

Job J0221-1067	Truss A1	Truss Type Common	Qty 4	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:44:47 2021 Page 1  
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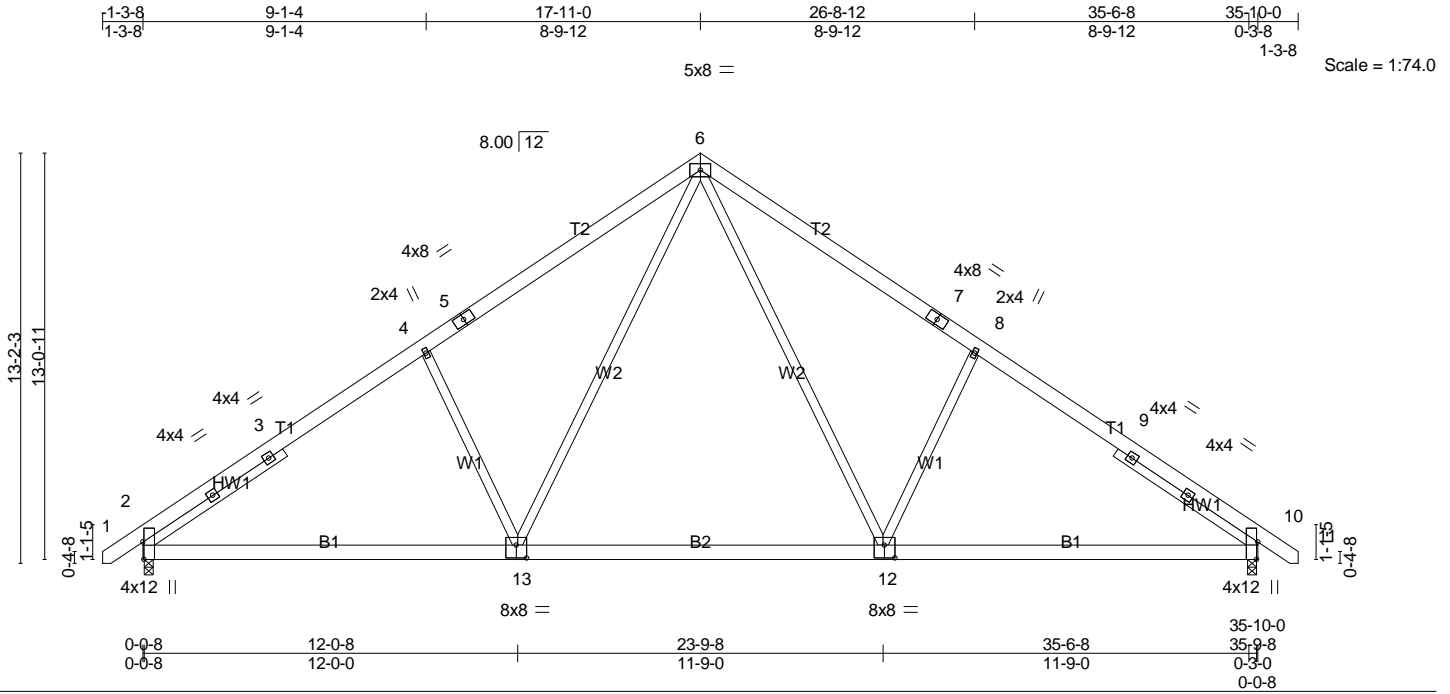


Plate Offsets (X,Y)-- [2:0-6-12,Edge], [10:0-6-12,Edge], [12:0-4-0,0-5-0], [13:0-4-0,0-5-0]

LOADING (psf)	SPACING	CSI	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.35	Vert(LL) -0.21	12-13	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.69	Vert(CT) -0.30	2-13	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.44	Horz(CT) 0.05	10	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL) 0.03	2-13	>999	240		
	Code IRC2015/TPI2014						Weight: 269 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2  
 SLIDER Left 2x4 SP No.2 -t 5-5-7, Right 2x4 SP No.2 -t 5-5-7

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-0-1 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.** (size) 2=0-3-8 (min. 0-2-2), 10=0-3-8 (min. 0-2-2)  
 Max Horz 2=-253(LC 10)  
 Max Grav 2=1792(LC 19), 10=1792(LC 20)

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

TOP CHORD 2-4=-2369/294, 4-6=-2202/397, 6-8=-2202/397, 8-10=-2369/294  
 BOT CHORD 2-13=-92/2006, 12-13=0/1357, 10-12=-96/1838  
 WEBS 6-12=-131/1103, 8-12=-473/293, 6-13=-131/1103, 4-13=-473/293

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-15 to 6-10-1, Interior(1) 6-10-1 to 17-11-0, Exterior(2) 17-11-0 to 25-11-0, Interior(1) 25-11-0 to 36-11-15 zone; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard

Job J0221-1067	Truss A1A	Truss Type GABLE	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:44:48 2021 Page 1  
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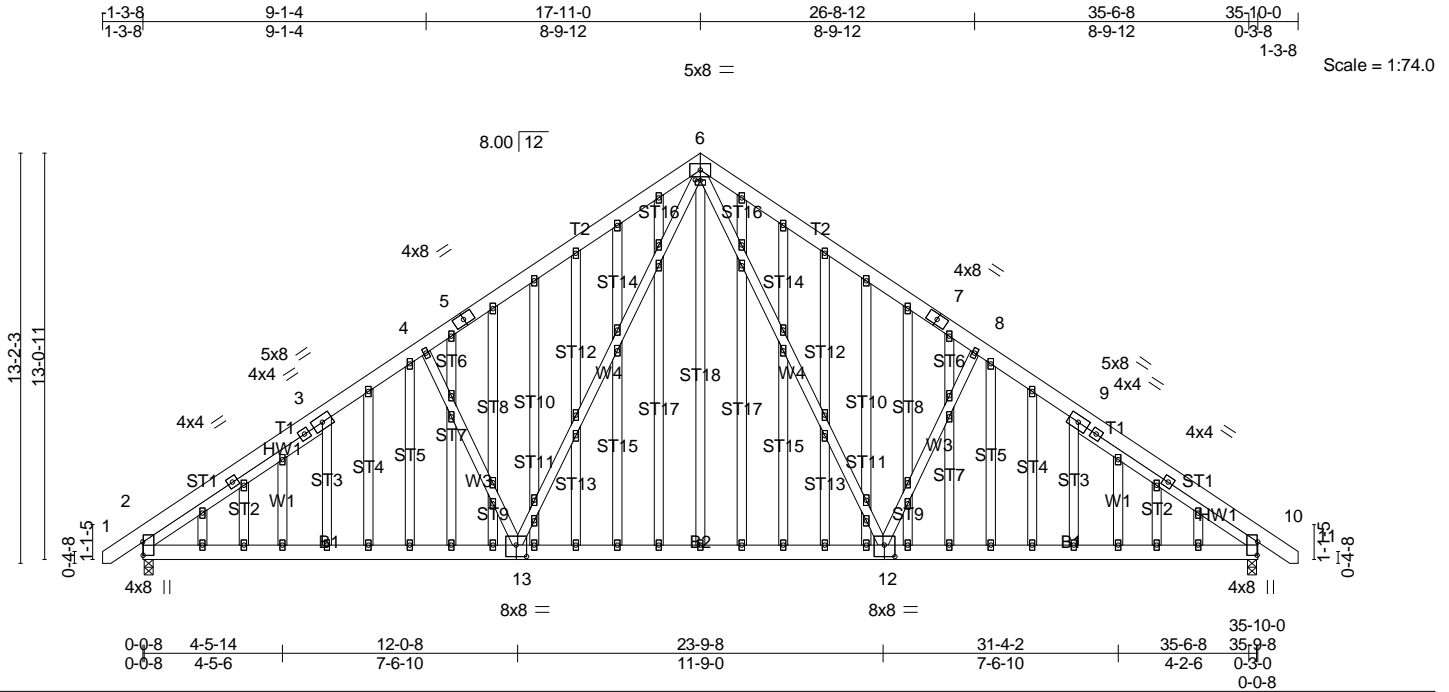


Plate Offsets (X,Y)-- [2:0-5-4,0-0-4], [6:0-2-0,0-0-4], [10:0-5-4,0-0-4], [12:0-4-0,0-4-8], [13:0-4-0,0-4-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.32	Vert(LL)	-0.38	12-13	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.65	Vert(CT)	-0.46	12-13	>937		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.44	Horz(CT)	0.05	10	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.03	2-13	>999		
	Code IRC2015/TPI2014						Weight: 514 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2  
 OTHERS 2x4 SP No.2  
 SLIDER Left 2x4 SP No.2 -t 6-11-15, Right 2x4 SP No.2 -t 6-11-15

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-4-13 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.**

(size) 2=0-3-8 (min. 0-1-13), 10=0-3-8 (min. 0-1-13)  
 Max Horz 2=-253(LC 10)  
 Max Grav 2=1562(LC 19), 10=1562(LC 20)

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

TOP CHORD 2-4=-2103/292, 4-6=-1937/395, 6-8=-1937/395, 8-10=-2103/292  
 BOT CHORD 2-13=-91/1784, 12-13=0/1204, 10-12=-95/1617  
 WEBS 6-12=-130/942, 8-12=-473/292, 6-13=-130/942, 4-13=-473/292

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-15 to 6-10-1, Interior(1) 6-10-1 to 17-11-0, Exterior(2) 17-11-0 to 25-11-0, Interior(1) 25-11-0 to 36-11-15 zone; C-C for members and forces & MWFRS for reactions shown; 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 studs spaced at 1-4-0 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard

Job J0221-1067	Truss A1B	Truss Type Roof Special	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:44:49 2021 Page 1  
ID:B4IkScsUv1LB9OVBG5UU\_Szjw\_W-BiDPebqRplyx97SfUs3NNugtUoGu34CkaHzEJsztEy

1-3-8	9-1-4	17-11-0	26-4-2	30-11-5	35-6-0	35-10-0
1-3-8	9-1-4	8-9-12	8-5-2	4-7-3	4-6-11	0-4-0

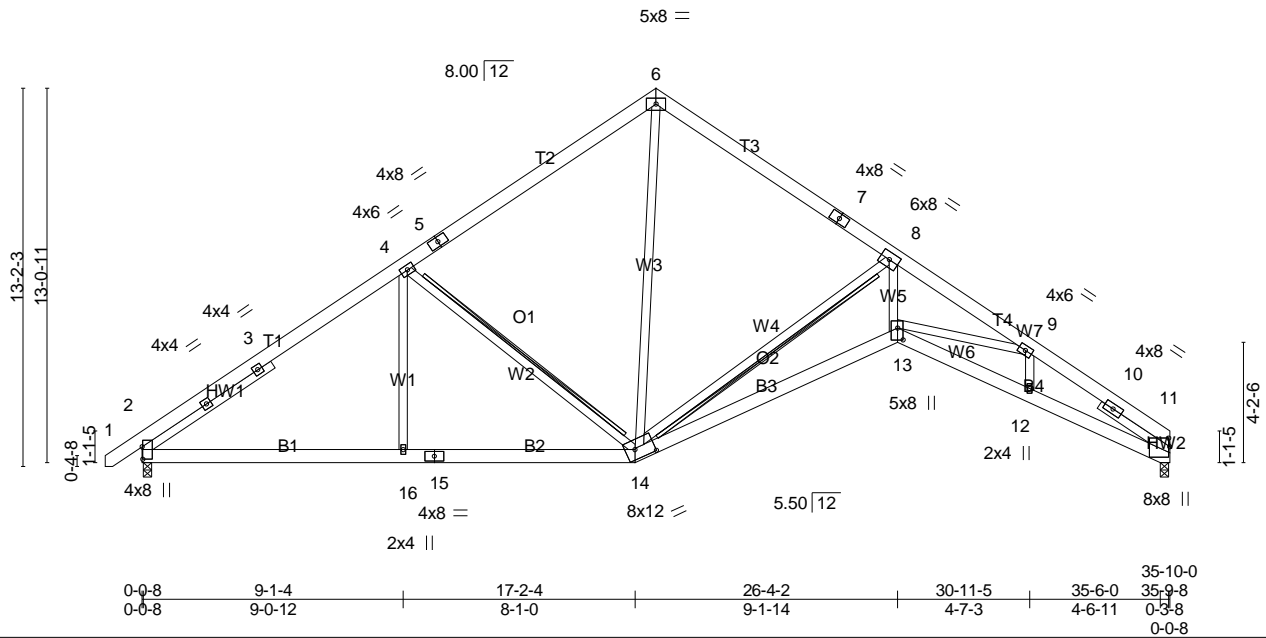


Plate Offsets (X,Y)-- [2:0-5-4,0-0-4], [11:0-3-10,0-0-8], [13:0-5-0,0-2-4], [14:0-8-0,0-4-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.77	Vert(LL) -0.24	13	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.59	Vert(CT) -0.51	13-14	>831	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.78	Horz(CT) 0.39	11	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.13	13	>999	240		
							Weight: 278 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 W4: 2x4 SP 2400F 2.0E  
 SLIDER Left 2x4 SP No.2 -t 5-5-4, Right 2x4 SP No.2 -t 2-11-10

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 2-4-13 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS T-Brace: 2x4 SPF No.2 - 4-14  
 2x6 SPF No.2 - 8-14  
 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.  
 Brace must cover 90% of web length.

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

**REACTIONS.** (size) 11=0-3-8 (min. 0-1-8), 2=0-3-8 (min. 0-1-15)  
 Max Horz 2=253(LC 11)  
 Max Grav 11=1425(LC 1), 2=1627(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-2168/276, 4-6=-1447/332, 6-8=-1377/324, 8-9=-4402/410, 9-11=-3913/436  
 BOT CHORD 2-16=-81/1835, 14-16=-81/1835, 13-14=-203/3879, 12-13=-279/3244, 11-12=-279/3192  
 WEBS 4-16=0/574, 4-14=-863/213, 6-14=-155/977, 8-14=-3154/327, 8-13=-82/3177,  
 9-13=0/809

**NOTES-**

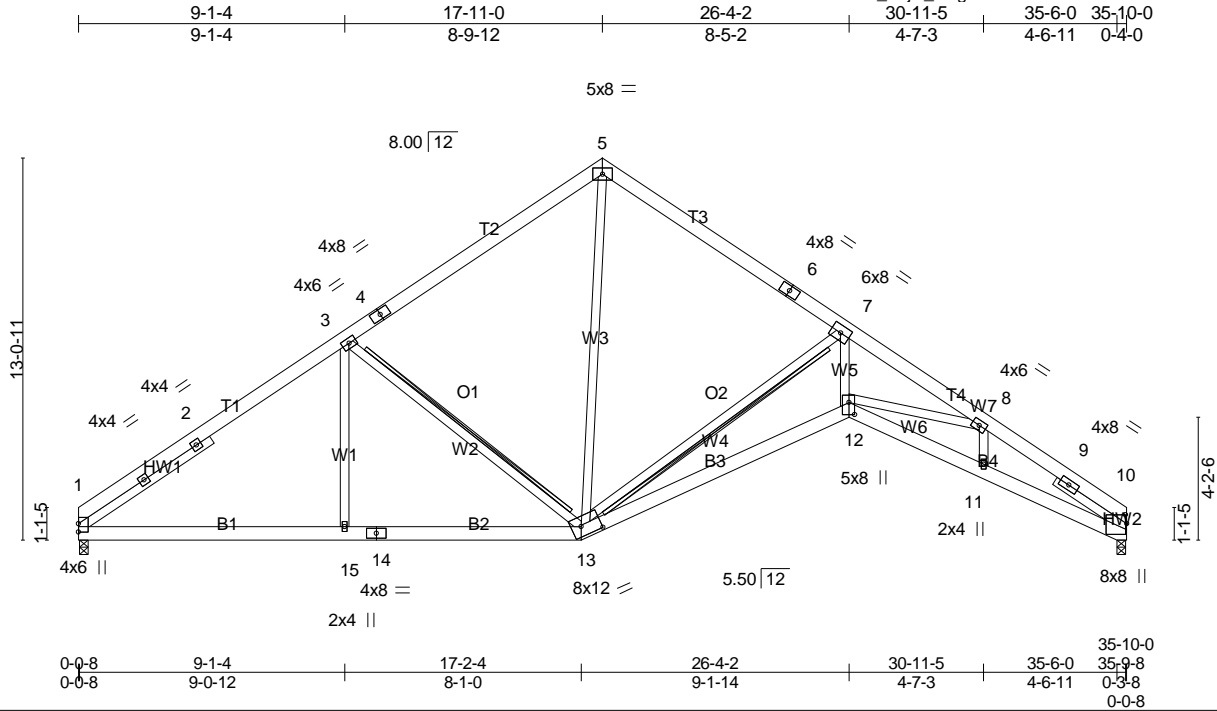
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-15 to 6-10-1, Interior(1) 6-10-1 to 17-11-0, Exterior(2) 17-11-0 to 26-2-6, Interior(1) 26-2-6 to 35-7-11 zone; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

**LOAD CASE(S)** Standard

Job J0221-1067	Truss A1C	Truss Type ROOF SPECIAL	Qty 7	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:44:50 2021 Page 1  
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Scale = 1:78.8

Plate Offsets (X,Y)-- [10:0-3-10,0-0-8], [12:0-5-0,0-2-4], [13:0-8-0,0-4-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.77	Vert(LL) -0.24	12	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.59	Vert(CT) -0.52	12-13	>830	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.78	Horz(CT) 0.39	10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.13	12	>999	240		
							Weight: 274 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 W4: 2x4 SP 2400F 2.0E  
 SLIDER Left 2x4 SP No.2 -t 5-5-4, Right 2x4 SP No.2 -t 2-11-10

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 2-4-11 oc purlins.  
 Rigid ceiling directly applied or 10-0-0 oc bracing.  
 BOT CHORD  
 WEBS T-Brace: 2x4 SPF No.2 - 3-13  
 2x6 SPF No.2 - 7-13  
 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.  
 Brace must cover 90% of web length.

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

**REACTIONS.** (size) 10=0-3-8 (min. 0-1-8), 1=0-3-8 (min. 0-1-13)  
 Max Horz 1=251(LC 8)  
 Max Grav 10=1426(LC 1), 1=1562(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-3=-2173/285, 3-5=-1448/339, 5-7=-1378/325, 7-8=-4407/411, 8-10=-3916/437  
 BOT CHORD 1-15=-86/1841, 13-15=-86/1841, 12-13=-215/3883, 11-12=-280/3247, 10-11=-279/3195  
 WEBS 3-15=0/578, 3-13=-868/215, 5-13=-163/980, 7-13=-3157/334, 7-12=-82/3180,  
 8-12=0/810

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 8-0-0, Interior(1) 8-0-0 to 17-11-0, Exterior(2) 17-11-0 to 26-2-6, Interior(1) 26-2-6 to 35-7-11 zone;C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

**LOAD CASE(S)** Standard

Job J0221-1067	Truss A2	Truss Type Hip	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:44:51 2021 Page 1  
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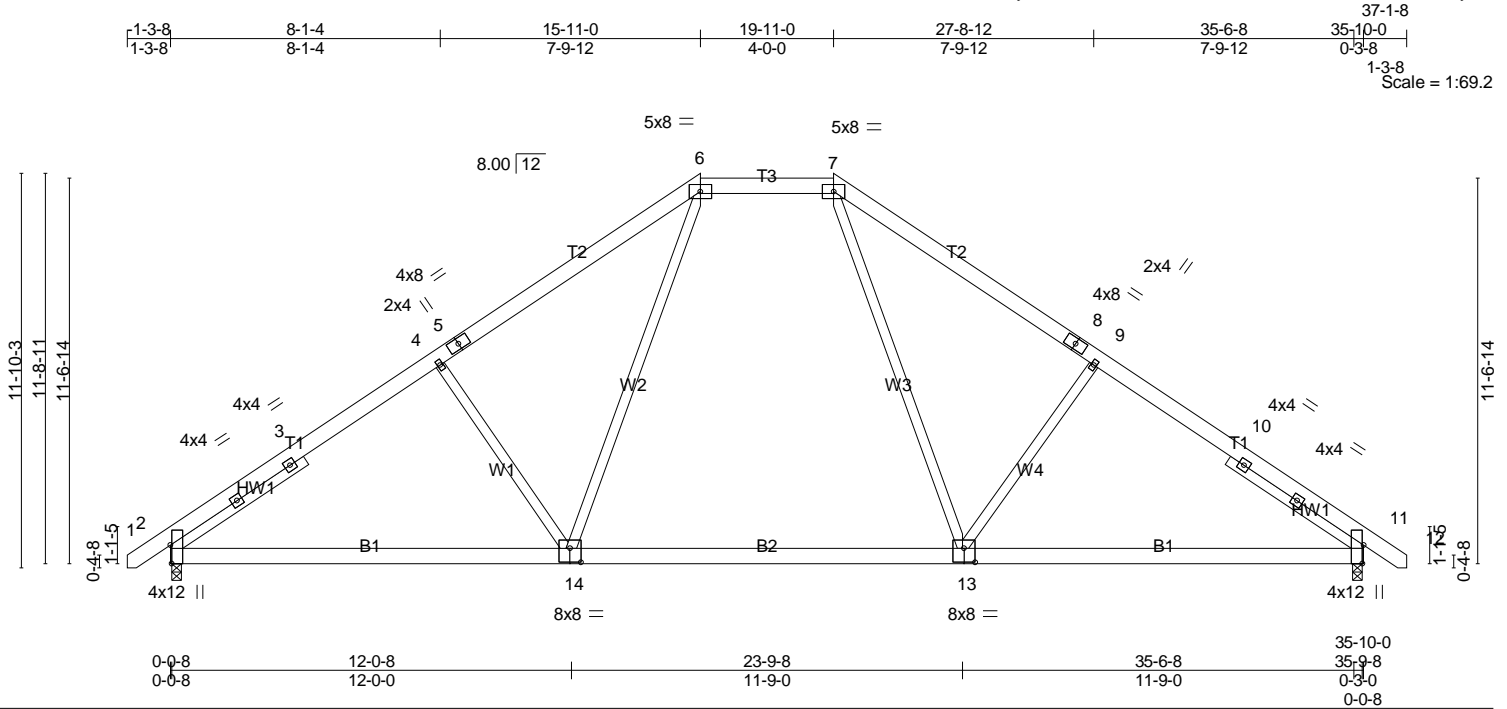


Plate Offsets (X,Y)-- [2:0-6-12,Edge], [11:0-6-12,Edge], [13:0-4-0,0-5-0], [14:0-4-0,0-5-0]

LOADING (psf)	SPACING	CSI	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.40	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.71	Vert(LL) -0.26 13-14 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.36	Vert(CT) -0.34 13-14 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.05 11 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.12 2-14 >999 240		
				Weight: 259 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2  
 SLIDER Left 2x4 SP No.2 -t 4-10-4, Right 2x4 SP No.2 -t 4-10-4

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-11-7 oc purlins, except  
 2-0-0 oc purlins (6-0-0 max.): 6-7.  
 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.** (size) 2=0-3-8 (min. 0-2-1), 11=0-3-8 (min. 0-2-1)  
 Max Horz 2=226(LC 11)  
 Max Grav 2=1751(LC 19), 11=1752(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-2324/337, 4-6=-2112/386, 6-7=-1375/356, 7-9=-2111/385, 9-11=-2324/337  
 BOT CHORD 2-14=-163/1956, 13-14=0/1435, 11-13=-155/1791  
 WEBS 4-14=-404/287, 6-14=-87/935, 7-13=-86/938, 9-13=-405/287

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-15 to 6-10-1, Interior(1) 6-10-1 to 15-11-0, Exterior(2) 15-11-0 to 31-2-12, Interior(1) 31-2-12 to 36-11-15 zone; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - 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 J0221-1067	Truss A2A	Truss Type Hip	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH
Comtech, Inc., Fayetteville, NC 28309, Bob Lewis					Job Reference (optional)

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:44:52 2021 Page 1  
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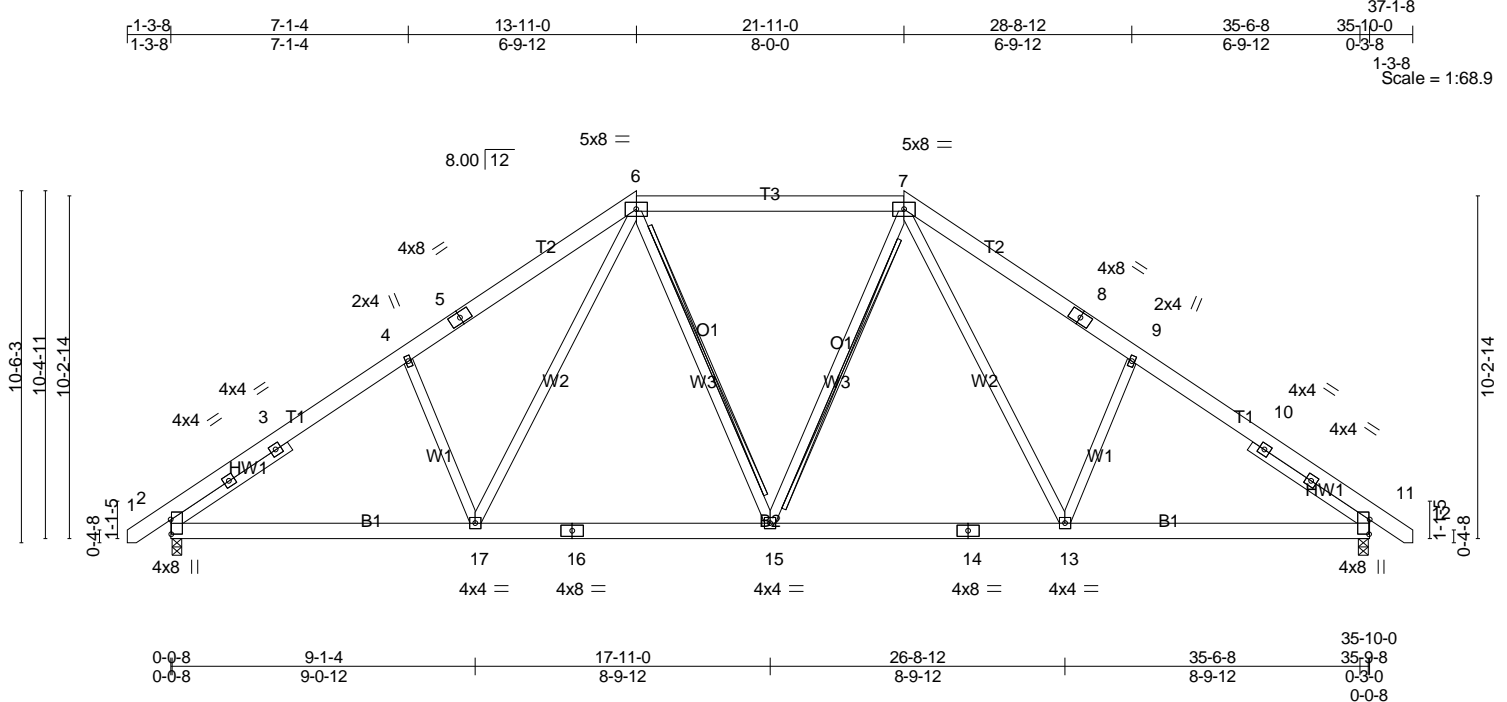


Plate Offsets (X,Y)-- [2:0-5-4,0-0-4], [11:0-5-4,0-0-4]

LOADING (psf)	SPACING	CSI	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.31	Vert(LL)	-0.10	13-15	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.44	Vert(CT)	-0.16	13-15	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.26	Horz(CT)	0.05	11	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.03	17	>999		
	Code IRC2015/TPI2014						Weight: 279 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.2  
SLIDER Left 2x4 SP No.2 -t 4-3-0, Right 2x4 SP No.2 -t 4-3-0

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-11-11 oc purlins, except  
2-0-0 oc purlins (5-10-12 max.): 6-7.  
Rigid ceiling directly applied or 10-0-0 oc bracing.  
BOT CHORD T-Brace: 2x4 SPF No.2 - 6-15, 7-15  
WEBS Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.  
Brace must cover 90% of web length.

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

**REACTIONS.** (size) 2=0-3-8 (min. 0-2-0), 11=0-3-8 (min. 0-2-0)  
Max Horz 2=199(LC 11)  
Max Grav 2=1678(LC 19), 11=1678(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-2312/352, 4-6=-2149/448, 6-7=-1549/351, 7-9=-2149/448, 9-11=-2312/352  
BOT CHORD 2-17=-181/1890, 15-17=-37/1499, 13-15=-28/1459, 11-13=-172/1769  
WEBS 4-17=-319/243, 6-17=-125/678, 6-15=-36/328, 7-15=-36/328, 7-13=-125/678,  
9-13=-319/243

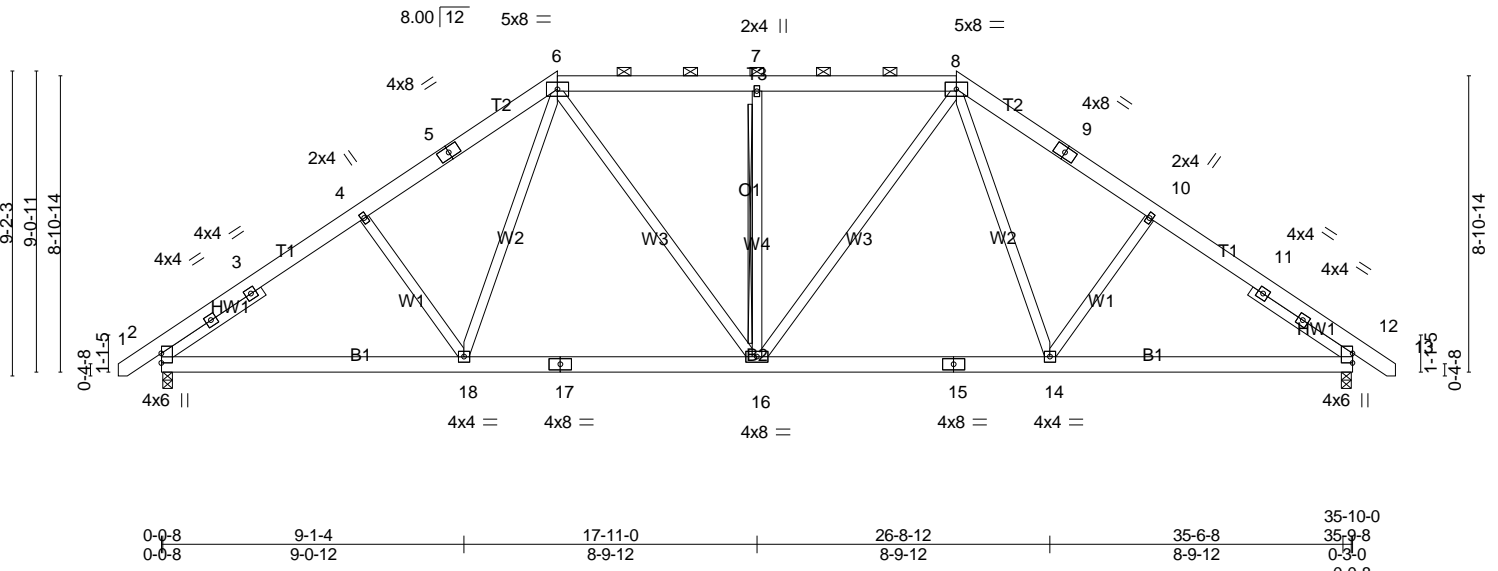
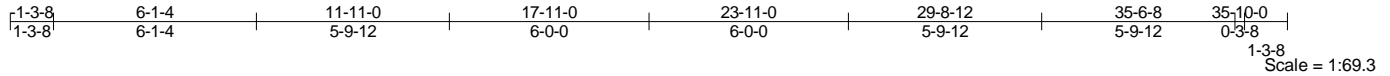
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-15 to 7-0-3, Interior(1) 7-0-3 to 13-11-0, Exterior(2) 13-11-0 to 33-2-12, Interior(1) 33-2-12 to 36-11-15 zone; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

**LOAD CASE(S)** Standard

Job J0221-1067	Truss A2B	Truss Type Hip	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:44:52 2021 Page 1  
ID:B4IkScsUv1LB9OVBG5UU\_Szjw\_W-cHvXGctK6DKV0bBE9\_c4\_XIXx0KIGbZAHFBvwAzjtEv



<b>LOADING</b> (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	<b>SPACING-</b> Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2015/TPI2014	<b>CSI.</b> TC 0.25 BC 0.41 WB 0.16 Matrix-S	<b>DEFL.</b> in (loc) l/defl L/d Vert(LL) -0.10 14-16 >999 360 Vert(CT) -0.16 14-16 >999 240 Horz(CT) 0.05 12 n/a n/a Wind(LL) 0.03 16 >999 240	<b>PLATES</b> MT20 Weight: 280 lb	<b>GRIP</b> 244/190 FT = 20%
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**LUMBER-**  
TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.2  
SLIDER Left 2x4 SP No.2 -t 3-7-13, Right 2x4 SP No.2 -t 3-7-13

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-1-13 oc purlins, except 2-0-0 oc purlins (5-11-11 max.): 6-8.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS T-Brace: 2x4 SPF No.2 - 7-16  
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

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

**REACTIONS.** (size) 2=0-3-8 (min. 0-1-13), 12=0-3-8 (min. 0-1-13)  
Max Horz 2=173(LC 10)  
Max Grav 2=1517(LC 2), 12=1517(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-2123/379, 4-6=-1924/416, 6-7=-1695/402, 7-8=-1695/402, 8-10=-1924/416, 10-12=-2123/379  
BOT CHORD 2-18=-209/1685, 16-18=-81/1444, 14-16=-69/1441, 12-14=-197/1611  
WEBS 6-18=-52/463, 6-16=-78/515, 7-16=-414/185, 8-16=-78/515, 8-14=-52/463

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-15 to 6-10-1, Interior(1) 6-10-1 to 11-11-0, Exterior(2) 11-11-0 to 23-2-12, Interior(1) 23-2-12 to 23-11-0, Exterior(2) 23-11-0 to 35-2-12, Interior(1) 35-2-12 to 36-11-15 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 9) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

**LOAD CASE(S)** Standard

Job J0221-1067	Truss A3	Truss Type Roof Special	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:44:53 2021 Page 1

ID: B4lkScsUv1LB9OVBG5UU\_Szjw\_W-4TSvUytysXSMelmQjj7JXkrijQh1?rpJvVxSSdzjtEu

1-3-8	5-7-4	10-11-0	11-11-0	18-11-0	25-11-0	30-8-12	35-6-8	35-10-0
1-3-8	5-7-4	5-3-12	1-0-0	7-0-0	7-0-0	4-9-12	4-9-12	0-3-8

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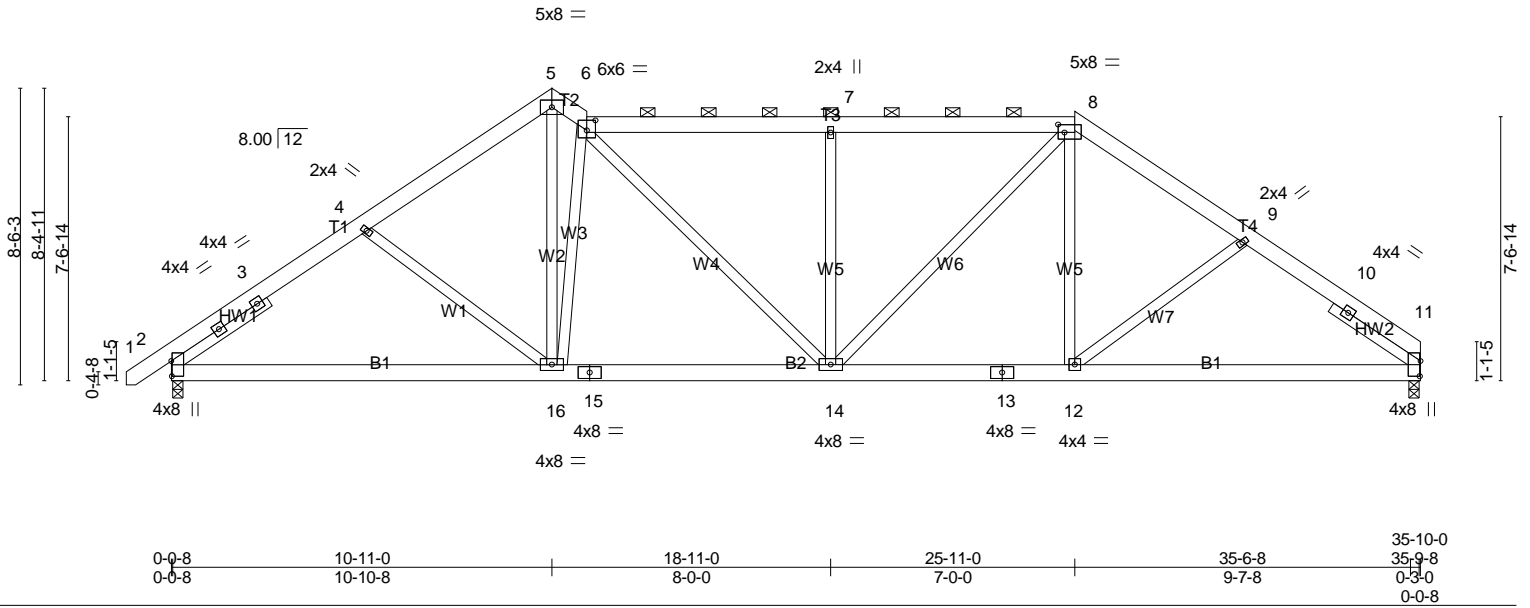


Plate Offsets (X,Y)-- [2:0-5-4,0-0-4], [6:0-3-0,0-3-8], [8:0-2-4,0-2-12], [11:0-5-4,0-0-4]

LOADING (psf)	SPACING-	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	14-16	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.38	Vert(CT) -0.20	2-16	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 1.00	Horz(CT) 0.05	11	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.05	14	>999	240		
							Weight: 281 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2  
 SLIDER Left 2x4 SP No.2 -t 3-4-3, Right 2x4 SP No.2 -t 3-0-9

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-3-13 oc purlins, except  
 2-0-0 oc purlins (5-5-9 max.): 6-8.  
 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.**

(size) 11=0-3-8 (min. 0-1-11), 2=0-3-8 (min. 0-1-12)  
 Max Horz 2=-158(LC 10)  
 Max Uplift 11=-30(LC 13)  
 Max Grav 11=1432(LC 1), 2=1504(LC 1)

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

TOP CHORD 2-4=-2013/363, 4-5=-1780/345, 5-6=-1607/357, 6-7=-1881/422, 7-8=-1879/421,  
 8-9=-1827/365, 9-11=-2025/383  
 BOT CHORD 2-16=-197/1607, 14-16=-101/1652, 12-14=-89/1502, 11-12=-211/1523  
 WEBS 5-16=-244/1429, 6-16=-1115/273, 6-14=-94/462, 7-14=-538/216, 8-14=-110/558,  
 8-12=0/361

**NOTES-**

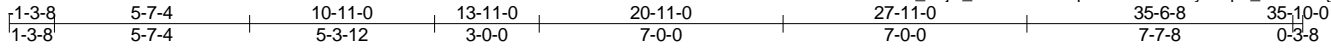
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) V<sub>asd</sub>=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-15 to 6-10-1, Interior(1) 6-10-1 to 10-11-0, Exterior(2) 10-11-0 to 11-11-0, Interior(1) 11-11-0 to 25-11-0, Exterior(2) 25-11-0 to 33-11-0, Interior(1) 33-11-0 to 35-10-0 zone; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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) 11.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 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 J0221-1067	Truss A3A	Truss Type Roof Special	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH
Comtech, Inc., Fayetteville, NC 28309, Bob Lewis					Job Reference (optional)

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:44:54 2021 Page 1  
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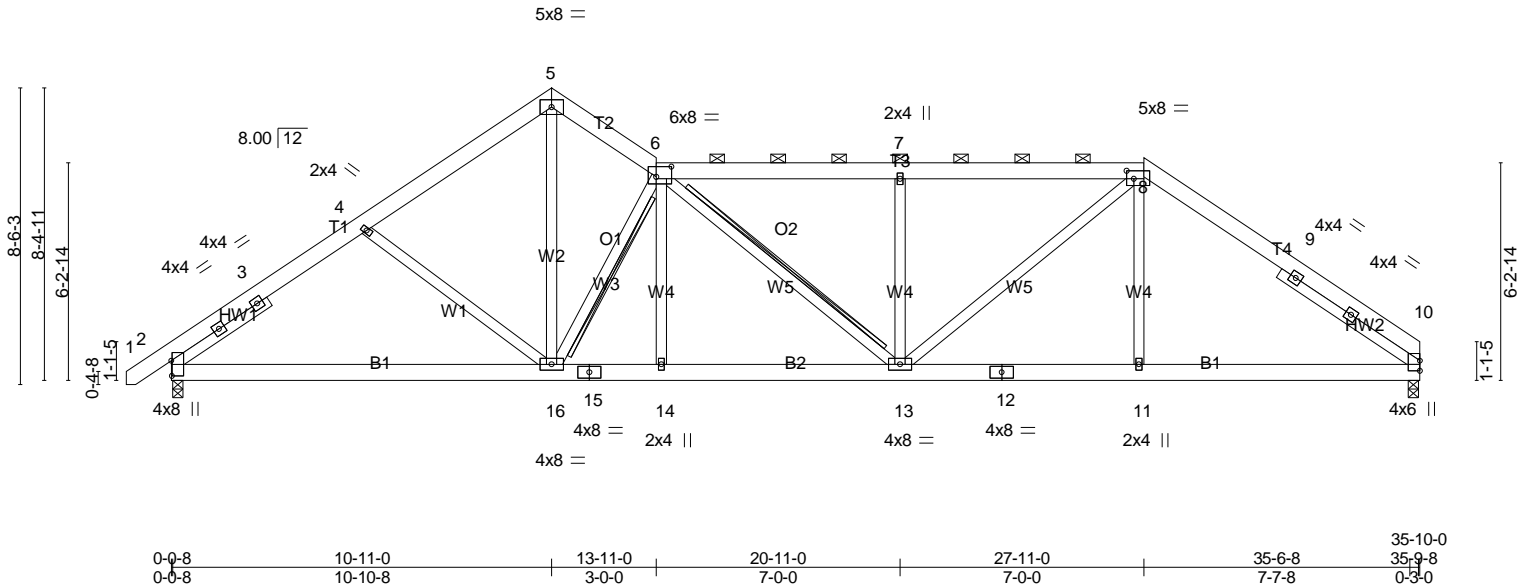


Plate Offsets (X,Y)-- [2:0-5-4,0-0-4], [6:0-5-4,0-3-8], [8:0-2-8,0-2-12]

LOADING (psf)	SPACING	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	2-16	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.40	Vert(CT) -0.21	2-16	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.39	Horz(CT) 0.06	10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.05	13-14	>999	240		
							Weight: 274 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2  
 SLIDER Left 2x4 SP No.2 -t 3-4-3, Right 2x4 SP No.2 -t 4-9-12

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-3-14 oc purlins, except 2-0-0 oc purlins (5-0-10 max.): 6-8.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS T-Brace: 2x4 SPF No.2 - 6-16, 6-13  
 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.  
 Brace must cover 90% of web length.

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

**REACTIONS.** (size) 10=0-3-8 (min. 0-1-12), 2=0-3-8 (min. 0-1-12)  
 Max Horz 2=159(LC 9)  
 Max Uplift 10=-30(LC 13)  
 Max Grav 10=1476(LC 2), 2=1504(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-2017/356, 4-5=-1759/336, 5-6=-1746/365, 6-7=-2231/453, 7-8=-2231/453, 8-10=-2114/352  
 BOT CHORD 2-16=-192/1566, 14-16=-202/2111, 13-14=-201/2114, 11-13=-146/1640, 10-11=-148/1631  
 WEBS 5-16=-276/1598, 6-16=-1532/325, 6-13=-56/259, 7-13=-522/201, 8-13=-122/873, 8-11=0/433

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-15 to 6-10-1, Interior(1) 6-10-1 to 10-11-0, Exterior(2) 10-11-0 to 13-11-0, Interior(1) 13-11-0 to 27-11-0, Exterior(2) 27-11-0 to 35-10-0 zone; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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) 10.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer on page 2

Job	Truss	Truss Type	Qty	Ply	RAY & CHRISTINE HYMBAUGH
J0221-1067	A3A	Roof Special	1	1	Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

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**NOTES-**

- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

**LOAD CASE(S)** Standard



Job	Truss	Truss Type	Qty	Ply	RAY & CHRISTINE HYMBAUGH
J0221-1067	A3GR	Roof Special Girder	1	2	Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:44:56 2021 Page 2  
 ID:B4IkScsUv1LB9OVBG5UU\_Szjw\_W-U2826\_wq9SrxVCV?Oqh09NTBCdfjCGymBs963yzjtEr

**NOTES-**

12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 145 lb down and 102 lb up at 23-8-12, 145 lb down and 102 lb up at 25-8-12, 145 lb down and 102 lb up at 27-8-12, and 145 lb down and 102 lb up at 29-8-12, and 145 lb down and 121 lb up at 33-8-12 on top chord, and 1129 lb down at 21-11-0, 75 lb down at 23-8-12, 75 lb down at 25-8-12, 75 lb down at 27-8-12, 75 lb down at 29-8-12, and 75 lb down at 31-8-12, and 75 lb down at 33-8-12 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: 1-5=-60, 5-6=-60, 6-8=-60, 8-10=-60, 2-10=-20

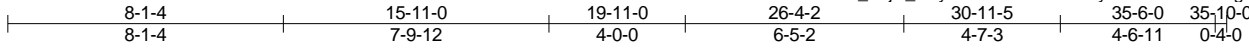
Concentrated Loads (lb)

Vert: 11=-37(F) 12=-37(F) 18=-105(F) 19=-105(F) 20=-105(F) 21=-105(F) 22=-105(F) 23=-1129(F) 24=-37(F) 25=-37(F) 26=-37(F) 27=-37(F)

Job J0221-1067	Truss A4	Truss Type Hip	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:44:57 2021 Page 1  
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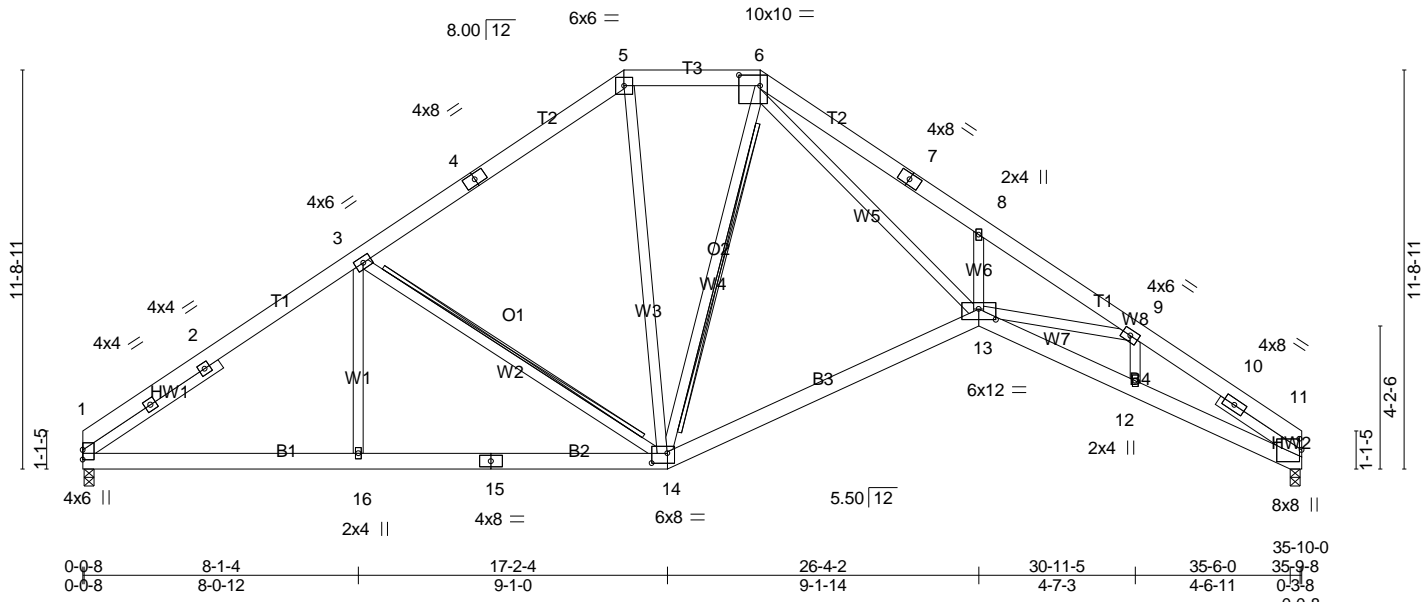


Plate Offsets (X,Y)-- [6:0-7-8,0-3-12], [11:0-3-14,0-0-12], [13:0-6-0,0-3-12], [14:0-5-8,0-3-8]

LOADING (psf)	SPACING	CSI	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.79	Vert(LL) -0.25	13	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.55	Vert(CT) -0.53	13-14	>811	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.86	Horz(CT) 0.39	11	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL) 0.15	13	>999	240		
	Code IRC2015/TPI2014						Weight: 283 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2  
 SLIDER Left 2x4 SP No.2 -t 4-10-1, Right 2x4 SP No.2 -t 2-11-10

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 2-3-2 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-6.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS T-Brace: 2x4 SPF No.2 - 3-14, 6-14  
 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.  
 Brace must cover 90% of web length.

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

**REACTIONS.** (size) 11=0-3-8 (min. 0-1-8), 1=0-3-8 (min. 0-1-12)  
 Max Horz 1=225(LC 11)  
 Max Grav 11=1426(LC 1), 1=1502(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-3=-2123/314, 3-5=-1459/351, 5-6=-1144/352, 6-8=-4476/692, 8-9=-4360/501, 9-11=-3933/504  
 BOT CHORD 1-16=-145/1782, 14-16=-145/1782, 13-14=0/1406, 12-13=-338/3267, 11-12=-336/3214  
 WEBS 3-16=0/518, 3-14=-783/215, 5-14=-69/456, 6-14=-542/53, 6-13=-402/3519, 8-13=-475/266, 9-13=0/717

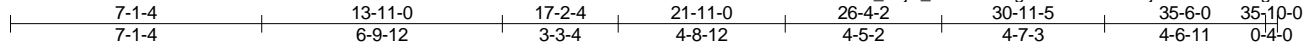
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 8-1-4, Interior(1) 8-1-4 to 15-11-0, Exterior(2) 15-11-0 to 30-11-5, Interior(1) 30-11-5 to 35-7-11 zone; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

**LOAD CASE(S)** Standard

Job J0221-1067	Truss A4A	Truss Type Hip	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

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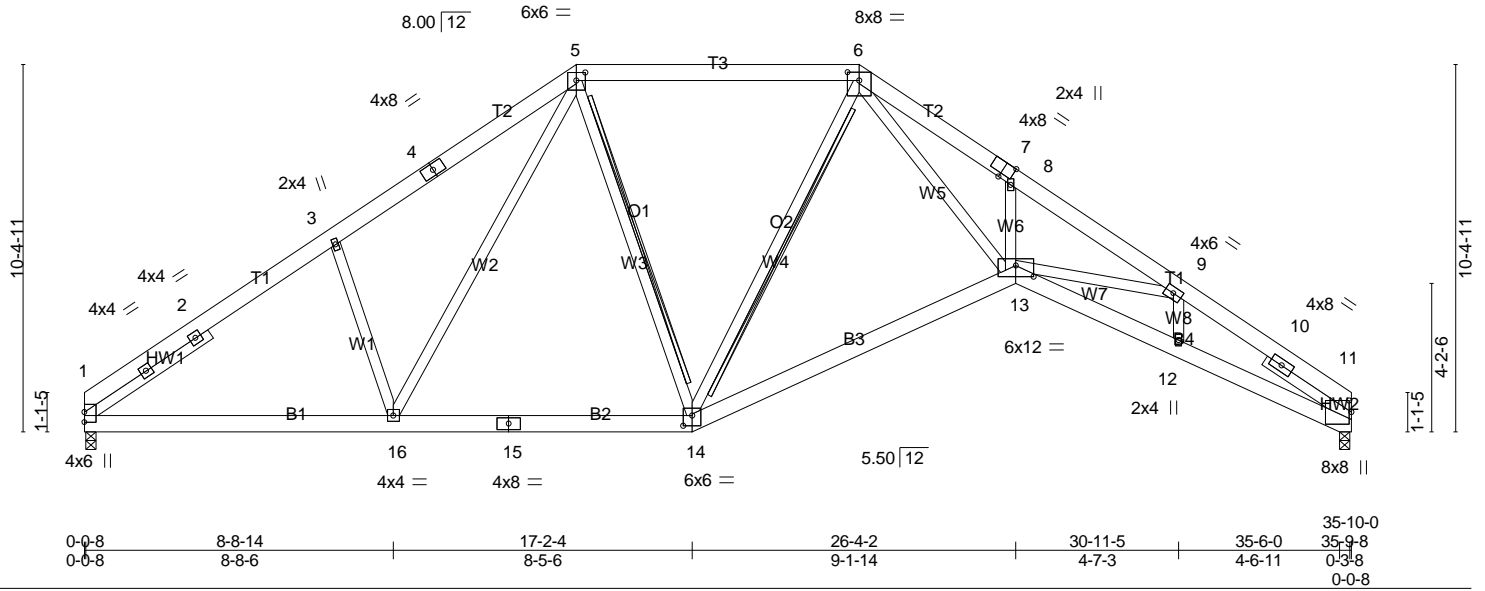


Plate Offsets (X,Y)-- [5:0-3-0,0-2-12], [6:0-4-0,0-2-13], [7:0-3-11,Edge], [11:0-3-14,0-0-12], [13:0-6-0,0-3-12], [14:0-3-0,0-3-8]

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.80	Vert(LL) -0.22	13	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.56	Vert(CT) -0.46	13-14	>928	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.82	Horz(CT) 0.34	11	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL) 0.13	13	>999	240		
	Code IRC2015/TPI2014						Weight: 275 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.2  
SLIDER Left 2x4 SP No.2 -t 4-3-0, Right 2x4 SP No.2 -t 2-11-10

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-6.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS T-Brace: 2x4 SPF No.2 - 5-14, 6-14  
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

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

**REACTIONS.** (size) 11=0-3-8 (min. 0-1-8), 1=0-3-8 (min. 0-1-12)  
Max Horz 1=198(LC 8)  
Max Grav 11=1426(LC 1), 1=1492(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-3=-2136/353, 3-5=-1999/468, 5-6=-1307/359, 6-8=-4381/689, 8-9=-4332/543, 9-11=-3941/559  
BOT CHORD 1-16=-187/1751, 14-16=-41/1315, 13-14=-69/1743, 12-13=-400/3284, 11-12=-393/3225  
WEBS 3-16=-336/255, 5-16=-145/750, 6-14=-716/87, 6-13=-363/3328, 8-13=-363/197, 9-13=0/695

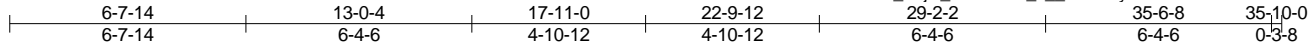
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 8-0-0, Interior(1) 8-0-0 to 13-11-0, Exterior(2) 13-11-0 to 33-2-12, Interior(1) 33-2-12 to 35-7-11 zone; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

**LOAD CASE(S)** Standard

Job J0221-1067	Truss A4B	Truss Type GABLE	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:01 2021 Page 1  
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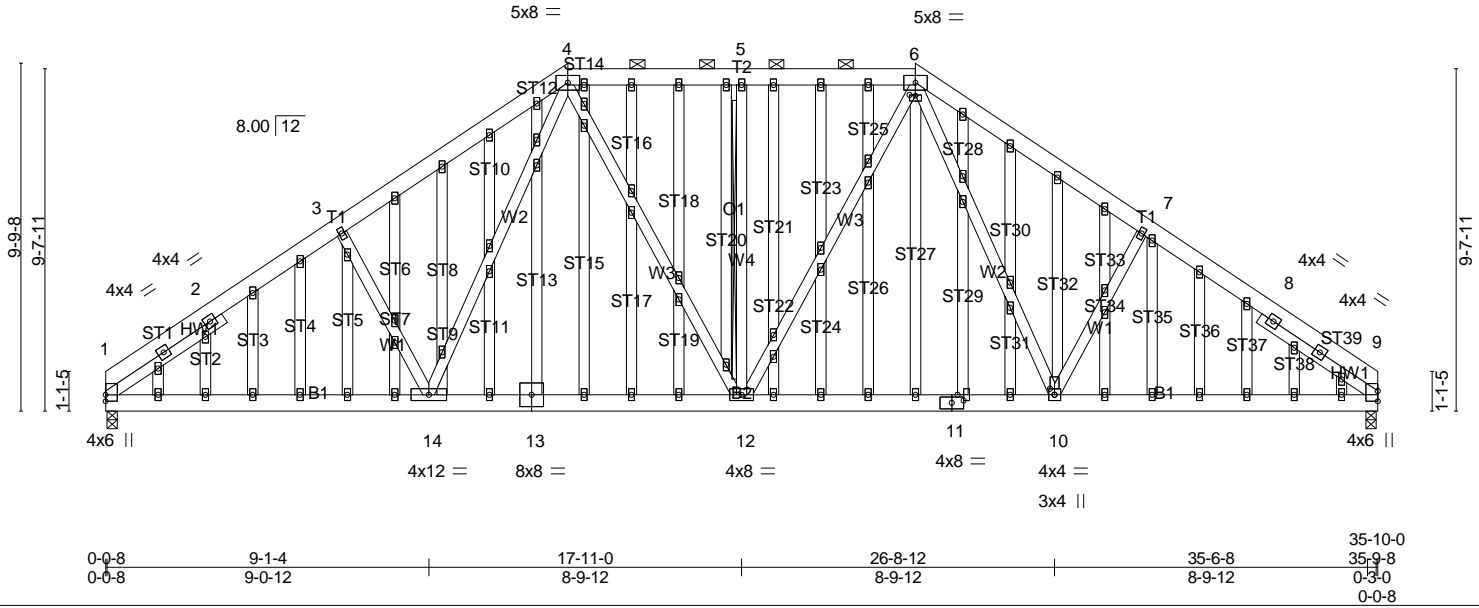


Plate Offsets (X,Y)-- [6:0-2-0,0-0-4], [10:0-2-0,0-1-8], [13:0-1-12,0-0-0], [13:0-0-0,0-2-12], [14:0-0-7,0-0-0], [42:0-1-12,0-0-0], [57:0-2-0,0-2-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.25	Vert(LL) -0.11	10-12	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.44	Vert(CT) -0.17	10-12	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.16	Horz(CT) 0.05	9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.03	12	>999	240		
							Weight: 500 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.2  
OTHERS 2x4 SP No.2  
SLIDER Left 2x4 SP No.2 -t 3-11-13, Right 2x4 SP No.2 -t 3-11-13

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-1-6 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-6.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS T-Brace: 2x4 SPF No.2 - 5-12  
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.  
Brace must cover 90% of web length.

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

**REACTIONS.** (size) 1=0-3-8 (min. 0-1-12), 9=0-3-8 (min. 0-1-12)  
Max Horz 1=184(LC 11)  
Max Grav 1=1481(LC 19), 9=1481(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-3=-2161/374, 3-4=-1965/442, 4-5=-1590/389, 5-6=-1590/389, 6-7=-1965/442, 7-9=-2161/374  
BOT CHORD 1-14=-209/1745, 12-14=-68/1434, 10-12=-56/1410, 9-10=-197/1647  
WEBS 3-14=-281/228, 4-14=-95/534, 4-12=-75/471, 5-12=-318/140, 6-12=-75/471, 6-10=-95/535, 7-10=-281/228

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 8-0-0, Interior(1) 8-0-0 to 13-0-4, Exterior(2) 13-0-4 to 34-1-8, Interior(1) 34-1-8 to 35-10-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - Provide adequate drainage to prevent water ponding.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable studs spaced at 1-4-0 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

Job	Truss	Truss Type	Qty	Ply	RAY & CHRISTINE HYMBAUGH
J0221-1067	A4B	GABLE	1	1	Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:01 2021 Page 2  
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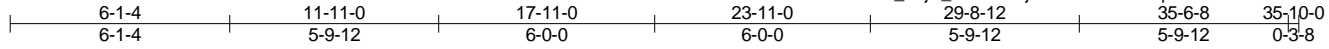
**LOAD CASE(S)** Standard



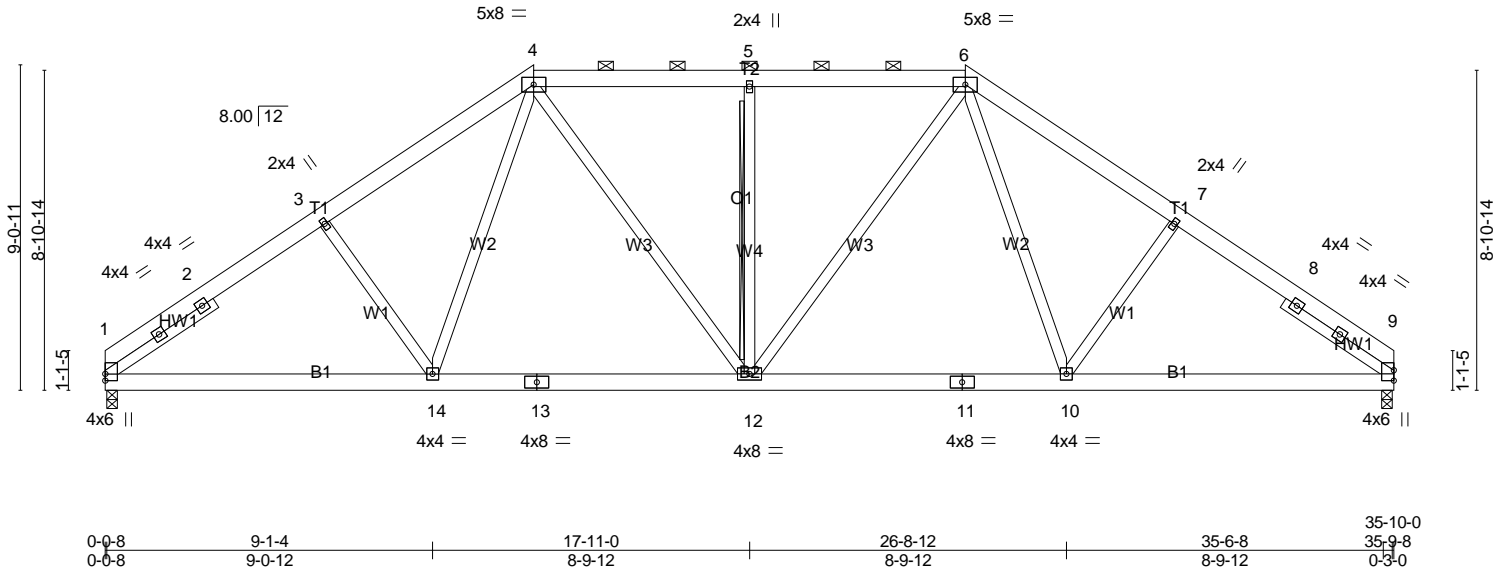
Job J0221-1067	Truss A4C	Truss Type Hip	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:04 2021 Page 1  
ID: B41kScsUv1LB9OVBG5UU\_Szjw\_W-Fad4nj0rHvroSR6XsWquU3oamrR740Yx165XLUzjtEj



Scale: 3/16"=1'



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 0.41	Vert(LL) -0.10 10-12 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.16	Vert(CT) -0.16 10-12 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.05 9 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.03 12 >999 240	Weight: 273 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2  
 SLIDER Left 2x4 SP No.2 -t 3-7-13, Right 2x4 SP No.2 -t 3-7-13

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-1-8 oc purlins, except 2-0-0 oc purlins (5-11-9 max.): 4-6.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS T-Brace: 2x4 SPF No.2 - 5-12  
 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.  
 Brace must cover 90% of web length.

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

**REACTIONS.** (size) 1=0-3-8 (min. 0-1-12), 9=0-3-8 (min. 0-1-12)  
 Max Horz 1=169(LC 11)  
 Max Grav 1=1459(LC 2), 9=1459(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-3=-2132/386, 3-4=-1933/422, 4-5=-1698/409, 5-6=-1698/409, 6-7=-1933/422, 7-9=-2132/386  
 BOT CHORD 1-14=-220/1694, 12-14=-90/1447, 10-12=-78/1446, 9-10=-208/1621  
 WEBS 4-14=-53/471, 4-12=-78/514, 5-12=-411/185, 6-12=-78/514, 6-10=-53/471

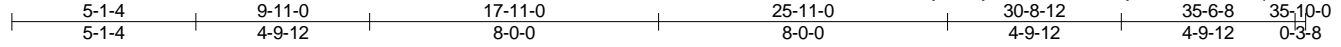
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph (3-second gust) V<sub>asd</sub>=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 8-0-0, Interior(1) 8-0-0 to 11-11-0, Exterior(2) 11-11-0 to 23-2-12, Interior(1) 23-2-12 to 23-11-0, Exterior(2) 23-11-0 to 35-2-12, Interior(1) 35-2-12 to 35-10-0 zone; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

**LOAD CASE(S)** Standard

Job J0221-1067	Truss A4D	Truss Type Hip	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:05 2021 Page 1  
ID:B4IkScsUv1LB9OVBG5UU\_Szjw\_W-jnBS?31T2Dzf4bhjQDL70GKK2Fn9pPY4Gmr5twzjtEi



Scale: 3/16"=1'

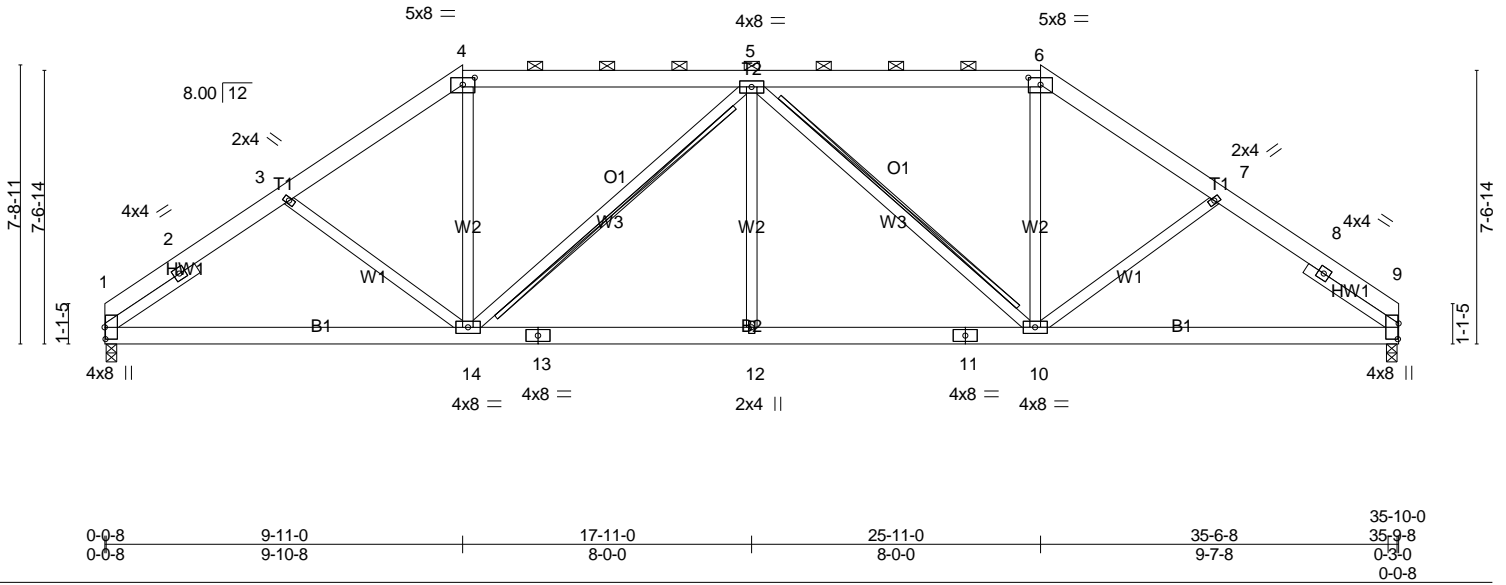


Plate Offsets (X,Y)-- [1:0-4-0,0-0-4], [4:0-4-0,0-2-6], [6:0-4-0,0-2-6], [9:0-5-4,0-0-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.28	Vert(LL)	-0.08	12-14	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.36	Vert(CT)	-0.15	9-10	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.44	Horz(CT)	0.06	9	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.04	12	>999		
	Code IRC2015/TPI2014						Weight: 265 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-3-8 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-6.
BOT CHORD 2x6 SP No.1	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	T-Brace: 2x4 SPF No.2 - 5-14, 5-10
SLIDER Left 2x4 SP No.2 -t 3-0-9, Right 2x4 SP No.2 -t 3-0-9	Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

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

**REACTIONS.** (size) 1=0-3-8 (min. 0-1-11), 9=0-3-8 (min. 0-1-11)  
Max Horz 1=143(LC 9)  
Max Grav 1=1433(LC 1), 9=1433(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-3=-2026/397, 3-4=-1846/381, 4-5=-1530/360, 5-6=-1530/360, 6-7=-1846/381, 7-9=-2026/397  
BOT CHORD 1-14=-223/1550, 12-14=-195/2008, 10-12=-195/2008, 9-10=-222/1522  
WEBS 4-14=-58/660, 5-14=-710/128, 5-12=0/499, 5-10=-710/128, 6-10=-58/660

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 8-0-0, Interior(1) 8-0-0 to 9-11-0, Exterior(2) 9-11-0 to 21-2-12, Interior(1) 21-2-12 to 25-11-0, Exterior(2) 25-11-0 to 35-10-0 zone;C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

**LOAD CASE(S)** Standard

Job J0221-1067	Truss A4E	Truss Type Hip	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:05 2021 Page 1  
ID: B4lkScsUv1LB9OVBG5UU\_Sziw\_W-jnBS?31T2Dzf4bhjQDL70GKj2F18pQO4Gmr5twzjtEi

1-3-8	7-11-0	14-7-0	21-3-0	27-11-0	35-6-8	35-10-0
1-3-8	7-11-0	6-8-0	6-8-0	6-8-0	7-7-8	0-3-8

Scale = 1:67.8

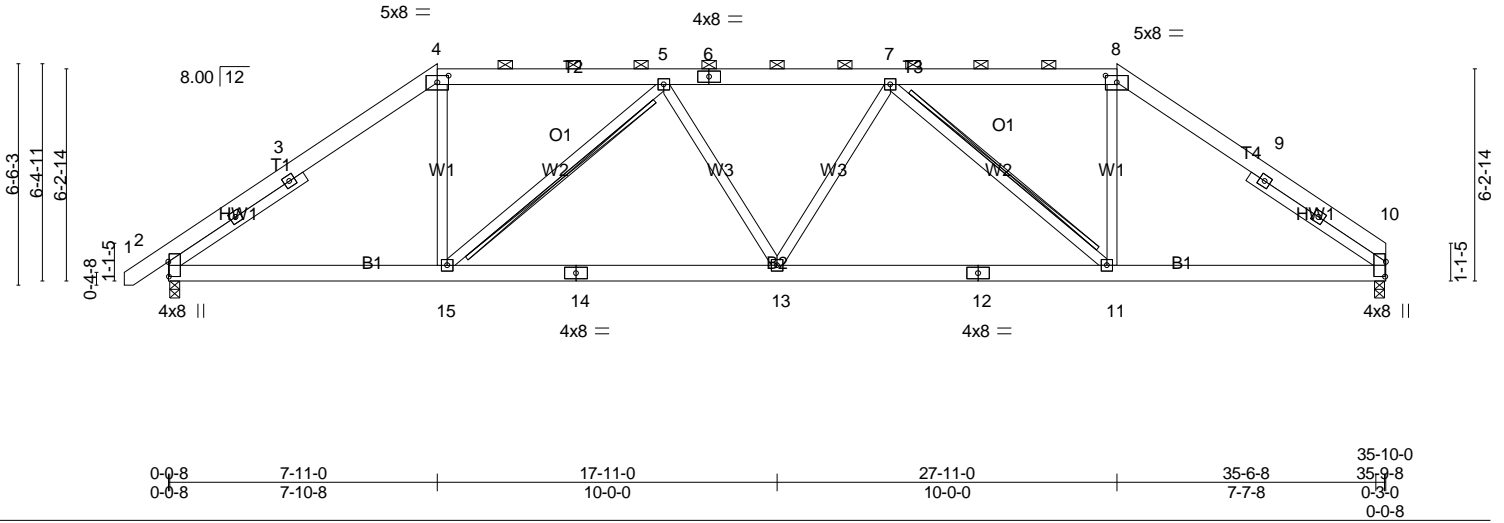


Plate Offsets (X,Y)-- [2:0-5-4,0-0-4], [4:0-4-0,0-2-6], [8:0-4-0,0-2-6], [10:0-5-4,0-0-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.35	Vert(LL)	-0.11	13-15	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.49	Vert(CT)	-0.21	13-15	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.38	Horz(CT)	0.07	10	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.05	13	>999		
	Code IRC2015/TPI2014						Weight: 253 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2  
 SLIDER Left 2x4 SP No.2 -t 4-9-12, Right 2x4 SP No.2 -t 4-9-12

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-0-12 oc purlins, except  
 2-0-0 oc purlins (4-11-9 max.): 4-8.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS T-Brace: 2x4 SPF No.2 - 5-15, 7-11  
 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.  
 Brace must cover 90% of web length.

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

**REACTIONS.** (size) 10=0-3-8 (min. 0-1-13), 2=0-3-8 (min. 0-1-14)  
 Max Horz 2=118(LC 9)  
 Max Grav 10=1518(LC 2), 2=1578(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-2197/352, 4-5=-1719/356, 5-7=-2453/442, 7-8=-1723/370, 8-10=-2202/362  
 BOT CHORD 2-15=-142/1695, 13-15=-268/2345, 11-13=-278/2346, 10-11=-156/1699  
 WEBS 4-15=-11/933, 5-15=-893/168, 5-13=0/251, 7-11=-891/162, 8-11=-6/935

**NOTES-**

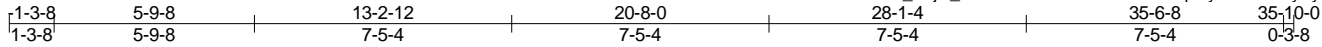
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-15 to 6-10-1, Interior(1) 6-10-1 to 7-11-0, Exterior(2) 7-11-0 to 19-2-12, Interior(1) 19-2-12 to 27-11-0, Exterior(2) 27-11-0 to 35-10-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are 4x4 MT20 unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

**LOAD CASE(S)** Standard

Job J0221-1067	Truss A4GR	Truss Type Half Hip Girder	Qty 1	Ply 2	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:08 2021 Page 1  
ID: B4IkScsUv1LB9OVBG5UU\_Szjw\_W-8Msad43MK8LEx2PI5LvgqvyCSn?0eyXyk3IUFzjtEf



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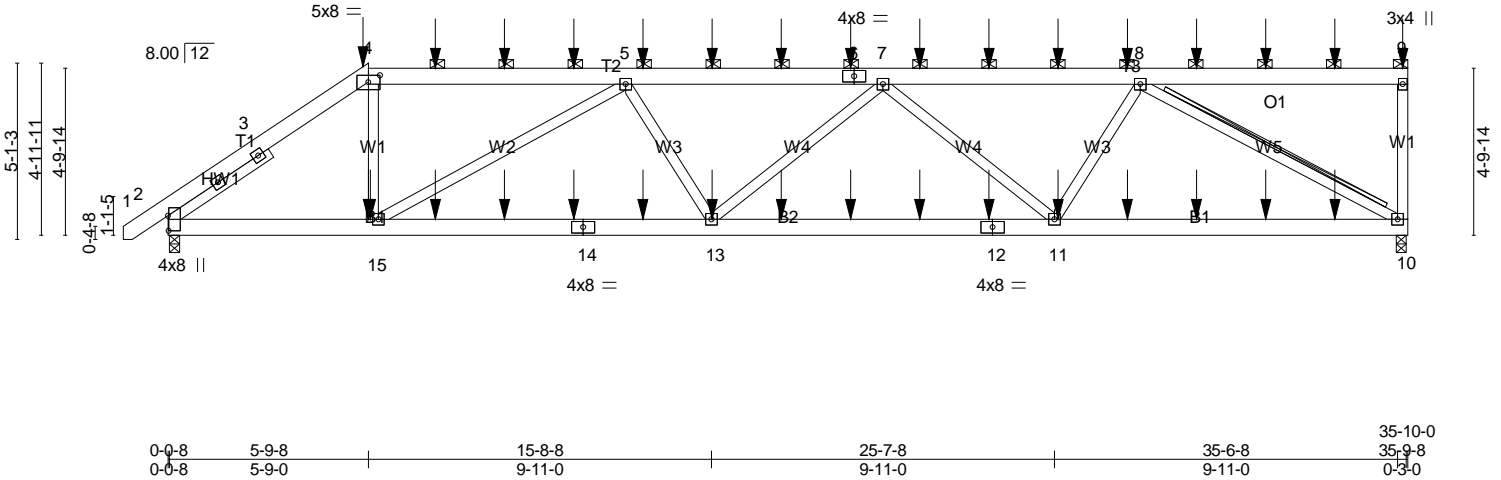


Plate Offsets (X,Y)-- [2:0-5-4,0-0-4], [4:0-4-0,0-2-6]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.47	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.48	Vert(LL) -0.12 11-13 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.90	Vert(CT) -0.25 11-13 >999 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.08 10 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.12 11-13 >999 240		
				Weight: 497 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2  
 SLIDER Left 2x4 SP No.2 -t 3-6-7

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-9.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS T-Brace: 2x4 SPF No.2 - 8-10  
 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

**REACTIONS.**

(size) 10=0-3-8 (min. 0-1-9), 2=0-3-8 (min. 0-1-10)  
 Max Horz 2=122(LC 8)  
 Max Uplift 10=502(LC 5), 2=443(LC 5)  
 Max Grav 10=2689(LC 1), 2=2711(LC 1)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-4086/736, 4-5=-3249/626, 5-7=-5584/1017, 7-8=-4557/799, 9-10=-3511/134  
 BOT CHORD 2-15=-618/3185, 13-15=-1099/5392, 11-13=-1115/5524, 10-11=-787/3841  
 WEBS 4-15=-212/1851, 5-15=-2541/587, 5-13=0/661, 7-13=0/301, 7-11=-1288/422, 8-11=-23/1504, 8-10=-4373/906

**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, 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are 4x4 MT20 unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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) except (jt=lb) 10=502, 2=443.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	RAY & CHRISTINE HYMBAUGH
J0221-1067	A4GR	Half Hip Girder	1	2	Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:08 2021 Page 2  
ID:B4IkScsUv1LB9OVBG5UU\_Szjw\_W-8Msad43MK8LEx2PI5LvqevyCSTn?0eyXyk3IUFjtEf

**NOTES-**

- 11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 124 lb down and 106 lb up at 5-9-8, 127 lb down and 102 lb up at 7-8-12, 127 lb down and 102 lb up at 9-8-12, 127 lb down and 102 lb up at 11-8-12, 127 lb down and 102 lb up at 13-8-12, 127 lb down and 102 lb up at 15-8-12, 127 lb down and 102 lb up at 17-8-12, 127 lb down and 102 lb up at 19-8-12, 127 lb down and 102 lb up at 21-8-12, 127 lb down and 102 lb up at 23-8-12, 127 lb down and 102 lb up at 25-8-12, 127 lb down and 102 lb up at 27-8-12, 127 lb down and 102 lb up at 29-8-12, 127 lb down and 102 lb up at 31-8-12, and 127 lb down and 102 lb up at 33-8-12, and 50 lb down and 19 lb up at 35-8-4 on top chord, and 350 lb down and 104 lb up at 5-9-8, 75 lb down at 7-8-12, 75 lb down at 9-8-12, 75 lb down at 11-8-12, 75 lb down at 13-8-12, 75 lb down at 15-8-12, 75 lb down at 17-8-12, 75 lb down at 19-8-12, 75 lb down at 21-8-12, 75 lb down at 23-8-12, 75 lb down at 25-8-12, 75 lb down at 27-8-12, 75 lb down at 29-8-12, and 75 lb down at 31-8-12, and 75 lb down at 33-8-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 14) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-4=-60, 4-9=-60, 2-10=-20

Concentrated Loads (lb)

Vert: 4=-105(B) 6=-105(B) 9=-31 14=-37(B) 15=-350(B) 13=-37(B) 11=-37(B) 12=-37(B) 16=-105(B) 17=-105(B) 18=-105(B) 19=-105(B) 20=-105(B) 21=-105(B) 22=-105(B) 23=-105(B) 24=-105(B) 25=-105(B) 26=-105(B) 27=-105(B) 28=-105(B) 29=-37(B) 30=-37(B) 31=-37(B) 32=-37(B) 33=-37(B) 34=-37(B) 35=-37(B) 36=-37(B) 37=-37(B) 38=-37(B)

Job J0221-1067	Truss B1	Truss Type Common	Qty 3	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:08 2021 Page 1  
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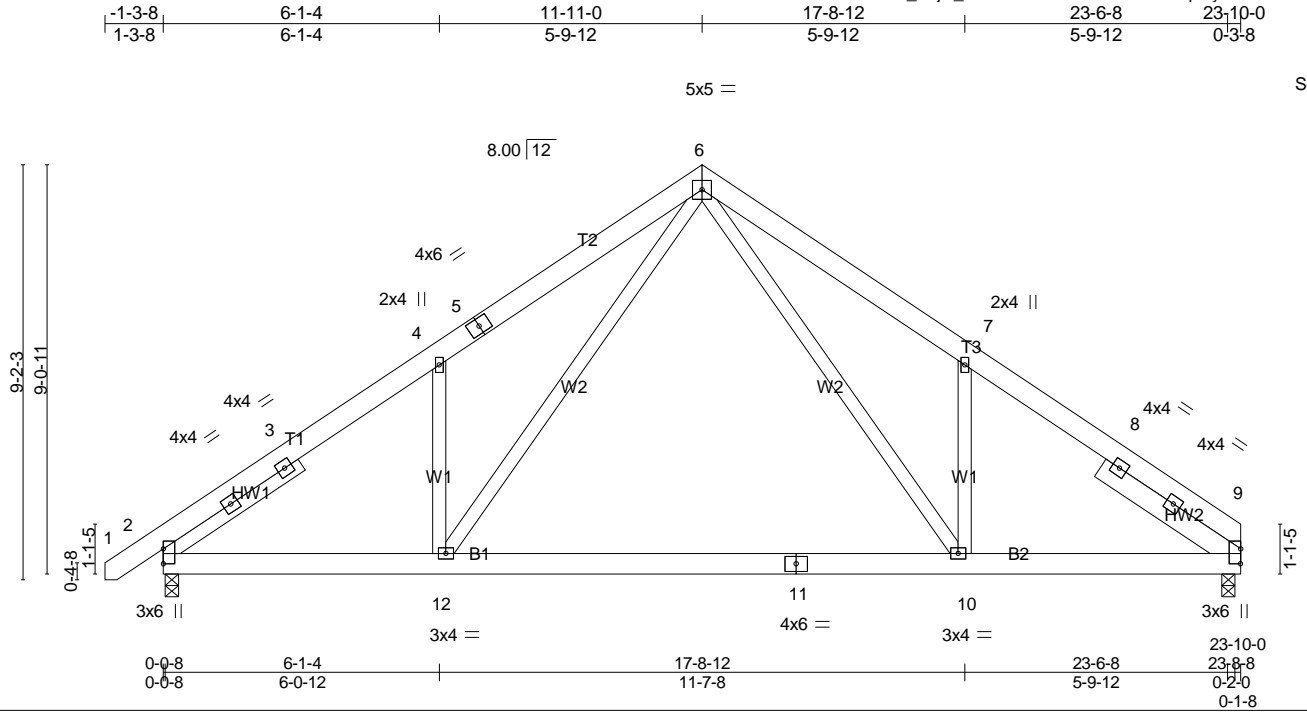


Plate Offsets (X,Y)-- [9:0-4-0,0-0-1]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.15	Vert(LL)	-0.25	10-12	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.56	Vert(CT)	-0.36	10-12	>792		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.30	Horz(CT)	0.02	9	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.02	10-12	>999		
	Code IRC2015/TPI2014						Weight: 183 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2  
 SLIDER Left 2x4 SP No.2 -t 3-7-10, Right 2x6 SP No.1 -t 3-7-10

**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.**

(size) 9=0-3-8 (min. 0-1-8), 2=0-3-8 (min. 0-1-8)  
 Max Horz 2=173(LC 11)  
 Max Uplift 2=-3(LC 12)  
 Max Grav 9=1010(LC 20), 2=1077(LC 19)

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

TOP CHORD 2-4=-1494/179, 4-6=-1447/354, 6-7=-1456/367, 7-9=-1498/188  
 BOT CHORD 2-12=-46/1211, 10-12=0/775, 9-10=-47/1110  
 WEBS 4-12=-313/254, 6-12=-160/776, 6-10=-162/788, 7-10=-314/257

**NOTES-**

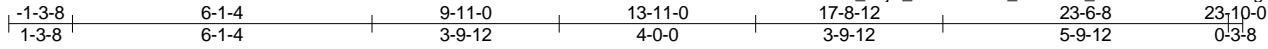
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-15 to 6-10-1, Interior(1) 6-10-1 to 11-11-0, Exterior(2) 11-11-0 to 19-11-0, Interior(1) 19-11-0 to 23-10-0 zone; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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) 2.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard

Job J0221-1067	Truss B2	Truss Type Hip	Qty 2	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

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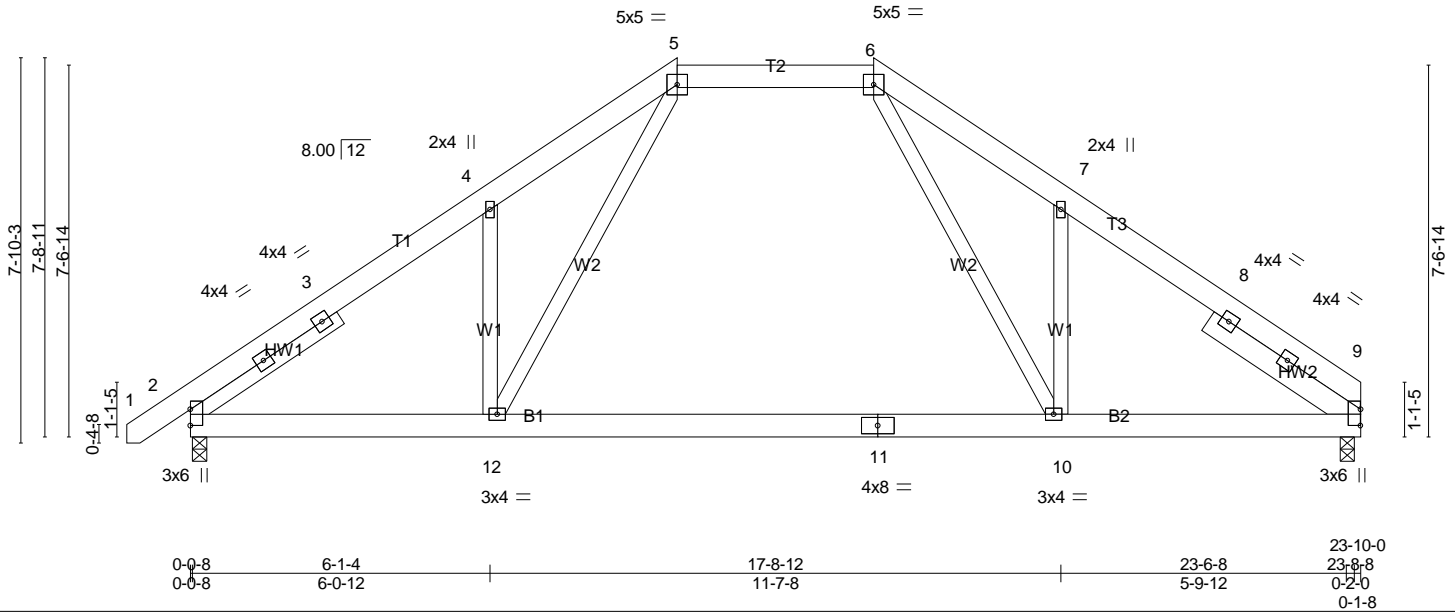


Plate Offsets (X,Y)-- [9:0-4-0,0-0-1]

LOADING (psf)	SPACING	CSI	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.16	Vert(LL) -0.27	10-12	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.60	Vert(CT) -0.38	10-12	>751	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.15	Horz(CT) 0.02	9	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL) 0.03	12	>999	240		
	Code IRC2015/TPI2014						Weight: 175 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2  
 SLIDER Left 2x4 SP No.2 -t 3-7-10, Right 2x6 SP No.1 -t 3-7-10

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-6.  
 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.** (size) 9=0-3-8 (min. 0-1-8), 2=0-3-8 (min. 0-1-8)  
 Max Horz 2=145(LC 11)  
 Max Grav 9=1014(LC 20), 2=1080(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-1507/204, 4-5=-1399/353, 5-6=-844/264, 6-7=-1410/351, 7-9=-1511/207  
 BOT CHORD 2-12=-64/1187, 10-12=-8/869, 9-10=-60/1113  
 WEBS 5-12=-120/677, 6-10=-125/690, 7-10=-256/234

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-15 to 6-10-1, Interior(1) 6-10-1 to 9-11-0, Exterior(2) 9-11-0 to 23-10-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 8) 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

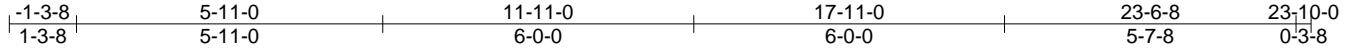




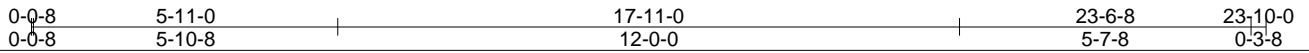
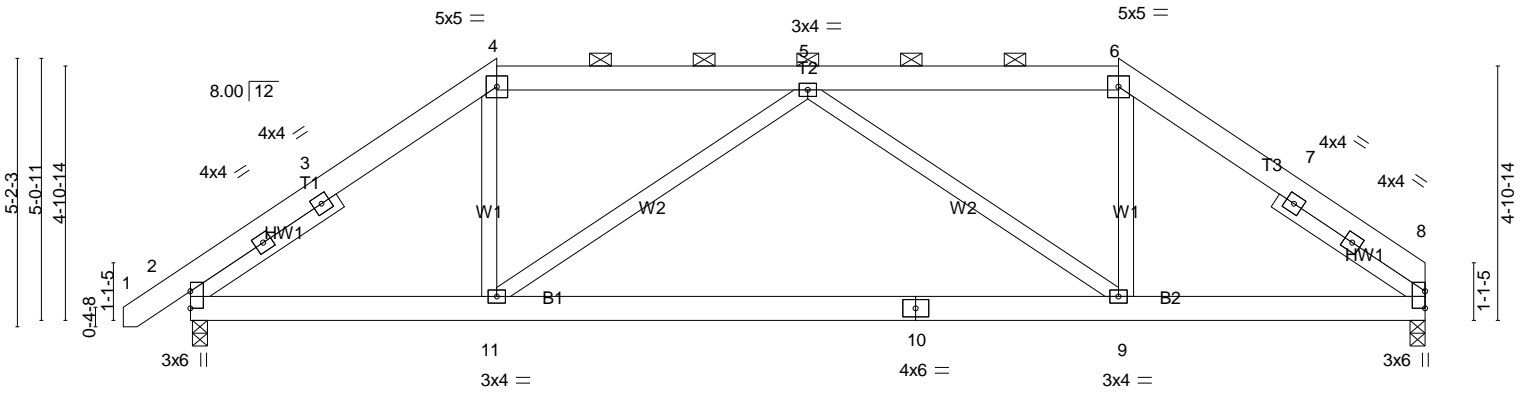
Job J0221-1067	Truss B4	Truss Type Hip	Qty 2	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:10 2021 Page 1  
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Scale = 1:44.5



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.18	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.40	Vert(LL) -0.12 9-11 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.43	Vert(CT) -0.26 9-11 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.02 8 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.02 9-11 >999 240	Weight: 165 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.2  
SLIDER Left 2x4 SP No.2 -t 3-5-4, Right 2x4 SP No.2 -t 3-5-4

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-6.  
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.** (size) 8=0-3-8 (min. 0-1-8), 2=0-3-8 (min. 0-1-8)  
Max Horz 2=92(LC 9)  
Max Grav 8=952(LC 1), 2=1025(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-1355/220, 4-5=-978/236, 5-6=-984/240, 6-8=-1337/224  
BOT CHORD 2-11=-70/990, 9-11=-198/1280, 8-9=-75/996  
WEBS 4-11=0/510, 5-11=-435/156, 5-9=-431/153, 6-9=0/510

**NOTES-**

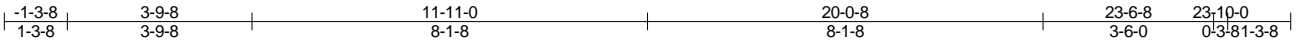
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-15 to 17-2-12, Interior(1) 17-2-12 to 17-11-0, Exterior(2) 17-11-0 to 23-10-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 8) 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 J0221-1067	Truss B5GR	Truss Type Hip Girder	Qty 1	Ply 2	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:12 2021 Page 1  
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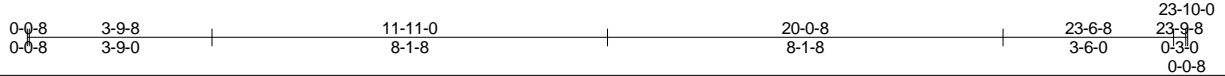
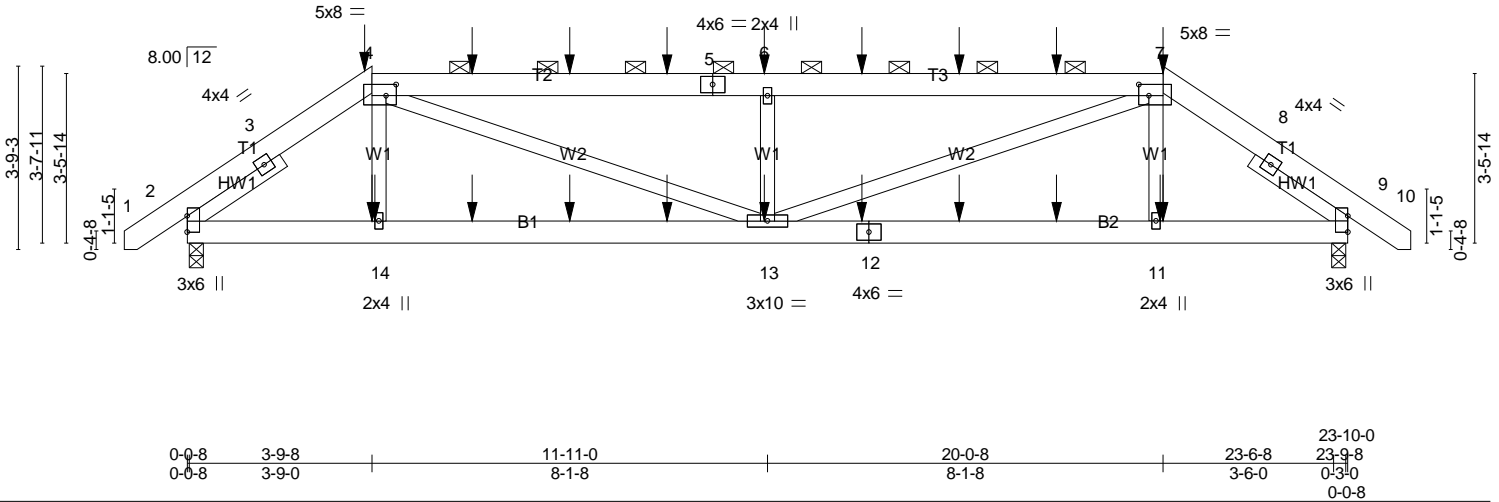


Plate Offsets (X,Y)-- [4:0-2-8,0-2-12], [7:0-2-8,0-2-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.22	Vert(LL) -0.05	13	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.17	Vert(CT) -0.09	13	>999	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.18	Horz(CT) 0.02	9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.05	13	>999	240		
							Weight: 331 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2  
 SLIDER Left 2x4 SP No.2 -t 2-4-0, Right 2x4 SP No.2 -t 2-4-0

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-7.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 2=0-3-8 (min. 0-1-8), 9=0-3-8 (min. 0-1-8)  
 Max Horz 2=-65(LC 25)  
 Max Uplift 2=-213(LC 8), 9=-211(LC 4)  
 Max Grav 2=1451(LC 1), 9=1449(LC 1)

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

TOP CHORD 2-4=-2044/353, 4-6=-2915/554, 6-7=-2915/554, 7-9=-2041/352  
 BOT CHORD 2-14=-302/1561, 13-14=-299/1576, 11-13=-249/1573, 9-11=-253/1558  
 WEBS 4-14=0/447, 4-13=-324/1455, 6-13=-793/365, 7-13=-327/1458, 7-11=0/446

**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 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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) except (jt=lb) 2=213, 9=211.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 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	RAY & CHRISTINE HYMBAUGH
J0221-1067	B5GR	Hip Girder	1	2	Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:12 2021 Page 2  
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**NOTES-**

12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 85 lb down and 78 lb up at 3-9-8, 89 lb down and 75 lb up at 5-10-4, 89 lb down and 75 lb up at 7-10-4, 89 lb down and 75 lb up at 9-10-4, 89 lb down and 75 lb up at 11-10-4, 89 lb down and 75 lb up at 13-10-4, 89 lb down and 75 lb up at 15-10-4, and 89 lb down and 75 lb up at 17-10-4, and 85 lb down and 78 lb up at 20-0-8 on top chord, and 182 lb down and 58 lb up at 3-9-8, 35 lb down at 5-10-4, 35 lb down at 7-10-4, 35 lb down at 9-10-4, 35 lb down at 11-10-4, 35 lb down at 13-10-4, 35 lb down at 15-10-4, and 35 lb down at 17-10-4, and 182 lb down and 58 lb up at 19-11-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-4=-60, 4-7=-60, 7-10=-60, 2-9=-20

Concentrated Loads (lb)

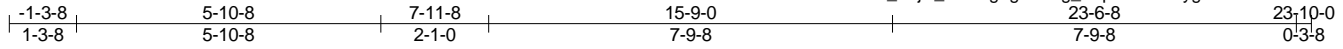
Vert: 4=-41(B) 12=-17(B) 14=-182(B) 13=-17(B) 6=-41(B) 7=-41(B) 11=-182(B) 15=-41(B) 16=-41(B) 17=-41(B) 18=-41(B) 19=-41(B) 20=-41(B) 21=-17(B)  
 22=-17(B) 23=-17(B) 24=-17(B) 25=-17(B)

Job J0221-1067	Truss B6GR	Truss Type Roof Special Girder	Qty 1	Ply 2	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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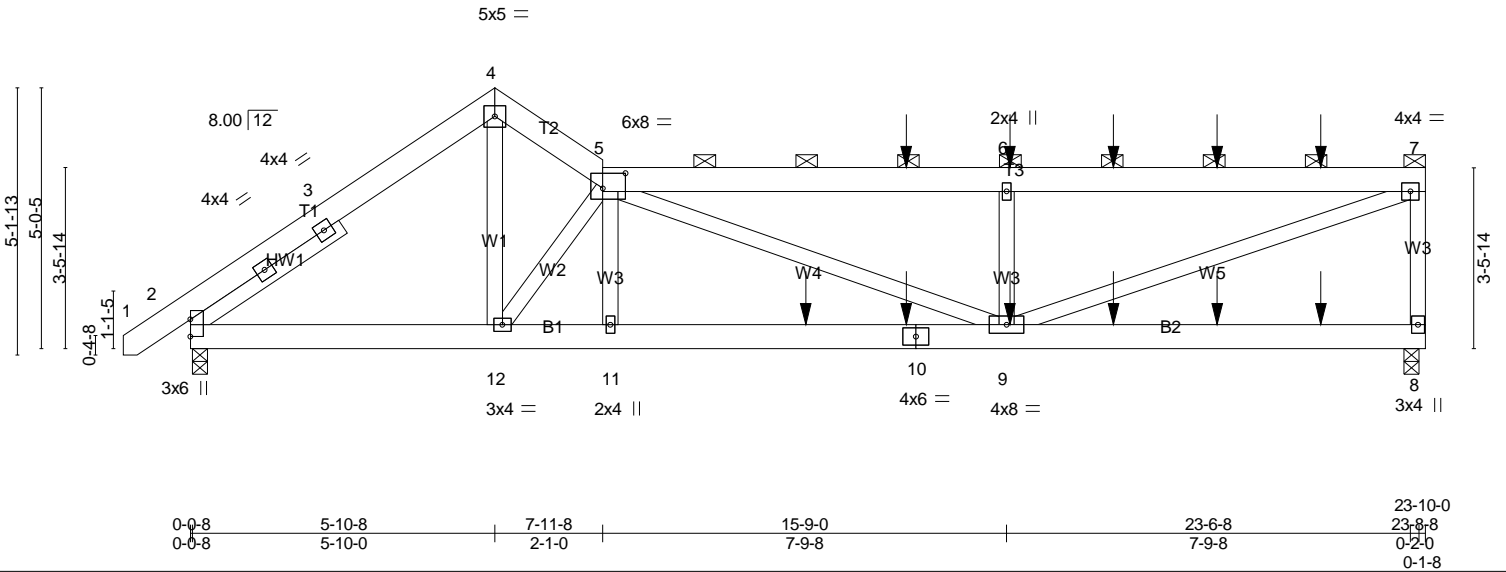
Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:13 2021 Page 1

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Scale = 1:44.5



0-0-8	5-10-8	7-11-8	15-9-0	23-6-8	23-10-0
0-0-8	5-10-0	2-1-0	7-9-8	7-9-8	0-2-0
					0-1-8

Plate Offsets (X,Y)-- [5:0-5-4-0-3-8]							
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.19	Vert(LL) -0.07 9-11	>999 360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.43	Vert(CT) -0.15 9-11	>999 240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.35	Horz(CT) 0.01 8	n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL) 0.03 9-11	>999 240		
						Weight: 342 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-7.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	
SLIDER Left 2x4 SP No.2 -t 3-6-0	

**REACTIONS.** (size) 8=0-3-8 (min. 0-1-8), 2=0-3-8 (min. 0-1-8)  
 Max Horz 2=101(LC 27)  
 Max Uplift 8=108(LC 9)  
 Max Grav 8=1359(LC 1), 2=1284(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-1682/18, 4-5=-1578/25, 5-6=-2715/121, 6-7=-2713/119, 7-8=-1277/150  
 BOT CHORD 2-12=0/1257, 11-12=0/2437, 9-11=0/2461  
 WEBS 4-12=0/1612, 5-12=-2107/0, 5-11=0/519, 5-9=-259/356, 6-9=-703/311, 7-9=-114/2838

- 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, 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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) except (jt=lb) 8=108.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - 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	RAY & CHRISTINE HYMBAUGH
J0221-1067	B6GR	Roof Special Girder	1	2	Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:13 2021 Page 2  
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**NOTES-**

12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 89 lb down and 75 lb up at 13-9-12, 89 lb down and 75 lb up at 15-9-12, 89 lb down and 75 lb up at 17-9-12, and 89 lb down and 75 lb up at 19-9-12, and 89 lb down and 75 lb up at 21-9-12 on top chord, and 388 lb down at 11-10-8, 35 lb down at 13-9-12, 35 lb down at 15-9-12, 35 lb down at 17-9-12, and 35 lb down at 19-9-12, and 35 lb down at 21-9-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-4=-60, 4-5=-60, 5-7=-60, 2-8=-20

Concentrated Loads (lb)

Vert: 10=-17(F) 6=-41(F) 9=-17(F) 13=-41(F) 14=-41(F) 15=-41(F) 16=-41(F) 17=-388(F) 18=-17(F) 19=-17(F) 20=-17(F)

Job J0221-1067	Truss C1	Truss Type Common	Qty 3	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:14 2021 Page 1  
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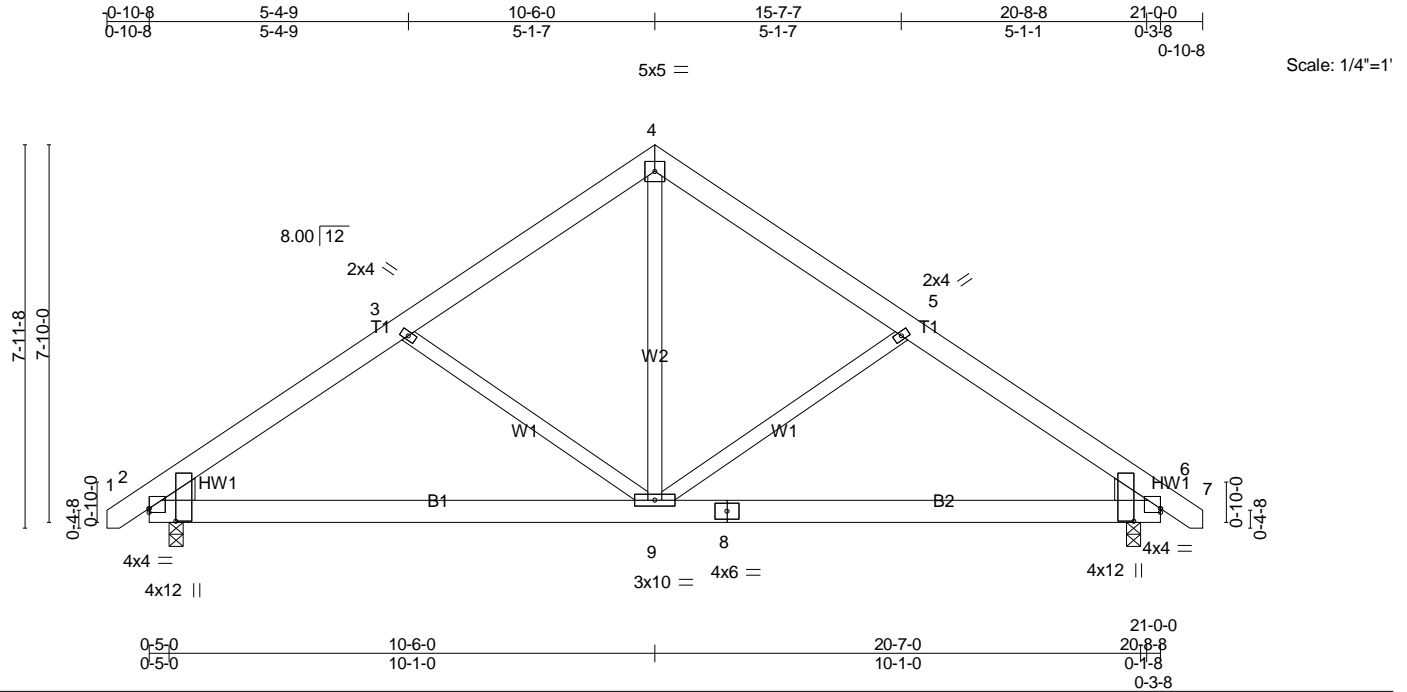


Plate Offsets (X,Y)-- [2:0-0-0,0-0-15], [2:0-3-2,0-6-11], [6:Edge,0-0-15], [6:0-3-2,0-6-11]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.46	Vert(LL)	-0.06	2-9	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.36	Vert(CT)	-0.12	2-9	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.56	Horz(CT)	0.02	6	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.10	2-9	>999		
	Code IRC2015/TPI2014						Weight: 145 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.2  
WEDGE  
Left: 2x6 SP No.1 , Right: 2x6 SP No.1

**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.** (size) 2=0-3-8 (min. 0-1-8), 6=0-3-8 (min. 0-1-8)

Max Horz 2=-149(LC 10)  
Max Uplift 2=-64(LC 9), 6=-64(LC 8)  
Max Grav 2=882(LC 1), 6=882(LC 1)

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

TOP CHORD 2-3=-1095/712, 3-4=-847/685, 4-5=-847/685, 5-6=-1095/712  
BOT CHORD 2-9=-501/834, 6-9=-504/834  
WEBS 4-9=-637/583, 5-9=-296/198, 3-9=-296/198

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-15 to 7-3-1, Interior(1) 7-3-1 to 10-6-0, Exterior(2) 10-6-0 to 18-6-0, Interior(1) 18-6-0 to 21-8-15 zone; cantilever left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard

Job J0221-1067	Truss C1GE	Truss Type GABLE	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:15 2021 Page 1  
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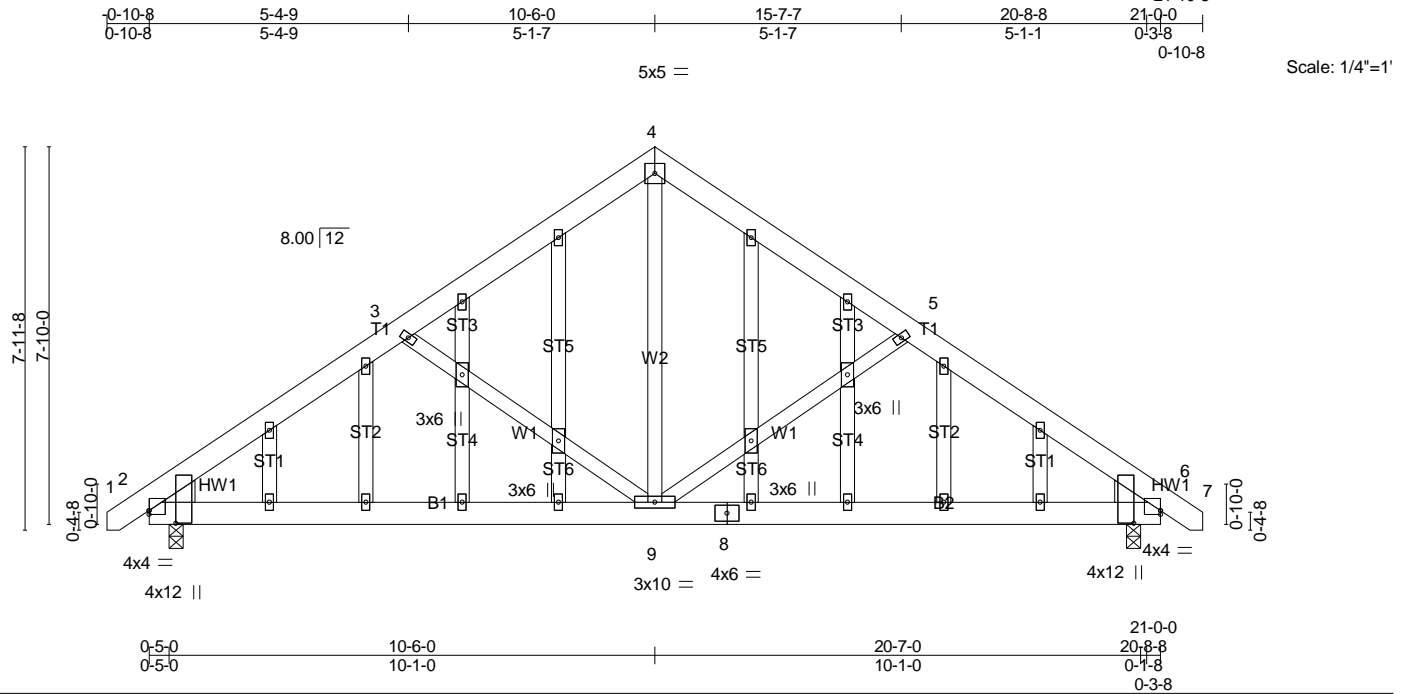


Plate Offsets (X,Y)-- [2:0-0-0,0-0-15], [2:0-3-2,0-6-11], [6:Edge,0-0-15], [6:0-3-2,0-6-11]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.46	Vert(LL)	-0.06	2-9	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.36	Vert(CT)	-0.12	2-9	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.56	Horz(CT)	0.02	6	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.10	2-9	>999		
	Code IRC2015/TPI2014						Weight: 187 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2  
 OTHERS 2x4 SP No.2  
 WEDGE  
 Left: 2x6 SP No.1 , Right: 2x6 SP No.1

**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.**

(size) 2=0-3-8 (min. 0-1-8), 6=0-3-8 (min. 0-1-8)  
 Max Horz 2=-187(LC 10)  
 Max Uplift 2=-109(LC 12), 6=-109(LC 13)  
 Max Grav 2=882(LC 1), 6=882(LC 1)

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

TOP CHORD 2-3=-1095/712, 3-4=-847/685, 4-5=-847/685, 5-6=-1095/712  
 BOT CHORD 2-9=-501/834, 6-9=-504/834  
 WEBS 4-9=-637/583, 5-9=-297/222, 3-9=-297/222

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-8-15 to 7-3-1, Interior(1) 7-3-1 to 10-6-0, Exterior(2) 10-6-0 to 18-6-0, Interior(1) 18-6-0 to 21-8-15 zone; cantilever left and right exposed ; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; 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 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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) except (jt=lb) 2=109, 6=109.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard

Job J0221-1067	Truss C2GE	Truss Type GABLE	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

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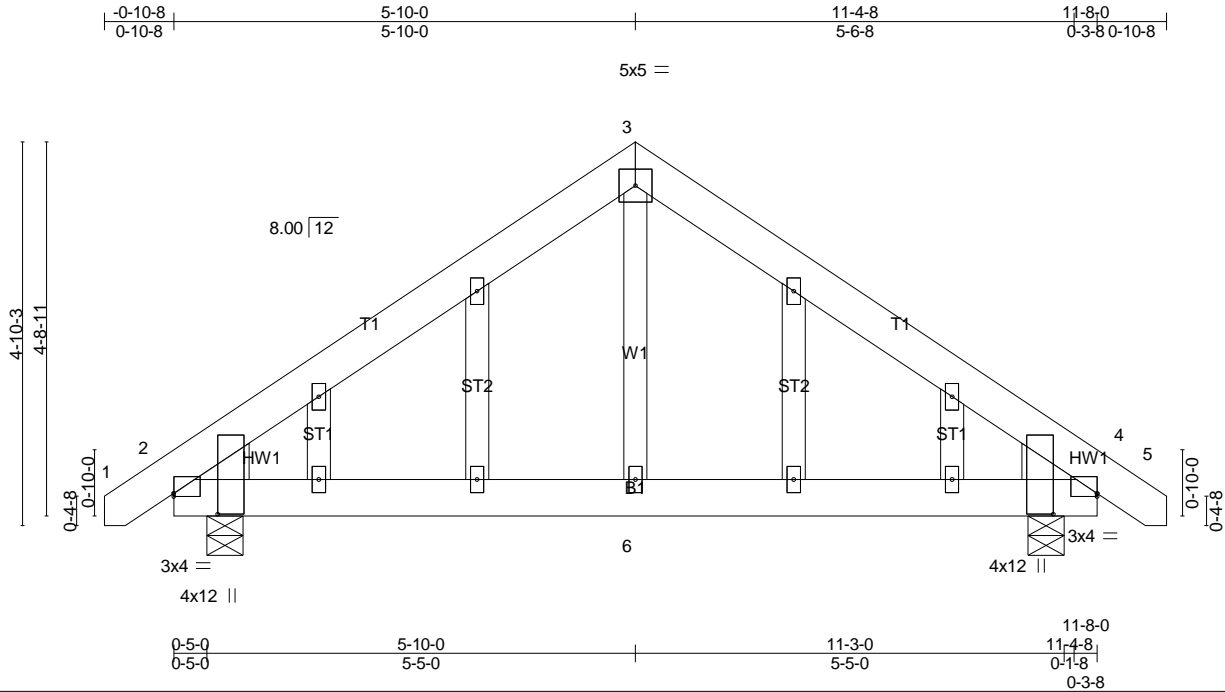


Plate Offsets (X,Y)-- [2:0-0-0,0-0-7], [2:0-3-2,0-6-11], [4:Edge,0-0-7], [4:0-3-2,0-6-11]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.21	Vert(LL) -0.01	4-6	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.29	Vert(CT) -0.01	4-6	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.08	Horz(CT) 0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.02	4-6	>999	240		
							Weight: 85 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2  
 OTHERS 2x4 SP No.2  
 WEDGE  
 Left: 2x6 SP No.1 , Right: 2x6 SP No.1

**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.** (size) 2=0-5-8 (min. 0-1-8), 4=0-5-8 (min. 0-1-8)

Max Horz 2=87(LC 11)  
 Max Uplift 2=-33(LC 9), 4=-33(LC 8)  
 Max Grav 2=507(LC 1), 4=507(LC 1)

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

TOP CHORD 2-3=-521/390, 3-4=-521/390  
 BOT CHORD 2-6=-212/338, 4-6=-212/338  
 WEBS 3-6=-282/270

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; cantilever left and right exposed ; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; 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 2x4 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

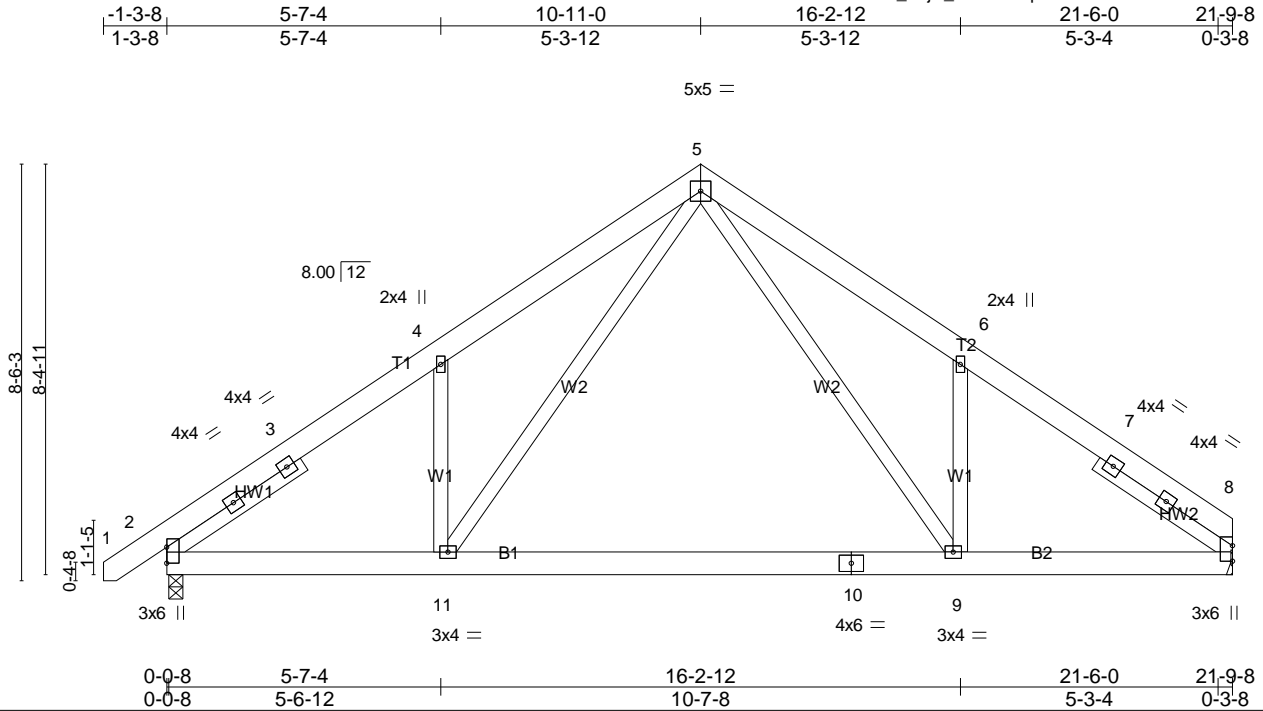
**LOAD CASE(S)** Standard



Job J0221-1067	Truss D1	Truss Type Common	Qty 2	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:16 2021 Page 1  
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.13	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.45	Vert(LL) -0.17 9-11 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.24	Vert(CT) -0.25 9-11 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.02 8 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.01 9-11 >999 240		
				Weight: 165 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2  
 SLIDER Left 2x4 SP No.2 -t 3-4-1, Right 2x4 SP No.2 -t 3-3-15

**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.**

(size) 8=Mechanical, 2=0-3-8 (min. 0-1-8)  
 Max Horz 2=159(LC 9)  
 Max Uplift 2=-4(LC 12)  
 Max Grav 8=913(LC 20), 2=979(LC 19)

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

TOP CHORD 2-4=-1330/167, 4-5=-1265/330, 5-6=-1266/342, 6-8=-1330/177  
 BOT CHORD 2-11=-43/1073, 9-11=0/694, 8-9=-44/977  
 WEBS 4-11=-277/234, 5-11=-149/679, 5-9=-154/679, 6-9=-271/238

**NOTES-**

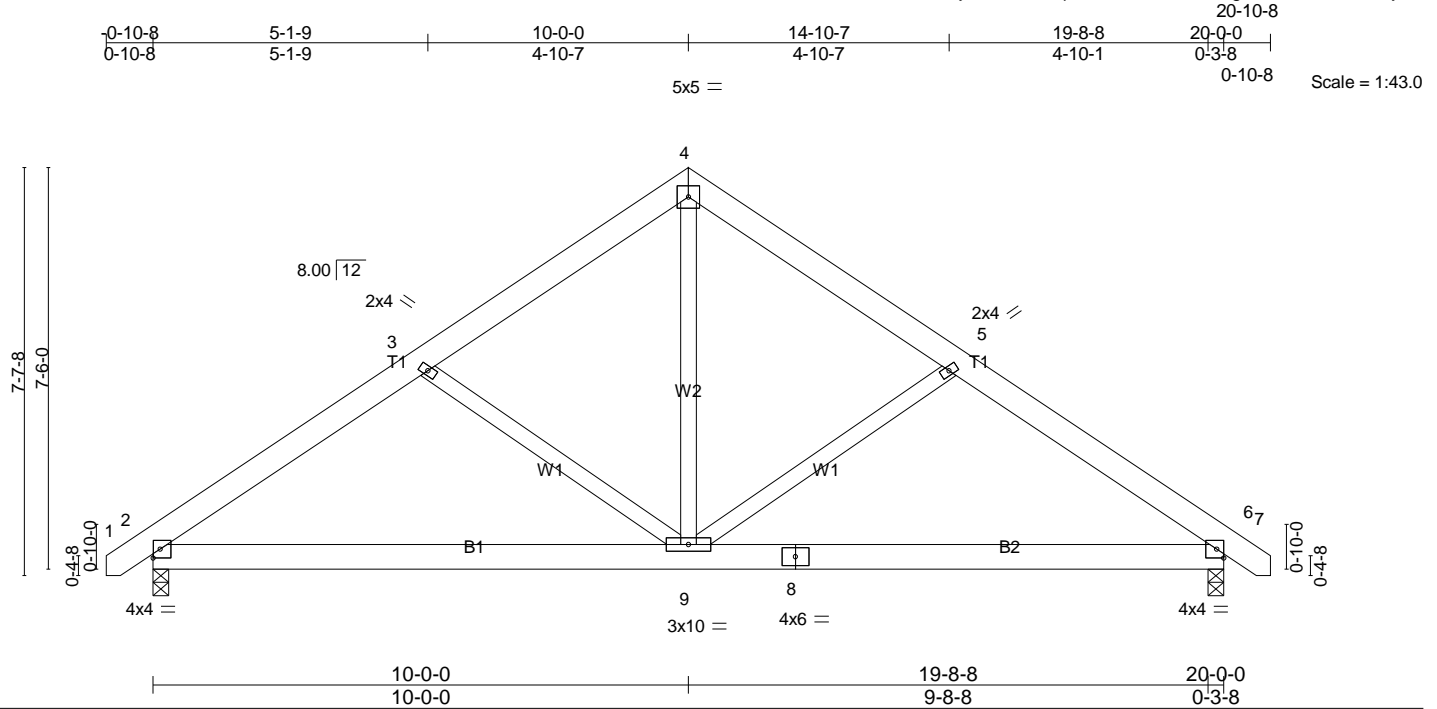
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-15 to 6-10-1, Interior(1) 6-10-1 to 10-11-0, Exterior(2) 10-11-0 to 18-11-0, Interior(1) 18-11-0 to 21-9-8 zone; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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) 2.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard

Job J0221-1067	Truss E1	Truss Type Common	Qty 5	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:16 2021 Page 1  
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.13	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.33	Vert(LL) -0.05 2-9 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.49	Vert(CT) -0.10 2-9 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 6 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.09 2-9 >999 240	Weight: 136 lb	FT = 20%

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

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

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

**REACTIONS.** (size) 6=0-3-8 (min. 0-1-8), 2=0-3-8 (min. 0-1-8)  
Max Horz 2=-143(LC 10)  
Max Uplift 6=-61(LC 8), 2=-61(LC 9)  
Max Grav 6=842(LC 1), 2=842(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1038/686, 3-4=-803/662, 4-5=-803/662, 5-6=-1038/686  
BOT CHORD 2-9=-482/788, 6-9=-485/788  
WEBS 4-9=-616/551, 5-9=-279/187, 3-9=-279/187

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-15 to 7-3-1, Interior(1) 7-3-1 to 10-0-0, Exterior(2) 10-0-0 to 18-0-0, Interior(1) 18-0-0 to 20-8-15 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3'-6" tall by 2'-0" wide will fit 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) 6, 2.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard

Job J0221-1067	Truss E1GE	Truss Type GABLE	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:17 2021 Page 1  
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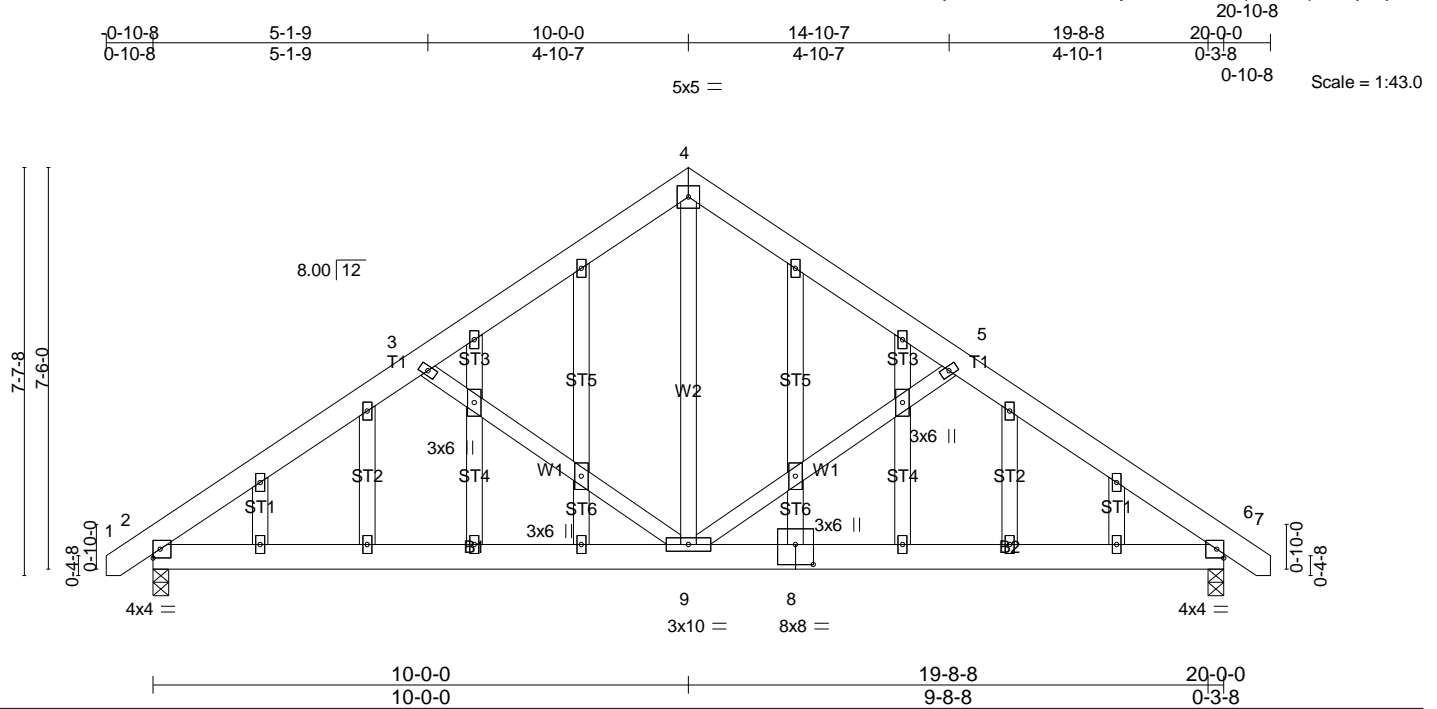


Plate Offsets (X,Y)-- [8:0-4-0,0-4-8]

<b>LOADING</b> (psf)	<b>SPACING</b>	<b>CSI</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.13	Vert(LL) -0.05	2-9	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.33	Vert(CT) -0.10	2-9	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.49	Horz(CT) 0.01	6	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL) 0.09	2-9	>999	240		
	Code IRC2015/TPI2014						Weight: 173 lb	FT = 20%

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

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

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

**REACTIONS.** (size) 6=0-3-8 (min. 0-1-8), 2=0-3-8 (min. 0-1-8)  
Max Horz 2=-178(LC 10)  
Max Uplift 6=-104(LC 13), 2=-104(LC 12)  
Max Grav 6=842(LC 1), 2=842(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1038/686, 3-4=-803/662, 4-5=-803/662, 5-6=-1038/686  
BOT CHORD 2-9=-482/788, 6-9=-485/788  
WEBS 4-9=-616/551, 5-9=-280/211, 3-9=-279/210

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) V<sub>asd</sub>=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-8-15 to 7-3-1, Interior(1) 7-3-1 to 10-0-0, Exterior(2) 10-0-0 to 18-0-0, Interior(1) 18-0-0 to 20-8-15 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; 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 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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) except (jt=lb) 6=104, 2=104.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard

Job J0221-1067	Truss E2	Truss Type Common	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:18 2021 Page 1  
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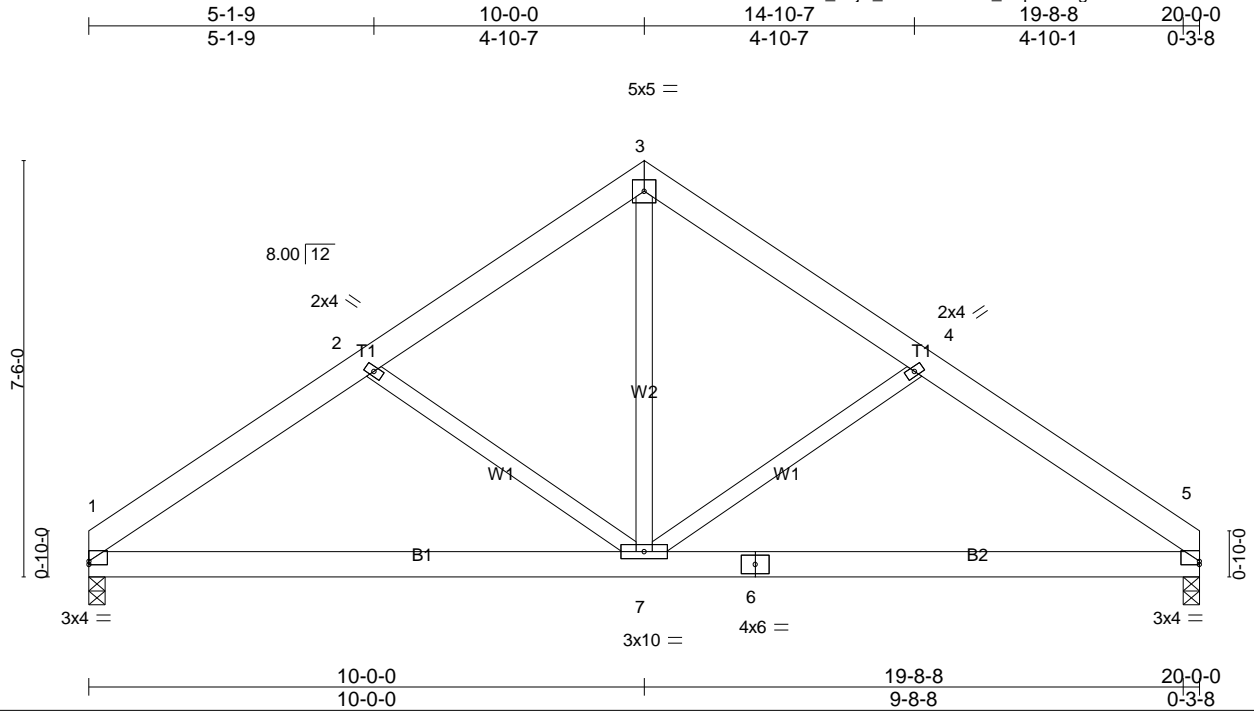


Plate Offsets (X,Y)-- [1:0-0-0,0-0-11], [5:Edge,0-0-11]

LOADING (psf)	SPACING	CSI	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.12	Vert(LL)	-0.05	1-7	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.34	Vert(CT)	-0.11	1-7	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.50	Horz(CT)	0.01	5	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.09	1-7	>999		
	Code IRC2015/TPI2014						Weight: 131 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

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

**REACTIONS.** (size) 1=0-3-8 (min. 0-1-8), 5=0-3-8 (min. 0-1-8)

Max Horz 1=-139(LC 8)  
Max Uplift 1=-59(LC 9), 5=-59(LC 8)  
Max Grav 1=788(LC 1), 5=788(LC 1)

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

TOP CHORD 1-2=-1044/694, 2-3=-809/669, 3-4=-809/669, 4-5=-1044/694  
BOT CHORD 1-7=-492/794, 5-7=-493/794  
WEBS 3-7=-621/553, 4-7=-278/183, 2-7=-278/183

**NOTES-**

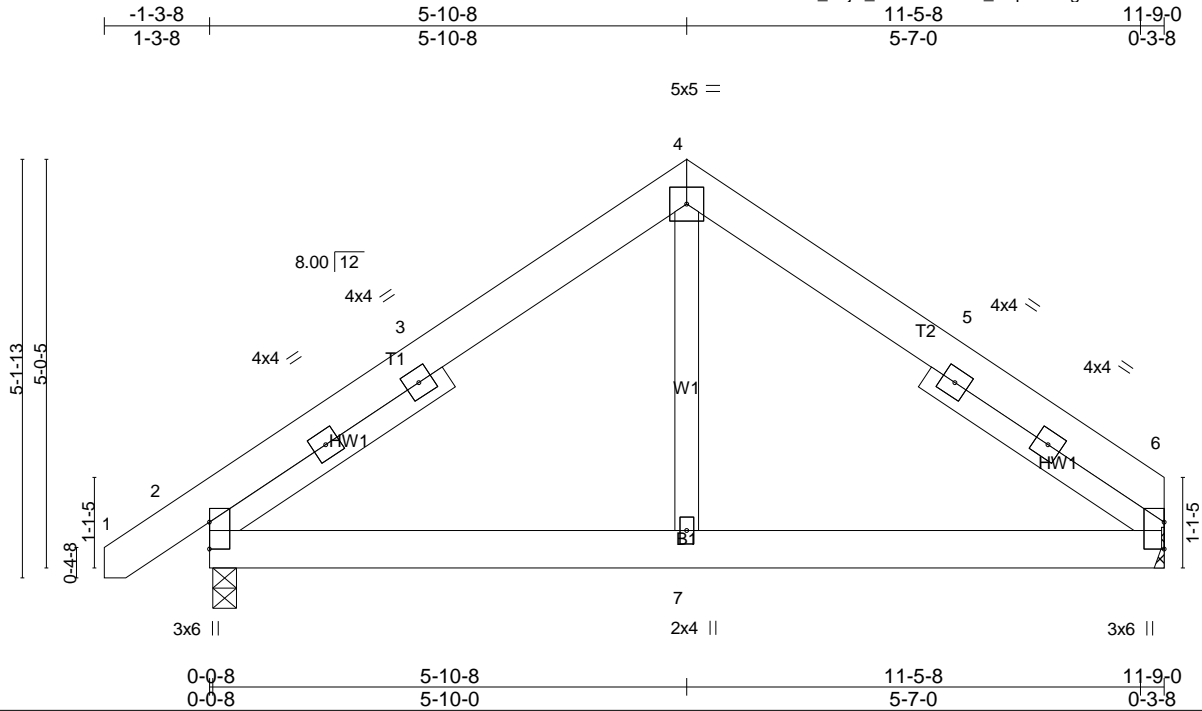
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 8-1-12, Interior(1) 8-1-12 to 10-0-0, Exterior(2) 10-0-0 to 18-0-0, Interior(1) 18-0-0 to 19-10-4 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5.
- 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job J0221-1067	Truss F1	Truss Type Common	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:18 2021 Page 1  
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Scale = 1:28.4

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.12	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.12	Vert(LL) -0.01 6-7 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.06	Vert(CT) -0.02 6-7 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 6 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.00 2-7 >999 240	Weight: 82 lb	FT = 20%

**LUMBER-**

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

**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.**

(size) 6=Mechanical, 2=0-3-8 (min. 0-1-8)  
 Max Horz 2=92(LC 11)  
 Max Uplift 2=-6(LC 12)  
 Max Grav 6=467(LC 1), 2=543(LC 1)

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

TOP CHORD 2-4=-540/118, 4-6=-514/116  
 BOT CHORD 2-7=0/339, 6-7=0/339  
 WEBS 4-7=0/270

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard



Job J0221-1067	Truss QA1	Truss Type GABLE	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:20 2021 Page 1  
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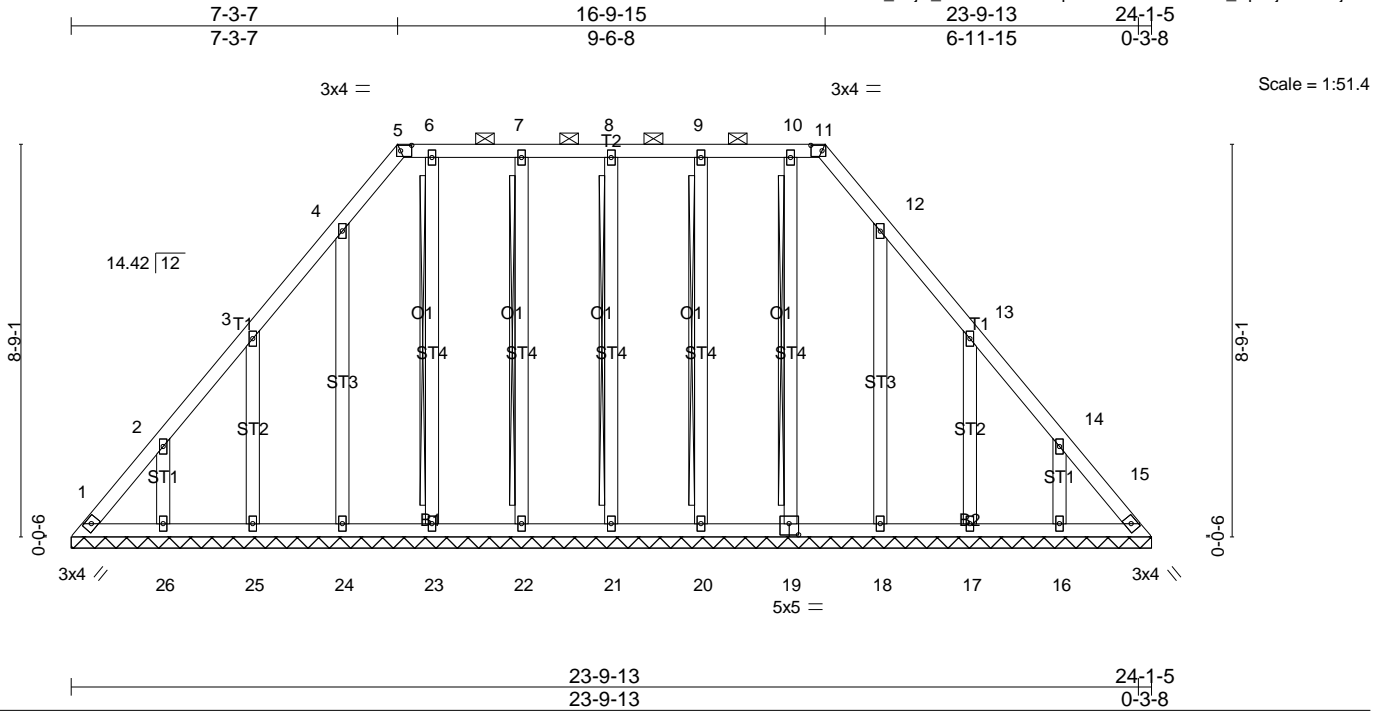


Plate Offsets (X,Y)--	[5:0-3-0,0-1-8], [11:0-3-0,0-1-8], [19:0-2-8,0-3-0]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.05	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.11	Horz(CT)	0.01	15	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 182 lb	FT = 20%
	Code IRC2015/TPI2014							

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.2

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.); 5-11.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS T-Brace: 2x4 SPF No.2 - 8-21, 7-22, 6-23, 9-20, 10-19  
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

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

**REACTIONS.** All bearings 24-1-5.  
(lb) - Max Horz 1=178(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 15, 21, 22, 23, 24, 25, 26, 20, 18, 17, 16  
Max Grav All reactions 250 lb or less at joint(s) 1, 15, 21, 22, 23, 24, 25, 26, 20, 19, 18, 17, 16

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

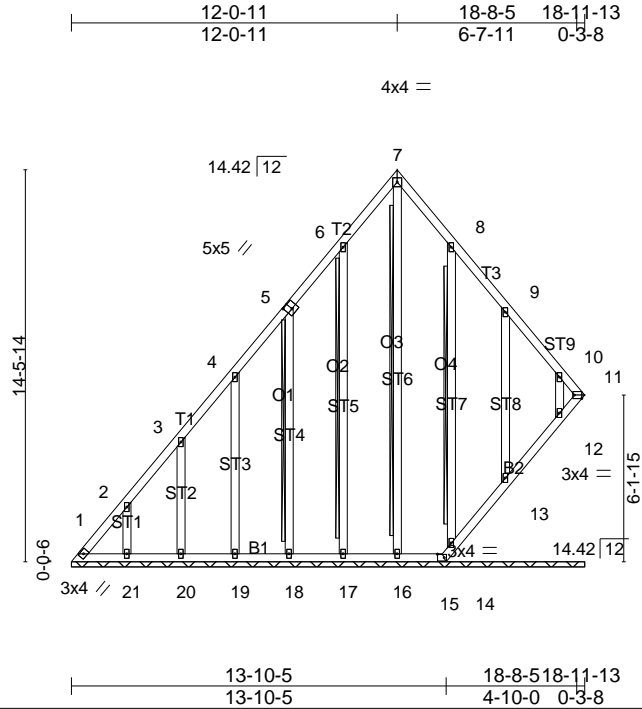
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - All plates are 2x4 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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, 15, 21, 22, 23, 24, 25, 26, 20, 18, 17, 16.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

**LOAD CASE(S)** Standard

Job J0221-1067	Truss QA2	Truss Type GABLE	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:20 2021 Page 1  
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Scale = 1:85.2

Plate Offsets (X,Y)-- [5:0-2-8,0-3-0], [11:Edge,0-1-8], [15:0-3-0,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.08	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.25	Horz(CT)	0.01	11	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S						
	Code IRC2015/TPI2014						Weight: 175 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS T-Brace: 2x4 SPF No.2 - 7-16, 6-17, 5-18, 8-14  
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.  
Brace must cover 90% of web length.

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

**REACTIONS.** All bearings 18-11-13.

(lb) - Max Horz 1=283(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 17, 18, 19, 20, 21, 14, 13, 12 except 11=202(LC 11), 1=157(LC 10), 15=139(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 15, 16, 17, 18, 19, 20, 21, 14, 13, 12 except 11=292(LC 13), 1=318(LC 12)

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

TOP CHORD 1-2=-502/422, 2-3=-378/306

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) V<sub>asd</sub>=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-12 to 8-0-9, Interior(1) 8-0-9 to 12-0-11, Exterior(2) 12-0-11 to 18-9-9 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 2x4 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 11, 14, 13, 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 18, 19, 20, 21, 14, 13, 12 except (jt=lb) 11=202, 1=157, 15=139.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 11, 14, 13, 12.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

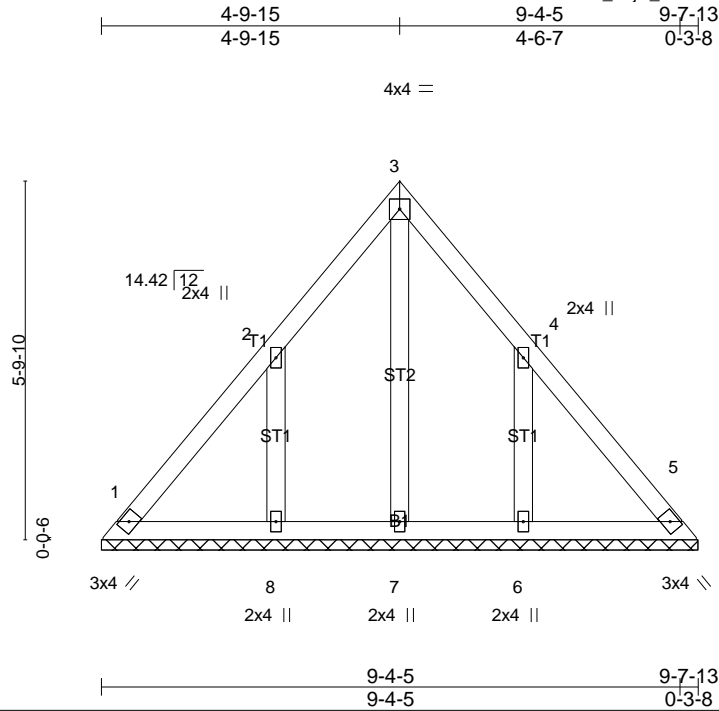
**LOAD CASE(S)** Standard



Job J0221-1067	Truss QA3	Truss Type GABLE	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:21 2021 Page 1  
ID:B4IkScsUv1LB9OVBG5UU\_Szjw\_W-Fs9VMXDWG7\_O\_2voMaetge?WKikXzKWRxFjxR?zjtES



Scale = 1:37.3

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.07	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.04	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.05	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 51 lb	FT = 20%
	Code IRC2015/TPI2014							

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.2

**BRACING-**  
TOP CHORD  
BOT CHORD

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

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

**REACTIONS.** All bearings 9-7-13.  
(lb) - Max Horz 1=-114(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-116(LC 12), 6=-116(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=261(LC 19), 6=261(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 2-8=-268/243, 4-6=-268/243

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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 except (jt=lb) 8=116, 6=116.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job J0221-1067	Truss QB1	Truss Type GABLE	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:22 2021 Page 1  
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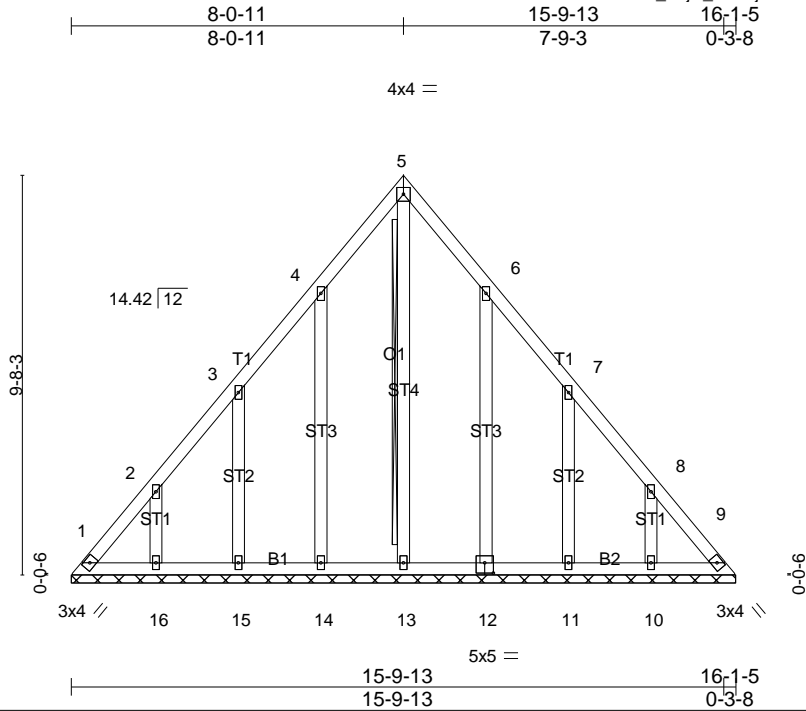


Plate Offsets (X,Y)-- [12:0-2-8,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.06	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.16	Horz(CT)	0.00	9	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S						
	Code IRC2015/TPI2014						Weight: 112 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS T-Brace: 2x4 SPF No.2 - 5-13  
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.  
Brace must cover 90% of web length.

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

**REACTIONS.**

All bearings 16-1-5.  
(lb) - Max Horz 1--195(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 14, 15, 16, 12, 11, 10  
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 14, 15, 16, 12, 11, 10

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

TOP CHORD 1-2--281/223, 8-9--280/221

**NOTES-**

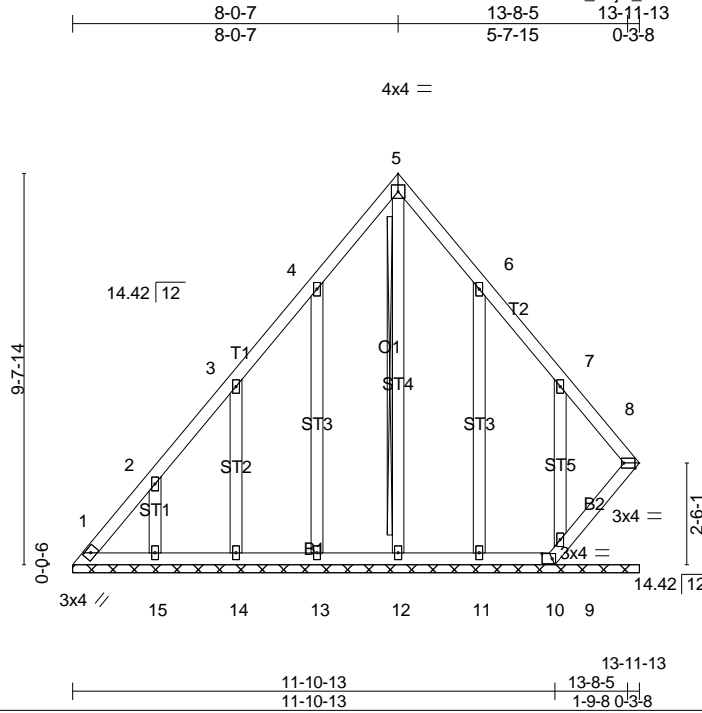
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 2x4 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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, 9, 14, 15, 16, 12, 11, 10.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

**LOAD CASE(S)** Standard

Job J0221-1067	Truss QB2	Truss Type GABLE	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:23 2021 Page 1  
ID:B4kScsUv1LB9OVBG5UU\_Szjw\_W-CEHFndFmoleE6EM3BT?gL34t\_W0T1cKkPZC2WtzjE9



Scale = 1:56.9

Plate Offsets (X,Y)-- [8:Edge,0-1-8], [10:0-3-0,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.06	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.16	Horz(CT)	0.00	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S						
							Weight: 103 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS T-Brace: 2x4 SPF No.2 - 5-12  
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.  
Brace must cover 90% of web length.

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

**REACTIONS.**

All bearings 13-11-13.  
(lb) - Max Horz 1=190(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 13, 14, 15, 11 except 8=-117(LC 11), 10=-117(LC 13), 9=-104(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 8, 10, 12, 13, 14, 15, 11, 9

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

TOP CHORD 1-2=-317/248

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 2x4 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 8, 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 13, 14, 15, 11 except (jt=lb) 8=117, 10=117, 9=104.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 8, 9.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

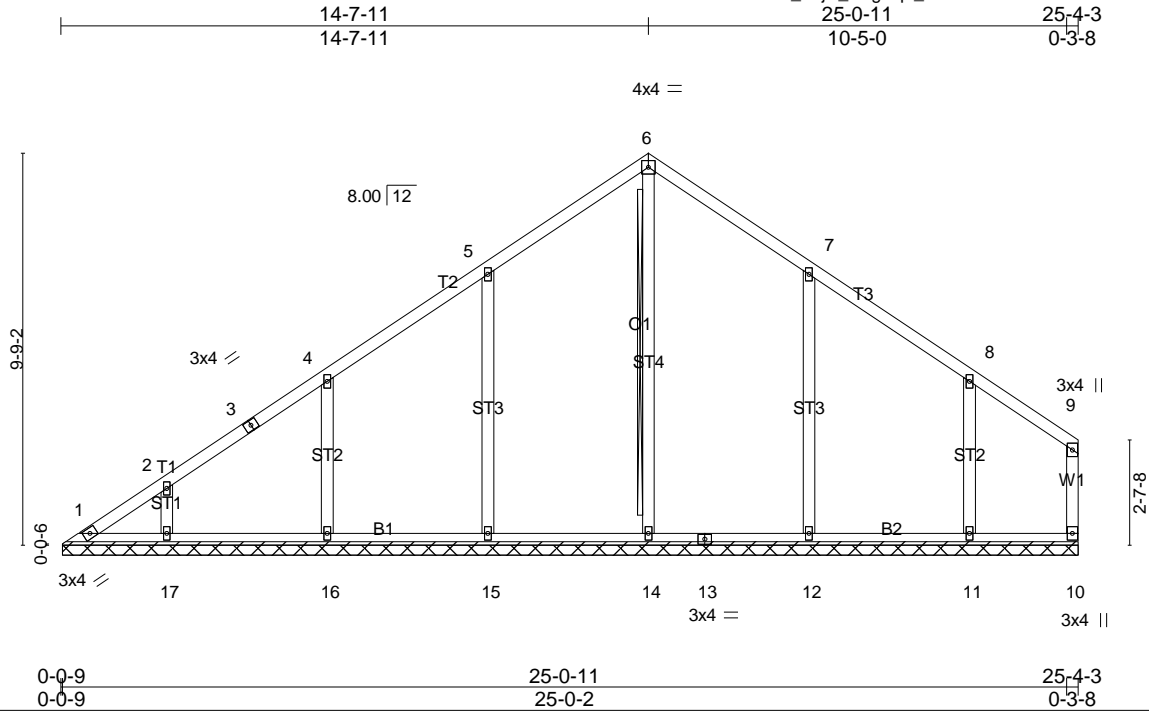
**LOAD CASE(S)** Standard



Job J0221-1067	Truss V2	Truss Type Valley	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:24 2021 Page 1  
ID:B4IkScsUv1LB9OVBG5UU\_Szjw\_W-gRqd\_ZFOZ2MzsWeN1BaHhD0MvJYm2dteDxb2KzjtEP



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.15	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.17	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.22	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 10 n/a n/a		
	Code IRC2015/TPI2014			Weight: 132 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS T-Brace: 2x4 SPF No.2 - 6-14  
 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.  
 Brace must cover 90% of web length.

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

**REACTIONS.** All bearings 25-3-10.  
 (lb) - Max Horz 1=186(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 10, 1, 15, 16, 17, 12, 11  
 Max Grav All reactions 250 lb or less at joint(s) 10, 1 except 14=495(LC 22),  
 15=542(LC 19), 16=428(LC 19), 17=279(LC 23), 12=549(LC 20), 11=393(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 5-6=-237/258, 6-7=-238/259  
 WEBS 5-15=-270/174, 4-16=-261/165, 7-12=-276/177

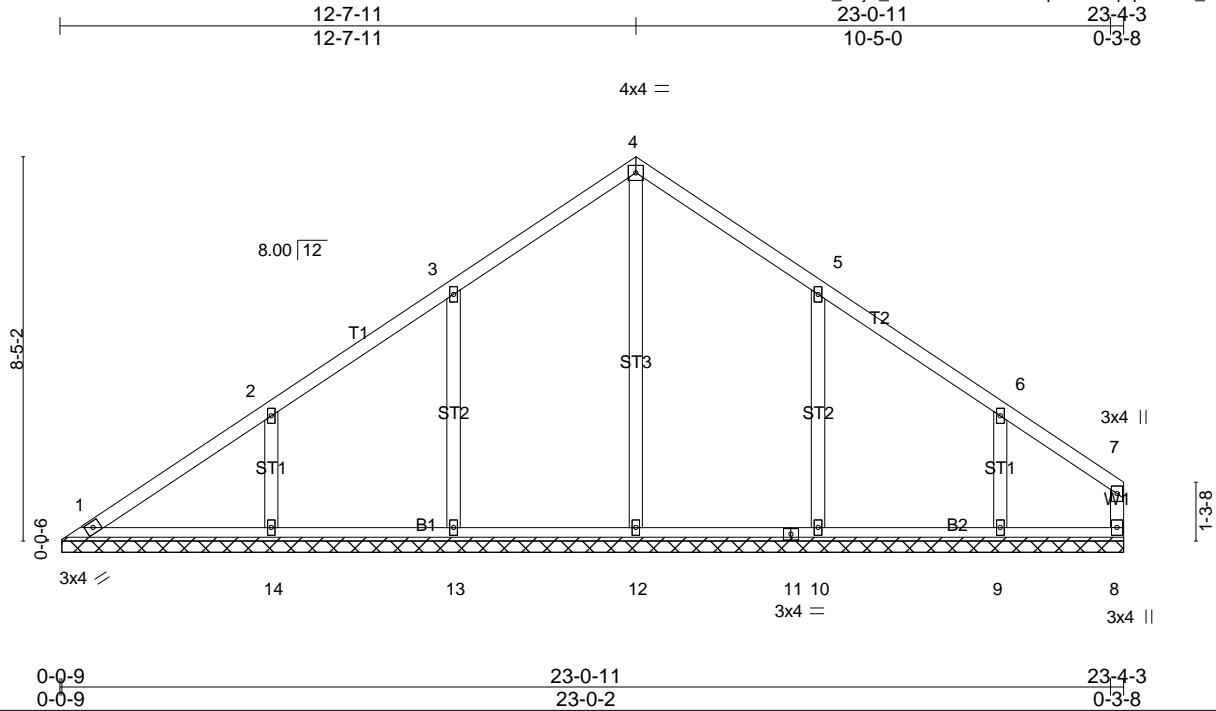
**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-15 to 8-5-15, Interior(1) 8-5-15 to 14-7-11, Exterior(2) 14-7-11 to 22-7-11, Interior(1) 22-7-11 to 25-2-7 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 1, 15, 16, 17, 12, 11.
- 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

**LOAD CASE(S)** Standard

Job J0221-1067	Truss V3	Truss Type Valley	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH
Comtech, Inc., Fayetteville, NC 28309, Bob Lewis					Job Reference (optional)

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:25 2021 Page 1  
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Scale = 1:50.6

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.15	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.16	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.25	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 8 n/a n/a		
	Code IRC2015/TPI2014			Weight: 112 lb	FT = 20%

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

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

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

**REACTIONS.** All bearings 23-3-10.  
(lb) - Max Horz 1=161(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 13, 14, 10, 9  
Max Grav All reactions 250 lb or less at joint(s) 1, 8 except 12=479(LC 22),  
13=515(LC 19), 14=406(LC 19), 10=534(LC 20), 9=327(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 3-13=-263/172, 2-14=-286/184, 5-10=-276/178

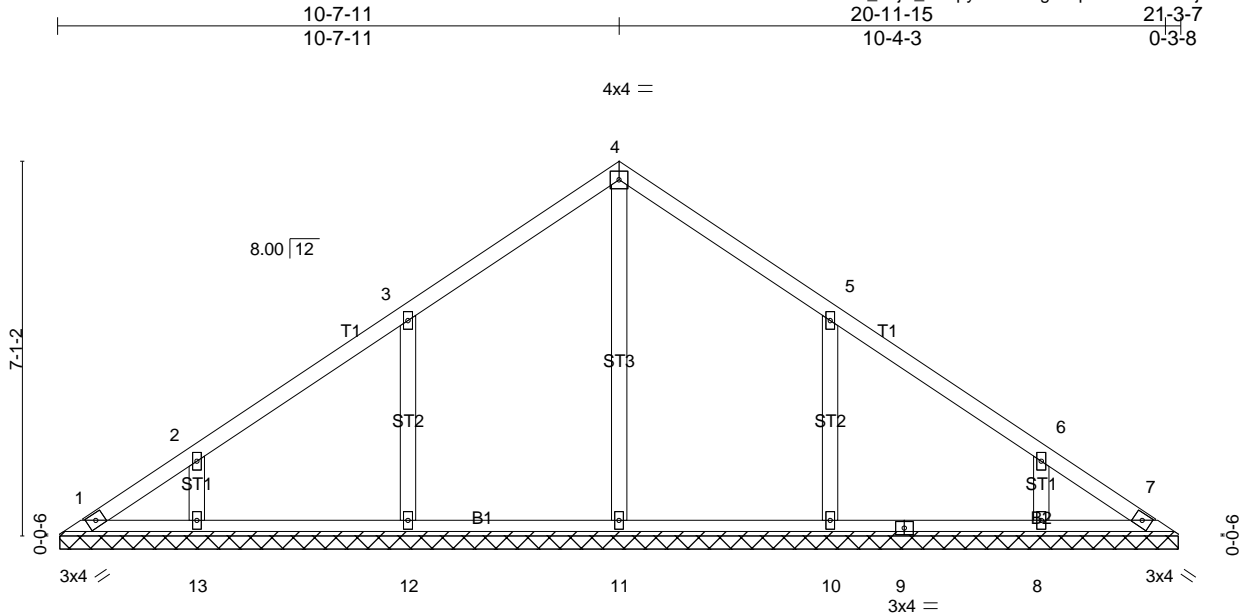
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-15 to 8-7-11, Interior(1) 8-7-11 to 12-7-11, Exterior(2) 12-7-11 to 20-7-11, Interior(1) 20-7-11 to 23-2-7 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - All plates are 2x4 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 13, 14, 10, 9.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job J0221-1067	Truss V4	Truss Type Valley	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:26 2021 Page 1  
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Scale = 1:43.7

0-0-9	20-11-15	21-3-7
0-0-9	20-11-6	0-3-8

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.15	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.19	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.14	Horz(CT)	0.00	7	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 93 lb	FT = 20%
	Code IRC2015/TPI2014							

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.2

**BRACING-**  
TOP CHORD  
BOT CHORD

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

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

**REACTIONS.** All bearings 21-2-5.  
(lb) - Max Horz 1=-135(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 12, 13, 10, 8  
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 11=442(LC 19),  
12=449(LC 19), 13=273(LC 1), 10=448(LC 20), 8=273(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 3-12=-279/180, 5-10=-279/180

**NOTES-**

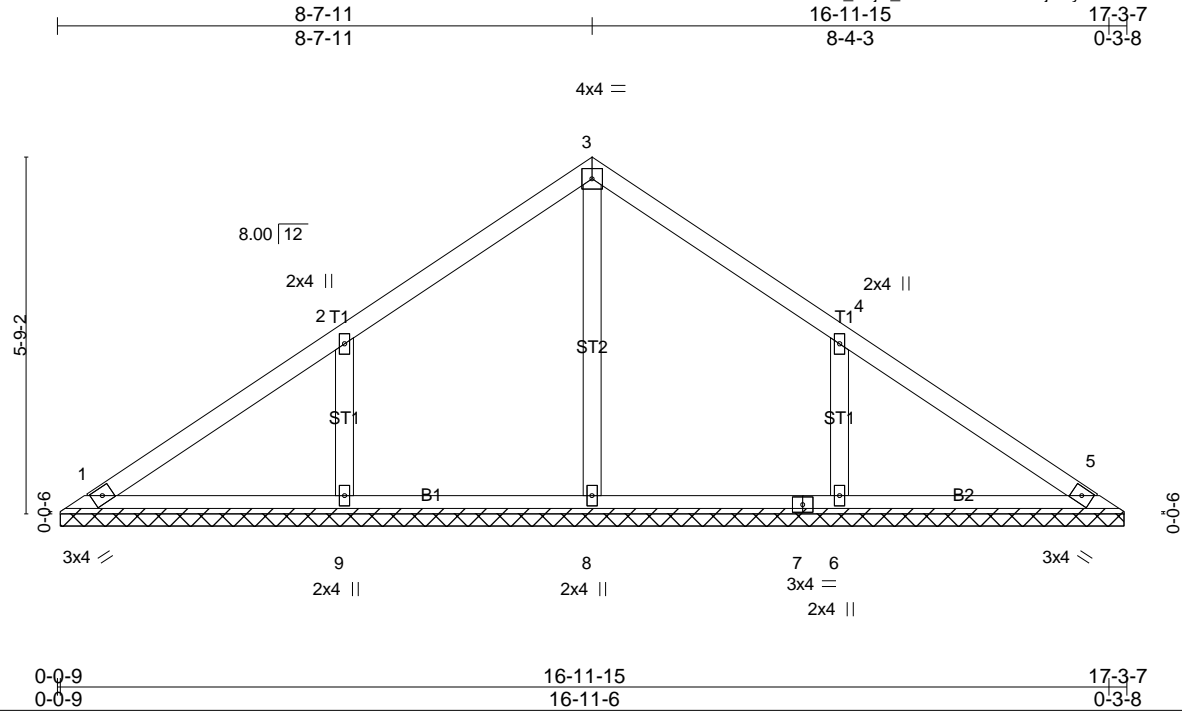
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-15 to 8-5-15, Interior(1) 8-5-15 to 10-7-11, Exterior(2) 10-7-11 to 18-7-11, Interior(1) 18-7-11 to 20-9-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 12, 13, 10, 8.
- 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job J0221-1067	Truss V5	Truss Type Valley	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:27 2021 Page 1  
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Scale = 1:37.2

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.17	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.15	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.08	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 5 n/a n/a		
	Code IRC2015/TPI2014			Weight: 70 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.2

**BRACING-**  
TOP CHORD  
BOT CHORD

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

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

**REACTIONS.** All bearings 17-2-5.  
(lb) - Max Horz 1=-108(LC 10)  
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 8=395(LC 19), 9=429(LC 19), 6=429(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 2-9=-304/192, 4-6=-304/192

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 6.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

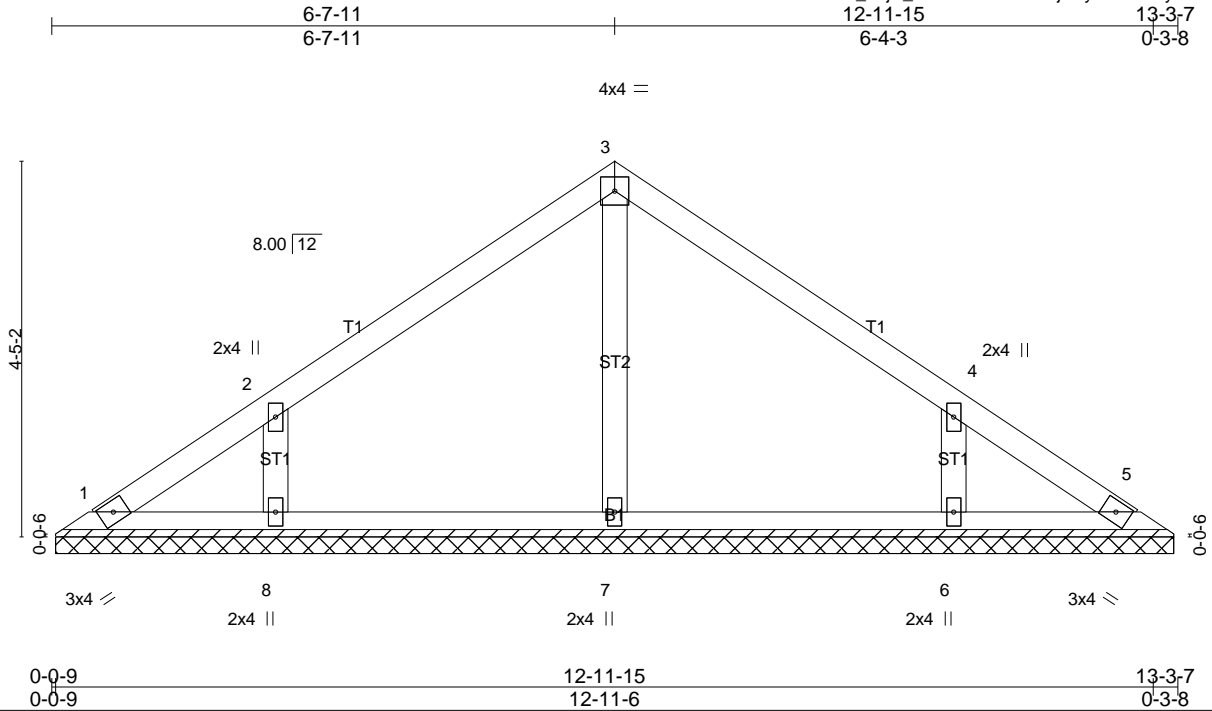
**LOAD CASE(S)** Standard



Job J0221-1067	Truss V6	Truss Type Valley	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:27 2021 Page 1  
ID:B4IkScsUv1LB9OVBG5UU\_Szjw\_W-40WmcalHszlYjzMyirkHvvFYy7MYzSyKKBAffzjEM



Scale = 1:27.2

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.13	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.09	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.05	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 5 n/a n/a		
	Code IRC2015/TPI2014			Weight: 51 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.2

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

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

**REACTIONS.** All bearings 13-2-5.  
(lb) - Max Horz 1=82(LC 11)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 8, 6  
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=264(LC 1),  
8=311(LC 19), 6=310(LC 20)

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

**NOTES-**

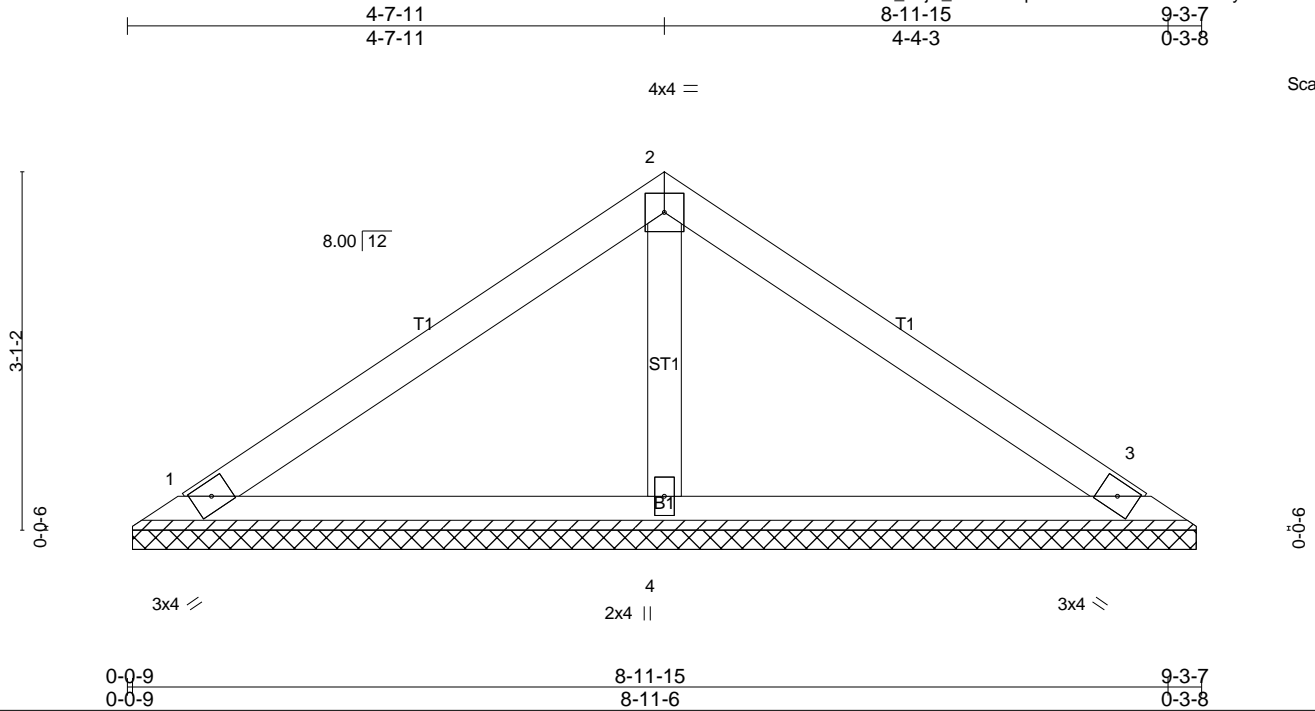
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3'-6-0 tall by 2'-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 8, 6.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job J0221-1067	Truss V7	Truss Type Valley	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:28 2021 Page 1  
ID: B41kScsUv1LB9OVBG5UU\_Szjw\_W-YC48qwJvdHtOK7x8GYGWS7nyXiBivVTYrvpB5zjtEL



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.18	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.13	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.03	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2015/TPI2014			Weight: 32 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.2

**BRACING-**  
TOP CHORD  
BOT CHORD

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

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

**REACTIONS.** (size) 1=9-2-5 (min. 0-1-8), 3=9-2-5 (min. 0-1-8), 4=9-2-5 (min. 0-1-8)  
Max Horz 1=-55(LC 10)  
Max Uplift 1=-9(LC 12), 3=-15(LC 13)  
Max Grav 1=165(LC 1), 3=165(LC 1), 4=334(LC 1)

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

**NOTES-**

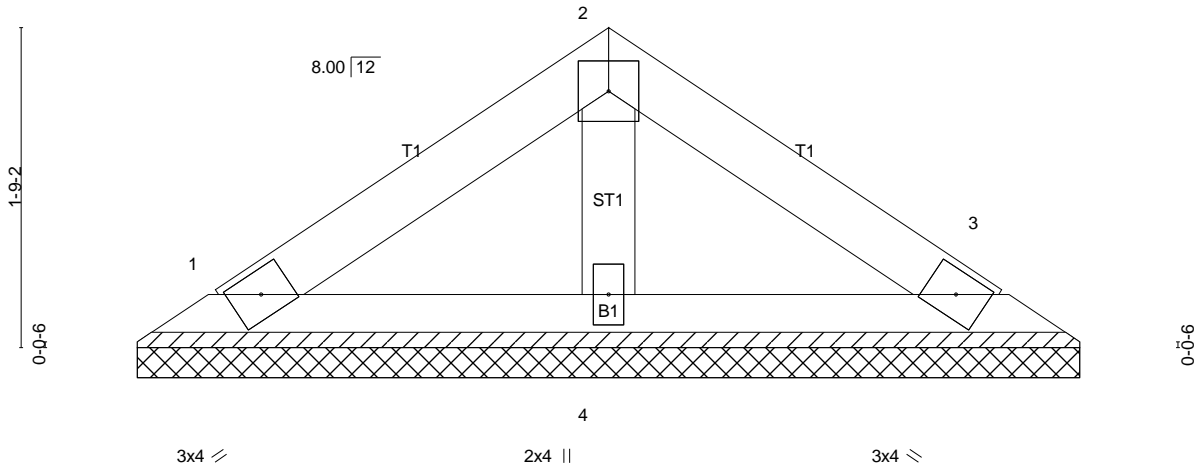
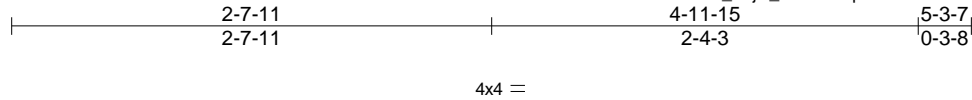
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job J0221-1067	Truss V8	Truss Type Valley	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:28 2021 Page 1  
ID: B41kScsUv1LB9OVBG5UU\_Szjw\_W-YC48qwJvdHtOK7x8GYGWS7nknXjdivrTYrpbB5zjtEL



0-0-9	4-11-15	5-3-7
0-0-9	4-11-6	0-3-8

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.06	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.01	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P						
	Code IRC2015/TPI2014						Weight: 17 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.2

**BRACING-**  
TOP CHORD  
BOT CHORD

Structural wood sheathing directly applied or 5-3-7 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.** (size) 1=5-2-5 (min. 0-1-8), 3=5-2-5 (min. 0-1-8), 4=5-2-5 (min. 0-1-8)  
Max Horz 1=29(LC 11)  
Max Uplift 1=-8(LC 12), 3=-11(LC 13)  
Max Grav 1=94(LC 1), 3=94(LC 1), 4=157(LC 1)

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

**NOTES-**

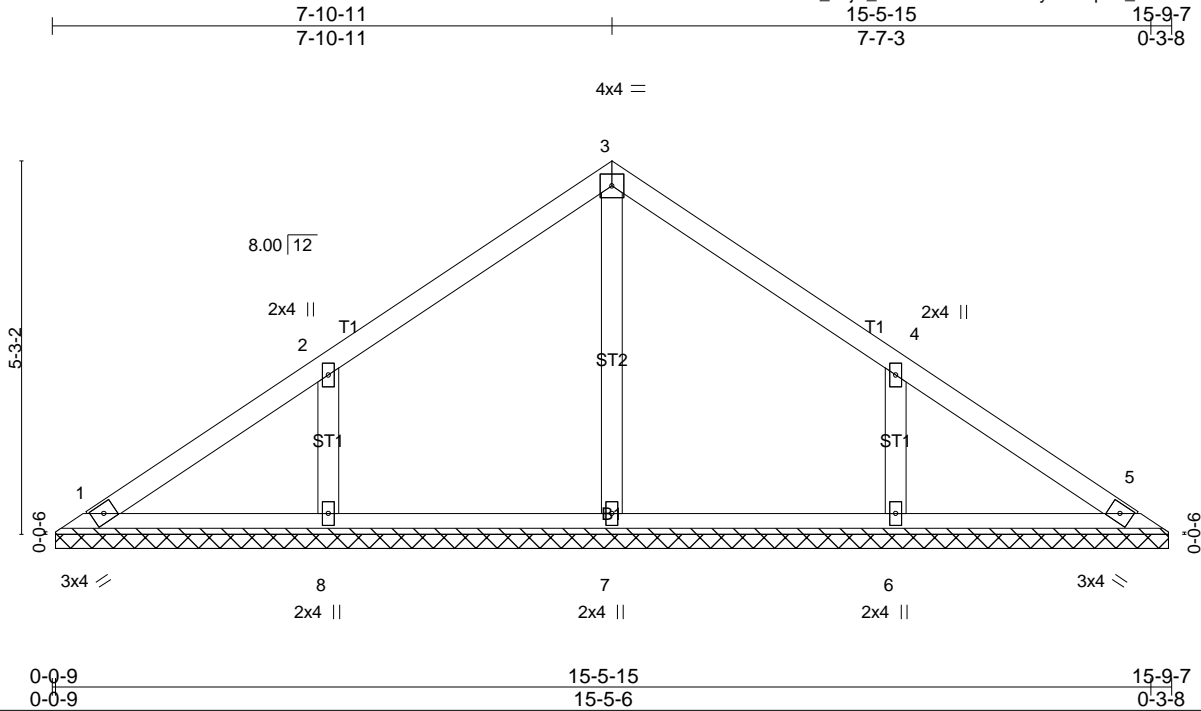
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job JO221-1067	Truss VA1	Truss Type Valley	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:29 2021 Page 1  
ID:B4IkScsUv1LB9OVBG5UU\_Szjw\_W-0OeW1GJXOb?FyHWLqGnL\_KkTbW27RL8cnVfMjXzjtEK



Scale = 1:32.5

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.14	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.08	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.07	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 5 n/a n/a		
	Code IRC2015/TPI2014			Weight: 63 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.2

**BRACING-**  
TOP CHORD  
BOT CHORD

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

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

**REACTIONS.** All bearings 15-8-5.  
(lb) - Max Horz 1=98(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 8, 6  
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=362(LC 19),  
6=362(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 2-8=-276/177, 4-6=-276/177

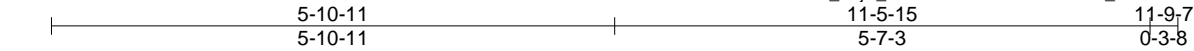
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Gable requires continuous bottom chord bearing.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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) 8, 6.
  - 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

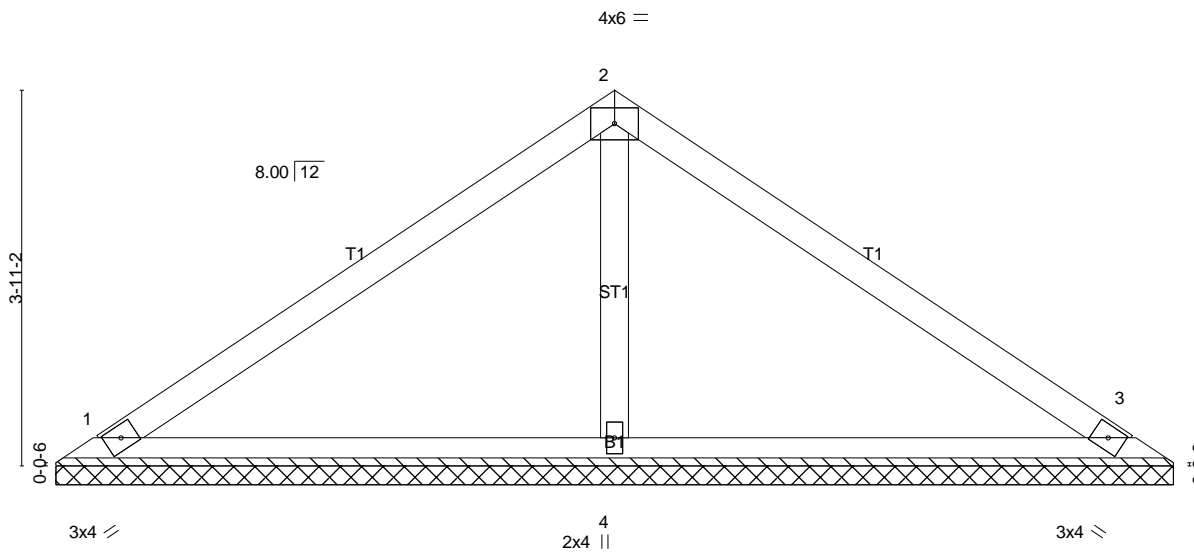
Job J0221-1067	Truss VA2	Truss Type Valley	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:30 2021 Page 1  
ID: B41kScsUv1LB9OVBG5UU\_Szjw\_W-VbCvFck99u76aR5XNzl\_XYt0JKMIAnWm09OvGzzjtEJ



Scale: 1/2"=1'



0-0-9	11-5-15	11-9-7
0-0-9	11-5-6	0-3-8

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.31	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.21	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.07	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S						
	Code IRC2015/TPI2014						Weight: 42 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.2

**BRACING-**  
TOP CHORD  
BOT CHORD

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

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

**REACTIONS.** (size) 1=11-8-5 (min. 0-1-8), 3=11-8-5 (min. 0-1-8), 4=11-8-5 (min. 0-1-8)  
Max Horz 1=-72(LC 10)  
Max Uplift 1=-12(LC 12), 3=-19(LC 13)  
Max Grav 1=214(LC 1), 3=214(LC 1), 4=435(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 2-4=-275/96

**NOTES-**

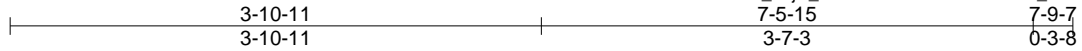
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

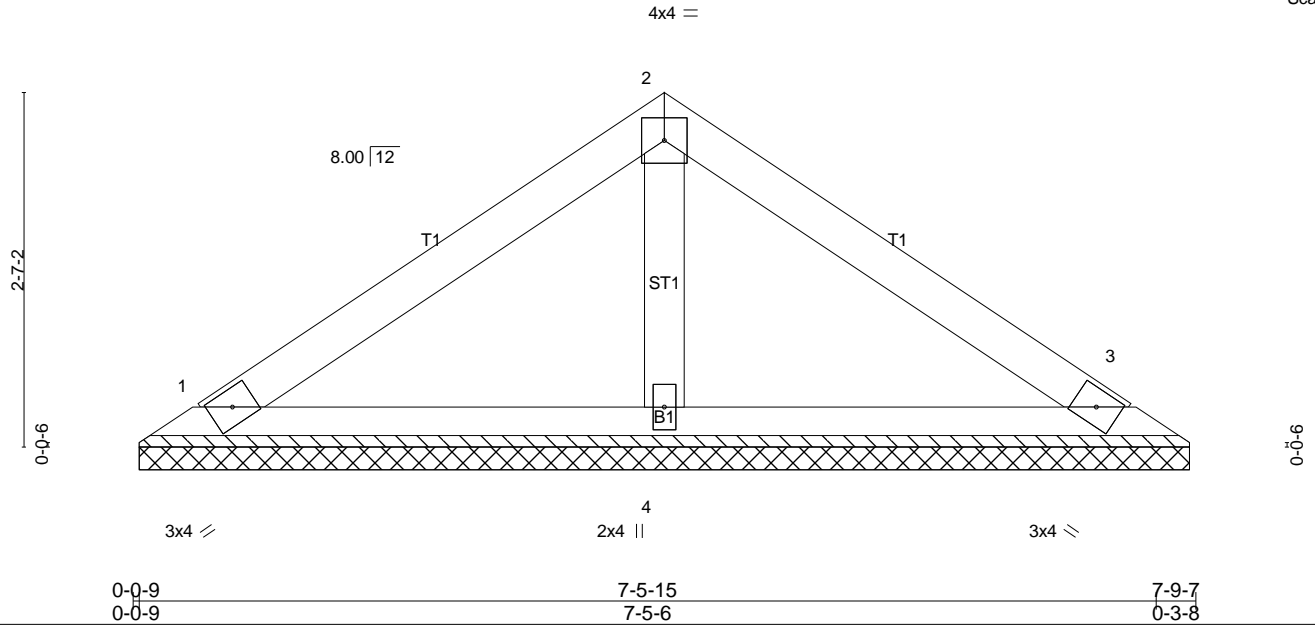
Job J0221-1067	Truss VA3	Truss Type Valley	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:30 2021 Page 1  
ID: B41kScsUv1LB9OVBG5UU\_Szjw\_W-VbCvFcK99u76aR5XNzI\_XYt2hKOIAoBm09OvGzzjtEJ



Scale = 1:16.9



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.16	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.09	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.02	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2015/TPI2014			Weight: 27 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 OTHERS 2x4 SP No.2

**BRACING-**  
 TOP CHORD  
 BOT CHORD

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

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

**REACTIONS.** (size) 1=7-8-5 (min. 0-1-8), 3=7-8-5 (min. 0-1-8), 4=7-8-5 (min. 0-1-8)  
 Max Horz 1=-45(LC 10)  
 Max Uplift 1=-13(LC 12), 3=-17(LC 13)  
 Max Grav 1=148(LC 1), 3=148(LC 1), 4=248(LC 1)

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

**NOTES-**

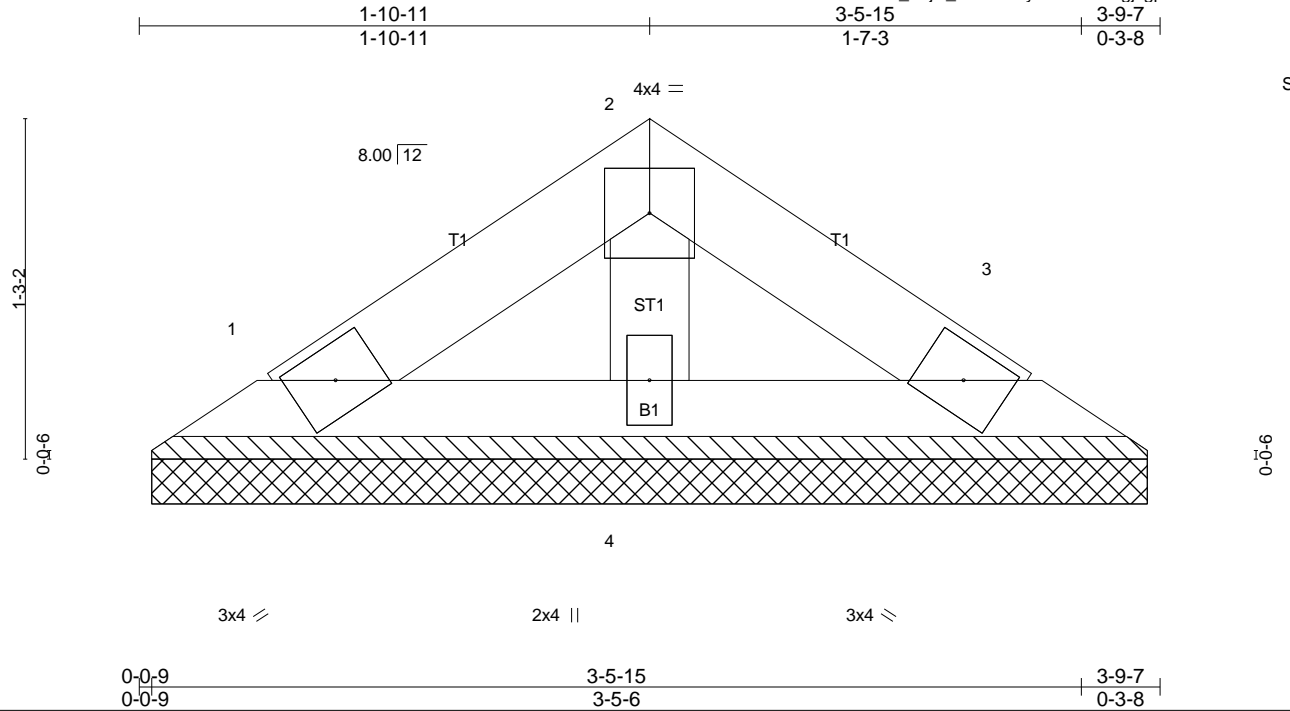
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job J0221-1067	Truss VA4	Truss Type Valley	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:31 2021 Page 1  
ID:B4IkScsUv1LB9OVBG5UU\_Szjw\_W-znlHSyLnwCFzBagjxgpD4IPFZkkevFfvFp8ToQzjtEI



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.02	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.01	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.01	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2015/TPI2014			Weight: 11 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.2

**BRACING-**  
TOP CHORD  
BOT CHORD

Structural wood sheathing directly applied or 3-9-7 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.** (size) 1=3-8-5 (min. 0-1-8), 3=3-8-5 (min. 0-1-8), 4=3-8-5 (min. 0-1-8)  
Max Horz 1=-19(LC 8)  
Max Uplift 1=-5(LC 12), 3=-7(LC 13)  
Max Grav 1=61(LC 1), 3=61(LC 1), 4=102(LC 1)

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

**NOTES-**

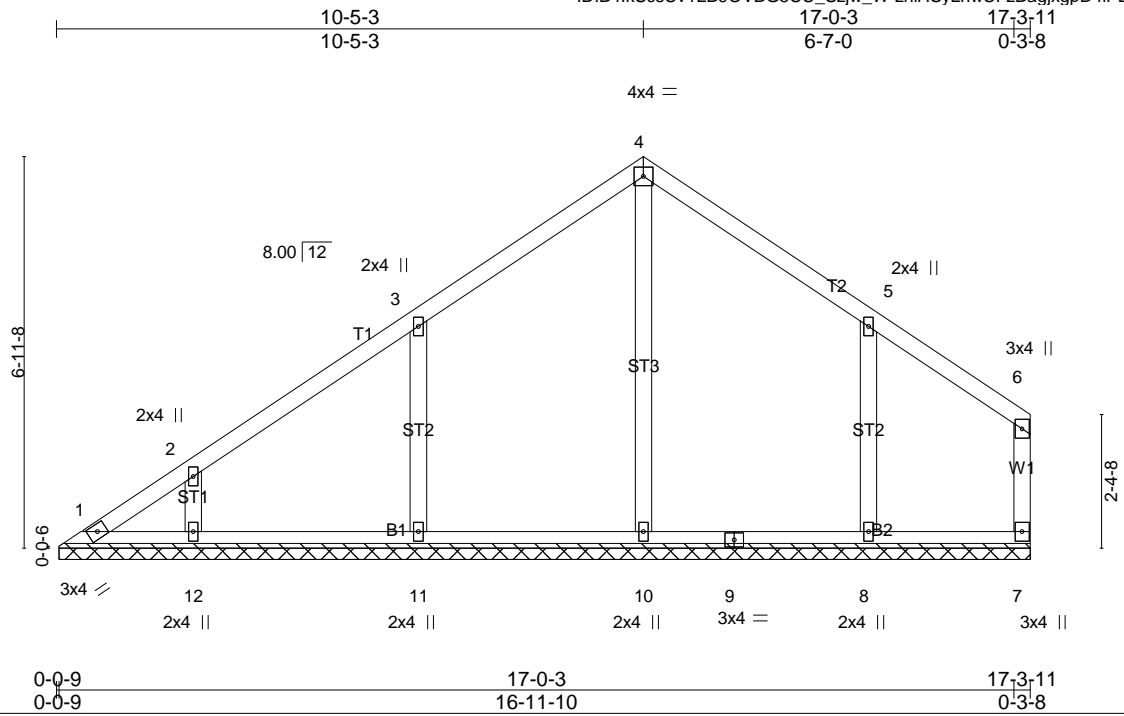
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job J0221-1067	Truss VB1	Truss Type Valley	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:31 2021 Page 1  
ID:B4lkScsUv1LB9OVBG5UU\_Szjw\_W-znIHSyLnwCFzBagjxgpD4IPDRkizvDAvFp8ToQzjtEI



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.16	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.19	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.17	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 7 n/a n/a		
	Code IRC2015/TPI2014			Weight: 81 lb	FT = 20%

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

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

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

**REACTIONS.** All bearings 17-3-2.  
(lb) - Max Horz 1=130(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 11, 12, 8  
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=502(LC 19), 11=449(LC 19), 12=268(LC 1), 8=419(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 3-11=-279/178, 5-8=-253/164

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-15 to 8-5-15, Interior(1) 8-5-15 to 10-5-3, Exterior(2) 10-5-3 to 17-1-15 zone; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 11, 12, 8.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

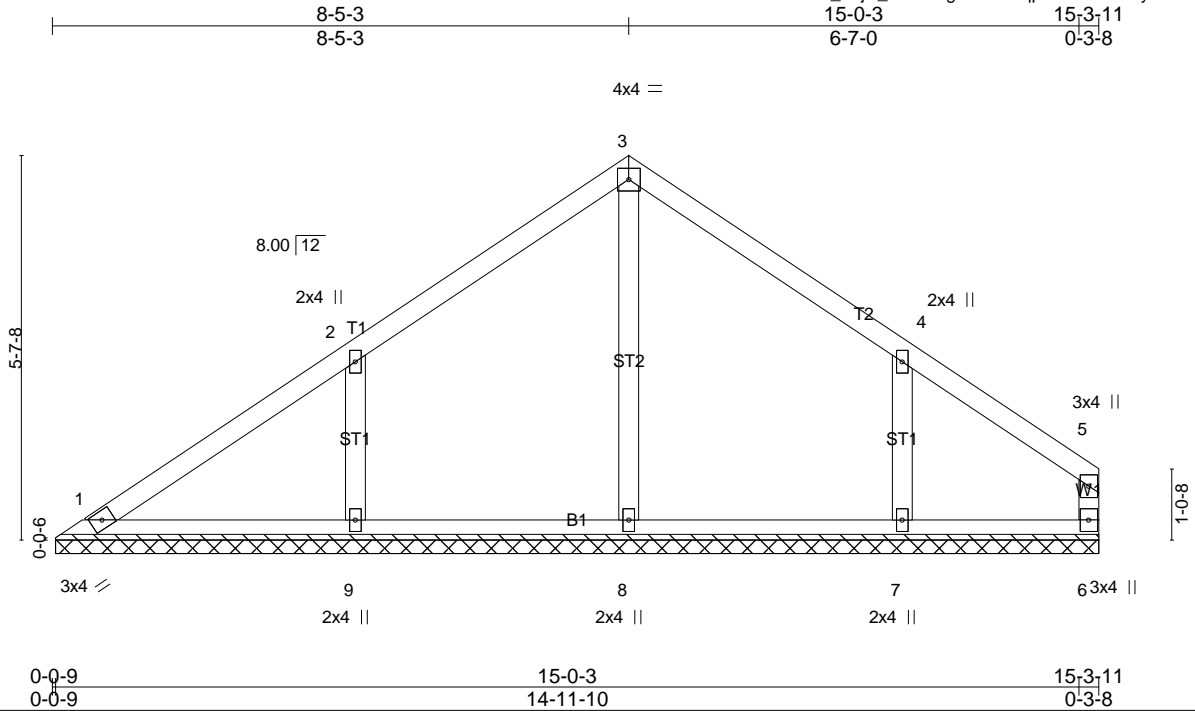
**LOAD CASE(S)** Standard



Job J0221-1067	Truss VB2	Truss Type Valley	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:32 2021 Page 1  
ID:B4IkScsUv1LB9OVBG5UU\_Szjw\_W-RzJfgIMPhVNqpkFwVOKSczyO882vehb3TTt0KszjEH



Scale = 1:33.7

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.16	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.14	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.09	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 6 n/a n/a		
	Code IRC2015/TPI2014			Weight: 65 lb	FT = 20%

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

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

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

**REACTIONS.** All bearings 15-3-2.  
(lb) - Max Horz 1=105(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 7  
Max Grav All reactions 250 lb or less at joint(s) 1, 6 except 8=433(LC 19), 9=409(LC 19), 7=352(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 2-9=-296/190, 4-7=-257/169

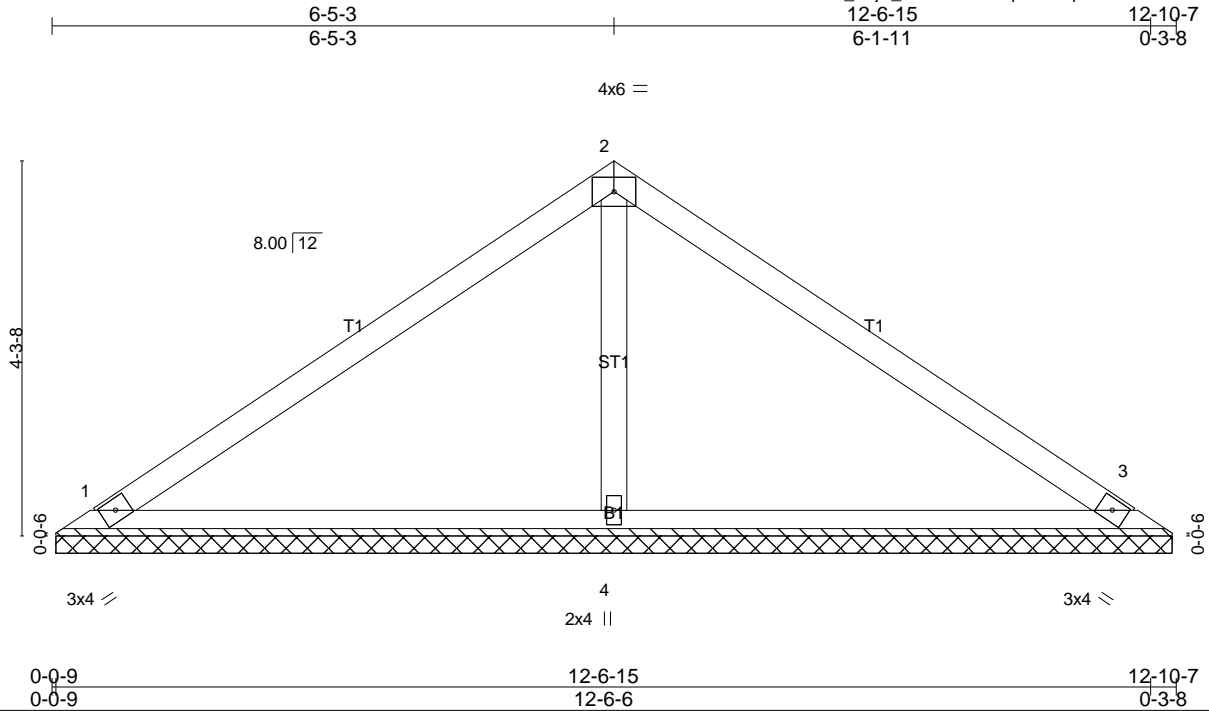
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9, 7.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job J0221-1067	Truss VB3	Truss Type Valley	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:33 2021 Page 1  
ID: B41kScsUv1LB9OVBG5UU\_Szjw\_W-vAt1teM2SpVhRuq635rh9AVWSXMIN8xCi7daslztjEG



Scale = 1:26.4

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.38	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.26	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.09	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2015/TPI2014			Weight: 46 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.2

**BRACING-**  
TOP CHORD  
BOT CHORD

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

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

**REACTIONS.** (size) 1=12-9-5 (min. 0-1-8), 3=12-9-5 (min. 0-1-8), 4=12-9-5 (min. 0-1-8)  
Max Horz 1=-79(LC 10)  
Max Uplift 1=-13(LC 12), 3=-21(LC 13)  
Max Grav 1=236(LC 1), 3=236(LC 1), 4=479(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 2-4=-303/104

**NOTES-**

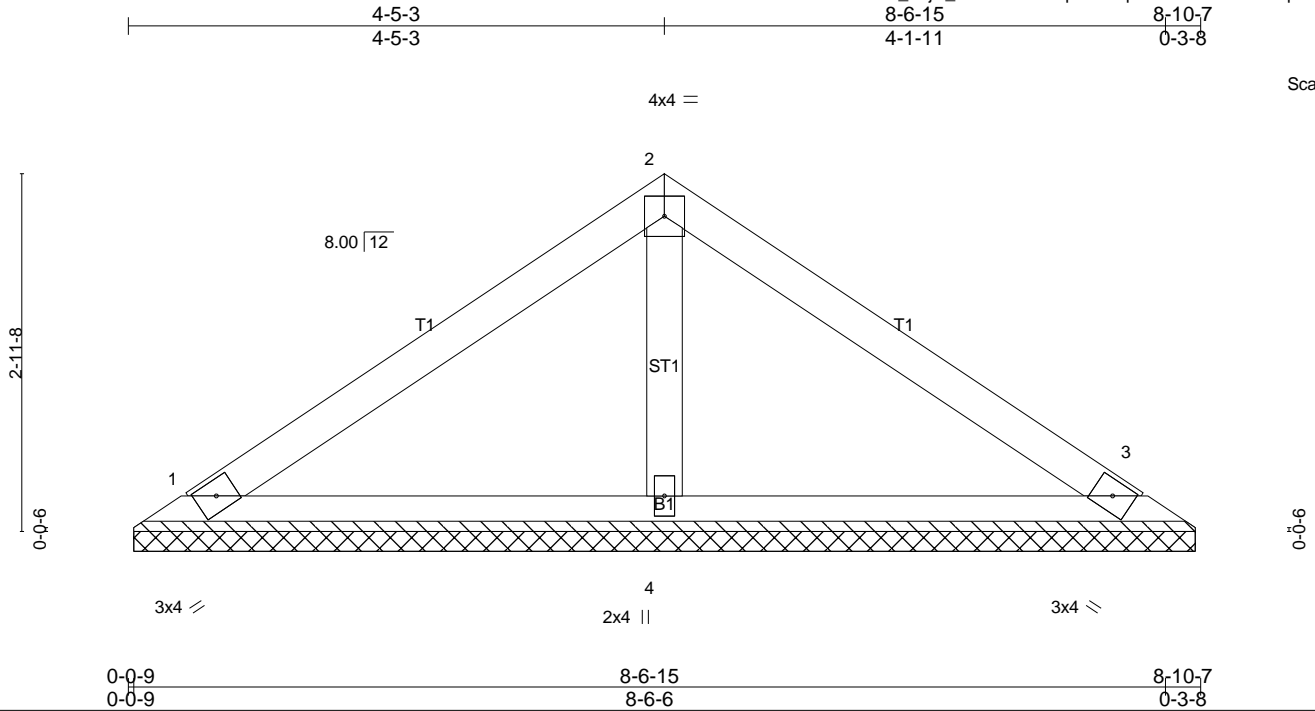
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job J0221-1067	Truss VB4	Truss Type Valley	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:33 2021 Page 1  
ID:B4IkScsUv1LB9OVBG5UU\_Szjw\_W-vAt1teM2SpVhRuq635rh9AVY?XPXN9pCi7dasIzjEG



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.22	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.12	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.03	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2015/TPI2014			Weight: 31 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.2

**BRACING-**  
TOP CHORD  
BOT CHORD

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

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

**REACTIONS.** (size) 1=8-9-5 (min. 0-1-8), 3=8-9-5 (min. 0-1-8), 4=8-9-5 (min. 0-1-8)  
Max Horz 1=-53(LC 10)  
Max Uplift 1=-15(LC 12), 3=-20(LC 13)  
Max Grav 1=171(LC 1), 3=171(LC 1), 4=288(LC 1)

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

**NOTES-**

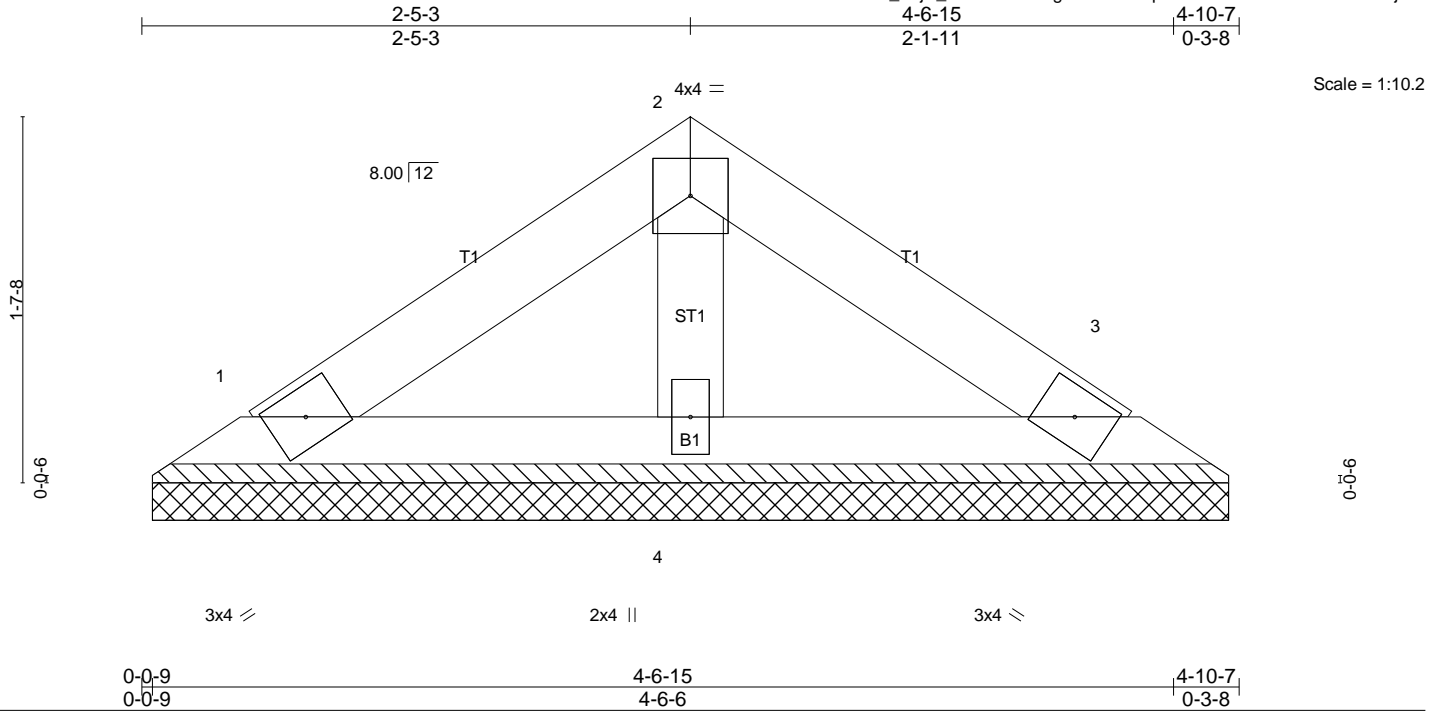
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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 30.0psf on the bottom chord in all areas where a rectangle 3'-6-0 tall by 2'-0-0 wide will fit 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 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job JO221-1067	Truss VB5	Truss Type Valley	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:34 2021 Page 1  
ID: B4lkScsUv1LB9OVBG5UU\_Szjw\_W-NMRP4zNgC7dY22PlcpMwhO1mRxm76cLMxnM7PlzjtEF



Scale = 1:10.2

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.05	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.03	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.01	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2015/TPI2014			Weight: 16 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.2

**BRACING-**  
TOP CHORD  
BOT CHORD

Structural wood sheathing directly applied or 4-10-7 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.** (size) 1=4-9-5 (min. 0-1-8), 3=4-9-5 (min. 0-1-8), 4=4-9-5 (min. 0-1-8)  
Max Horz 1=26(LC 10)  
Max Uplift 1=-7(LC 12), 3=-10(LC 13)  
Max Grav 1=84(LC 1), 3=84(LC 1), 4=142(LC 1)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

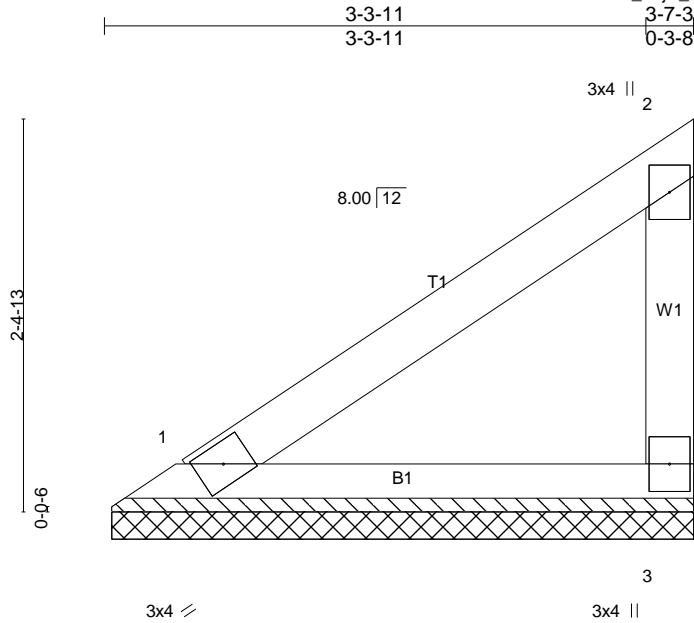
**LOAD CASE(S)** Standard



Job J0221-1067	Truss VC2	Truss Type Valley	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:35 2021 Page 1  
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Scale = 1:14.1

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.12	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.07	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.00	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P						
	Code IRC2015/TPI2014						Weight: 13 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 3-7-3 oc purlins, except end verticals.  
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.** (size) 1=3-6-10 (min. 0-1-8), 3=3-6-10 (min. 0-1-8)  
Max Horz 1=54(LC 12)  
Max Uplift 3=-23(LC 12)  
Max Grav 1=118(LC 1), 3=123(LC 19)

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

**NOTES-**

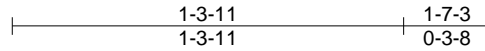
- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
- 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

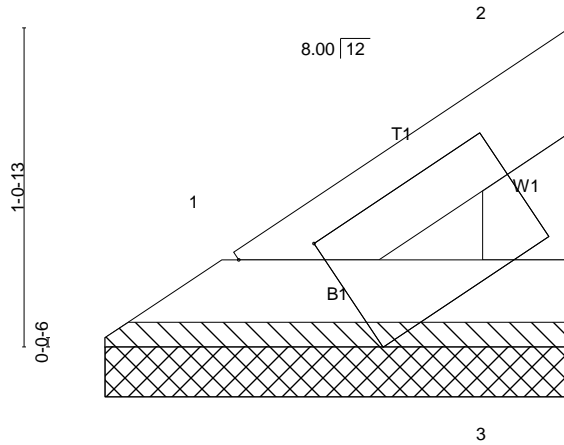
Job J0221-1067	Truss VC3	Truss Type Valley	Qty 1	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:35 2021 Page 1  
ID: B4lkScsUv1LB9OVBG5UU\_Szjw\_W-rY?oIJOIzQIPgCzUAWu9EbaxmL6ir3mV9R6gxBzjtEE



Scale = 1:7.7



5x8

Plate Offsets (X,Y)-- [1:0-2-6,0-1-9], [1:0-2-14,0-1-2], [2:0-2-2,0-0-0], [3:0-1-7,0-1-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.01	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.01	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.00		n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 5 lb	FT = 20%
	Code IRC2015/TPI2014							

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 1-7-3 oc purlins, except end verticals.  
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.** (size) 1=1-6-10 (min. 0-1-8), 3=1-6-10 (min. 0-1-8)

Max Horz 1=18(LC 12)  
Max Uplift 3=7(LC 12)  
Max Grav 1=38(LC 1), 3=40(LC 19)

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

**NOTES-**

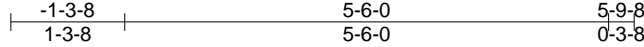
- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
- 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

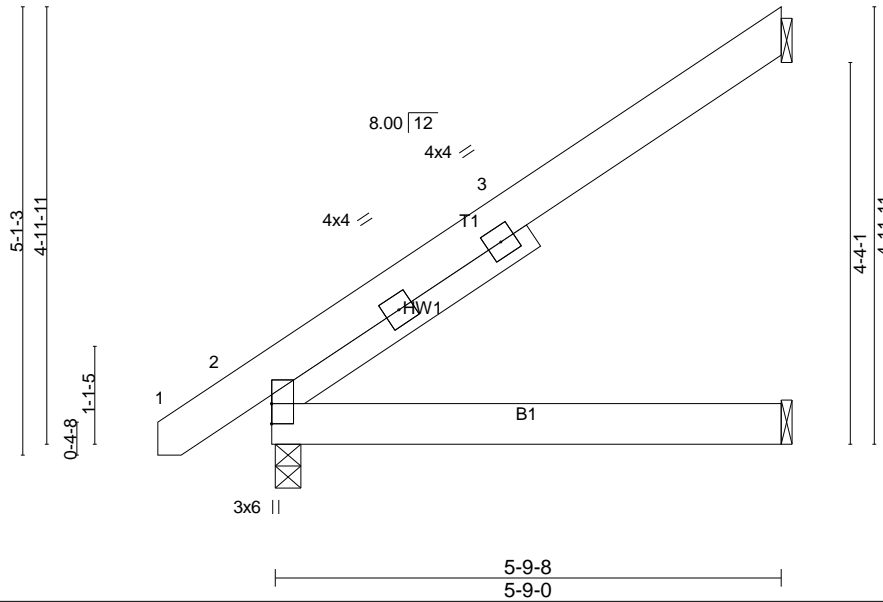
Job J0221-1067	Truss X1	Truss Type Jack-Open	Qty 21	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:36 2021 Page 1  
ID:B4IkScsUv1LB9OVBG5UU\_Szjw\_W-JkZAVfPwktGIMYhkEPOp72TIR2aW0eO5rETdzjIED



Scale = 1:26.2



LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	2-0-0	TC 0.20	Vert(LL) -0.01	2-5	>999	360		MT20	244/190
TCDL 10.0	Lumber DOL 1.15		BC 0.13	Vert(CT) -0.03	2-5	>999	240			
BCLL 0.0 *	Rep Stress Incr YES		WB 0.00	Horz(CT) 0.01	4	n/a	n/a			
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P	Wind(LL) 0.00	2	****	240		Weight: 39 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
SLIDER Left 2x4 SP No.2 -t 3-6-7

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-9-8 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 4=Mechanical, 2=0-3-8 (min. 0-1-8), 5=Mechanical  
Max Horz 2=124(LC 12)  
Max Uplift 4=88(LC 12)  
Max Grav 4=178(LC 19), 2=306(LC 1), 5=115(LC 3)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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) 4.
- 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

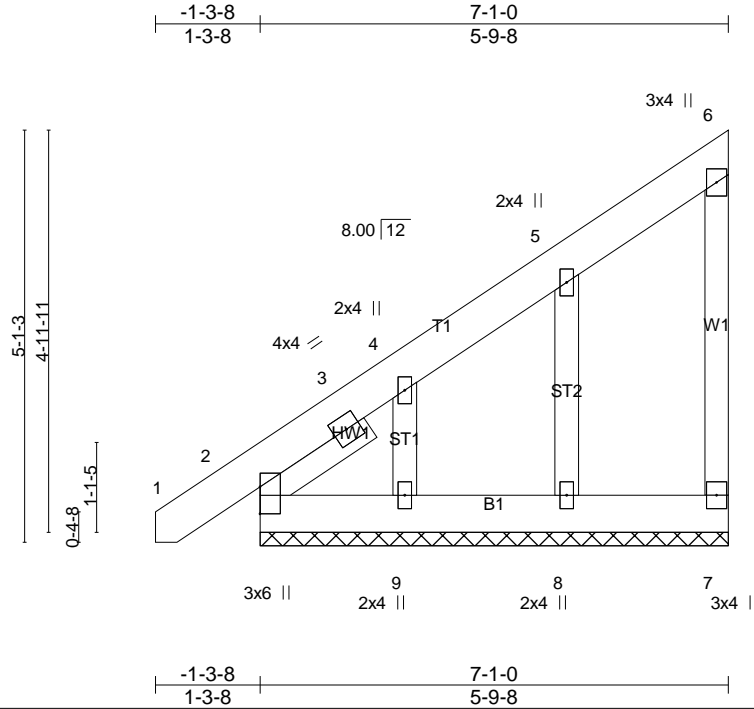
**LOAD CASE(S)** Standard



Job J0221-1067	Truss X1GE	Truss Type Jack-Open Supported Gable	Qty 2	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:37 2021 Page 1  
ID:B4lkScsUv1LB9OVBG5UU\_Szjw\_W-nx7Yj?QYV2?7vV7tlxwJ0fGv9n7Jzqodlbn?3zjtEC



Scale = 1:28.5

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
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 0.01	Vert(LL) 0.00 1 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.03	Vert(CT) -0.00 1 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 n/a n/a		
	Code IRC2015/TPI2014			Weight: 48 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.2  
OTHERS 2x4 SP No.2  
SLIDER Left 2x4 SP No.2 -t 1-7-3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-9-8 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 5-9-8.  
(lb) - Max Horz 2=122(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 7, 8, 9  
Max Grav All reactions 250 lb or less at joint(s) 7, 2, 8, 9

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

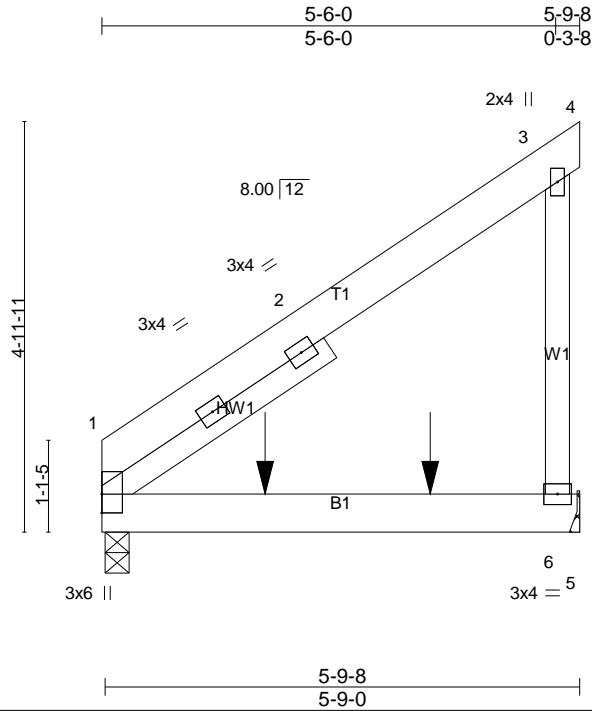
- NOTES-**
- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Corner(3) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 3) Gable requires continuous bottom chord bearing.
  - 4) Gable studs spaced at 2-0-0 oc.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 8, 9.
  - 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 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 J0221-1067	Truss X1GR	Truss Type Jack-Open Girder	Qty 1	Ply 2	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:37 2021 Page 1  
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Scale = 1:27.9

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.11	Vert(LL) -0.06	1-6	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.75	Vert(CT) -0.13	1-6	>497	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.01	Horz(CT) 0.00		n/a	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-P	Wind(LL) -0.01	1-6	>999	240		
	Code IRC2015/TPI2014						Weight: 82 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.2  
SLIDER Left 2x4 SP No.2 -t 3-3-7

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-9-8 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=0-3-8 (min. 0-1-8), 6=Mechanical  
Max Horz 1=120(LC 8)  
Max Grav 1=1003(LC 1), 6=1149(LC 1)

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

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 850 lb down at 1-11-12, and 850 lb down at 3-11-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-60, 3-4=-20, 1-5=-20  
Concentrated Loads (lb)  
Vert: 7=-850(B) 8=-850(B)

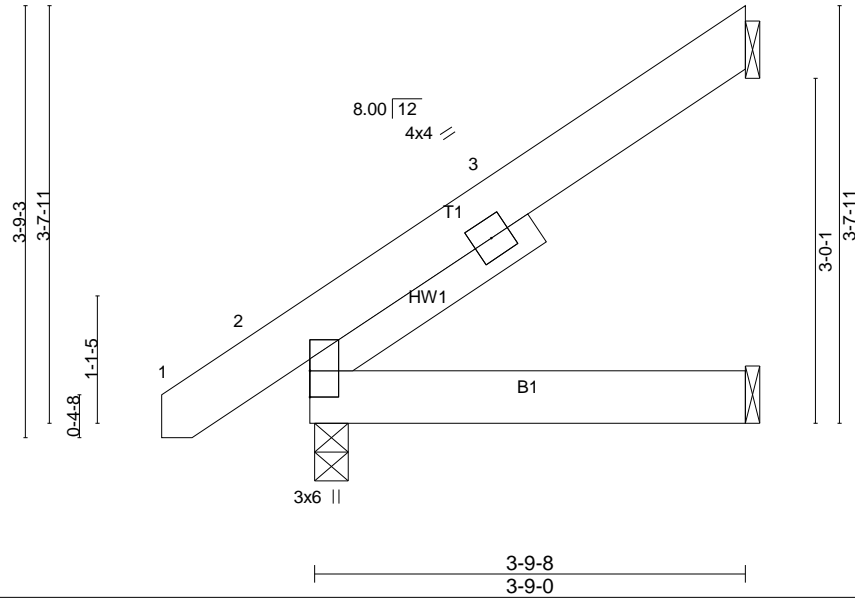
Job J0221-1067	Truss X2	Truss Type Jack-Open	Qty 14	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:38 2021 Page 1  
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.09	Vert(LL) -0.00	2-5	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.05	Vert(CT) -0.01	2-5	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(CT) 0.00	4	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Wind(LL) 0.00	2	****	240		
	Code IRC2015/TPI2014						Weight: 27 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
SLIDER Left 2x4 SP No.2 -t 2-4-0

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 3-9-8 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 4=Mechanical, 2=0-3-8 (min. 0-1-8), 5=Mechanical  
Max Horz 2=87(LC 12)  
Max Uplift 4=61(LC 12)  
Max Grav 4=112(LC 19), 2=230(LC 1), 5=75(LC 3)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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) 4.
- 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard

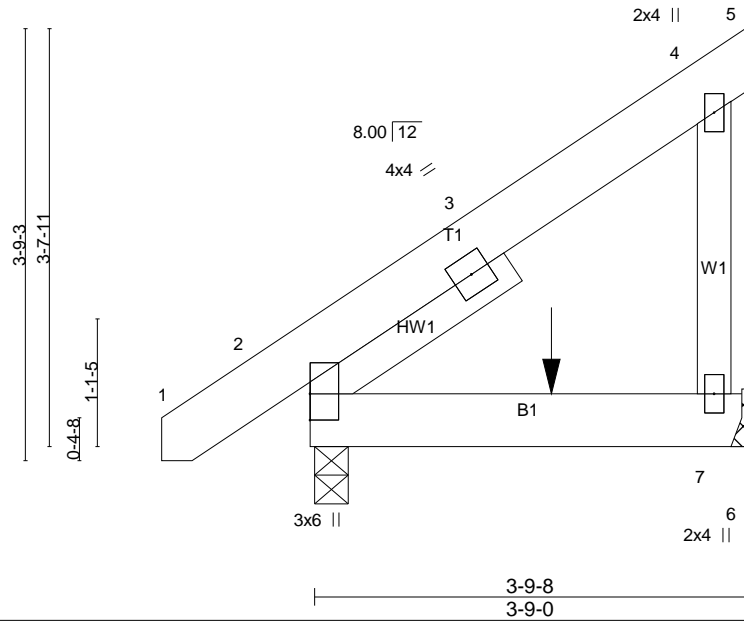
Job J0221-1067	Truss X2GR	Truss Type Jack-Open Girder	Qty 1	Ply 2	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:39 2021 Page 1  
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Scale = 1:20.1



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.03	Vert(LL)	-0.01	2-7	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.18	Vert(CT)	-0.01	2-7	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.01	Horz(CT)	0.00		n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-P	Wind(LL)	-0.00	2	>999		
	Code IRC2015/TPI2014						Weight: 61 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2  
 SLIDER Left 2x4 SP No.2 -t 2-1-0

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 3-9-8 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8 (min. 0-1-8), 7=Mechanical  
 Max Horz 2=87(LC 8)  
 Max Grav 2=401(LC 1), 7=407(LC 1)

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

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 447 lb down at 2-1-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

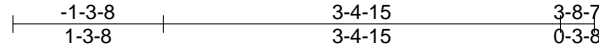
**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-4=-60, 4-5=-20, 2-6=-20  
 Concentrated Loads (lb)  
 Vert: 8=-447(B)

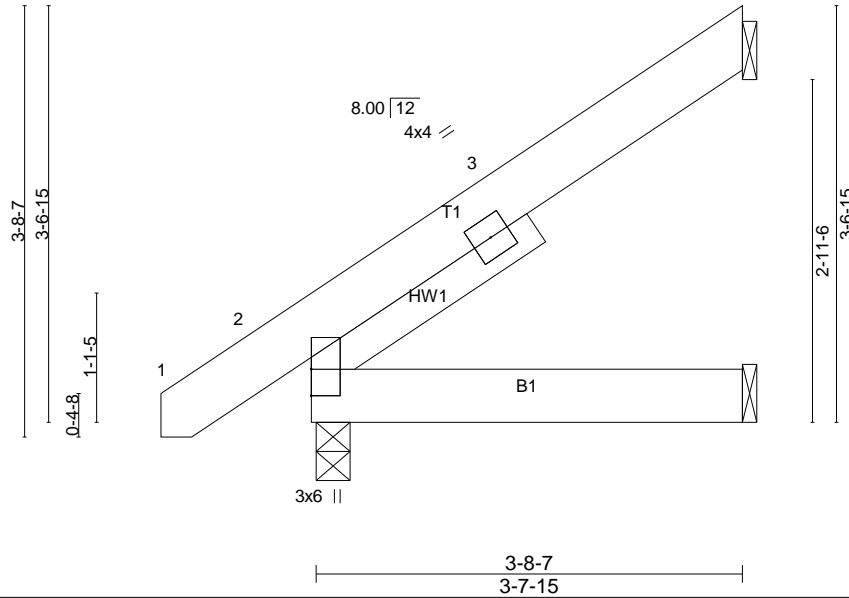
Job J0221-1067	Truss Y1	Truss Type Jack-Open	Qty 2	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:39 2021 Page 1  
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Scale = 1:19.8



LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	2-0-0	TC 0.09	Vert(LL)	-0.00	2-5	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	-0.00	2-5	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P	Wind(LL)	0.00	2	****	240	Weight: 27 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
SLIDER Left 2x4 SP No.2 -t 2-3-6

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 3-8-7 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 4=Mechanical, 2=0-3-8 (min. 0-1-8), 5=Mechanical  
Max Horz 2=86(LC 12)  
Max Uplift 4=60(LC 12)  
Max Grav 4=109(LC 19), 2=226(LC 1), 5=73(LC 3)

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

**NOTES-**

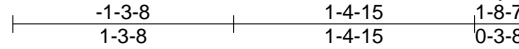
- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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) 4.
- 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard

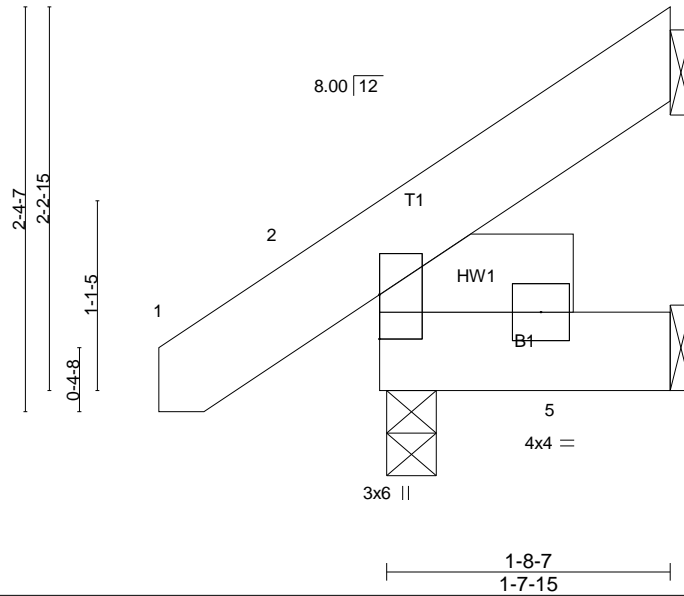
Job J0221-1067	Truss Y1A	Truss Type Jack-Open	Qty 2	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:40 2021 Page 1  
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Scale = 1:13.5



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.03	Vert(LL) -0.00	2	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.01	Vert(CT) -0.00	2	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(CT) 0.00	3	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Wind(LL) 0.00	2	****	240		
	Code IRC2015/TPI2014						Weight: 16 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
SLIDER Left 2x6 SP No.1 -t 1-1-10

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 1-8-7 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 2=0-3-8 (min. 0-1-8), 4=Mechanical  
Max Horz 2=51(LC 12)  
Max Uplift 3=-33(LC 12)  
Max Grav 3=36(LC 19), 2=161(LC 1), 4=34(LC 3)

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

**NOTES-**

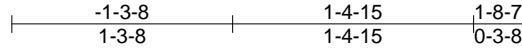
- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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) 3.
- 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard

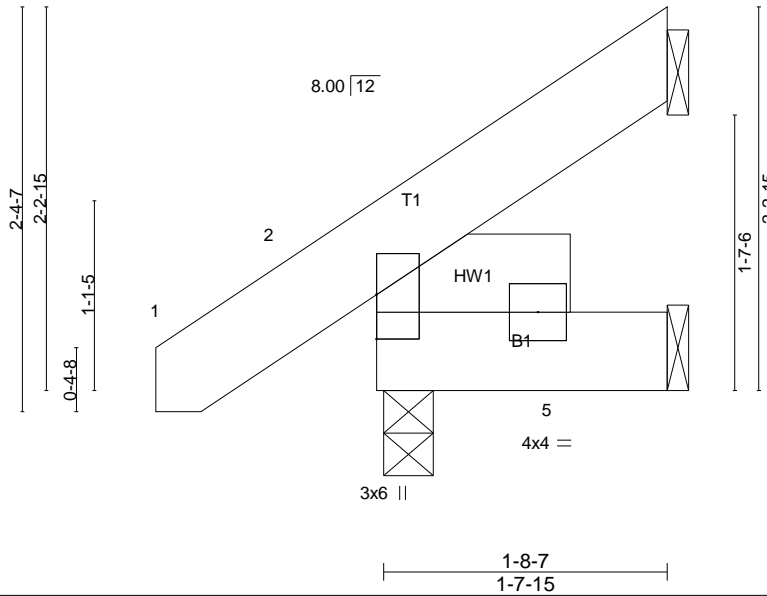
Job J0221-1067	Truss Y2	Truss Type Jack-Open	Qty 4	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:40 2021 Page 1  
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Scale = 1:13.5



LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	2-0-0	TC 0.03	Vert(LL)	-0.00	2	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.01	Vert(CT)	-0.00	2	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P	Wind(LL)	0.00	2	****	240	Weight: 16 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
SLIDER Left 2x6 SP No.1 -t 1-1-10

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 1-8-7 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 3=Mechanical, 2=0-3-8 (min. 0-1-8), 4=Mechanical  
Max Horz 2=51(LC 12)  
Max Uplift 3=-33(LC 12)  
Max Grav 3=36(LC 19), 2=161(LC 1), 4=34(LC 3)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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) 3.
- 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard





Job	Truss	Truss Type	Qty	Ply	RAY & CHRISTINE HYMBAUGH
J0221-1067	Z1	Diagonal Hip Girder	1	1	Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:41 2021 Page 2  
ID:B41kScsUv1LB9OVBG5UU\_Szjw\_W-gjM3YNT3ZGVYO7ReXn\_ZUsqx5m83FmSOYmZ?8rzjtE8

**LOAD CASE(S)** Standard

Uniform Loads (plf)

Vert: 1-5=-60, 5-6=-20, 2-7=-20

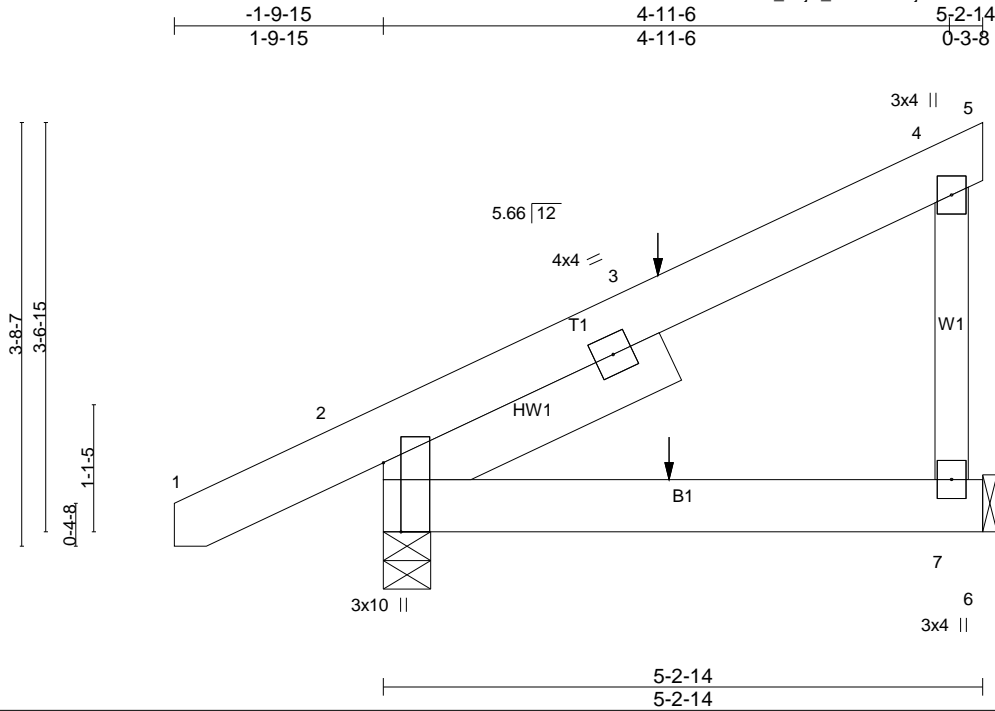
Concentrated Loads (lb)

Vert: 11=-27(F=-13, B=-13) 13=-16(F=-8, B=-8)

Job J0221-1067	Truss Z2	Truss Type Diagonal Hip Girder	Qty 2	Ply 1	RAY & CHRISTINE HYMBAUGH Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, Bob Lewis

Run: 8.300 s Mar 22 2019 Print: 8.300 s Mar 22 2019 MiTek Industries, Inc. Thu Feb 18 15:45:42 2021 Page 1  
ID:B4IkScsUv1LB9OVBG5UU\_Szjw\_W-8uwRmjThKadPOH0r4UW0o4N52AUr\_EVXm0IYhHzjtE7



Scale = 1:20.1

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.13	Vert(LL)	-0.01	2-7	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.10	Vert(CT)	-0.02	2-7	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.00		n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-P	Wind(LL)	0.00	2	****		
	Code IRC2015/TPI2014						Weight: 41 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.2  
SLIDER Left 2x6 SP No.1 -t 2-8-12

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-2-14 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 7=Mechanical, 2=0-4-15 (min. 0-1-8)  
Max Horz 2=87(LC 8)  
Max Uplift 7=-32(LC 8), 2=-8(LC 4)  
Max Grav 7=193(LC 1), 2=317(LC 1)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit 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) 7, 2.
- 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 64 lb down and 37 lb up at 2-5-15, and 64 lb down and 37 lb up at 2-5-15 on top chord, and at 2-5-15, and at 2-5-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) 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: 1-4=-60, 4-5=-20, 2-6=-20