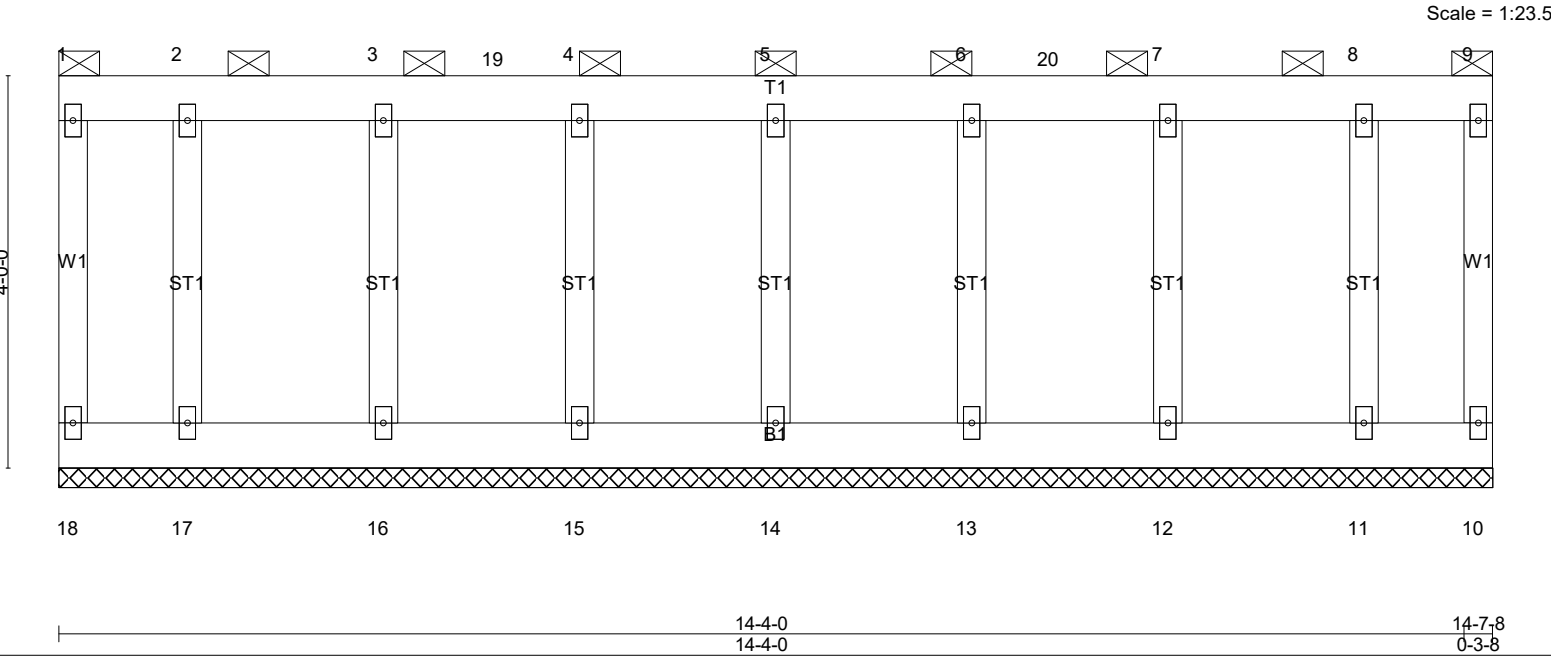
14-4-0

14-7-8

0-3-8

14-0-8

0-3-8



		14-4-0		14-7-8	
		14-4-0		0-3-8	
<b>LOADING</b> (psf)	<b>SPACING-</b>		<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.18	in (loc) l/defl L/d	MT20 244/190	
TCDL 10.0	Lumber DOL 1.15	BC 0.03	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.04	Vert(CT) n/a - n/a 999		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Horz(CT) -0.00 10 n/a n/a		
				Weight: 110 lb FT = 20%	

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-9, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 14-7-8.  
 (lb) - Max Horz 18=-92(LC 4)  
 Max Uplift All uplift 100 lb or less at joint(s) 18, 10, 14, 15, 16, 13, 12 except 17=-103(LC 5), 11=-102(LC 4)  
 Max Grav All reactions 250 lb or less at joint(s) 18, 10 except 14=356(LC 1), 15=355(LC 1), 16=362(LC 1), 17=355(LC 27), 13=355(LC 1), 12=362(LC 1), 11=355(LC 28)

**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=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
  - 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) Provide adequate drainage to prevent water ponding.
  - 4) All plates are 2x4 MT20 unless otherwise indicated.
  - 5) Gable requires continuous bottom chord bearing.
  - 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.
  - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18, 10, 14, 15, 16, 13, 12 except (jt=lb) 17=103, 11=102.
  - 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.

Job	Truss	Truss Type	Qty	Ply	Freedom Const\Isreal Benavidez
28567	G2	GABLE	1	1	Job Reference (optional)

**NOTES-**

13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 196 lb down and 37 lb up at 1-6-12, 196 lb down and 37 lb up at 3-6-12, 196 lb down and 37 lb up at 5-6-12, 196 lb down and 37 lb up at 7-6-12, 196 lb down and 37 lb up at 9-6-12, and 196 lb down and 37 lb up at 11-6-12, and 197 lb down and 36 lb up at 13-6-12 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: 1-9=-60, 10-18=-20

Concentrated Loads (lb)

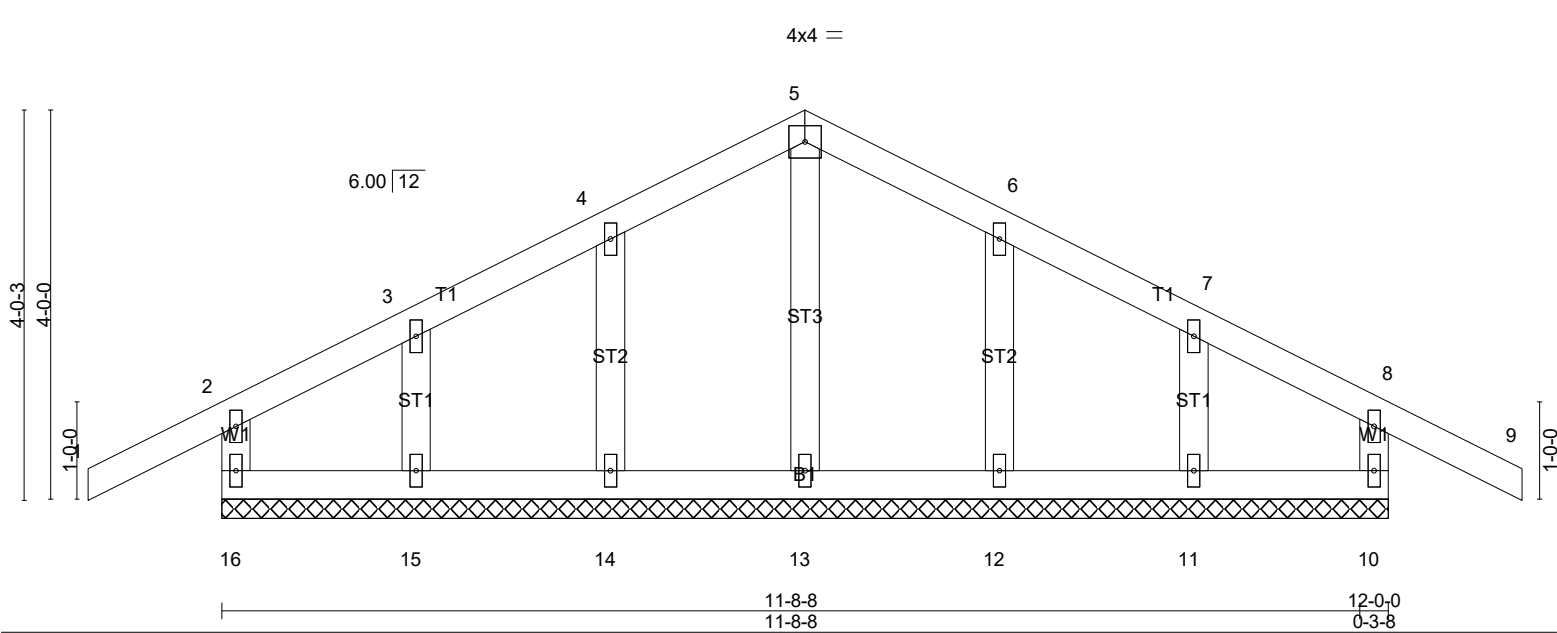
Vert: 14=-196 15=-196 16=-196 17=-196 13=-196 12=-196 11=-197

Job	Truss	Truss Type	Qty	Ply	Freedom Const\Isreal Benavidez
28567	G3	Common Supported Gable	1	1	Job Reference (optional)

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Scale = 1:23.7



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.16	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.03	Vert(LL) -0.01 9 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.04	Vert(CT) -0.01 9 n/r 120		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	Horz(CT) 0.00 10 n/a n/a		
				Weight: 61 lb	FT = 20%

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

**REACTIONS.** All bearings 12-0-0.  
(lb) - Max Horz 16=-72(LC 6)  
Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 15, 12, 11  
Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

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

- NOTES-**  
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=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60  
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.  
4) All plates are 1.5x4 MT20 unless otherwise indicated.  
5) Gable requires continuous bottom chord bearing.  
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.  
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10, 14, 15, 12, 11.  
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job <b>28567</b>	Truss <b>G4</b>	Truss Type <b>GABLE</b>	Qty <b>1</b>	Ply <b>1</b>	Freedom Const\Isreal Benavidez Job Reference (optional)
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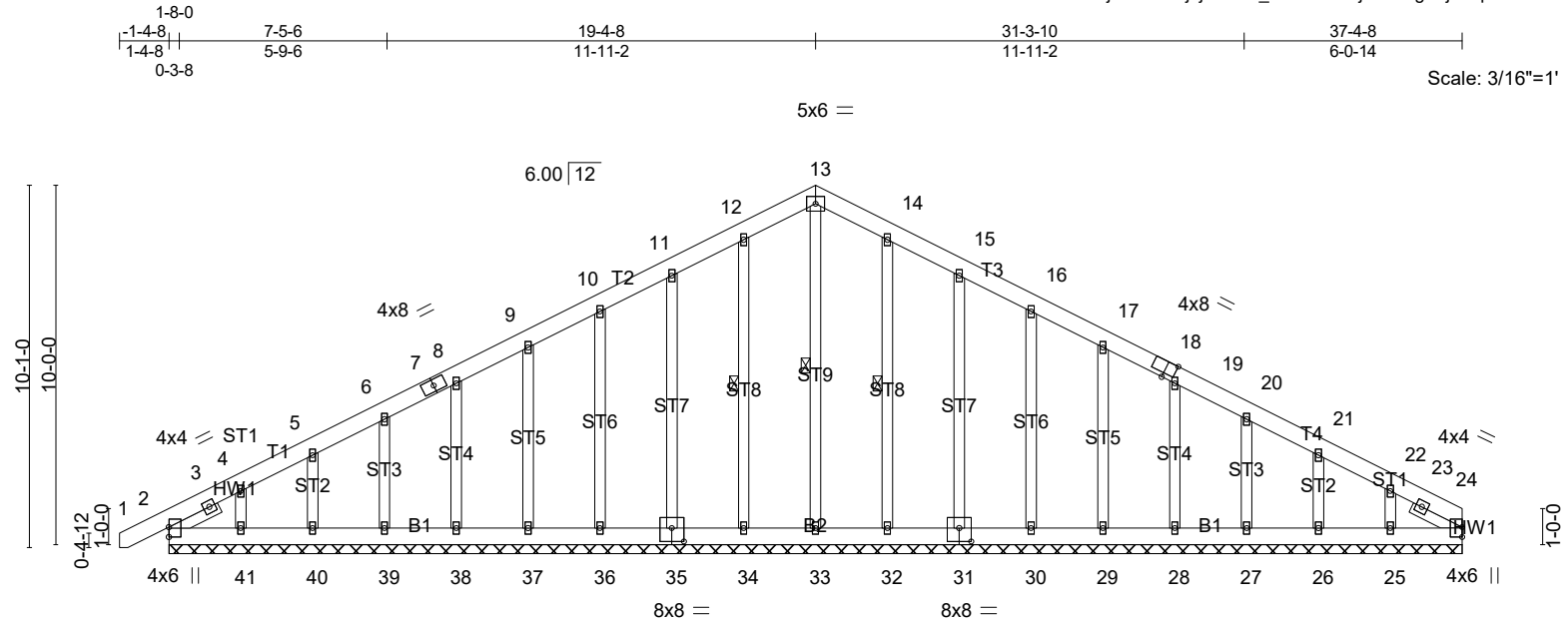


Plate Offsets (X,Y)-- [18:0-3-8,Edge], [31:0-4-0,0-4-8], [35:0-4-0,0-4-8]					
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.03	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.02	Vert(LL) -0.00 1 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.13	Vert(CT) -0.00 1 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 24 n/a n/a		
	Code IRC2018/TPI2014			Weight: 310 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 OTHERS 2x4 SP No.3  
 SLIDER Left 2x4 SP No.3 -D 1-6-4, Right 2x4 SP No.3 -D 1-6-4

#### 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 13-33, 12-34, 14-32

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

#### REACTIONS.

All bearings 36-0-0.  
 (lb) - Max Horz 2=136(LC 7)  
 Max Uplift All uplift 100 lb or less at joint(s) 35, 36, 37, 38, 39, 40, 41, 31, 30, 29, 28, 27, 26, 25  
 Max Grav All reactions 250 lb or less at joint(s) 2, 24, 33, 34, 35, 36, 37, 38, 39, 40, 41, 32, 31, 30, 29, 28, 27, 26, 25

**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 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 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) 35, 36, 37, 38, 39, 40, 41, 31, 30, 29, 28, 27, 26, 25.
- 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.

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Job	Truss	Truss Type	Qty	Ply	Freedom Const\Isreal Benavidez
28567	G4	GABLE	1	1	Job Reference (optional)

**LOAD CASE(S)** Standard

Job <b>28567</b>	Truss <b>GR1</b>	Truss Type <b>GABLE</b>	Qty <b>1</b>	Ply <b>1</b>	Freedom Const\Isreal Benavidez
Job Reference (optional)					

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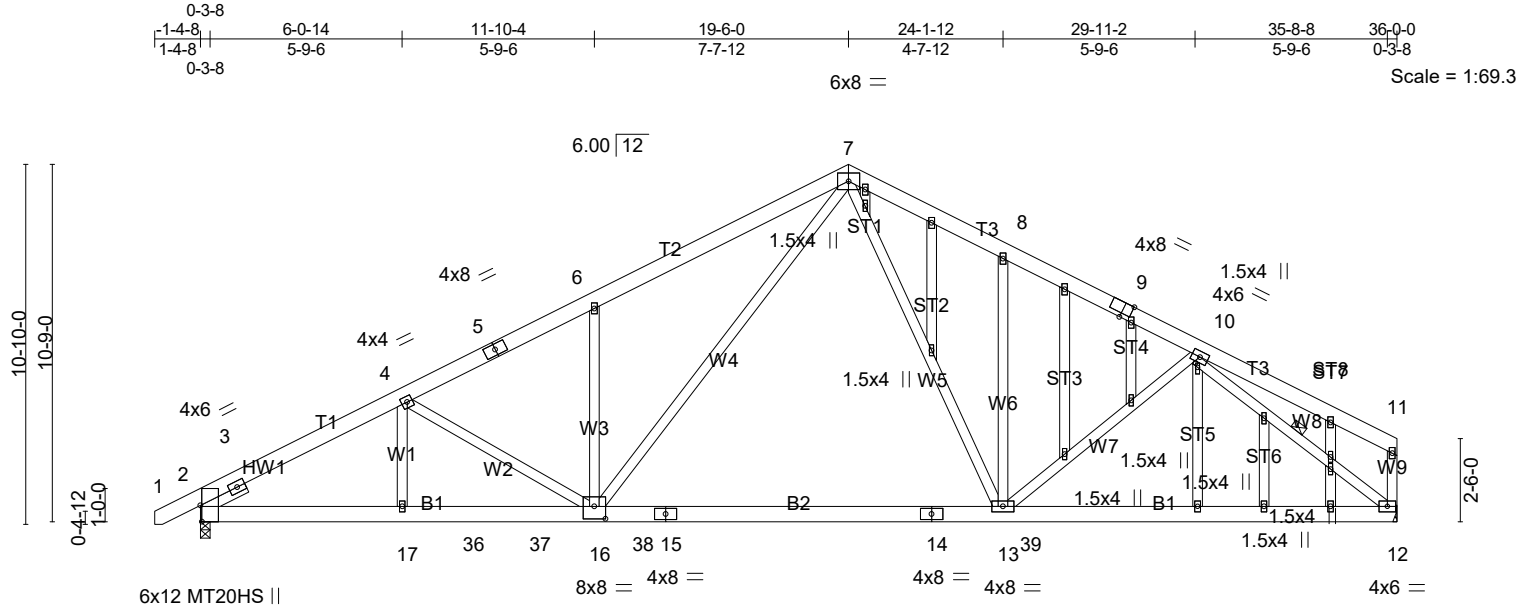


Plate Offsets (X,Y)--	[2:0-5-14,Edge], [9:0-3-5,Edge], [10:0-1-9,0-0-12], [16:0-4-0,0-4-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.77	Vert(LL)	-0.27 13-16	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.65	Vert(CT)	-0.40 13-16	>999	240	MT20HS	187/143
BCLL 0.0 *	Lumber DOL 1.15	WB 0.85	Horz(CT)	0.06 12	n/a	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS	Wind(LL)	0.14 16-17	>999	240		
	Code IRC2018/TPI2014						Weight: 311 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 2-10-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP 2400F 2.0E *Except*	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
B2: 2x6 SP No.1	WEBS 1 Row at midpt 10-12
WEBS 2x4 SP No.3	
OTHERS 2x4 SP No.3	
SLIDER Left 2x4 SP No.3 -D 1-6-0	

**REACTIONS.** (lb/size) 2=2338/0-3-8 (min. 0-1-15), 12=1713/Mechanical  
Max Horz 2=177(LC 7)  
Max Uplift2=-134(LC 8), 12=-14(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1713/30, 3-4=-3981/258, 4-5=-3291/186, 5-6=-3241/205, 6-7=-3373/300, 7-8=-2200/156, 8-9=-2154/96, 9-10=-2225/68  
BOT CHORD 2-17=-171/3430, 17-36=-171/3430, 36-37=-171/3430, 16-37=-171/3430, 16-38=0/1709, 15-38=0/1709, 14-15=0/1709, 14-39=0/1709, 13-39=0/1709, 12-13=-4/1717  
WEBS 4-16=-639/117, 6-16=-494/121, 7-16=-203/2062, 7-13=0/711, 8-13=-315/78, 10-13=0/342, 10-12=-2171/46, 4-17=-180/535

- 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=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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) All plates are MT20 plates unless otherwise indicated.
  - 5) All plates are 2x4 MT20 unless otherwise indicated.
  - 6) Gable studs spaced at 2-0-0 oc.
  - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
  - 9) Refer to girder(s) for truss to truss connections.

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Job	Truss	Truss Type	Qty	Ply	Freedom Const\Isreal Benavidez
28567	GR1	GABLE	1	1	Job Reference (optional)

- NOTES-**
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12 except (jt=lb) 2=134.
  - 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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - 13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 553 lb down and 96 lb up at 8-0-12, and 553 lb down and 106 lb up at 10-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - 14) 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: 1-7=-60, 7-11=-60, 12-32=-20
    - Concentrated Loads (lb)
      - Vert: 36=-553(B) 37=-553(B)

Job 28567	Truss GR2	Truss Type COMMON GIRDER	Qty 1	Ply 2	Freedom Const\Isreal Benavidez
Job Reference (optional)					

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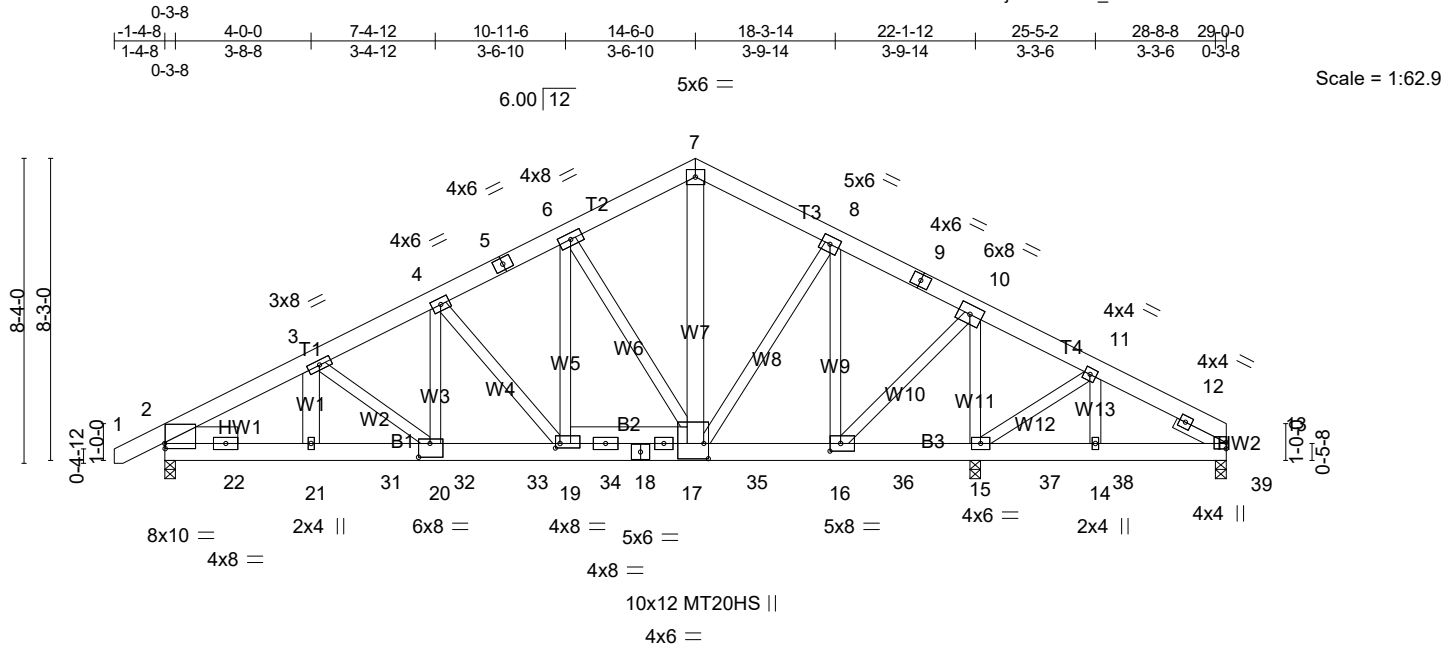


Plate Offsets (X,Y)--	[2:0-0,2,0-1-11], [16:0-3-8,0-2-8], [17:0-5-0,0-1-8], [19:0-1-8,0-1-8], [20:0-3-12,0-4-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.27	Vert(LL)	-0.11 19-20	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.52	Vert(CT)	-0.21 19-20	>999	240	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr NO	WB 0.87	Horz(CT)	0.05 15	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS	Wind(LL)	0.07 19-20	>999	240	Weight: 517 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except*	
W1,W7: 2x6 SP No.1, W10: 2x4 SP No.2	
SLIDER Left 2x6 SP No.1 -D 2-0-0, Right 2x4 SP No.3 -D 1-6-0	

**REACTIONS.** (lb/size) 2=7892/0-3-8 (min. 0-3-4), 15=7832/0-3-8 (min. 0-3-4), 13=401/0-3-8 (min. 0-1-8)  
Max Horz 2=55(LC 7)  
Max Uplift 2=-257(LC 8)  
Max Grav 2=7892(LC 1), 15=7832(LC 1), 13=410(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-12019/386, 3-4=-11339/384, 4-5=-9118/332, 5-6=-9093/336,  
6-7=-6962/277, 7-8=-6751/270, 8-9=-4348/104, 9-10=-4395/95, 10-11=0/488  
BOT CHORD 2-22=-139/4425, 21-22=-322/10557, 21-31=-322/10557, 20-31=-322/10557,  
20-32=-310/10195, 32-33=-310/10195, 19-33=-310/10195, 19-34=-241/8031,  
18-34=-244/8189, 17-18=-246/8133, 17-35=-35/3875, 16-35=-42/3852,  
16-36=-414/0, 15-36=-414/0  
WEBS 3-21=-31/1002, 3-20=-459/15, 4-20=-76/3179, 4-19=-3201/100,  
6-19=-135/4224, 7-17=-220/5857, 8-17=-222/3792, 8-16=-4033/269,  
10-16=-48/6106, 10-15=-6797/81, 11-15=-587/0, 11-14=0/427,  
6-17=-3805/144

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-3-0 oc.  
Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 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

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedom Const\Isreal Benavidez
28567	GR2	COMMON GIRDER	1	2	Job Reference (optional)

- NOTES-**
- 5) All plates are MT20 plates unless otherwise indicated.
  - 6) The Fabrication Tolerance at joint 17 = 12%
  - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=257.
  - 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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1425 lb down and 49 lb up at 2-0-12, 1425 lb down and 49 lb up at 4-0-12, 1425 lb down and 49 lb up at 6-0-12, 1425 lb down and 49 lb up at 8-0-12, 1425 lb down and 49 lb up at 10-0-12, 1425 lb down and 49 lb up at 12-0-12, 1425 lb down and 49 lb up at 14-0-12, 2710 lb down and 316 lb up at 14-3-12, 380 lb down at 16-0-12, 380 lb down at 18-0-12, 380 lb down at 20-0-12, 367 lb down at 24-0-12, and 367 lb down at 26-0-12, and 367 lb down at 28-0-12 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: 1-7=-30, 7-13=-30, 23-27=-10
    - Concentrated Loads (lb)
      - Vert: 21=-1425(F) 17=-4135(F) 16=-380(F) 22=-1425(F) 31=-1425(F) 32=-1425(F) 33=-1425(F) 34=-1425(F) 35=-380(F) 36=-380(F) 37=-367(F) 38=-367(F) 39=-367(F)

Job <b>28567</b>	Truss <b>GR3</b>	Truss Type <b>COMMON</b>	Qty <b>1</b>	Ply <b>1</b>	Freedom Const\Isreal Benavidez
Job Reference (optional)					

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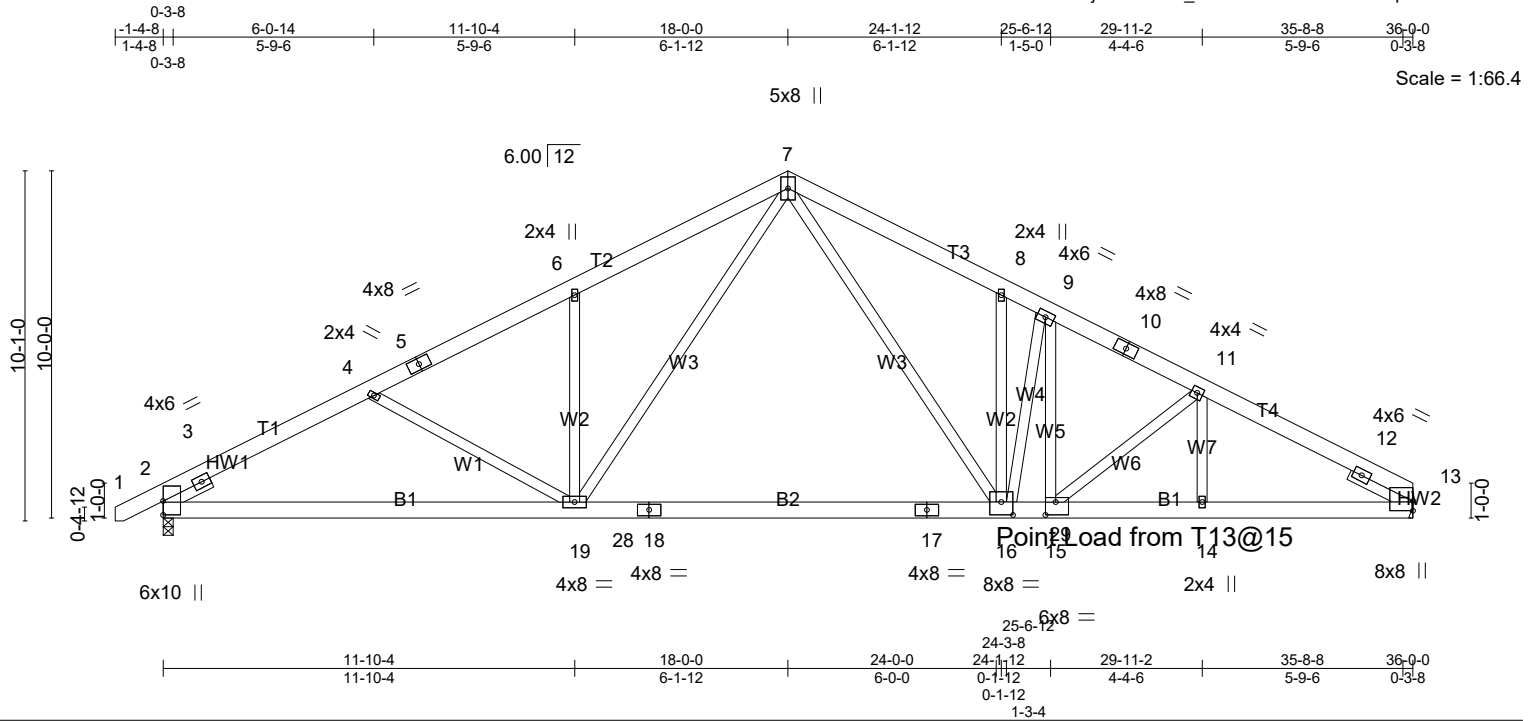


Plate Offsets (X,Y)-- [2:0-4-14,0-0-1], [15:0-3-8,0-4-8], [16:0-4-0,0-4-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.79	Vert(LL)	-0.32 16-19	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.63	Vert(CT)	-0.53 16-19	>816	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.99	Horz(CT)	0.09 13	n/a	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS	Wind(LL)	0.13 14-15	>999	240		
	Code IRC2018/TPI2014						Weight: 276 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP 2400F 2.0E \*Except\*  
 B2: 2x6 SP No.1  
 WEBS 2x4 SP No.3 \*Except\*  
 W3: 2x4 SP No.2  
 SLIDER Left 2x4 SP No.3 -D 1-6-0, Right 2x4 SP No.3 -D 2-0-0

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-6-14 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) 2=2041/0-3-8 (min. 0-1-11), 13=2723/Mechanical  
 Max Horz 2=135(LC 7)  
 Max Uplift 2=-104(LC 8), 13=-234(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1366/0, 3-4=-3407/212, 4-5=-3269/188, 5-6=-3242/212, 6-7=-3313/294,  
 7-8=-4441/531, 8-9=-4427/461, 9-10=-4677/538, 10-11=-4716/525,  
 11-12=-4720/471, 12-13=-2050/156  
 BOT CHORD 2-19=-132/2925, 19-28=-92/2414, 18-28=-92/2414, 17-18=-92/2414,  
 17-29=-92/2414, 16-29=-92/2414, 15-16=-377/4209, 14-15=-365/4088,  
 13-14=-365/4088  
 WEBS 7-16=-374/2811, 9-16=-1512/354, 7-19=0/1041, 6-19=-432/109,  
 9-15=-462/1427, 11-15=-186/272

#### NOTES- (11)

- 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=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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=104, 13=234.
- 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\Isreal Benavidez
28567	GR3	COMMON	1	1	Job Reference (optional)

- NOTES-** (11)
- 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1809 lb down and 384 lb up at 25-7-8 on bottom chord.  
The design/selection of such connection device(s) is the responsibility of others.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- 11) Point Load @15 from GR2

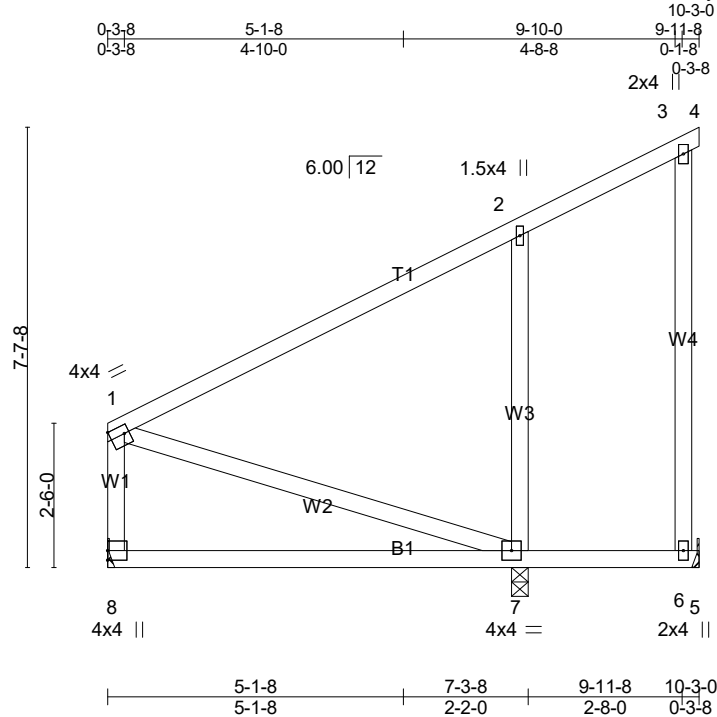
- LOAD CASE(S)** Standard
- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-7=-60, 7-13=-60, 20-24=-20
- Concentrated Loads (lb)
- Vert: 15=-1809(F)

Job 28567	Truss J1	Truss Type Jack-Closed	Qty 3	Ply 1	Freedom Const\Isreal Benavidez
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Scale = 1:39.9

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

LOADING (psf)	SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.45		Vert(LL)	-0.06	7-8	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.34		Vert(CT)	-0.11	7-8	>763	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.25		Horz(CT)	-0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS		Wind(LL)	-0.01	7-8	>999	240	Weight: 64 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.2 \*Except\*  
 W2,W3: 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=236/Mechanical, 6=17/Mechanical, 7=544/0-3-8 (min. 0-1-8)

Max Horz 8=198(LC 5)

Max Uplift 6=-27(LC 7), 7=-44(LC 8)

Max Grav 8=257(LC 14), 6=72(LC 15), 7=576(LC 13)

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

WEBS 2-7=-387/77

**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, with BCDL = 10.0psf.
- 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, 7.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

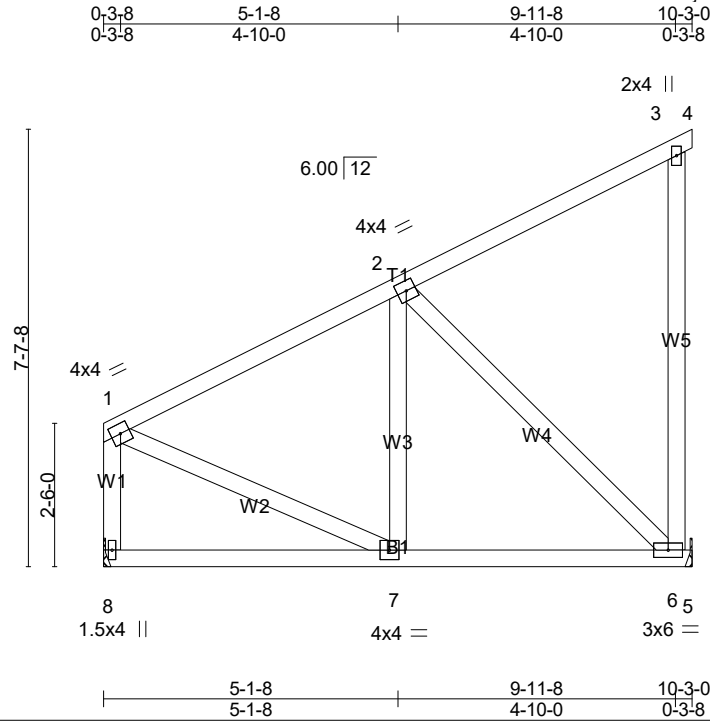
**LOAD CASE(S)** Standard

Job <b>28567</b>	Truss <b>J2</b>	Truss Type <b>Jack-Closed</b>	Qty <b>1</b>	Ply <b>1</b>	Freedom Const\Isreal Benavidez Job Reference (optional)
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Scale = 1:40.1

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.28	Vert(LL)	-0.01	7-8	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.23	Vert(CT)	-0.03	7-8	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.29	Horz(CT)	-0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS	Wind(LL)	-0.01	6-7	>999	240	Weight: 70 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
W1,W5: 2x4 SP No.2

#### 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=393/Mechanical, 6=404/Mechanical  
Max Horz 8=198(LC 5)  
Max Uplift 6=-32(LC 5)  
Max Grav 8=393(LC 1), 6=406(LC 13)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-8=-346/9, 1-2=-332/22  
BOT CHORD 6-7=-64/261  
WEBS 2-6=-333/37

#### 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.

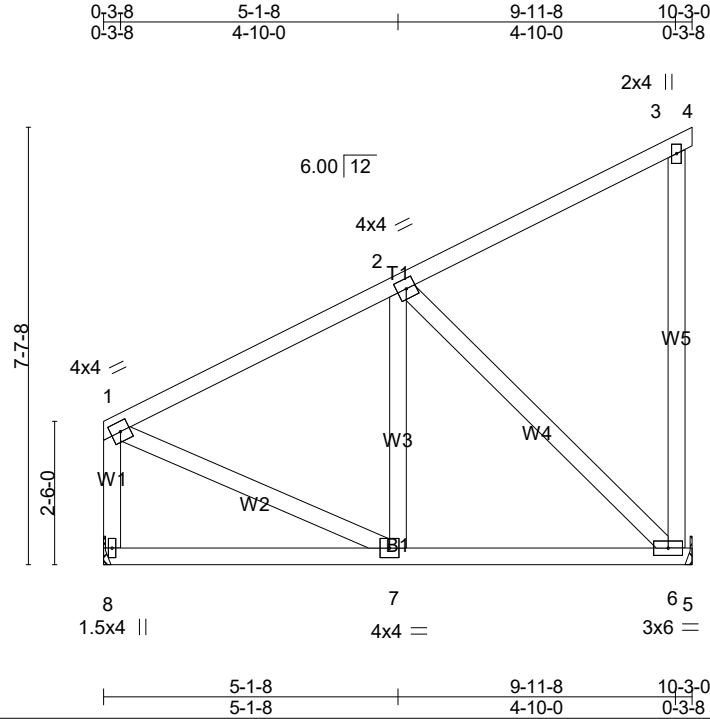
**LOAD CASE(S)** Standard

Job 28567	Truss J3	Truss Type Jack-Closed	Qty 3	Ply 1	Freedom Const\Isreal Benavidez
Job Reference (optional)					

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LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.28	Vert(LL)	-0.01	7-8	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.23	Vert(CT)	-0.03	7-8	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.29	Horz(CT)	-0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS	Wind(LL)	-0.01	6-7	>999	240	Weight: 70 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
W1,W5: 2x4 SP No.2

#### 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=393/Mechanical, 6=404/Mechanical  
Max Horz 8=198(LC 5)  
Max Uplift 6=-32(LC 5)  
Max Grav 8=393(LC 1), 6=406(LC 13)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-8=-346/9, 1-2=-332/22  
BOT CHORD 6-7=-64/261  
WEBS 2-6=-333/37

#### 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" 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

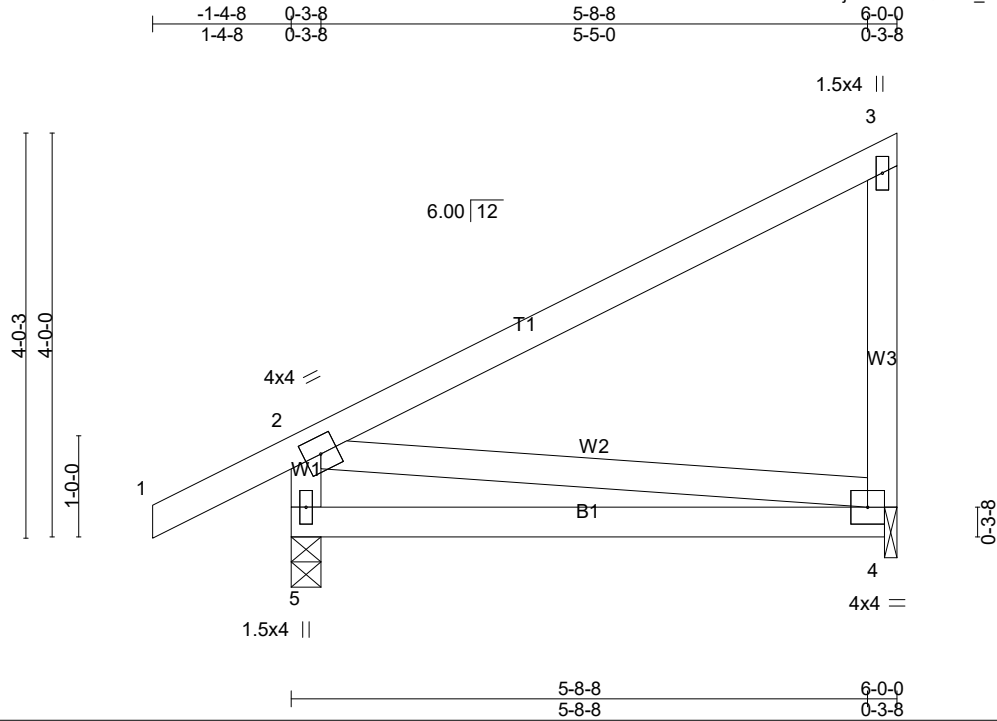


Job <b>28567</b>	Truss <b>J4</b>	Truss Type <b>Jack-Open</b>	Qty <b>7</b>	Ply <b>1</b>	Freedom Const\Isreal Benavidez Job Reference (optional)
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LOADING (psf)	SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	2-0-0	TC 0.48		Vert(LL)	-0.06	4-5	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.42		Vert(CT)	-0.13	4-5	>532	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05		Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS		Wind(LL)	0.00	5	****	240	Weight: 35 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, 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) 5=333/0-3-8 (min. 0-1-8), 4=216/0-1-8 (min. 0-1-8)  
Max Horz 5=103(LC 8)  
Max Uplift 5=-6(LC 8), 4=-17(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-5=-275/40

#### 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" between the bottom chord and any other members.
- 5) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 4.
- 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

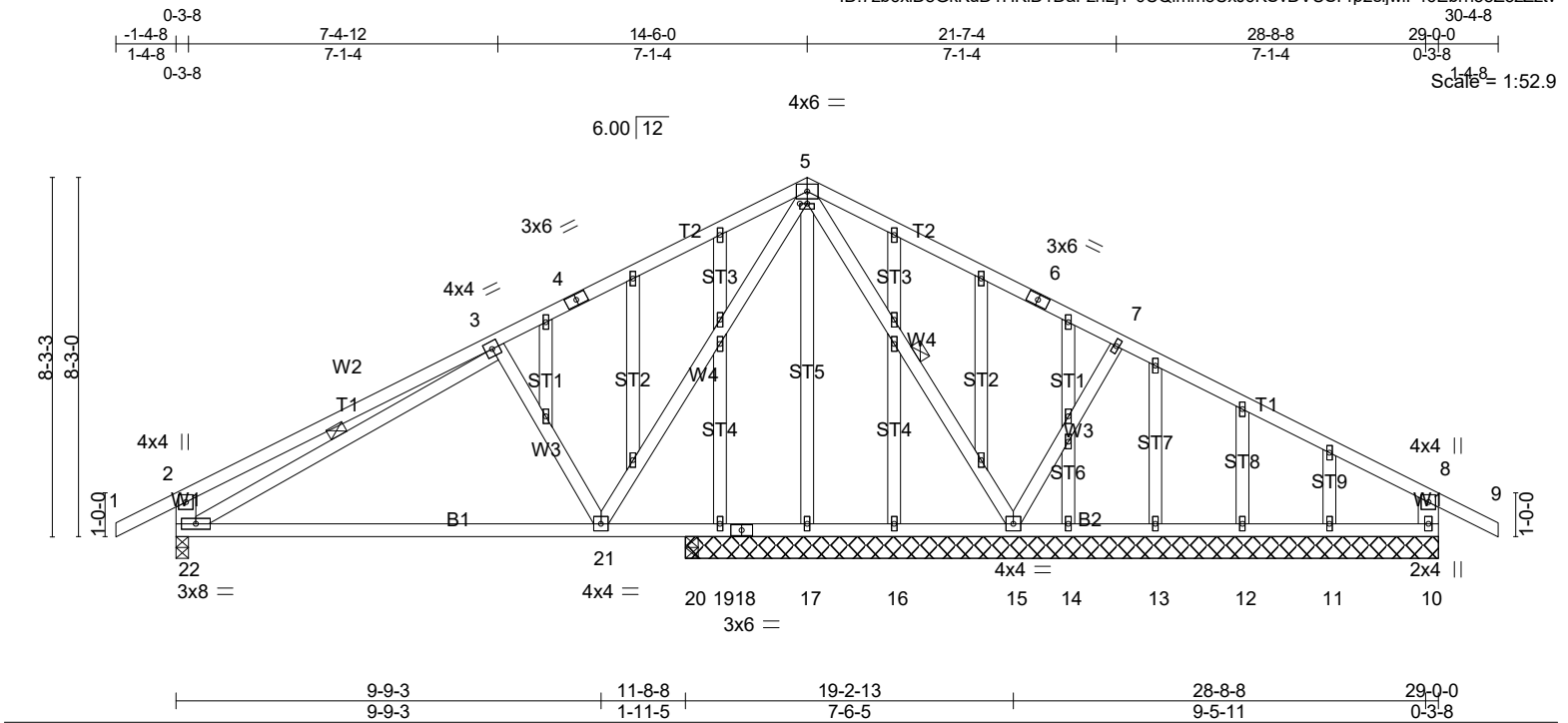


Plate Offsets (X,Y)-- [5:0-2-0,0-0-0]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc)		l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	-0.12 21-22	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.25 21-22	>547	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.32	Horz(CT)	0.01 10	n/a	n/a		
BCDL	10.0	Code IRC2018/TP12014		Matrix-AS		Wind(LL)	0.01 21-22	>999	240	Weight: 218 lb	FT = 20%

<p><b>LUMBER-</b></p> <p>TOP CHORD 2x4 SP 2400F 2.0E</p> <p>BOT CHORD 2x4 SP 2400F 2.0E</p> <p>WEBS 2x4 SP No.3 *Except*</p> <p>W1: 2x6 SP No.1</p> <p>OTHERS 2x4 SP No.3</p>	<p><b>BRACING-</b></p> <p>TOP CHORD Structural wood sheathing directly applied, except end verticals.</p> <p>BOT CHORD Rigid ceiling directly applied.</p> <p>WEBS 1 Row at midpt 5-15, 3-22</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.</p> </div>
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**REACTIONS.** All bearings 17-3-8 except (jt=length) 22=0-3-8, 20=0-3-8.  
(lb) - Max Horz 22=133(LC 7)  
Max Uplift All uplift 100 lb or less at joint(s) 15, 10, 22, 20 except  
19=118(LC 1)  
Max Grav All reactions 250 lb or less at joint(s) 17, 19, 16, 14, 13, 12,  
11, 20 except 15=985(LC 1), 10=389(LC 20), 22=810(LC 1)

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

**TOP CHORD** 2-3=-515/32, 3-4=-718/43, 4-5=-616/77, 7-8=-265/94, 2-22=-493/75,  
8-10=-375/102

**BOT CHORD** 21-22=0/747, 20-21=0/309, 19-20=0/309, 18-19=0/309, 17-18=0/309,  
16-17=0/309, 15-16=0/309

**WEBS** 5-15=-683/0, 7-15=-417/106, 5-21=0/529, 3-21=-374/104, 3-22=-415/13

**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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 1.5x4 MT20 unless otherwise indicated.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members. with BCdL = 10.0psf

Job	Truss	Truss Type	Qty	Ply	Freedom Const\Isreal Benavidez
28567	SG1	Common Structural Gable	1	1	Job Reference (optional)

**NOTES-**  
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 10, 22, 20 except (jt=lb) 19=118.  
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.

**LOAD CASE(S)** Standard

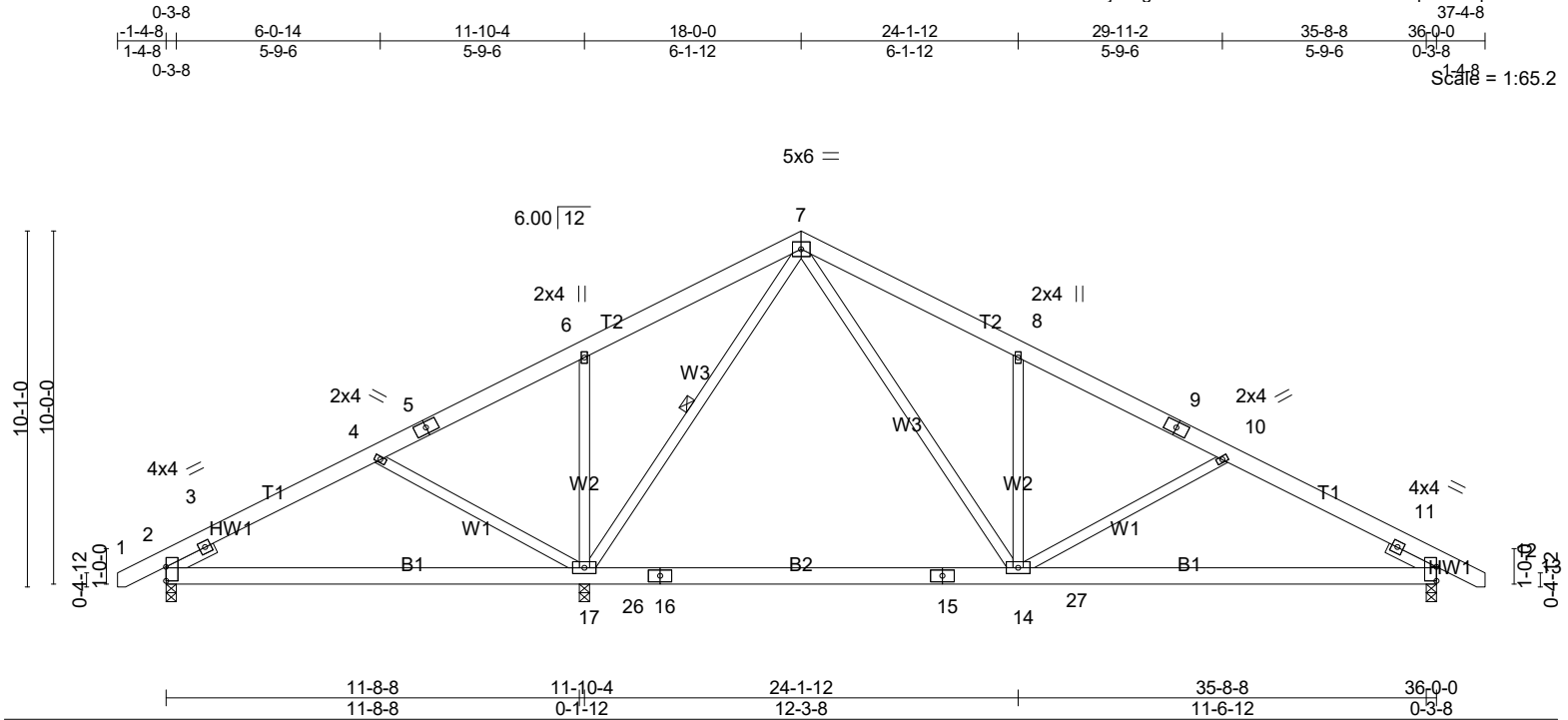
$$\text{Scale}^{1-48} = 1:65.2$$


Plate Offsets (X,Y)-- [2:0-4-14,0-0-1], [12:0-4-14,0-0-1]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.18	Vert(LL)	-0.30	14-17	>964	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.51	Vert(CT)	-0.38	14-17	>757	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.55	Horz(CT)	0.02	12	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS	Wind(LL)	0.02	14	>999	240	Weight: 260 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.3 \*Except\*  
W3: 2x4 SP No.2  
SLIDER Left 2x4 SP No.3 -D 1-6-0, Right 2x4 SP No.3 -D 1-6-0

**BRACING-**

TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 7-17

<p>MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.</p>
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**REACTIONS.** (lb/size) 2=452/0-3-8 (min. 0-1-8), 17=1585/0-3-8 (min. 0-2-1), 12=994/0-3-8 (min. 0-1-8)

Max Horz2=-136(LC 6)  
Max Uplift17=-8(LC 8)  
Max Grav2=492(LC 19), 17=1762(LC 13), 12=994(LC 1)

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

TOP CHORD	2-3=-516/0, 3-4=-391/38, 5-6=-77/277, 6-7=-85/253, 7-8=-1143/66, 8-9=-1054/0, 9-10=-1113/0, 10-11=-1367/0, 11-12=-775/0
BOT CHORD	2-17=-2/317, 17-26=0/379, 16-26=0/379, 15-16=0/379, 15-27=0/379, 14-27=0/379, 12-14=0/1150
WEBS	7-14=0/1105, 8-14=-395/104, 10-14=-321/78, 7-17=-970/13, 6-17=-388/104, 4-17=-414/78

**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=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) All plates are 4x8 MT20 unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6'-0" between the bottom chord and any other members, with BC DL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17.
- 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.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedom Const\Isreal Benavidez
28567	T1	COMMON	5	1	Job Reference (optional)

**NOTES-**  
9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard

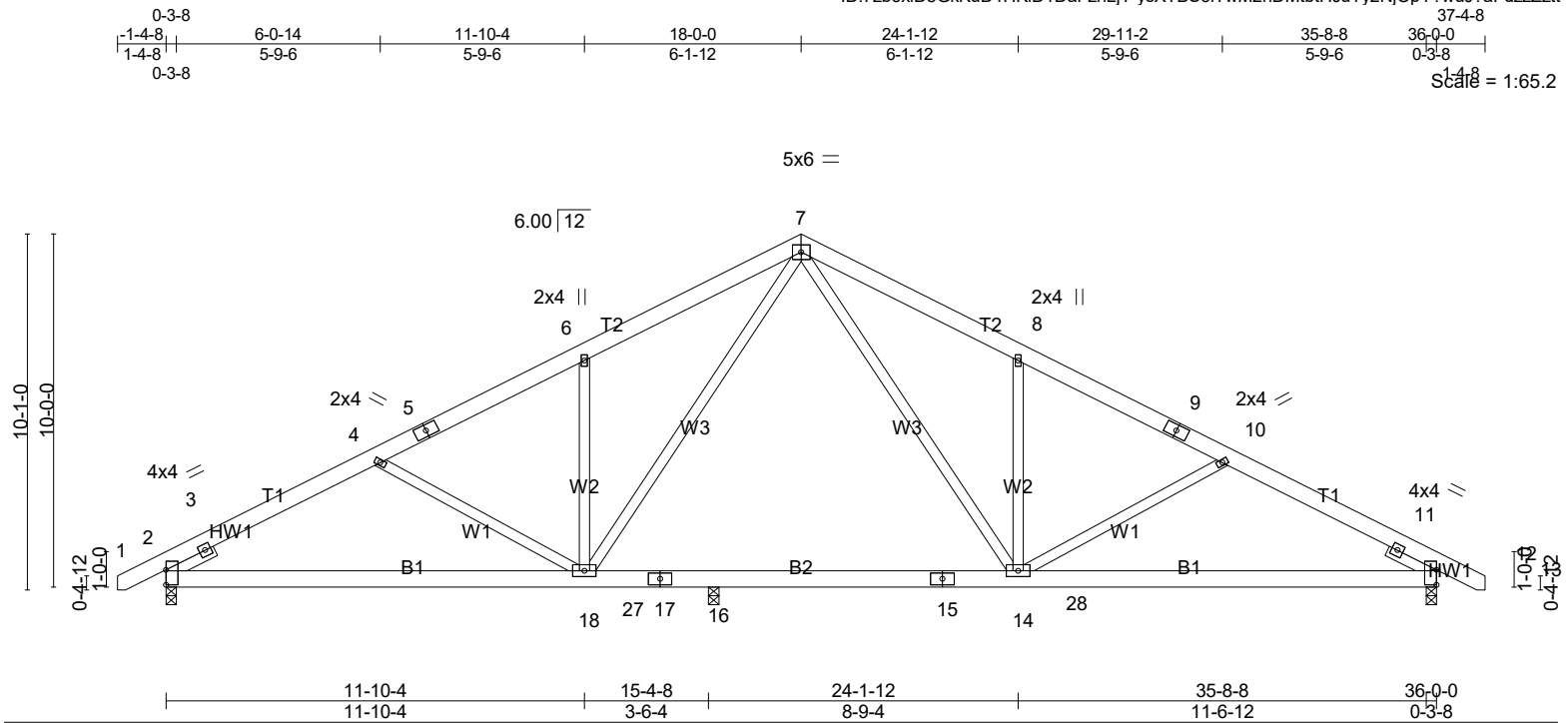


Plate Offsets (X,Y)-- [2:0-5-2,0-0-1], [12:0-5-2,0-0-1]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES	GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	-0.10	18-21	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.22	18-21	>839	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.05	12	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS		Wind(LL)	0.05	18-21	>999	240	Weight: 260 lb	FT = 20%

<b>LUMBER-</b> TOP CHORD 2x6 SP No.1 BOT CHORD 2x6 SP No.1 WEBS 2x4 SP No.3 *Except* W3: 2x4 SP No.2 SLIDER Left 2x4 SP No.3 -D 1-6-0, Right 2x4 SP No.3 -D 1-6-0	<b>BRACING-</b> TOP CHORD Structural wood sheathing directly applied. BOT CHORD Rigid ceiling directly applied. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;">           MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.         </div>
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**REACTIONS.** (lb/size) 2=1341/0-3-8 (min. 0-1-9), 12=1383/0-3-8 (min. 0-1-10), 16=307/0-3-8 (min. 0-1-8)  
 Max Horz 2=-136(LC 6)  
 Max Uplift 2=-13(LC 8), 12=-9(LC 8)  
 Max Grav 2=1341(LC 1), 12=1383(LC 1), 16=536(LC 15)

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

TOP CHORD 2-3=-1032/0, 3-4=-1990/41, 4-5=-1703/11, 5-6=-1631/35, 6-7=-1716/115,  
7-8=-1823/104, 8-9=-1739/24, 9-10=-1792/0, 10-11=-2083/31, 11-12=-1004/0

BOT CHORD 2-18=0/1708, 18-27=0/1137, 17-27=0/1137, 16-17=0/1137, 15-16=0/1137,  
15-28=0/1137, 14-28=0/1137, 12-14=0/1783

WEBS 7-14=-6/881, 8-14=-401/105, 10-14=-285/72, 7-18=-25/676, 6-18=-397/106,  
4-18=-306/69

- 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=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) All plates are 4x8 MT20 unless otherwise indicated.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6'-0" between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12.
  - 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.

Job	Truss	Truss Type	Qty	Ply	Freedom Const\Isreal Benavidez
28567	T1A	COMMON	5	1	Job Reference (optional)

**NOTES-**  
9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

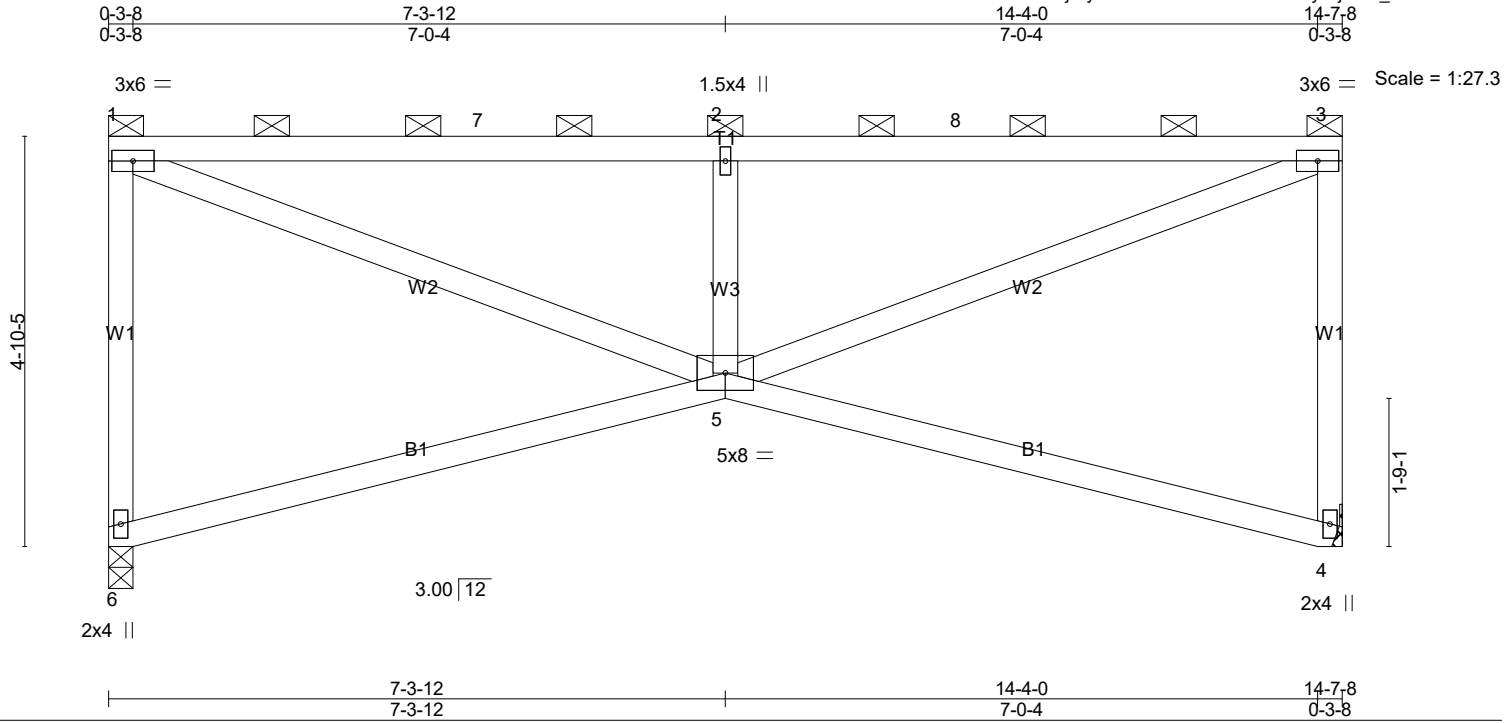
**LOAD CASE(S)** Standard

Job <b>28567</b>	Truss <b>T3</b>	Truss Type <b>Roof Special</b>	Qty <b>1</b>	Ply <b>1</b>	Freedom Const\Isreal Benavidez
Job Reference (optional)					

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ID:7zb6xID8GkKuD1HKiD1DaFzhLjT-ysXTBS6ITwM2hDMtbHJuTyz1jTmY\_xuJ?aFdzZzt



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.51	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.18	Vert(LL) -0.06 4-5 >999 360		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.37	Vert(CT) -0.12 4-5 >999 240		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS	Horz(CT) 0.03 4 n/a n/a		
			Wind(LL) 0.02 5 >999 240	Weight: 83 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 2-0-0 oc purlins (6-0-0 max.): 1-3, 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) 6=573/0-3-8 (min. 0-1-8), 4=573/Mechanical  
Max Horz 6=-119(LC 4)  
Max Uplift 6=-39(LC 4), 4=-39(LC 5)

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

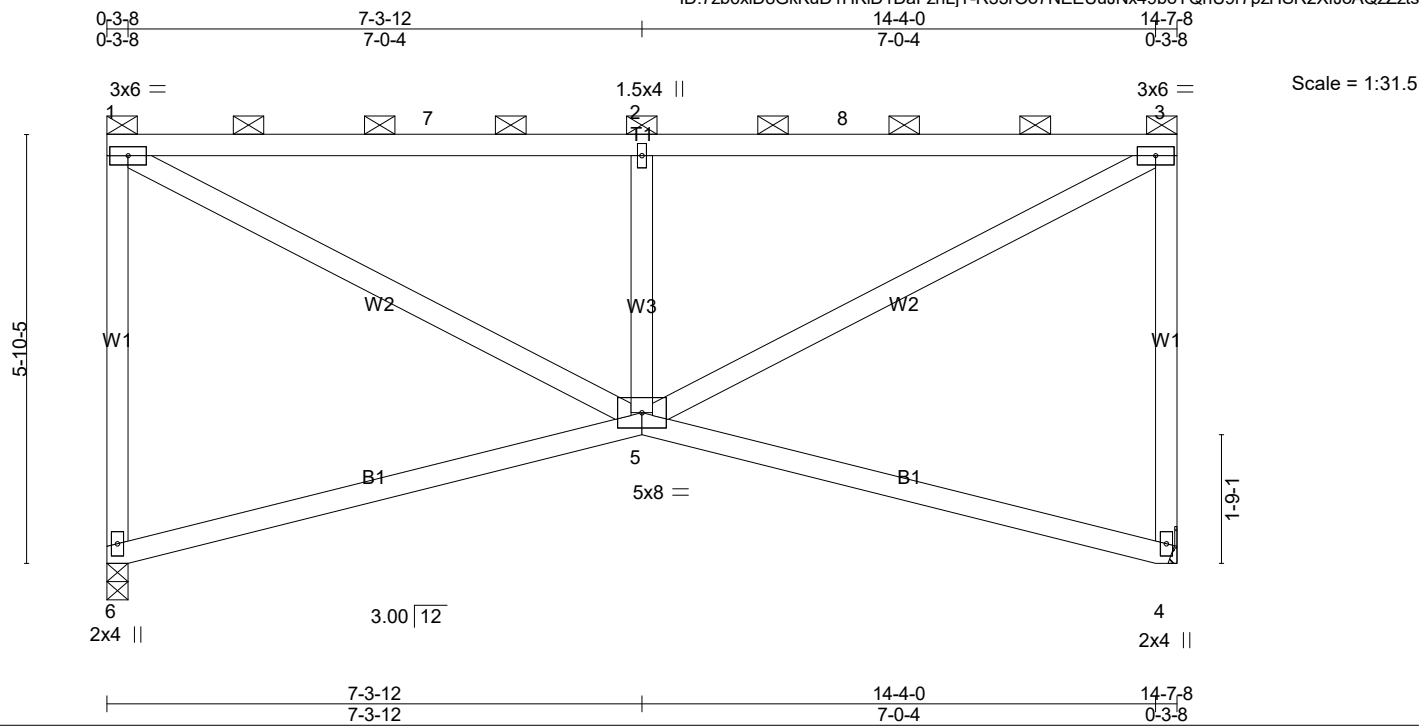
TOP CHORD 1-6=-510/53, 1-7=-865/66, 2-7=-865/66, 2-8=-865/66, 3-8=-865/66,  
3-4=-510/82  
WEBS 1-5=-38/892, 2-5=-490/118, 3-5=-98/892

#### 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) Provide adequate drainage to prevent water ponding.
- 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) Refer to girder(s) for truss to truss connections.
- 6) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 4.
- 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.
- 10) 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





<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc)	I/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.51	Vert(LL) -0.06 4-5	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.18	Vert(CT) -0.12 4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.29	Horz(CT) 0.02 4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS	Wind(LL) 0.02 5-6	>999	240	Weight: 88 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	2-0-0 oc purlins (6-0-0 max.): 1-3, except end verticals.
BOT CHORD	Rigid ceiling directly applied.

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

(lb/size) 6=573/0-3-8 (min. 0-1-8), 4=573/Mechanical  
Max Horz 6=-145(LC 4)  
Max Uplift 6=-48(LC 4), 4=-48(LC 5)

# FORCES.

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

TOP CHORD 1-6=-510/56, 1-7=-643/56, 2-7=-643/56, 2-8=-643/56, 3-8=-643/56,  
3-4=-510/92  
WEBS 1-5=-23/700, 2-5=-497/118, 3-5=-99/700

### NOTES-

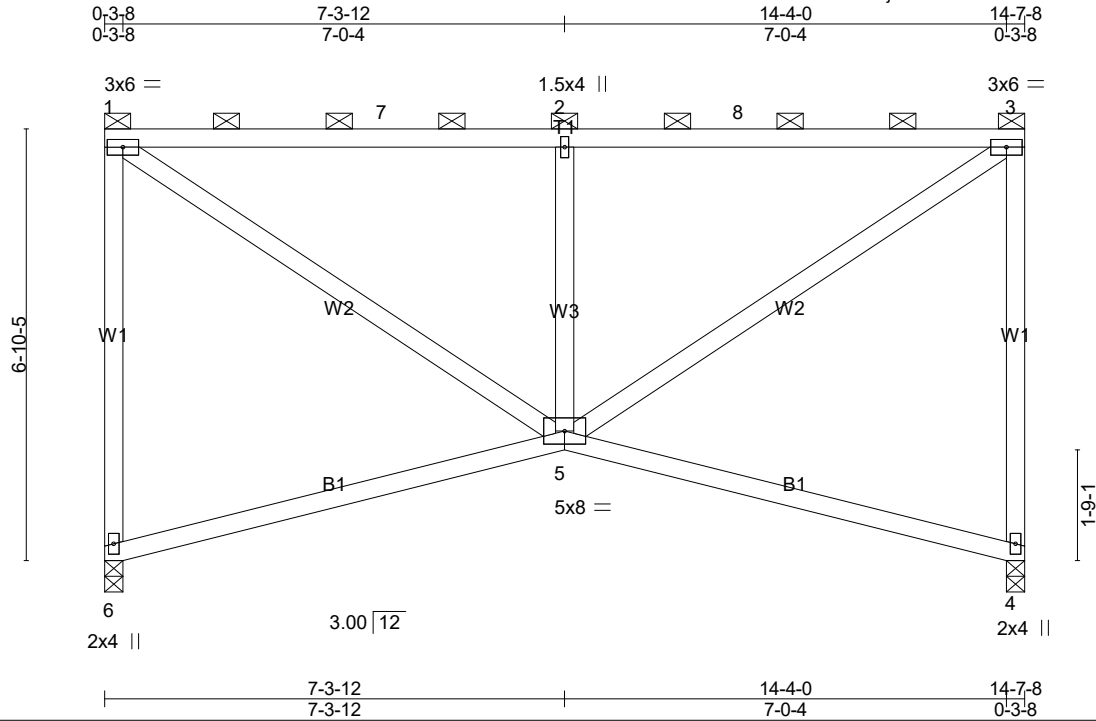
- 1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCdL=6.0psf; BCdL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6'-0" between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 4.
- 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.
- 10) 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 28567	Truss T5	Truss Type Roof Special	Qty 1	Ply 1	Freedom Const\Isreal Benavidez
Job Reference (optional)					

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Scale = 1:36.6

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	2-0-0	TC 0.39	Vert(LL)	-0.06	4-5	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	-0.11	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.24	Horz(CT)	0.01	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS	Wind(LL)	-0.02	5-6	>999	240	Weight: 94 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-3, 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) 6=573/0-3-8 (min. 0-1-8), 4=573/0-3-8 (min. 0-1-8)  
Max Horz 6=-171(LC 4)  
Max Uplift 6=-59(LC 4), 4=-59(LC 5)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-6=-510/61, 1-7=-511/50, 2-7=-511/50, 2-8=-511/50, 3-8=-511/50,  
3-4=-510/103  
WEBS 1-5=-30/591, 2-5=-500/118, 3-5=-106/591

#### NOTES-

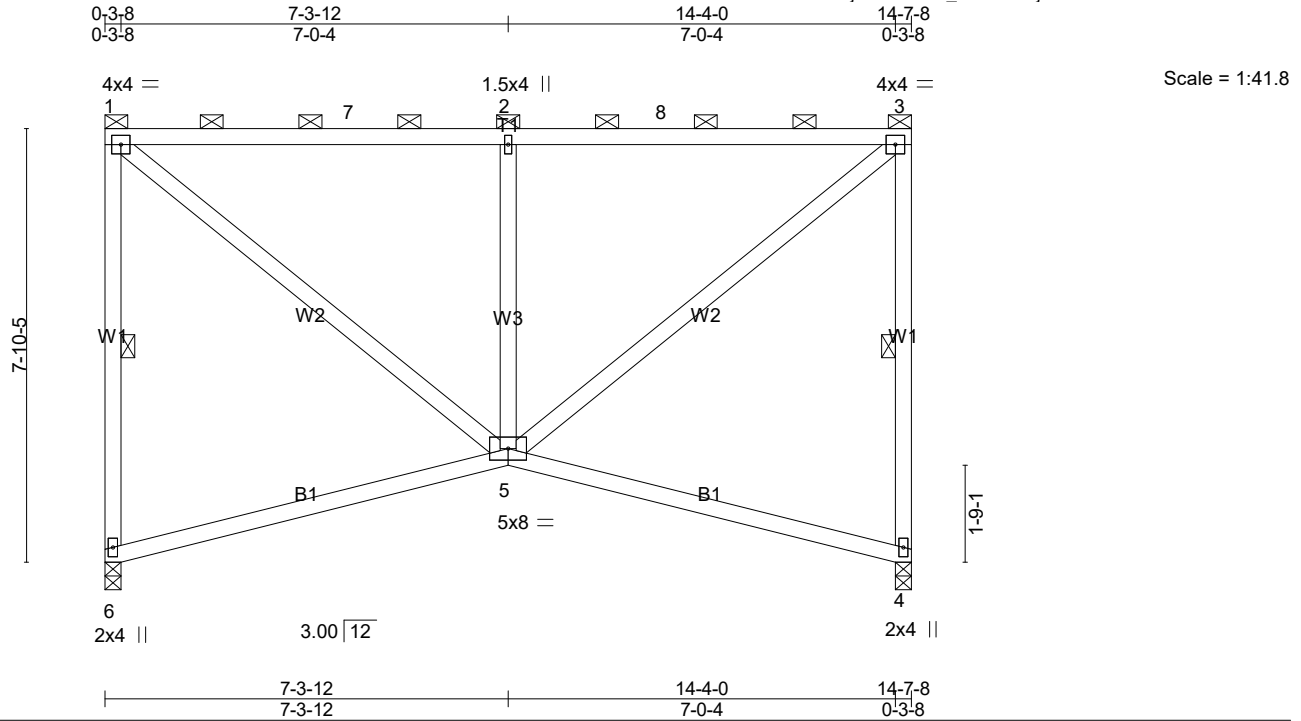
- 1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 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) Bearing at joint(s) 6, 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 4.
- 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 <b>28567</b>	Truss <b>T6</b>	Truss Type <b>Roof Special</b>	Qty <b>1</b>	Ply <b>1</b>	Freedom Const\Isreal Benavidez Job Reference (optional)
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.34	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.18	Vert(LL) -0.06 4-5 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.33	Vert(CT) -0.11 4-5 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.01 4 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) -0.03 5-6 >999 240		
				Weight: 101 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-3, except end verticals.  
BOT CHORD Rigid ceiling directly applied.  
WEBS 1 Row at midpt 1-6, 3-4

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

**REACTIONS.** (lb/size) 6=573/0-3-8 (min. 0-1-8), 4=573/0-3-8 (min. 0-1-8)  
Max Horz 6=-197(LC 4)  
Max Uplift 6=-72(LC 4), 4=-72(LC 5)

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

TOP CHORD 1-6=-509/67, 1-7=-425/47, 2-7=-425/47, 2-8=-425/47, 3-8=-425/47,  
3-4=-509/116  
WEBS 1-5=-39/525, 2-5=-503/118, 3-5=-117/530

#### 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) Provide adequate drainage to prevent water ponding.
- 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) Bearing at joint(s) 6, 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 4.
- 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.

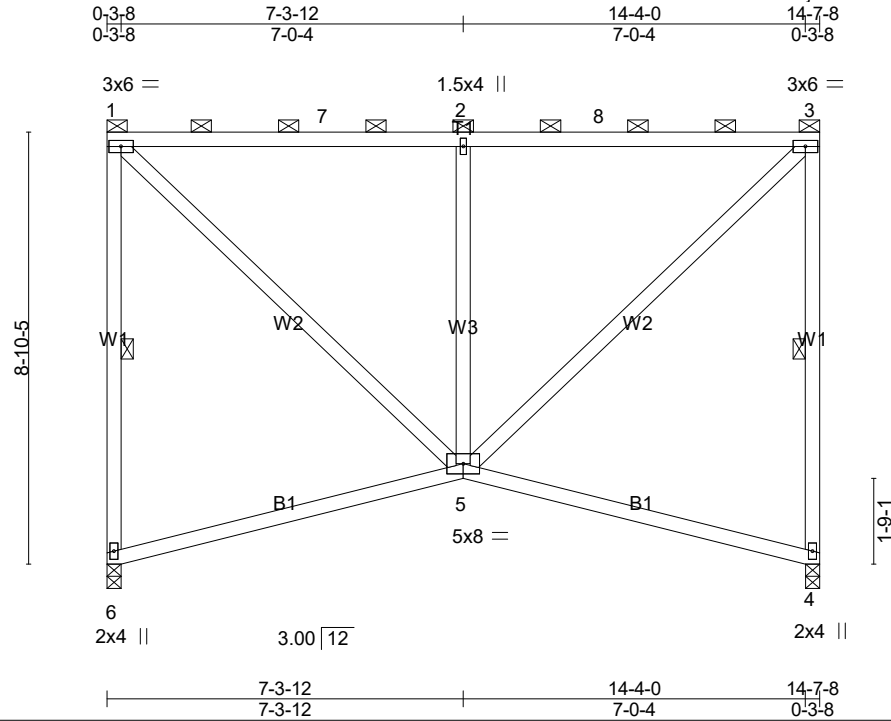
**LOAD CASE(S)** Standard

Job 28567	Truss T7	Truss Type Roof Special	Qty 1	Ply 1	Freedom Const\Isreal Benavidez
Job Reference (optional)					

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Scale = 1:47.3

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.74	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.18	Vert(LL) -0.06 4-5 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.45	Vert(CT) -0.12 4-5 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.01 4 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) -0.04 5-6 >999 240		
				Weight: 107 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-3, except end verticals.  
BOT CHORD Rigid ceiling directly applied.  
WEBS 1 Row at midpt 1-6, 3-4

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

**REACTIONS.** (lb/size) 6=573/0-3-8 (min. 0-1-8), 4=573/0-3-8 (min. 0-1-8)  
Max Horz 6=-223(LC 4)  
Max Uplift 6=-87(LC 4), 4=-87(LC 5)

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

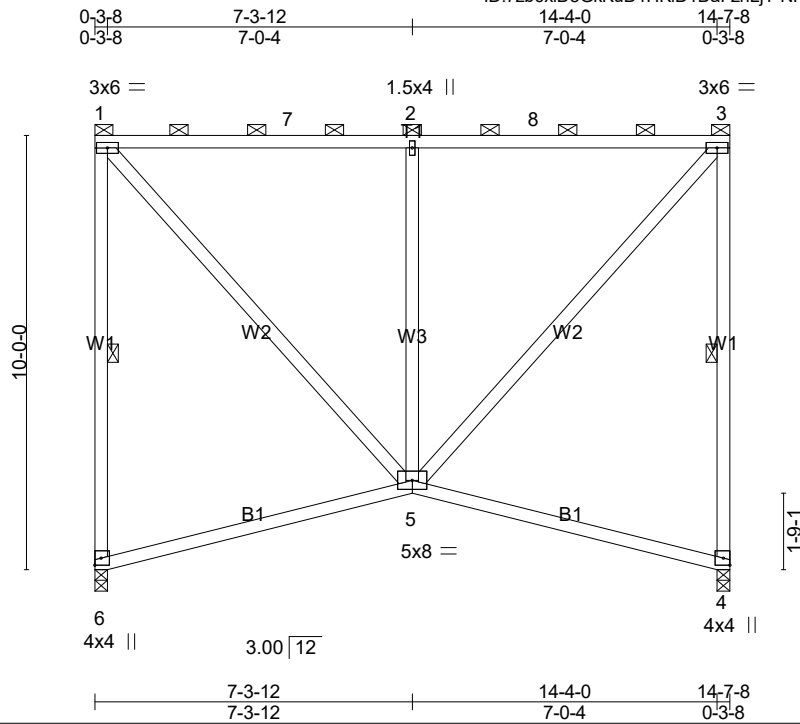
TOP CHORD 1-6=-509/75, 1-7=-362/51, 2-7=-362/51, 2-8=-362/51, 3-8=-362/51,  
3-4=-509/131  
WEBS 1-5=-47/478, 2-5=-500/117, 3-5=-128/499

#### 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) Provide adequate drainage to prevent water ponding.
- 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) Bearing at joint(s) 6, 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 4.
- 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	Truss	Truss Type	Qty	Ply	Freedom Const\Isreal Benavidez
28567	T8	Roof Special	1	1	Job Reference (optional)



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.38	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.18	Vert(LL) -0.06 4-5 >999 360		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.62	Vert(CT) -0.12 4-5 >999 240		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS	Horz(CT) 0.01 4 n/a n/a		
			Wind(LL) -0.05 5-6 >999 240	Weight: 115 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-3, except end verticals.  
BOT CHORD Rigid ceiling directly applied.  
WEBS 1 Row at midpt 1-6, 3-4

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

**REACTIONS.** (lb/size) 6=573/0-3-8 (min. 0-1-8), 4=573/0-3-8 (min. 0-1-8)  
Max Horz 6=-253(LC 4)  
Max Uplift 6=-106(LC 4), 4=-106(LC 5)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-6=-509/86, 1-7=-315/62, 2-7=-315/62, 2-8=-315/62, 3-8=-315/62,  
3-4=-509/149  
WEBS 1-5=-64/448, 2-5=-508/118, 3-5=-148/487

#### 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) Provide adequate drainage to prevent water ponding.
- 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) Bearing at joint(s) 6, 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=106, 4=106.
- 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.

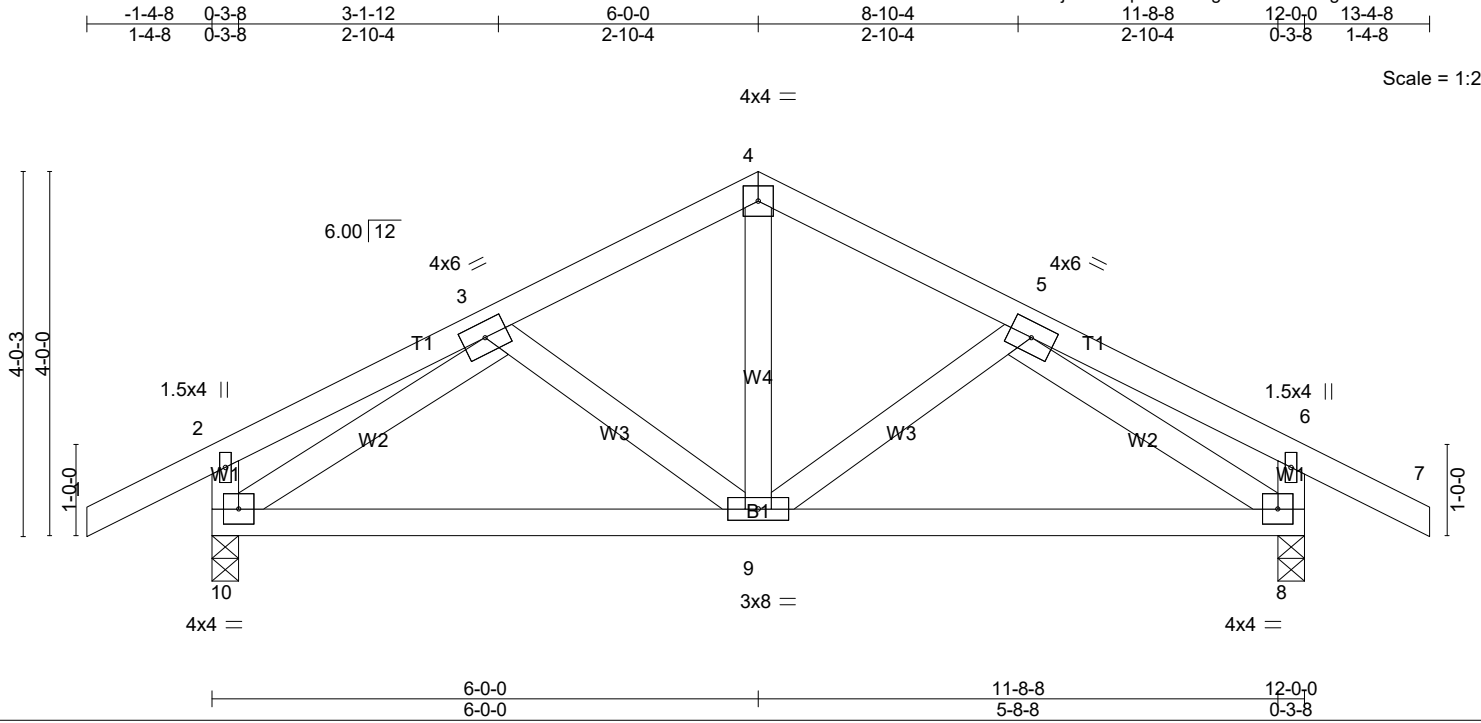
**LOAD CASE(S)** Standard

Job <b>28567</b>	Truss <b>T9</b>	Truss Type <b>Common</b>	Qty <b>1</b>	Ply <b>1</b>	Freedom Const\Isreal Benavidez Job Reference (optional)
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Scale = 1:25.3

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	2-0-0	TC 0.23	Vert(LL)	-0.02	8-9	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	-0.03	8-9	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.14	Horz(CT)	0.01	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS	Wind(LL)	0.00	9	>999	240	Weight: 70 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) 10=560/0-3-8 (min. 0-1-8), 8=560/0-3-8 (min. 0-1-8)  
 Max Horz 10=72(LC 7)  
 Max Uplift 10=-23(LC 8), 8=-23(LC 8)

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

TOP CHORD 3-4=-462/12, 4-5=-462/12  
 BOT CHORD 9-10=0/427, 8-9=0/427  
 WEBS 3-10=-466/10, 5-8=-466/10

**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) 10, 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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 <b>28567</b>	Truss <b>T10</b>	Truss Type <b>Common</b>	Qty <b>1</b>	Ply <b>1</b>	Freedom Const\Isreal Benavidez
Job Reference (optional)					

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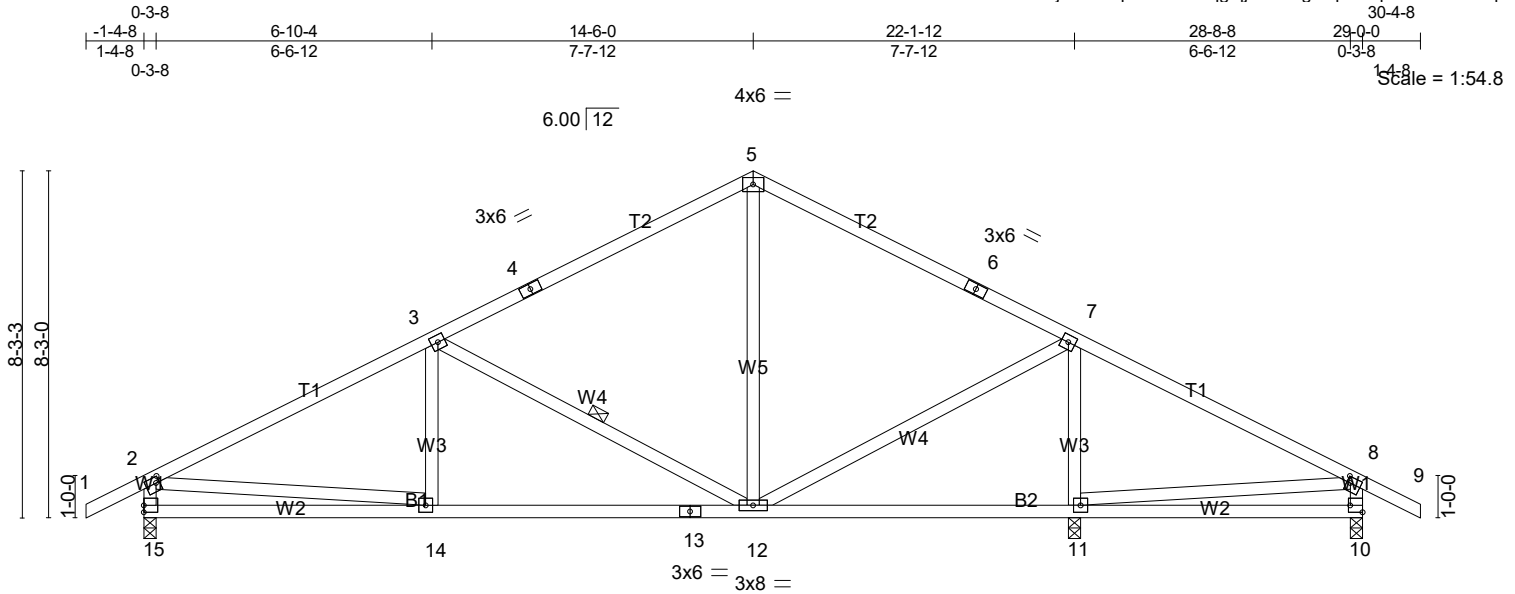


Plate Offsets (X,Y)--	[2:0-1-0,0-1-12], [8:0-1-0,0-1-12], [10:Edge,0-3-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.50	Vert(LL)	-0.04 12-14	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.23	Vert(CT)	-0.10 12-14	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.38	Horz(CT)	0.01 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS	Wind(LL)	0.02 12-14	>999	240	Weight: 165 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, except end verticals.  
 BOT CHORD Rigid ceiling directly applied.  
 WEBS 1 Row at midpt 3-12

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

**REACTIONS.** (lb/size) 15=957/0-3-8 (min. 0-1-8), 11=1209/0-3-8 (min. 0-1-8), 10=313/0-3-8 (min. 0-1-8)  
 Max Horz 15=-132(LC 6)  
 Max Uplift 15=-17(LC 8), 10=-38(LC 8)  
 Max Grav 15=957(LC 1), 11=1209(LC 1), 10=337(LC 20)

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

TOP CHORD 2-3=-1249/7, 3-4=-729/26, 4-5=-623/63, 5-6=-623/63, 6-7=-731/26,  
 2-15=-890/52, 8-10=-279/74  
 BOT CHORD 14-15=-10/338, 13-14=0/1041, 12-13=0/1041  
 WEBS 3-12=-576/40, 5-12=0/267, 7-12=0/628, 7-11=-1037/47, 2-14=0/777

**NOTES-**

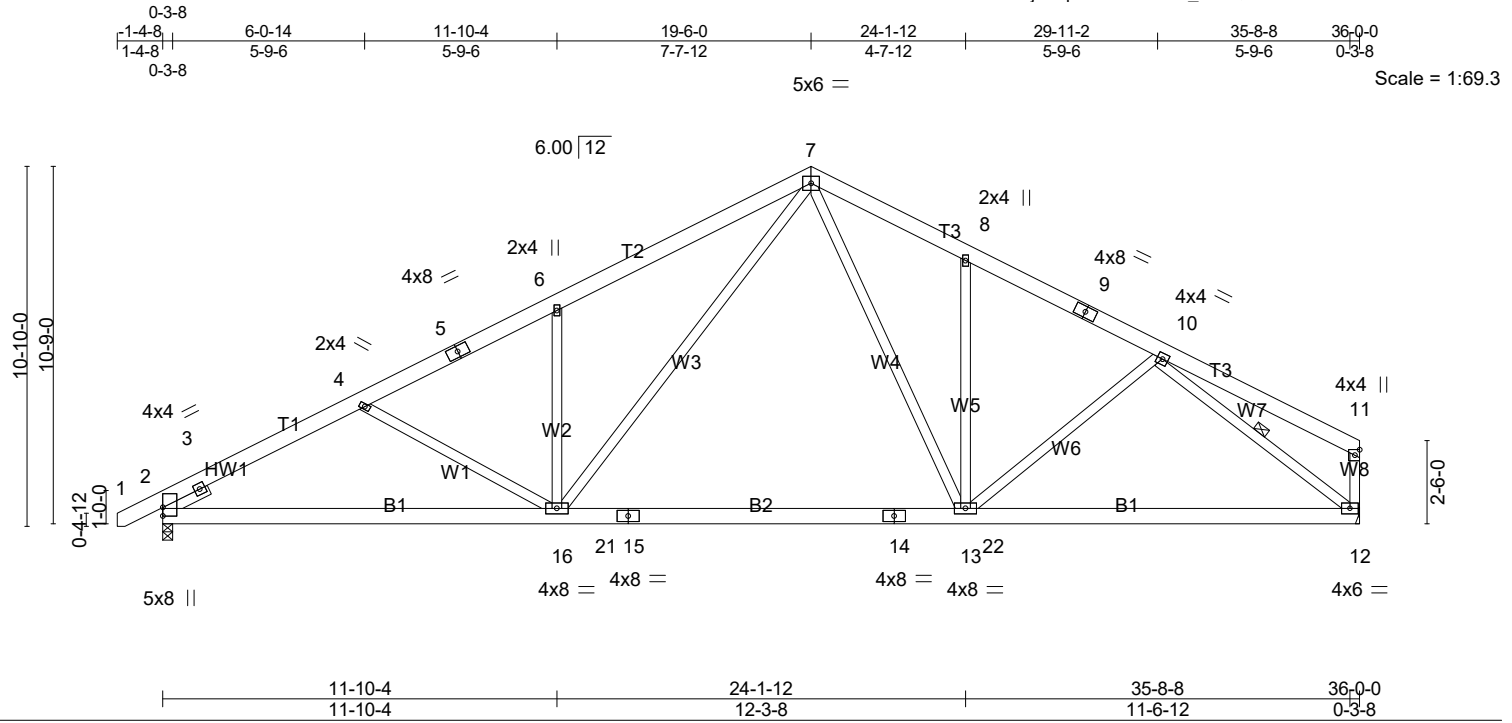
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are 4x4 MT20 unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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) 15, 10.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard

Job <b>28567</b>	Truss <b>T11</b>	Truss Type <b>COMMON</b>	Qty <b>2</b>	Ply <b>1</b>	Freedom Const\Isreal Benavidez
Job Reference (optional)					

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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.79	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.59	Vert(LL) -0.35 13-16 >999 360		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.60	Vert(CT) -0.49 13-16 >885 240		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS	Horz(CT) 0.05 12 n/a n/a		
			Wind(LL) 0.05 13-16 >999 240		
				Weight: 273 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.3  
SLIDER Left 2x4 SP No.3 -D 1-6-0

#### BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.  
BOT CHORD Rigid ceiling directly applied.  
WEBS 1 Row at midpt 10-12

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

**REACTIONS.** (lb/size) 2=1511/0-3-8 (min. 0-1-13), 12=1433/Mechanical  
Max Horz 2=177(LC 7)  
Max Grav 2=1526(LC 13), 12=1443(LC 14)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-999/0, 3-4=-2432/2, 4-5=-2238/0, 5-6=-2184/0, 6-7=-2317/90,  
7-8=-1813/81, 8-9=-1770/23, 9-10=-1842/0  
BOT CHORD 2-16=0/2171, 16-21=0/1367, 15-21=0/1367, 14-15=0/1367, 14-22=0/1367,  
13-22=0/1367, 12-13=0/1462  
WEBS 6-16=-468/121, 7-16=-15/1158, 7-13=0/701, 8-13=-308/75, 10-12=-1809/0

#### 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=24ft; 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) 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, with BCDL = 10.0psf.
- 5) Refer to girder(s) for truss to truss connections.
- 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.
- 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard



Job 28567	Truss T12	Truss Type ROOF SPECIAL	Qty 5	Ply 1	Freedom Const\Isreal Benavidez
Job Reference (optional)					

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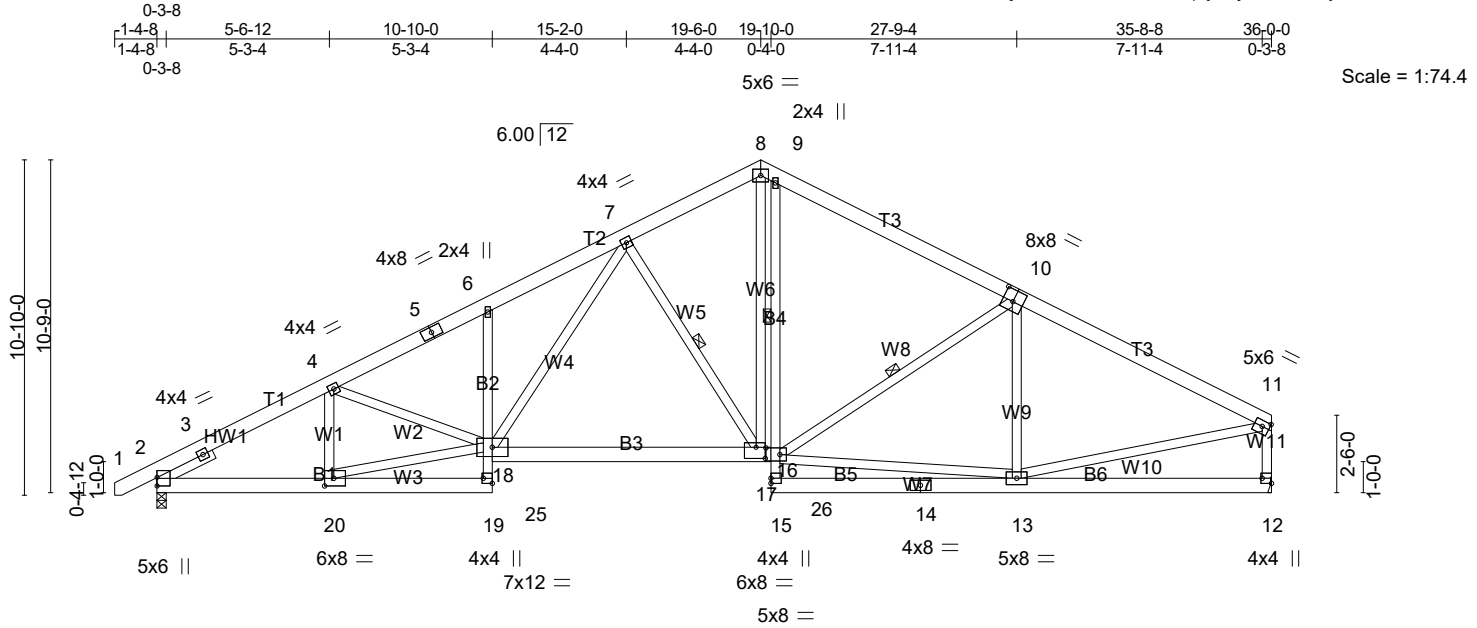


Plate Offsets (X,Y)--	[10:0-4-0,0-4-8], [11:Edge,0-2-4], [12:Edge,0-3-8], [16:0-5-8,0-2-8], [17:0-3-8,0-4-4], [19:Edge,0-3-8], [20:0-3-8,0-3-0]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.71	Vert(LL)	-0.16 17-18	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.53	Vert(CT)	-0.30 17-18	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.79	Horz(CT)	0.08 12	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Wind(LL)	0.06 17-18	>999	240		
	Code IRC2018/TPI2014						Weight: 311 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x6 SP No.1 *Except*	BOT CHORD Rigid ceiling directly applied. Except:
B2,B4: 2x4 SP No.3	1 Row at midpt 9-16
WEBS 2x4 SP No.3	1 Row at midpt 7-17, 10-16
SLIDER Left 2x4 SP No.3 -D 2-0-0	

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

**REACTIONS.** (lb/size) 2=1511/0-3-8 (min. 0-1-13), 12=1433/Mechanical  
Max Horz 2=177(LC 7)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-981/0, 3-4=-2324/0, 4-5=-2626/0, 5-6=-2563/0, 6-7=-2677/34,  
7-8=-1658/59, 8-9=-1571/51, 9-10=-1718/51, 10-11=-1810/8, 11-12=-1348/8  
BOT CHORD 2-20=0/2097, 6-18=-335/72, 18-25=0/1871, 25-26=0/1871, 17-26=0/1871,  
16-17=0/1498  
WEBS 4-20=-428/42, 18-20=0/2017, 4-18=0/347, 7-18=0/1022, 7-17=-716/52,  
10-13=-390/79, 11-13=0/1459, 8-17=0/1156, 10-16=-267/89, 13-16=0/1420

- 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=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
  - 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.
  - Refer to girder(s) for truss to truss connections.
  - 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.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Freedom Const\Isreal Benavidez
28567	T12	ROOF SPECIAL	5	1	Job Reference (optional)

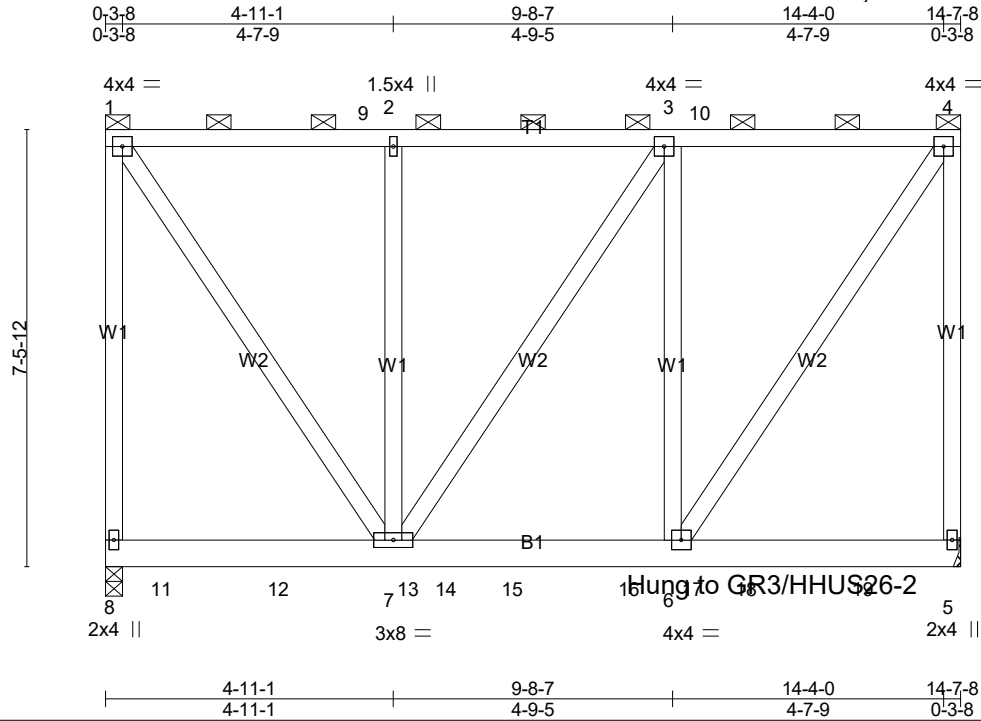
**LOAD CASE(S)** Standard

Job 28567	Truss T13	Truss Type Flat Girder	Qty 1	Ply 2	Freedom Const\Isreal Benavidez
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.25	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.24	Vert(LL) -0.02 7-8 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.34	Vert(CT) -0.03 5-6 >999 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS	Horz(CT) 0.00 5 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) 0.02 7-8 >999 240	Weight: 264 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 2-0-0 oc purlins (6-0-0 max.): 1-4, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(lb/size) 8=1913/0-3-8 (min. 0-1-8), 5=1829/Mechanical  
Max Horz 8=-184(LC 4)  
Max Uplift 8=-413(LC 4), 5=-323(LC 5)

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

TOP CHORD 1-8=-1484/309, 1-9=-924/214, 2-9=-924/214, 2-3=-924/214, 3-10=-940/197,  
4-10=-940/197, 4-5=-1507/284  
BOT CHORD 7-14=-219/940, 14-15=-219/940, 15-16=-219/940, 6-16=-219/940  
WEBS 1-7=-342/1637, 2-7=-303/92, 3-6=-282/158, 4-6=-313/1665

#### NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 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
- 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=413, 5=323.
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Continued on page 2

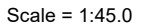
Job	Truss	Truss Type	Qty	Ply	Freedom Const\Isreal Benavidez
28567	T13	Flat Girder	1	2	Job Reference (optional)

**NOTES-**  
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 354 lb down and 113 lb up at 0-11-4, 352 lb down and 115 lb up at 2-11-4, 352 lb down and 115 lb up at 4-11-4, 384 lb down and 79 lb up at 6-11-4, 384 lb down and 79 lb up at 8-11-4, and 384 lb down and 79 lb up at 10-11-4, and 384 lb down and 79 lb up at 12-11-4 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=-60, 5-8=-20  
Concentrated Loads (lb)  
Vert: 7=-352(F) 11=-354(F) 12=-352(F) 15=-384(F) 16=-384(F) 18=-384(F) 19=-384(F)

Job	Truss	Truss Type	Qty	Ply	Freedom Const\Isreal Benavidez
28567	T14	Roof Special	1	1	Job Reference (optional)

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<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.34	Vert(LL) -0.06 4-5 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.18	Vert(CT) -0.12 4-5 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.40	Horz(CT) 0.01 4 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS	Wind(LL) -0.03 5-6 >999 240	Weight: 104 lb	FT = 20%

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

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): 1-3, except end verticals.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt                      1-6, 3-4

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

**REACTIONS.** (lb/size) 6=573/0-3-8 (min. 0-1-8), 4=573/0-3-8 (min. 0-1-8)

Max Uplift6=-80(LC 4),

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

TOP CHORD 1-6=-509/71, 1-7=-387/46, 2-7=-387/46, 2-8=-387/46, 3-8=-387/46,  
3-4=-509/124

WEBS 1-5=-45/499, 2-5=-504/118, 3-5=-124/512

**NOTES-**

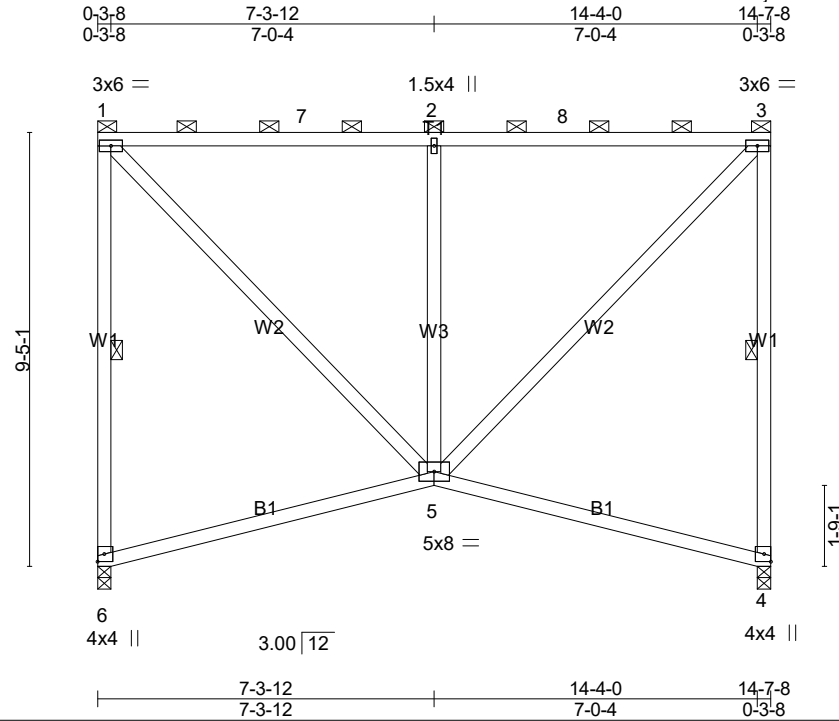
- 1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6'-0" between the bottom chord and any other members.
- 5) Bearing at joint(s) 6, 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 4.
- 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 28567	Truss T15	Truss Type Roof Special	Qty 1	Ply 1	Freedom Const\Isreal Benavidez
Job Reference (optional)					

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Scale = 1:50.0

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.34	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.18	Vert(LL) -0.06 5-6 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.54	Vert(CT) -0.12 4-5 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.01 4 n/a n/a		
	Code IRC2018/TPI2014		Wind(LL) -0.04 5-6 >999 240		
				Weight: 111 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-3, except end verticals.  
BOT CHORD Rigid ceiling directly applied.  
WEBS 1 Row at midpt 1-6, 3-4

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

**REACTIONS.** (lb/size) 6=573/0-3-8 (min. 0-1-8), 4=573/0-3-8 (min. 0-1-8)  
Max Horz 6=-238(LC 4)  
Max Uplift 6=-96(LC 4), 4=-96(LC 5)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-6=-509/80, 1-7=-335/56, 2-7=-335/56, 2-8=-335/56, 3-8=-335/56,  
3-4=-509/140  
WEBS 1-5=-56/464, 2-5=-506/118, 3-5=-139/493

#### NOTES-

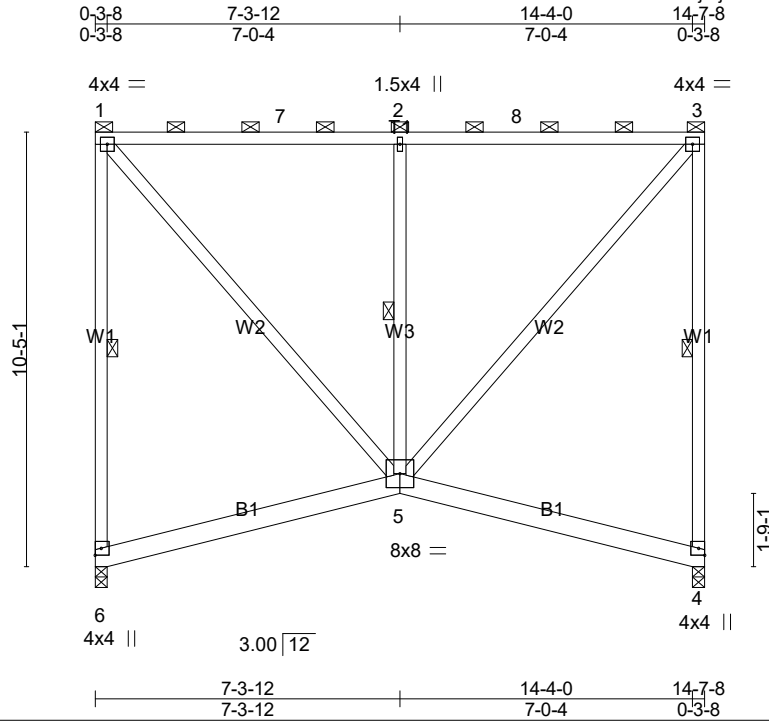
- 1) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 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) Bearing at joint(s) 6, 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 4.
- 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 28567	Truss T16	Truss Type ROOF SPECIAL GIRDER	Qty 2	Ply 1	Freedom Const\Isreal Benavidez
Job Reference (optional)					

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Scale = 1:55.3

LOADING (psf)	SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	2-0-0	TC	0.48	Vert(LL)	-0.03	4-5	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.08	4-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB	0.36	Horz(CT)	0.01	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS		Wind(LL)	0.03	5-6	>999	240	Weight: 129 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-3, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 1-6, 3-4, 2-5

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

#### REACTIONS.

(lb/size) 6=818/0-3-8 (min. 0-1-8), 4=818/0-3-8 (min. 0-1-8)  
Max Horz 6=-261(LC 4)  
Max Uplift 6=-122(LC 4), 4=-122(LC 5)  
Max Grav 6=832(LC 14), 4=832(LC 13)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-6=-645/94, 1-7=-428/71, 2-7=-428/71, 2-8=-428/71, 3-8=-428/71,  
3-4=-656/159  
BOT CHORD 5-6=-270/239  
WEBS 1-5=-72/625, 2-5=-515/119, 3-5=-157/675

#### 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) Provide adequate drainage to prevent water ponding.
- 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) Bearing at joint(s) 6, 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=122, 4=122.
- 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) Girder carries tie-in span(s): 4-0-0 from 0-0-0 to 14-7-8
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

Continued on page 2  
LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Freedom Const\Isreal Benavidez
28567	T16	ROOF SPECIAL GIRDER	2	1	Job Reference (optional)

**LOAD CASE(S)** Standard  
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-60, 5-6=-54(F=-34), 4-5=-54(F=-34)



Job <b>28567</b>	Truss <b>V1</b>	Truss Type <b>GABLE</b>	Qty <b>1</b>	Ply <b>1</b>	Freedom Const\Isreal Benavidez Job Reference (optional)
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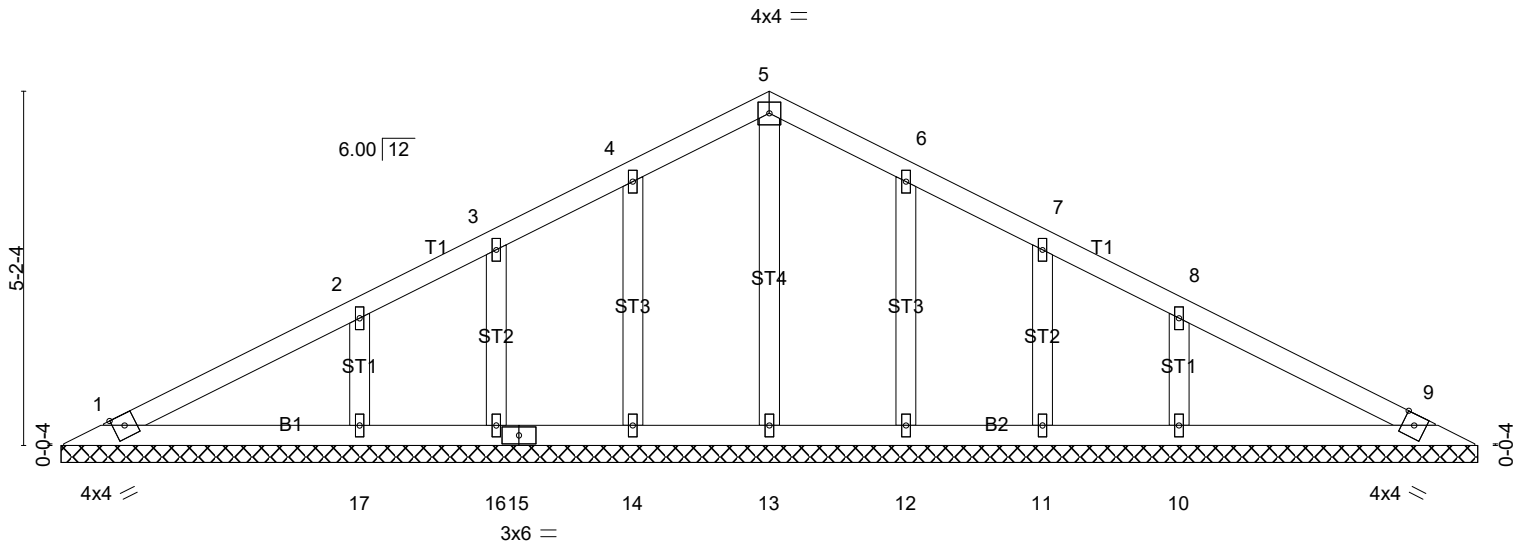
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0-3-8 10-4-8 20-5-8 20-9-0  
0-3-8 10-1-0 10-1-0 0-3-8

Scale = 1:33.7



20-5-8  
20-5-8

20-9-0  
0-3-8

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.16	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 0.05	Horz(CT)	0.00	9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 94 lb	FT = 20%

#### 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" oc purlins.  
Rigid ceiling directly applied or 10'-0" oc bracing.

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

#### REACTIONS.

All bearings 20-9-0.  
(lb) - Max Horz 1=-69(LC 6)  
Max Uplift All uplift 100 lb or less at joint(s) 14, 16, 17, 12, 11, 10  
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 14, 16, 12, 11  
except 17=306(LC 19), 10=306(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=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" 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) 14, 16, 17, 12, 11, 10.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job <b>28567</b>	Truss <b>V2</b>	Truss Type <b>Valley</b>	Qty <b>1</b>	Ply <b>1</b>	Freedom Const\Isreal Benavidez
Job Reference (optional)					

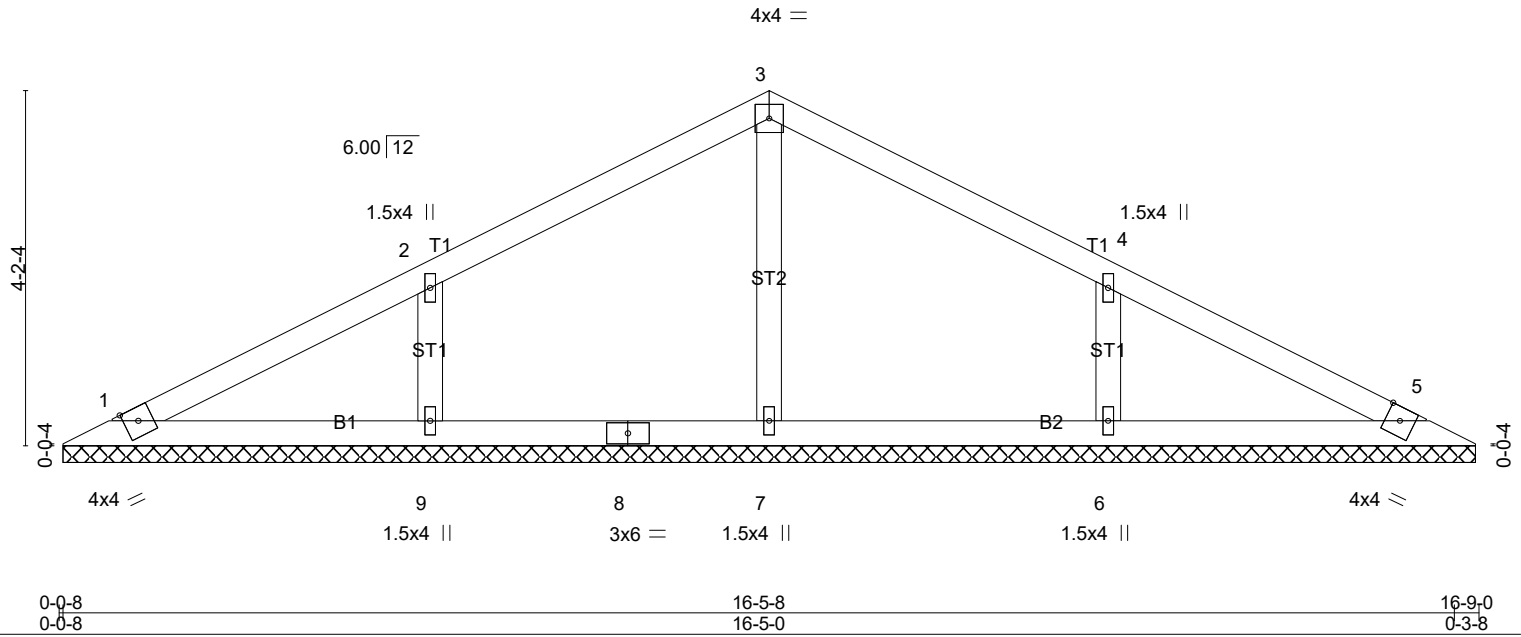
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0-3-8 8-4-8 16-5-8 16-9-0  
0-3-8 8-1-0 8-1-0 0-3-8

Scale = 1:27.2



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.21	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.12	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.06	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: 61 lb	FT = 20%

**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.

**REACTIONS.**

All bearings 16-8-0.  
(lb) - Max Horz 1=55(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=262(LC 1),  
9=368(LC 19), 6=368(LC 20)

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

WEBS 2-9=-276/69, 4-6=-276/69

**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) 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

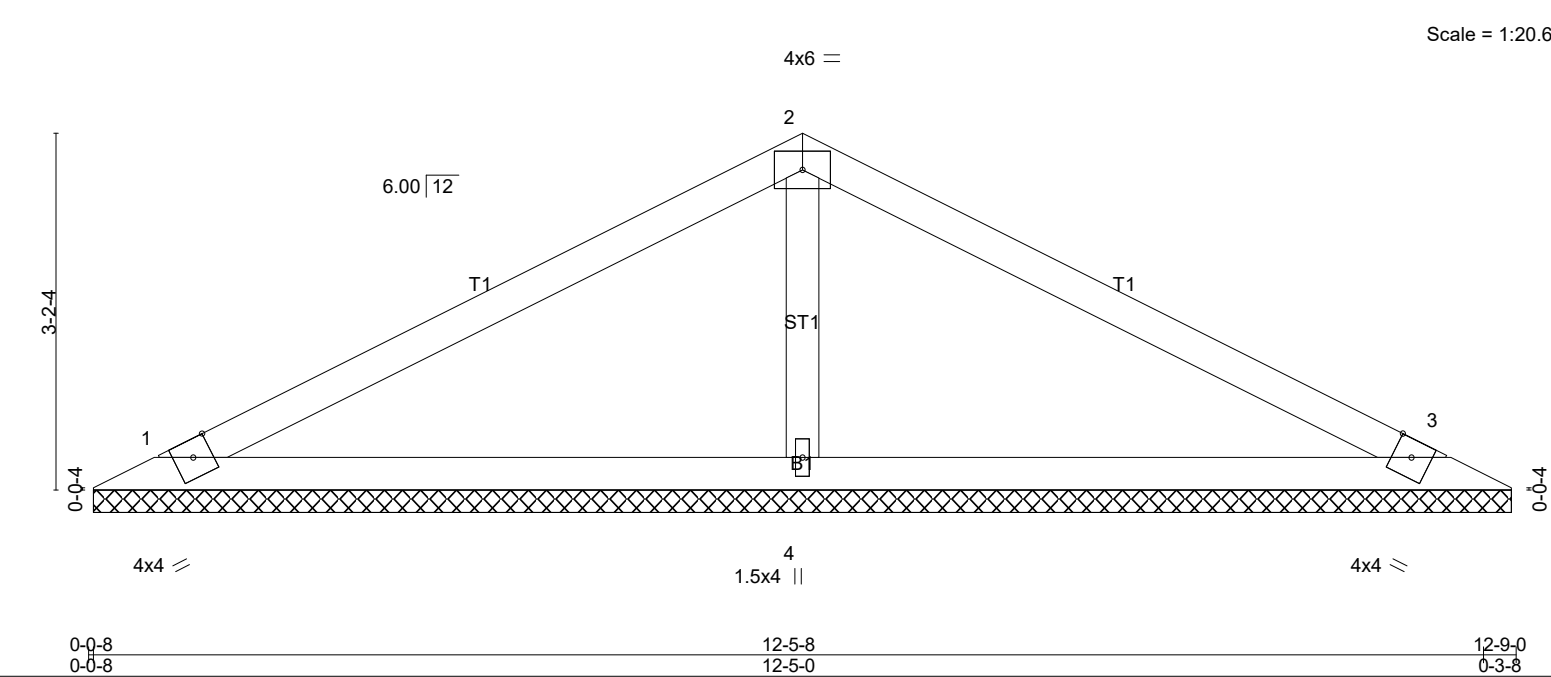
Job	Truss	Truss Type	Qty	Ply	Freedom Const\Isreal Benavidez
28567	V3	Valley	1	1	Job Reference (optional)

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0-3-8	6-4-8	12-5-8	12-9-0
0-3-8	6-1-0	6-1-0	0-3-8



0-0-8	12-5-8	12-9-0
0-0-8	12-5-0	0-3-8

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.48	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.33	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.08	Vert(CT) n/a - n/a 999		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT) 0.00 3 n/a n/a		
				Weight: 42 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	

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

**REACTIONS.** (lb/size) 1=209/12-8-0 (min. 0-1-8), 3=209/12-8-0 (min. 0-1-8), 4=500/12-8-0 (min. 0-1-8)  
Max Horz 1=-41(LC 6)  
Max Uplift 1=-5(LC 8), 3=-5(LC 8)  
Max Grav 1=212(LC 19), 3=212(LC 20), 4=500(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 2-4=-332/43

- 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 <b>28567</b>	Truss <b>V4</b>	Truss Type <b>Valley</b>	Qty <b>1</b>	Ply <b>1</b>	Freedom Const\Isreal Benavidez Job Reference (optional)
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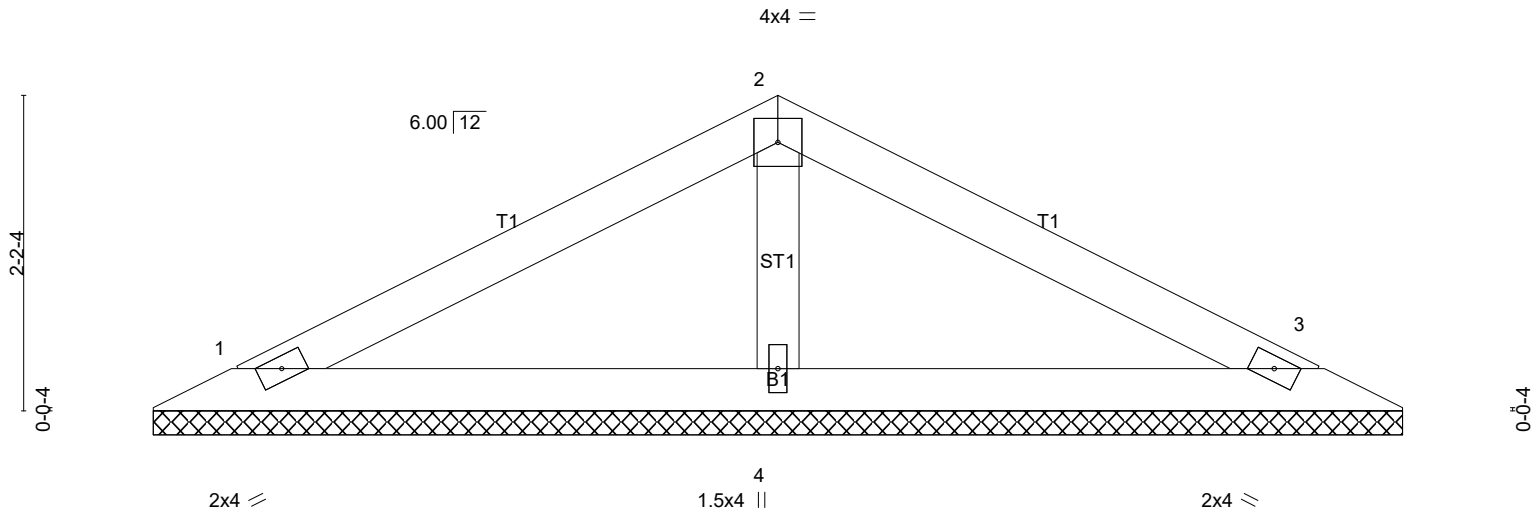
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0-3-8	4-4-8	8-5-8	8-9-0
0-3-8	4-1-0	4-1-0	0-3-8

Scale: 3/4"=1'



0-0-8	8-5-8	8-9-0
0-0-8	8-5-0	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 0.26	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 28 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=152/8-8-0 (min. 0-1-8), 3=152/8-8-0 (min. 0-1-8), 4=295/8-8-0 (min. 0-1-8)  
 Max Horz 1=27(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.

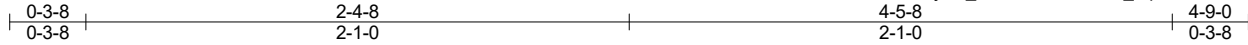
**LOAD CASE(S)** Standard

Job 28567	Truss V5	Truss Type Valley	Qty 1	Ply 1	Freedom Const\Isreal Benavidez
Job Reference (optional)					

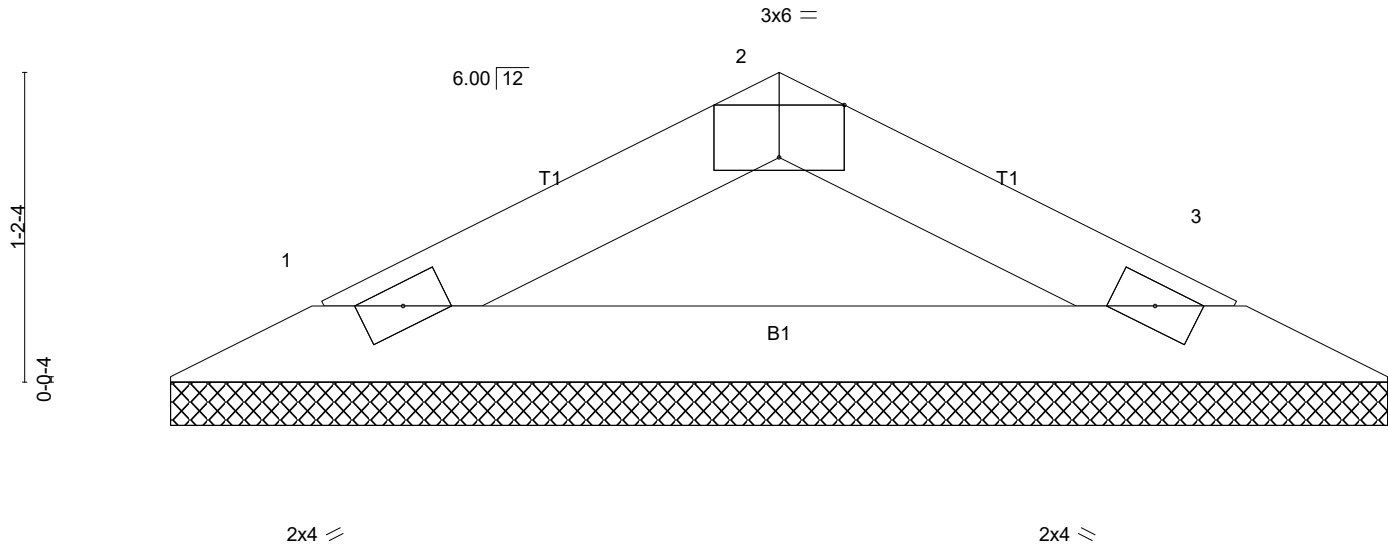
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Scale = 1:8.8



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

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	2-0-0	TC 0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 13 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-9-0 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=140/4-8-0 (min. 0-1-8), 3=140/4-8-0 (min. 0-1-8)  
Max Horz 1=12(LC 7)

**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.
- 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