

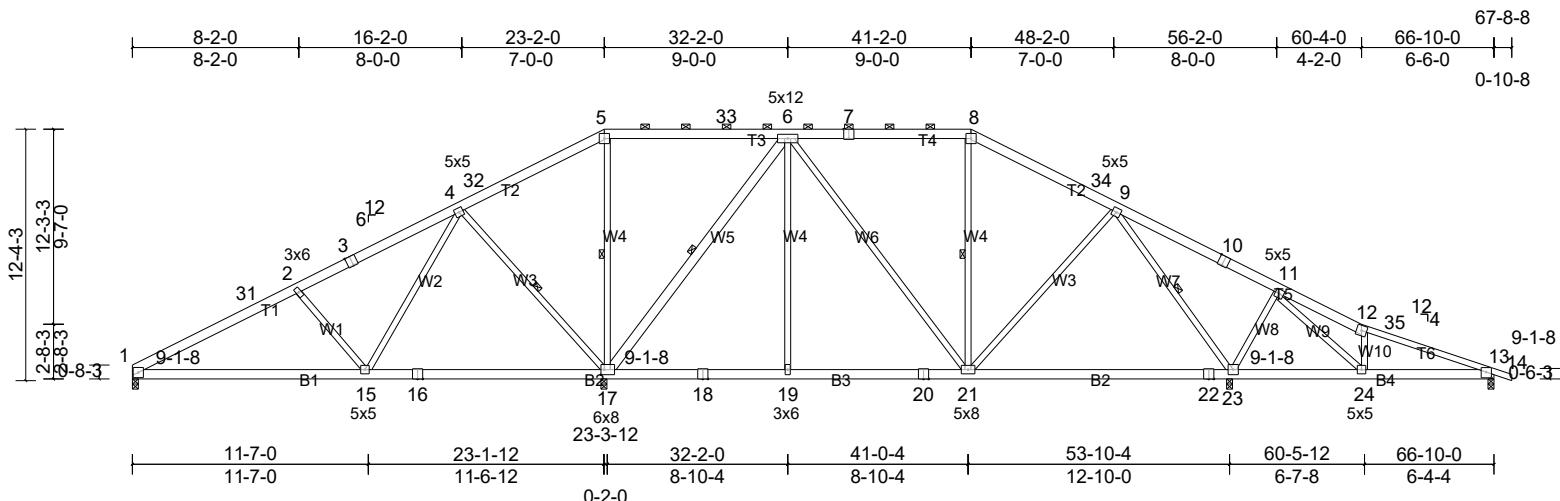


Job	Truss	Truss Type	Qty	Ply	Temms Residence
251198-A	A1A	Piggyback Base	2	1	Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309, user

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Oct 29 10:53:26

Page: 1



Scale = 1:113.6

Plate Offsets (X, Y): [3:0-3-0,Edge], [7:0-3-0,Edge], [10:0-3-0,Edge], [13:0-3-0,0-3-5], [17:0-2-0,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	-0.13	21-23	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(CT)	-0.26	21-23	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.02	23	n/a	n/a		
BCDL	10.0	Code	IRC2021/TP12014	Matrix-MS	Wind(LL)	0.06	15-27	>999	240	Weight: 510 lb	FT = 25%

## LUMBER

TOP CHORD 2x6 SP No.1 \*Except\* T6:2x4 SP No.1  
BOT CHORD 2x6 SP No.1

WEBS 2x4 SP No.2 \*Except\* W5:2x6 SP No.1

## **BRACING**

TOP CHC

6-0-0 oc purlins, except  
2-0-0 oc purlins (6-0-0 max.): 5-8.  
BOT. CHORD Structural wood sheathing directly applied or

BUT CHORD	Structural wood sheathing directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 15-17, 23-24.
WERS	1 Row at midpt. 4-17, 5-17, 6-17, 8-21

WEBS I Row at midpt 4-17, 5-17, 6-17, 8-21,  
9-23

## WEBS

$$\begin{aligned}
 6-17=&1332/420, 6-19=&0/291, 6-21=&-85/376, \\
 4-15=&-176/738, 2-15=&-477/365, \\
 9-23=&-1257/413, 11-23=&-574/352, \\
 11-24=&-282/633, 12-24=&-310/213
 \end{aligned}$$

**LOAD CASE(S)** Standard

## REACTIONS All bearings 0-3-8.

(lb) - Max Horiz 1=-250 (LC 13)

Max Uplift All uplift 100 (lb) or less at joint(s)  
except 1=-154 (LC 12), 13=-141  
(LC 9), 17=-451 (LC 12), 23=-427  
(LC 13)

Max Grav All reactions 250 (lb) or less at joint  
(s) except 1=674 (LC 25), 13=454  
(LC 26), 17=2605 (LC 1), 23=1761  
(LC 26)

## FORCES

TOP CHORD (lb) or less except when shown.  
1-31=-885/309, 2-31=-726/331,

2-3--601/255, 3-4--490/293, 4-32--45/493,  
 5-32--22/667, 5-33--0/525, 6-33--0/525,  
 6-7--585/430, 7-8--585/430, 8-34--657/401,  
 9-34--764/366, 9-10--0/406, 10-11--0/264,  
 11-12--557/289, 12-35--455/180,  
 13-35--538/170

**BOT CHORD** 1-15=-319/740, 15-16=-76/254,  
16-17=-76/254, 17-18=0/413, 18-19=0/413,  
19-20=0/413, 20-21=0/413, 21-22=0/471,  
22-23=0/471, 13-24=-60/455

**NOTES**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 6-0-0, Interior (1) 6-0-0 to 23-2-0, Exterior(2R) 23-2-0 to 29-2-0, Interior (1) 29-2-0 to 41-2-0, Exterior(2R) 41-2-0 to 47-2-0, Interior (1) 47-2-0 to 67-8-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are 6x6 (=) MT20 unless otherwise indicated.
- 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 0.0psf on the bottom chord in all areas where a rectangle 0-00 tall by 0-00 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 154 lb uplift at joint 1, 451 lb uplift at joint 17, 141 lb uplift at joint 13 and 426 lb uplift at joint 23.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

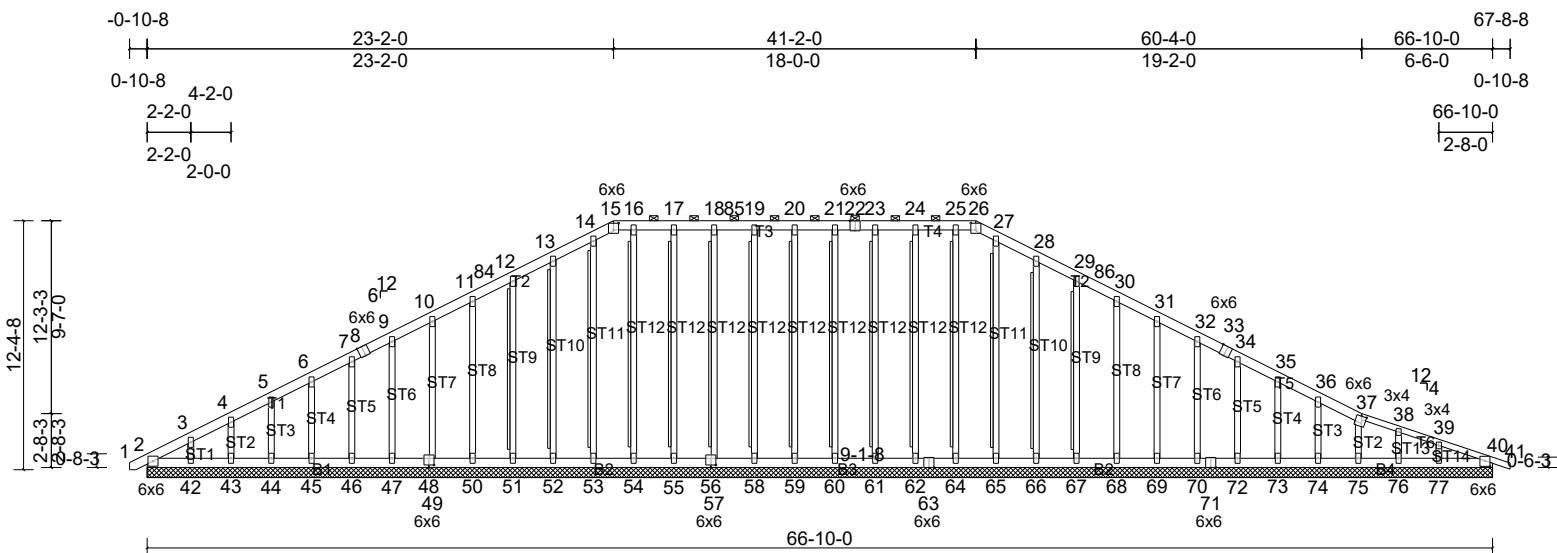
Job 251198-A	Truss A1GE	Truss Type Piggyback Base Supported Gable	Qty 1	Ply 1	Temms Residence Job Reference (optional)
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Page: 1



Scale = 1:114.9

Plate Offsets (X, Y): [8:0-3-0,Edge], [15:0-3-0,0-4-0], [22:0-3-0,Edge], [26:0-3-0,0-4-0], [33:0-3-0,Edge], [37:0-3-0,0-0-4], [40:0-3-0,0-3-5], [48:0-3-0,0-1-8], [56:0-3-0,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.01	40	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS						Weight: 669 lb	FT = 25%

#### LUMBER

TOP CHORD 2x6 SP No.1 \*Except\* T6:2x4 SP No.1  
BOT CHORD 2x6 SP No.1  
OTHERS 2x4 SP No.2 \*Except\* O1,O2,O3,O4,O5,O6,O7:2x4 SPF No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 15-26.  
BOT CHORD Structural wood sheathing directly applied or 10-0-0 oc bracing.

WEBS T-Brace: 2x4 SPF No.2 - 12-51, 13-52, 14-53, 16-54, 17-55, 18-57, 19-58, 20-59, 21-60, 23-61, 24-62, 25-64, 27-65, 28-66, 29-67

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 66-10-0.  
(lb) - Max Horiz 2=243 (LC 16)  
Max Uplift All uplift 100 (lb) or less at joint(s) 2, 40, 43, 44, 45, 46, 47, 49, 50, 51, 52, 55, 57, 58, 59, 60, 61, 62, 66, 67, 68, 69, 70, 72, 73, 74, 75, 76, 77 except 42=121 (LC 12)  
Max Grav All reactions 250 (lb) or less at joint(s) 2, 40, 42, 43, 44, 45, 46, 47, 49, 50, 51, 52, 53, 54, 55, 57, 58, 59, 60, 61, 62, 64, 65, 66, 67, 68, 69, 70, 72, 73, 74, 75, 76, 77

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

#### TOP CHORD

2-3=-334/119, 3-4=-277/115, 10-11=-88/252, 11-84=-108/287, 12-84=-92/297, 12-13=-129/349, 13-14=-150/399, 14-15=-153/399, 15-16=-143/395, 16-17=-143/395, 17-18=-143/395, 18-85=-143/395, 19-85=-143/395, 19-20=-143/395, 20-21=-143/395, 21-22=-143/395, 22-23=-143/395, 23-24=-143/395, 24-25=-143/395, 25-26=-143/395, 26-27=-153/391, 27-28=-150/367, 28-29=-129/307, 29-86=-92/256, 30-86=-108/250

#### NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDD=6.0psf; h=15ft; Cat II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-8-10 to 5-3-6, Exterior(2N) 5-3-6 to 23-2-0, Corner(3R) 23-2-0 to 29-2-0, Exterior(2N) 29-2-0 to 41-2-0, Corner(3R) 41-2-0 to 47-2-0, Exterior (2N) 47-2-0 to 67-8-8 zone; 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) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
- 5) Provide adequate drainage to prevent water ponding.
- 6) All plates are 3x6 (||) MT20 unless otherwise indicated.
- 7) Gable requires continuous bottom chord bearing.
- 8) Gable studs spaced at 2-0-0 oc.

9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

10) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 40, 43, 44, 45, 46, 47, 49, 50, 51, 52, 55, 57, 58, 59, 60, 61, 62, 66, 67, 68, 69, 70, 72, 73, 74, 75, 76, 77, 2, 40, 2 except (jt=lb) 42=121.

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

13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

14) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

#### LOAD CASE(S)

Standard

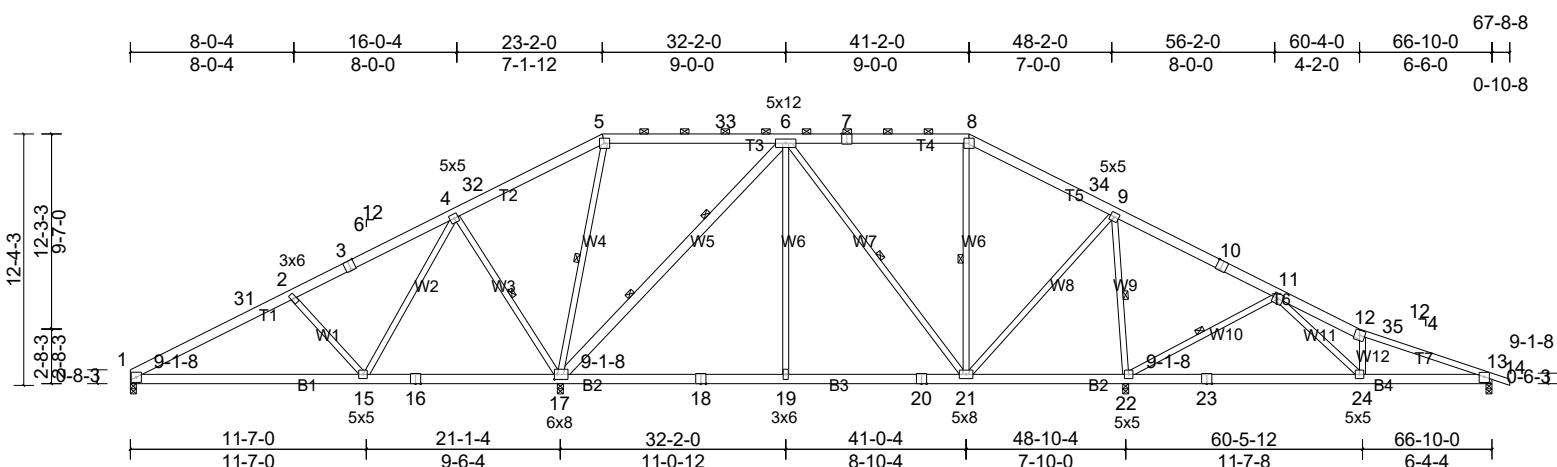
Job 251198-A	Truss A2	Truss Type Piggyback Base	Qty 3	Ply 1	Temms Residence Job Reference (optional)
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Page: 1



Scale = 1:113.6

Plate Offsets (X, Y): [3:0-3-0,Edge], [7:0-3-0,Edge], [10:0-3-0,Edge], [13:0-3-0,0-3-5], [17:0-1-11,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	-0.09	22-24	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(CT)	-0.18	15-27	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.01	13	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS	Wind(LL)	0.05	15-27	>999	240	Weight: 515 lb	FT = 25%

**LUMBER**

TOP CHORD 2x6 SP No.1 \*Except\* T7:2x4 SP No.1

BOT CHORD 2x6 SP No.1

WEBS 2x4 SP No.2 \*Except\* W5:2x6 SP No.1

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 5-11-7 oc purlins, except

2-0-0 oc purlins (6-0-0 max.): 5-8.

BOT CHORD Structural wood sheathing directly applied or 10-0-0 oc bracing, Except:

6-0-0 oc bracing: 15-17,21-22.

WEBS 1 Row at midpt 6-21, 8-21, 9-22, 11-22, 5-17, 4-17

WEBS 2 Rows at 1/3 pts 6-17

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

**REACTIONS** All bearings 0-3-8.

(lb) - Max Horiz 1=250 (LC 13)

Max Uplift All uplift 100 (lb) or less at joint(s) except 1=-129 (LC 12), 13=-179 (LC 13), 17=-464 (LC 12), 22=-428 (LC 13)

Max Grav All reactions 250 (lb) or less at joint (s) except 1=603 (LC 25), 13=576 (LC 26), 17=2288 (LC 1), 22=2013 (LC 26)

**FORCES**

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

TOP CHORD 1-31=-734/262, 2-31=-578/284, 2-3=-438/197, 3-4=-327/236, 4-32=-36/485, 5-32=-14/662, 5-33=0/399, 6-33=0/399, 6-7=-239/367, 7-8=-239/367, 8-34=-272/333, 9-34=-381/298, 9-10=-13/568, 10-11=-34/427, 11-12=-993/402, 12-35=-870/287, 13-35=-953/277

BOT CHORD 1-15=-282/614, 15-16=-145/275, 16-17=-145/275, 17-18=-7/397, 18-19=-7/397, 19-20=-7/397, 20-21=-7/397, 21-22=-324/277, 22-23=-47/295, 23-24=-47/295, 13-24=-162/848

**WEBS**

6-17=-974/294, 6-19=0/424, 8-21=-319/129, 9-21=-89/808, 9-22=-1421/488, 11-22=-780/395, 12-24=-357/230, 5-17=-697/254, 4-17=-813/440, 4-15=-188/673, 2-15=-482/363, 11-24=-201/824

9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard**NOTES**

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

2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=5ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 6-0-0, Interior (1) 6-0-0 to 23-2-10, Exterior(2R) 23-2-10 to 29-2-10, Interior (1) 29-2-10 to 41-2-0, Exterior(2R) 41-2-0 to 47-2-0, Interior (1) 47-2-0 to 67-8-8 zone; C-C for members and forces &amp; MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing &amp; Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.

4) Provide adequate drainage to prevent water ponding.

5) All plates are 6x6 (=) MT20 unless otherwise indicated.

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 0.0psf on the bottom chord in all areas where a rectangle 0-00 tall by 0-00 wide will fit between the bottom chord and any other members.

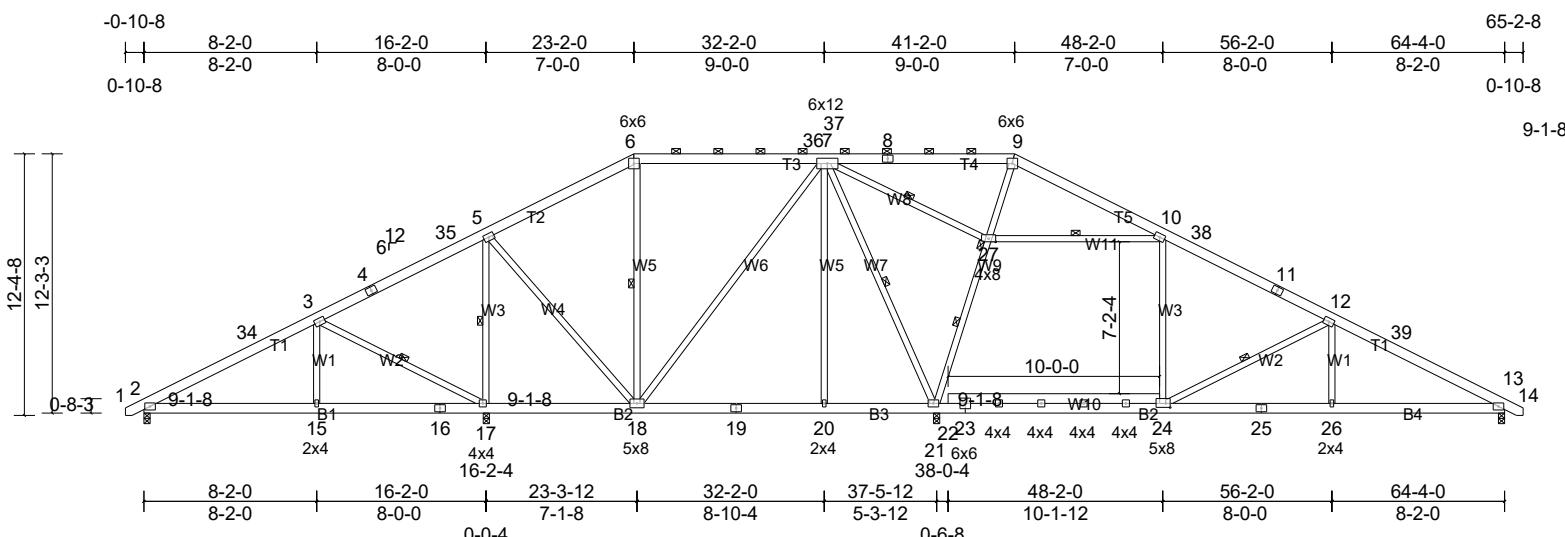
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 427 lb uplift at joint 22, 463 lb uplift at joint 17, 129 lb uplift at joint 1 and 178 lb uplift at joint 13.



Job 251198-A	Truss A4	Truss Type Piggyback Base	Qty 2	Ply 1	Temms Residence Job Reference (optional)
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Scale = 1:109.4

Plate Offsets (X, Y): [24:0-2-8,0-2-4], [27:0-4-0,0-1-13]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	-0.10	24-26	>999	360		
TCDL	10.0	Lumber DOL	1.15	BC	Vert(CT)	-0.20	24-26	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.03	13	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS	Wind(LL)	0.13	24-26	>999	240	Weight: 533 lb	FT = 25%

**LUMBER**

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.2 \*Except\* W10:2x6 SP No.1

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-9.  
BOT CHORD Structural wood sheathing directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 17-18.  
WEBS 1 Row at midpt 3-17, 5-17, 6-18, 7-21, 21-27, 12-24, 7-27, 10-27  
JOINTS 1 Brace at Jt(s): 27

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

**REACTIONS** All bearings 0-3-8.

(lb) - Max Horiz 2=242 (LC 16)  
Max Uplift All uplift 100 (lb) or less at joint(s) except 2=-146 (LC 12), 13=-312 (LC 13), 17=-454 (LC 12), 21=-445 (LC 13)  
Max Grav All reactions 250 (lb) or less at joint (s) except 2=661 (LC 1), 13=1008 (LC 26), 17=1462 (LC 25), 21=2193 (LC 1)

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

TOP CHORD 2-34=-830/193, 3-34=-646/215, 5-6=-405/290, 6-36=-279/303, 7-36=-279/303, 7-37=-249/1481, 8-37=-249/1481, 8-9=-249/1481, 9-10=-260/1401, 10-38=-655/375, 11-38=-717/355, 11-12=-831/336, 12-39=-1388/506, 13-39=-1571/484

BOT CHORD 2-15=-248/665, 15-16=-248/665, 16-17=-248/665, 18-19=-87/280, 19-20=-87/280, 20-21=-89/279, 21-22=-14/641, 22-23=-14/641, 23-24=-14/641, 24-25=-324/1324, 25-26=-324/1324, 13-26=-324/1324

**WEBS**

3-15=0/345, 3-17=-764/340, 5-17=-954/382, 5-18=-59/450, 6-18=-303/157, 7-20=0/256, 7-21=-516/365, 21-27=-1919/723, 9-27=-1068/384, 10-24=-24/627, 12-24=-776/352, 12-26=0/339, 7-27=-1691/673, 10-27=-1782/709

**NOTES**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-8-10 to 5-3-6, Interior (1) 5-3-6 to 23-2-0, Exterior(2R) 23-2-0 to 31-7-13, Interior (1) 31-7-13 to 41-1-6, Exterior(2R) 41-1-6 to 49-7-3, Interior (1) 49-7-3 to 65-0-10 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are 4x6 (=) MT20 unless otherwise indicated.
- 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 0.0psf on the bottom chord in all areas where a rectangle 0-00 tall by 0-00 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 145 lb uplift at joint 2, 454 lb uplift at joint 17, 445 lb uplift at joint 21 and 311 lb uplift at joint 13.

9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

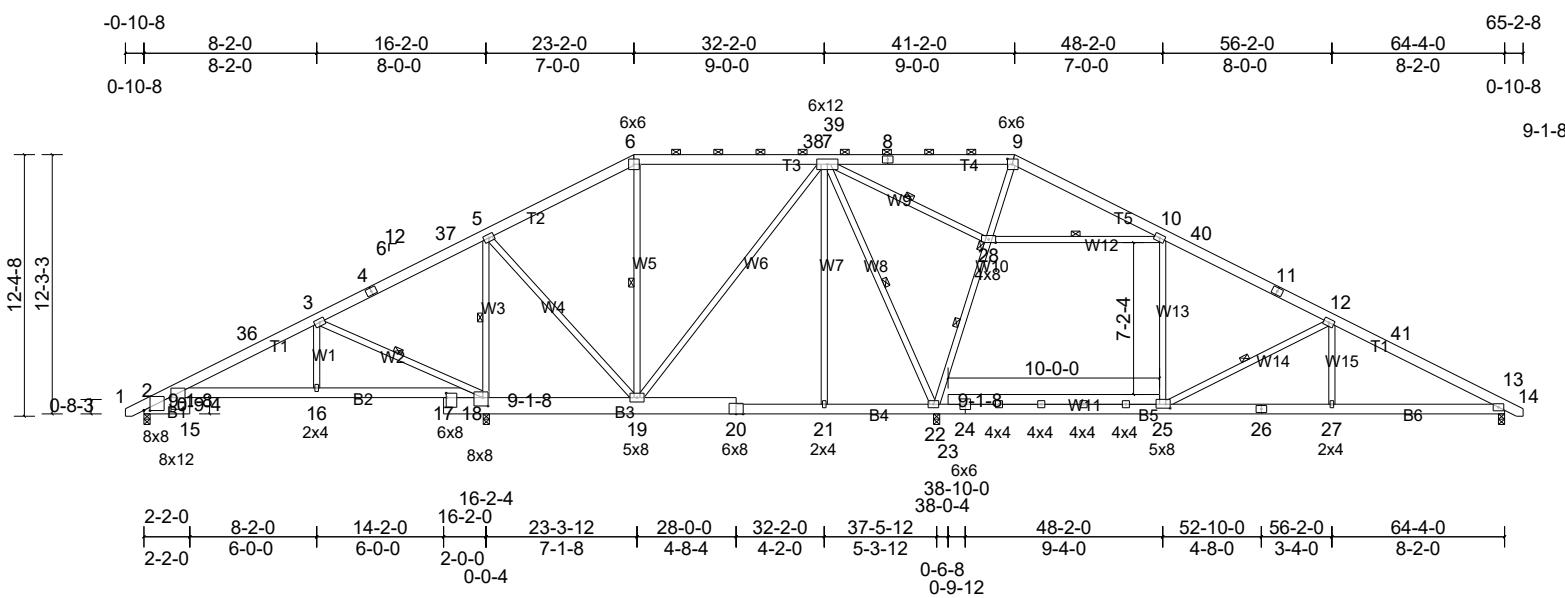
Job 251198-A	Truss A4A	Truss Type Piggyback Base	Qty 5	Ply 1	Temms Residence Job Reference (optional)
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Scale = 1:109.4

Plate Offsets (X, Y): [2:0-3-7,0-0-2], [2:0-0-10,1-3-5], [9:0-2-12,0-3-0], [17:0-2-8,0-0-8], [18:0-3-0,0-4-12], [25:0-2-8,0-2-4], [28:0-4-0,0-1-13]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	-0.10	25-27	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(CT)	-0.20	25-27	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.04	13	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS	Wind(LL)	0.13	25-27	>999	240	Weight: 562 lb	FT = 25%

**LUMBER**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1 \*Except\* B1,B3:2x10 SP No.1  
 WEBS 2x4 SP No.2 \*Except\* W11:2x6 SP No.1

**BRACING**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.); 6-9.  
 BOT CHORD Structural wood sheathing directly applied or 6-0-0 oc bracing.  
 WEBS 1 Row at midpt 6-19, 5-18, 12-25, 22-28, 7-22, 3-18, 7-28, 10-28

**JOINTS** 1 Brace at Jt(s): 28

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

**REACTIONS** All bearings 0-3-8.

(lb) - Max Horiz 2=-243 (LC 13)  
 Max Uplift All uplift 100 (lb) or less at joint(s) 2 except 13=-309 (LC 13), 18=-550 (LC 12), 22=-458 (LC 13)  
 Max Grav All reactions 250 (lb) or less at joint (s) except 2=459 (LC 1), 13=998 (LC 26), 18=1728 (LC 25), 22=2146 (LC 1)

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

TOP CHORD 2-36=-448/173, 3-36=-270/191, 3-4=-177/387, 4-37=-156/460, 5-37=-139/548, 5-6=-257/266, 6-38=-172/273, 7-38=-172/273, 7-39=-257/1534, 8-39=-257/1534, 8-9=-257/1534, 9-10=-267/1452, 10-40=-632/369, 11-40=-694/348, 11-12=-808/330, 12-41=-1366/500, 13-41=-1549/478

BOT CHORD 2-15=-124/360, 15-16=-124/360, 16-17=-124/360, 17-18=-134/331, 18-19=-298/222, 19-20=-113/283, 20-21=-113/281, 21-22=-115/280, 22-23=-8/620, 23-24=-8/620, 24-25=-8/620, 25-26=-319/1305, 26-27=-319/1305, 13-27=-319/1305

## WEBS

6-19=-372/187, 3-16=0/325, 5-18=-1204/476, 5-19=-81/630, 10-25=-25/627, 12-27=0/340, 12-25=-779/352, 22-28=-1942/727, 9-28=-1092/388, 7-22=-436/376, 3-18=-795/363, 7-28=-1689/674, 10-28=-1780/710

**LOAD CASE(S)** Standard**NOTES**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
 $Vasd=103\text{ mph}$ ;  $TCDL=6.0\text{ psf}$ ;  $BCDL=6.0\text{ psf}$ ;  $h=15\text{ ft}$ ; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-8-10 to 5-3-6, Interior (1) 5-3-6 to 23-2-0, Exterior(2R) 23-2-0 to 31-7-13, Interior (1) 31-7-13 to 41-1-6, Exterior(2R) 41-1-6 to 49-7-3, Interior (1) 49-7-3 to 65-0-10 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) **WARNING:** This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are 4x6 (=) MT20 unless otherwise indicated.
- 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 0.0psf on the bottom chord in all areas where a rectangle 0-00 tall by 0-00 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 except (jt=lb) 18=550, 22=458, 13=308.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

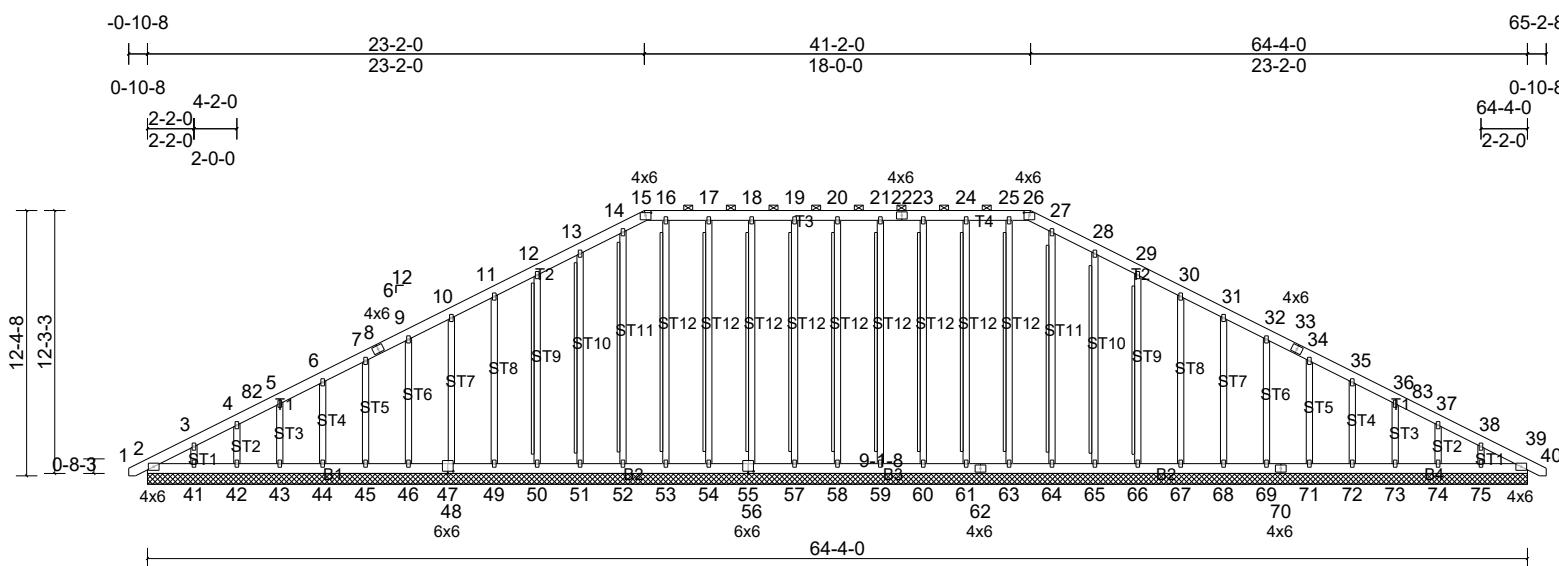
Job 251198-A	Truss A4GE	Truss Type Piggyback Base Supported Gable	Qty 1	Ply 1	Temms Residence Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, user

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Oct 29 10:53:31

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Page: 1



Scale = 1:107.9

Plate Offsets (X, Y): [15:0-3-0,0-1-9], [26:0-3-0,0-1-9], [47:0-3-0,0-1-4], [55:0-3-0,0-1-4]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.01	39	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS						Weight: 662 lb	FT = 25%

#### LUMBER

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
OTHERS 2x4 SP No.2 \*Except\*  
O4,O3,O2,O1,O5,O6,O7:2x4 SPF No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
6-0-0 oc purlins, except  
2-0-0 oc purlins (6-0-0 max.): 15-26.

BOT CHORD Structural wood sheathing directly applied or  
10-0-0 oc bracing.

WEBS T-Brace: 2x4 SPF No.2 - 20-58,  
19-57, 18-56, 17-54,  
16-53, 14-52, 13-51,  
12-50, 21-59, 23-60,  
24-61, 25-63, 27-64,  
28-65, 29-66

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 64-4-0.

(lb) - Max Horiz 2=242 (LC 16)

Max Uplift All uplift 100 (lb) or less at joint(s)  
2, 42, 43, 44, 45, 46, 48, 49, 50, 51,  
53, 54, 56, 57, 58, 59, 60, 61, 65,  
66, 67, 68, 69, 71, 72, 73, 74  
except 41=122 (LC 12), 75=108  
(LC 13)

Max Grav All reactions 250 (lb) or less at joint  
(s) 2, 39, 41, 42, 43, 44, 45, 46, 48,  
49, 50, 51, 52, 53, 54, 56, 57, 58,  
59, 60, 61, 63, 64, 65, 66, 67, 68,  
69, 71, 72, 73, 74, 75

#### FORCES

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

#### TOP CHORD

2-3=-336/111, 3-4=-279/108, 11-12=-106/298, 4)  
12-13=-127/358, 13-14=-148/418,  
14-15=-151/420, 15-16=-142/418,  
16-17=-142/418, 17-18=-142/418,  
18-19=-142/418, 19-20=-142/418,  
20-21=-142/418, 21-22=-142/418,  
22-23=-142/418, 23-24=-142/418,  
24-25=-142/418, 25-26=-142/418,  
26-27=-151/420, 27-28=-148/418,  
28-29=-127/358, 29-30=-106/298

#### BOT CHORD

2-41=-71/272, 41-42=-71/272,  
42-43=-71/272, 43-44=-71/272,  
44-45=-71/272, 45-46=-71/272,  
46-47=-71/272, 47-48=-71/272,  
48-49=-71/272, 49-50=-71/272,  
50-51=-71/272, 51-52=-71/272,  
52-53=-71/272, 53-54=-71/272,  
54-55=-71/272, 55-56=-71/272,  
56-57=-71/272, 57-58=-71/272,  
58-59=-71/272, 59-60=-71/272,  
60-61=-71/272, 61-62=-71/272,  
62-63=-71/272, 63-64=-71/272,  
64-65=-71/272, 65-66=-71/272,  
66-67=-71/272, 67-68=-71/272,  
68-69=-71/272, 69-70=-71/272,  
70-71=-71/272, 71-72=-71/272,  
72-73=-71/272, 73-74=-71/272,  
74-75=-71/272, 39-75=-71/272

#### NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-8-10 to 5-3-6, Exterior(2N) 5-3-6 to 23-2-10, Corner(3R) 23-2-10 to 29-2-10, Exterior(2N) 29-2-10 to 41-1-6, Corner(3R) 41-1-6 to 47-1-6, Exterior (2N) 47-1-6 to 65-0-10 zone; 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.

WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing &

Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.

- 5) Provide adequate drainage to prevent water ponding.
- 6) All plates are 2x4 (||) MT20 unless otherwise indicated.
- 7) Gable requires continuous bottom chord bearing.
- 8) Gable studs spaced at 2-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 2, 58, 57, 56, 54, 53, 51, 50, 49, 48, 46, 45, 44, 43, 42, 59, 60, 61, 65, 66, 67, 68, 69, 71, 72, 73, 74, 2 except (jt=lb) 41=121, 75=107.
- 12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 14) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

#### LOAD CASE(S)

Standard

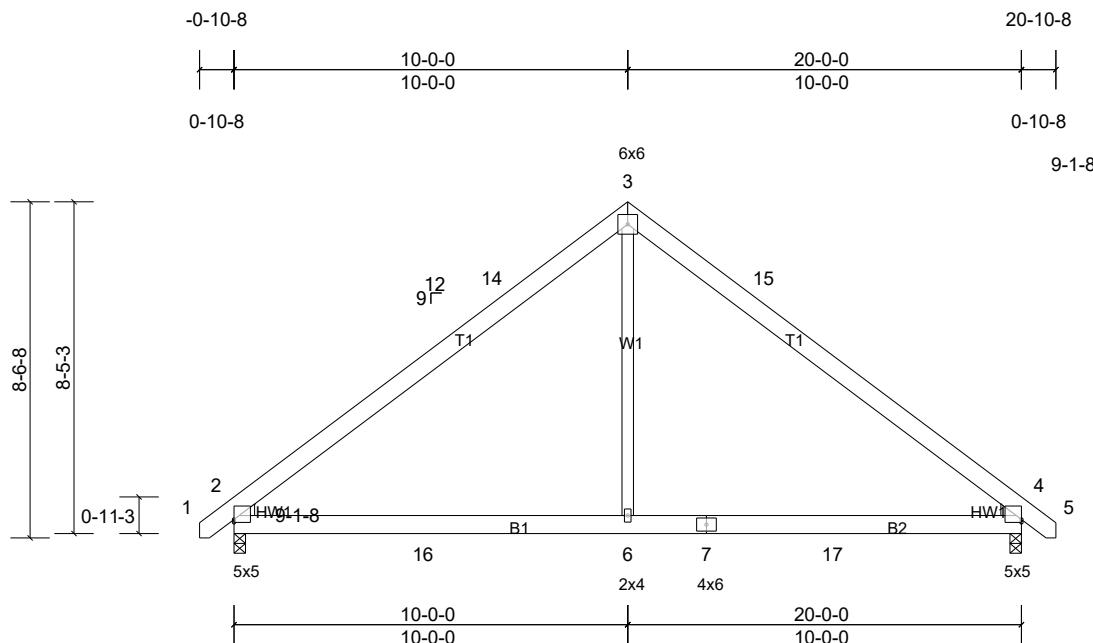
Job 251198-A	Truss G1	Truss Type Common	Qty 7	Ply 1	Temms Residence Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, user

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Oct 29 10:53:31

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Page: 1



Scale = 1:58.8

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	-0.09	6-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(CT)	-0.14	6-10	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	-0.02	2	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS	Wind(LL)	0.08	6-10	>999	240	Weight: 123 lb	FT = 25%

#### LUMBER

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

#### BRACING

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

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

**REACTIONS** (lb/size) 2=845/0-3-8, (min. 0-1-8),  
4=845/0-3-8, (min. 0-1-8)

Max Horiz 2=-242 (LC 10)

Max Uplift 2=-167 (LC 12), 4=-167 (LC 13)

Max Grav 2=1085 (LC 19), 4=1085 (LC 20)

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

TOP CHORD 2-14=-1201/193, 3-14=-935/232,

3-15=-934/232, 4-15=-1201/193

BOT CHORD 2-16=-509/900, 6-16=-52/900, 6-7=-52/900,  
7-17=-52/900, 4-17=-52/900

WEBS 3-6=0/784

#### NOTES

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

2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat.  
II; Exp C; Enclosed; MWFRS (envelope) exterior zone  
and C-C Exterior(2E) -0-9-0 to 2-3-0, Interior (1) 2-3-0 to  
10-0-0, Exterior(2R) 10-0-0 to 13-0-0, Interior (1) 13-0-0  
to 20-9-0 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  
3-06-00 tall by 2-00-00 wide will fit between the bottom  
chord and any other members, with BCDL = 10.0psf.

5) Provide mechanical connection (by others) of truss to  
bearing plate capable of withstanding 167 lb uplift at joint  
2 and 167 lb uplift at joint 4.

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

#### LOAD CASE(S)

Standard

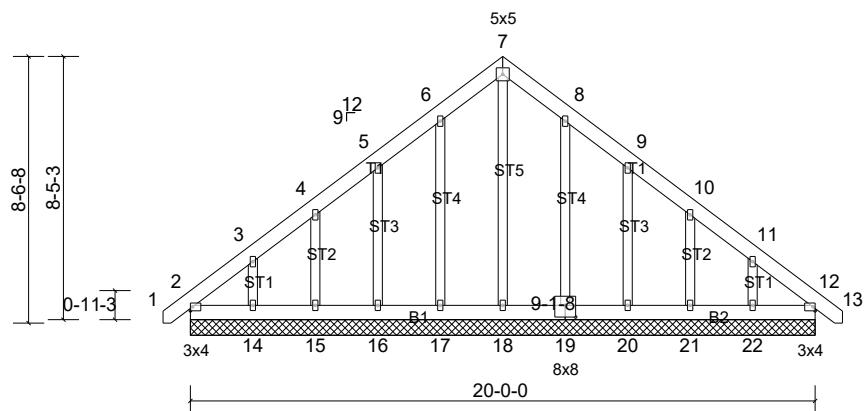
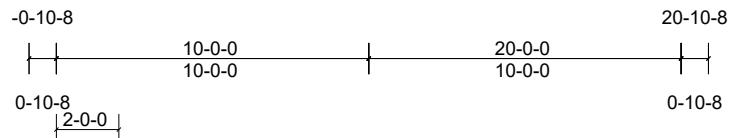
Job 251198-A	Truss G1GE	Truss Type Common Supported Gable	Qty 1	Ply 1	Temms Residence Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, user

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Page: 1



Scale = 1:74.1

Plate Offsets (X, Y): [19:0:4-0,0:4-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.06	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.00	12	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS						Weight: 167 lb	FT = 25%

#### LUMBER

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

#### BRACING

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

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

#### REACTIONS

All bearings 20-0-0.  
(lb) - Max Horiz 2=-242 (LC 10)

Max Uplift All uplift 100 (lb) or less at joint(s)  
15, 17, 19, 22 except 2=-145 (LC  
8), 14=-165 (LC 12), 16=-114 (LC  
12), 20=-105 (LC 13), 21=-145 (LC  
13)

Max Grav All reactions 250 (lb) or less at joint  
(s) 2, 15, 16, 17, 19, 20, 21 except  
14=251 (LC 19), 18=296 (LC 22),  
22=307 (LC 1)

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

TOP CHORD 2-3=-235/266, 5-6=-105/253, 6-7=-137/283,  
7-8=-137/283

WEBS 7-18=-254/40

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat.  
II; Exp C; Enclosed; MWFRS (envelope) exterior zone  
and C-C Corner(3E) -0-9-0 to 2-0-0, Exterior(2N) 2-0-0 to  
10-0-0, Corner(3R) 10-0-0 to 13-0-0, Exterior(2N) 13-0-0  
to 20-9-0 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.
- All plates are 2x4 (||) MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.

- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 17, 15, 19, 22 except (jt=lb) 2=144, 16=113, 14=165, 20=104, 21=145, 2=144.
- 10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

#### LOAD CASE(S)

Standard

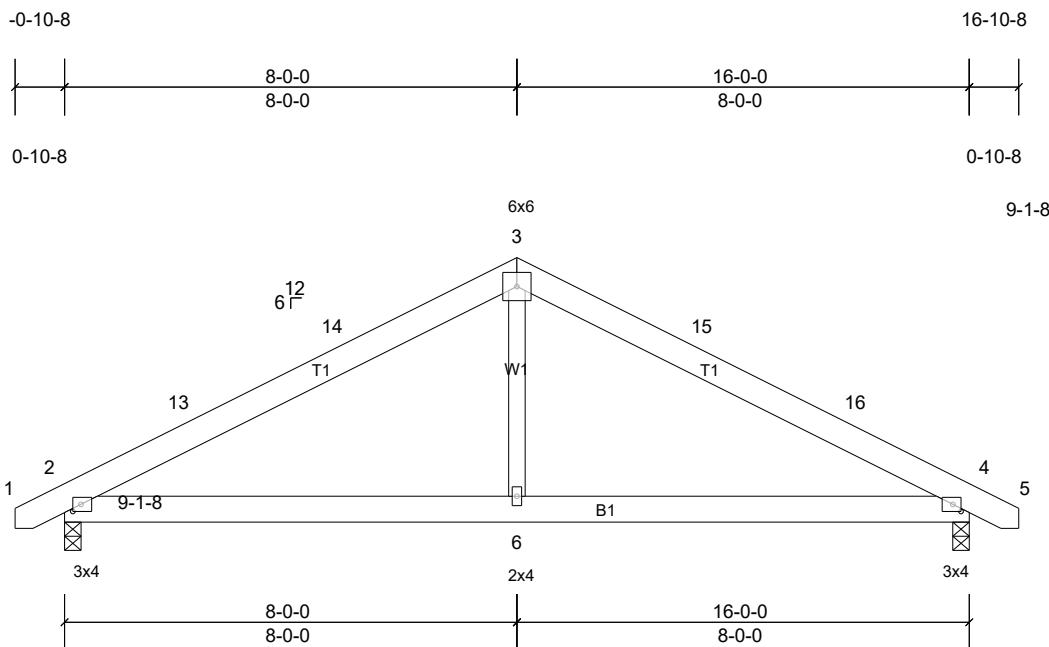
Job 251198-A	Truss P1	Truss Type Common	Qty 4	Ply 1	Temms Residence Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, user

Run: 25.20 S Jul 24 2025 Print: 25.2.0 S Jul 24 2025 MiTek Industries, Inc. Wed Oct 29 10:53:33

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Page: 1



Scale = 1:40.9

Plate Offsets (X, Y): [2:0-1-12,0-1-8], [4:0-1-12,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	-0.03	6-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(CT)	-0.05	6-9	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS	Wind(LL)	0.03	6-9	>999	240	Weight: 90 lb	FT = 25%

#### 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.  
BOT CHORD Structural wood sheathing directly applied.

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

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

#### LOAD CASE(S)

Standard

**REACTIONS** (lb/size) 2=683/0-3-8, (min. 0-1-8), 4=683/0-3-8, (min. 0-1-8)

Max Horiz 2=88 (LC 12)

Max Uplift 2=151 (LC 12), 4=151 (LC 13)

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

TOP CHORD 2-13=-886/310, 13-14=-796/319, 3-14=-767/340, 3-15=-767/341, 15-16=-796/319, 4-16=-886/310

BOT CHORD 2-6=-152/712, 4-6=-152/712

WEBS 3-6=0/354

#### NOTES

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

2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-8-10 to 2-3-6, Interior (1) 2-3-6 to 8-0-0, Exterior(2R) 8-0-0 to 11-0-0, Interior (1) 11-0-0 to 16-8-10 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 3-06-00 tall by 2-00-00 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 151 lb uplift at joint 2 and 151 lb uplift at joint 4.

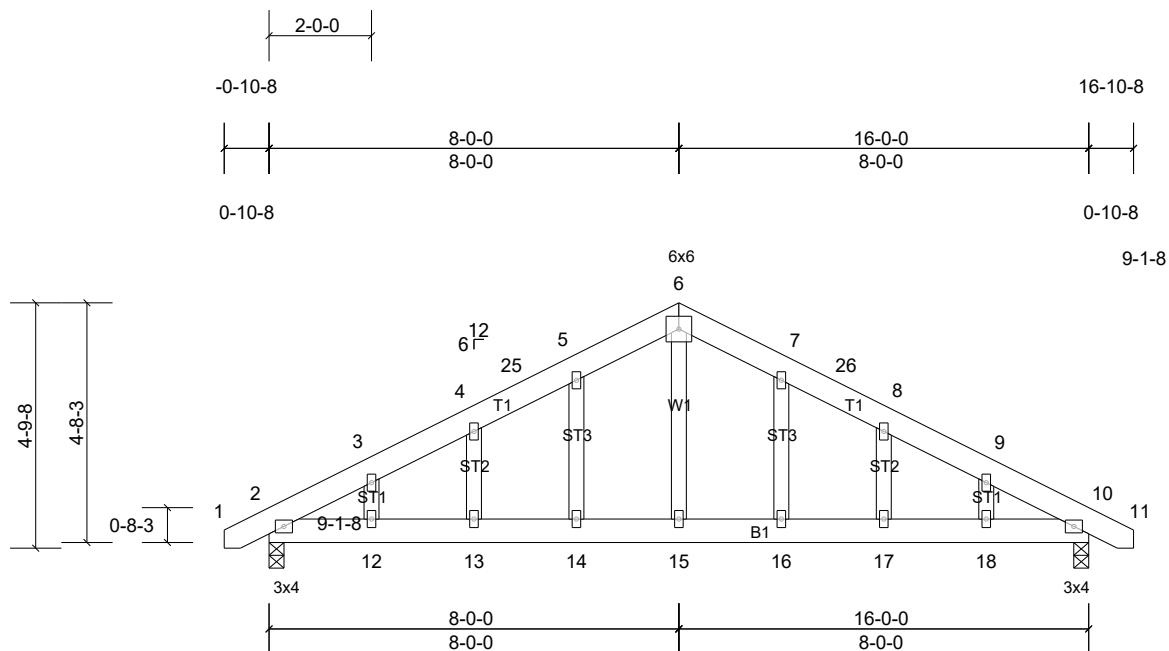
Job 251198-A	Truss P1GE	Truss Type Common Structural Gable	Qty 1	Ply 1	Temms Residence Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, user

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Scale = 1:45.2

Loading	(psf)	Spacing	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	2.0-0	TC	0.16	Vert(LL)	-0.04	13	>999	360
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.07	13	>999	240
BCLL	0.0*	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.01	10	n/a	n/a
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS		Wind(LL)	0.05	13	>999	240
									Weight: 106 lb	FT = 25%

**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.  
 BOT CHORD Structural wood sheathing directly applied.

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

**REACTIONS** (lb/size) 2=683/0-3-8, (min. 0-1-8),  
 10=683/0-3-8, (min. 0-1-8)

Max Horiz 2=88 (LC 12)

Max Uplift 2=151 (LC 12), 10=151 (LC 13)

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

TOP CHORD 2-3=-865/275, 3-4=-843/312, 4-25=-815/344,  
 5-25=-790/352, 5-6=-783/392, 6-7=-783/392,  
 7-26=-790/352, 8-26=-815/344,  
 8-9=-843/312, 9-10=-865/275

BOT CHORD 2-12=-166/729, 12-13=-166/729,  
 13-14=-166/729, 14-15=-166/729,  
 15-16=-166/729, 16-17=-166/729,  
 17-18=-166/729, 10-18=-166/729

WEBS 6-15=-143/347

**NOTES**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)  
 $V_{asd}=103\text{mph}$ ;  $TCDL=6.0\text{psf}$ ;  $BCDL=6.0\text{psf}$ ;  $h=15\text{ft}$ ; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-8-10 to 2-0-0, Interior (1) 2-0-0 to 8-0-0, Exterior(2R) 8-0-0 to 11-0-0, Interior (1) 11-0-0 to 16-8-10 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 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 3-06-00 tall by 2-00-00 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 151 lb uplift at joint 2 and 151 lb uplift at joint 10.

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

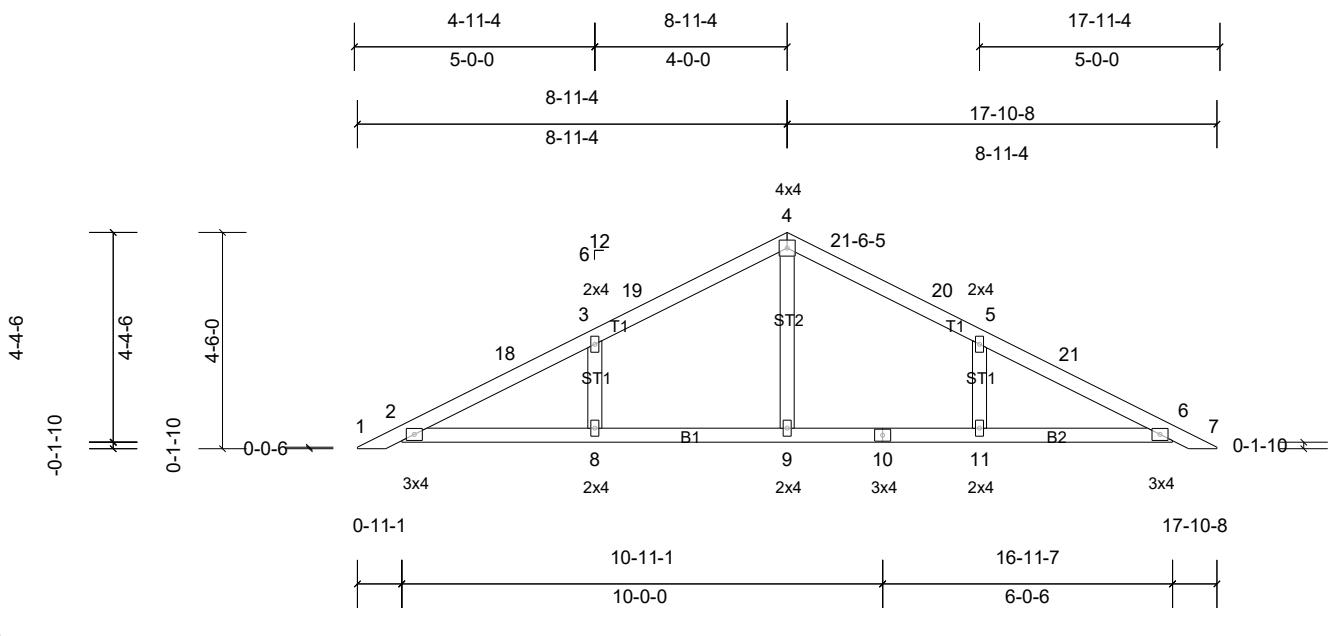
**LOAD CASE(S)** Standard

Job	Truss	Truss Type	Qty	Ply	Temms Residence
251198-A	PB1	Piggyback	23	1	Job Reference (optional)

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Scale = 1:48.1

0-11-1

0-11-1

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horiz(TL)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2017/TP12014	Matrix-AS						Weight: 65 lb	FT = 25%

## LUMBER

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

## BRACING

**BRACING**      TOP CHORD      Structural wood sheathing directly applied  
                            BOT CHORD      Structural wood sheathing directly applied

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

## REACTIONS All bearings 18-0-0

(lb) - Max Horiz. 1=87 (LC 16)

Max Uplift All uplift 100 (lb) or less at joint(s) 6  
except 1=-115 (LC 19), 2=-109 (LC  
12), 7=-104 (LC 1), 8=-155 (LC 12),  
11=-155 (LC 13)

Detail for Connection to base truss as applicable, or consult qualified building designer.

(lb) - Max. Comp./Max. Ten. - All forces 250

WEBS (lb) or less except when shown  
3-8=-259/210, 5-11=-259/210

## NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-4-5 to 3-4-5, Interior (1) 3-4-5 to 9-0-0, Exterior(2R) 9-0-0 to 12-0-0, Interior (1) 12-0-0 to 17-7-11 zone; 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) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 4-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

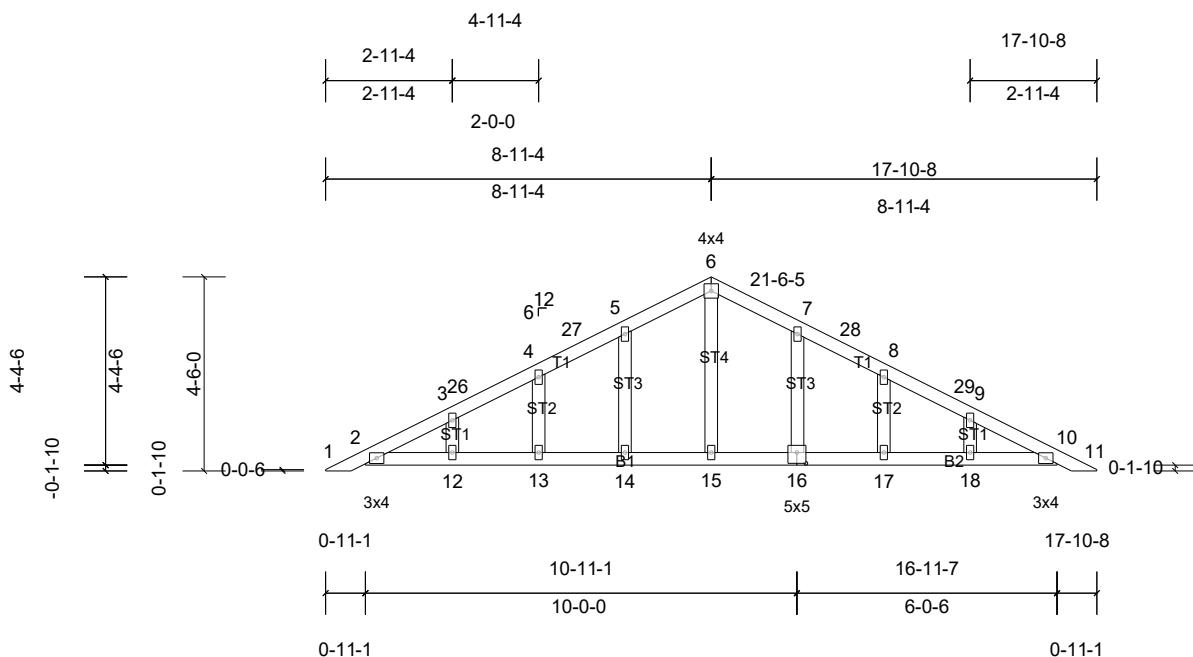
Job 251198-A	Truss PB1GE	Truss Type Piggyback	Qty 2	Ply 1	Temms Residence Job Reference (optional)
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Scale = 1:53.6

0-11-1

0-11-1

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.00	18	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS						Weight: 75 lb	FT = 25%

#### 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.  
BOT CHORD Structural wood sheathing directly applied.

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 2, 14, 13, 12, 16, 17, 18, 10, 2, 10.

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

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

**LOAD CASE(S)** Standard

#### REACTIONS

All bearings 16-0-6.  
(lb) - Max Horiz 2=87 (LC 12)

Max Uplift All uplift 100 (lb) or less at joint(s)  
2, 10, 12, 13, 14, 16, 17, 18

Max Grav All reactions 250 (lb) or less at joint  
(s) 2, 10, 12, 13, 14, 15, 16, 17, 18

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

#### NOTES

1) Unbalanced roof live loads have been considered for this design.  
2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-4-5 to 3-4-5, Interior (1) 3-4-5 to 9-0-0, Exterior(2R) 9-0-0 to 12-0-0, Interior (1) 12-0-0 to 17-7-11 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 requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

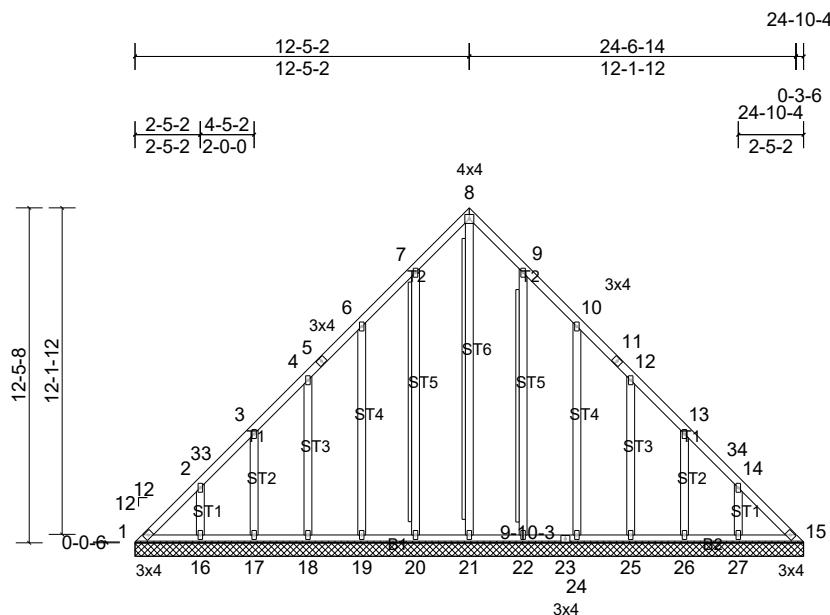
Job 251198-A	Truss VA1	Truss Type Valley	Qty 1	Ply 1	Temms Residence Job Reference (optional)
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Scale = 1:86

Loading	(psf)	Spacing	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	2-0-0	TC	0.11	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL		BC	0.11	n/a	-	n/a	999	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.56	0.01	26	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS					Weight: 193 lb	FT = 25%

**LUMBER**

TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 OTHERS 2x4 SP No.2 \*Except\* O2,O1,O3:2x4 SPF  
 No.2(flat)

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 9-10-12 oc purlins.  
 BOT CHORD Structural wood sheathing directly applied or 6-0-0 oc bracing.  
 WEBS T-Brace: 2x4 SPF No.2 - 8-21, 7-20, 9-22  
 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 24-10-4.  
 (lb) - Max Horiz 1=367 (LC 8)  
 Max Uplift All uplift 100 (lb) or less at joint(s) 15, 27 except 1=245 (LC 10), 16=137 (LC 12), 17=141 (LC 12), 18=138 (LC 12), 19=151 (LC 12), 20=121 (LC 12), 21=108 (LC 11), 22=102 (LC 13), 24=164 (LC 13), 25=111 (LC 13), 26=240 (LC 13)  
 Max Grav All reactions 250 (lb) or less at joint (s) 15, 16, 17, 18, 19, 20, 22, 24, 25, 26, 27 except 1=272 (LC 9), 21=711 (LC 13)

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

TOP CHORD 1-2=-408/470, 2-33=-343/398, 3-33=-335/424, 3-4=-289/387, 4-5=-252/410, 5-6=-236/426, 6-7=-218/513, 7-8=-246/558, 8-9=-246/535, 9-10=-184/427, 10-11=-81/285, 11-12=-106/270

WEBS 8-21=-686/230

**NOTES**

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
 $V_{asd}=103\text{ mph}$ ; TCDL=6.0psf; BCDL=6.0psf;  $h=15\text{ ft}$ ; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-0-6 to 3-0-6, Exterior(2N) 3-0-6 to 12-5-8, Corner(3R) 12-5-8 to 15-5-8, Exterior(2N) 15-5-8 to 24-10-10 zone; 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 requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 15, 27, 15 except (jt=lb) 1=245, 21=107, 20=120, 19=150, 18=137, 17=141, 16=136, 22=101, 24=164, 25=111, 26=240.
- 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

**LOAD CASE(S)**

Standard

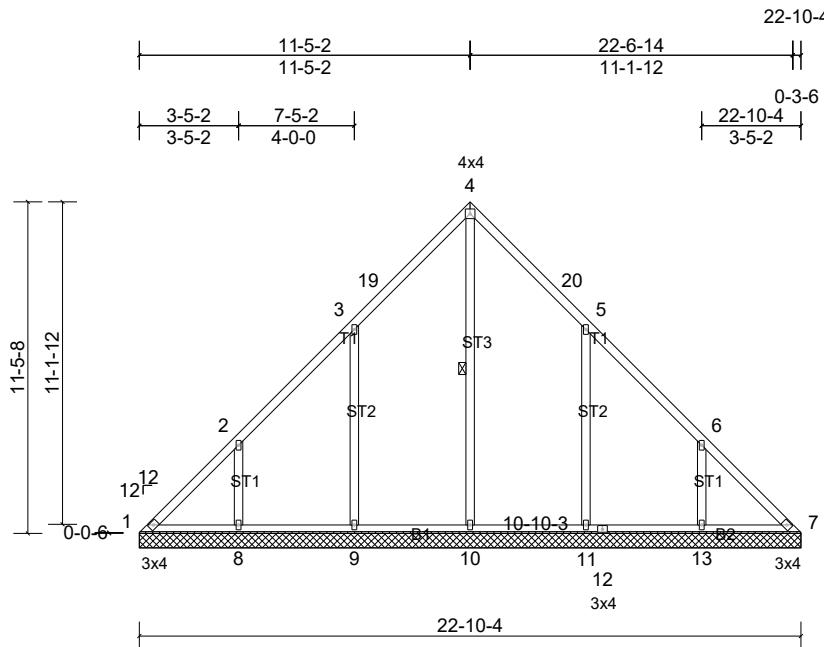
Job	Truss	Truss Type	Qty	Ply	Temms Residence
251198-A	VA2	Valley	1	1	Job Reference (optional)

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Scale = 1:79.9

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horiz(TL)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2021/TP12014	Matrix-MS						Weight: 126 lb	FT = 25%

## LUMBER

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

## BRACING

<b>BRACING</b>	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Structural wood sheathing directly applied or 6-0-0 oc bracing.

WEBS 6-0-0 8c bracing.  
1 Row at midpt 4-10

1 Row at Height 4-10

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

- 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 0.0psf on the bottom chord in all areas where a rectangle 0-00 tall by 0-00 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 229 lb uplift at joint 1, 304 lb uplift at joint 9, 260 lb uplift at joint 8, 318 lb uplift at joint 11 and 236 lb uplift at joint 13.

LOAD CASE(S) Standard

#### **REACTIONS** All bearings 22-10-4

(b) - Max Horiz. 1 = 337 (I C 8)

Max Uplift All uplift 100 (lb) or less at joint(s) 7  
except 1=-230 (LC 10), 8=-260 (LC  
12), 9=-304 (LC 12), 11=-319 (LC  
13), 13=-236 (LC 13)

Max Grav All reactions 250 (1b) or less at joint  
(s) 1, 7 except 8=360 (LC 19),  
9=411 (LC 19), 10=727 (LC 22),  
11=404 (LC 20), 13=375 (LC 20)

## FORCES

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

TOP CHORD 1-2=-356/476, 2-3=-248/427, 3-19=-184/495,  
4-19=-153/526, 4-20=-153/482,

WEBS 5-20=-184/451, 5-6=-26/274  
4-10=-644/70, 3-9=-334/355, 2-8=-269/291,  
5-11=-329/359, 6-13=-278/284

## NOTES

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-6 to 3-0-6, Interior (1) 3-0-6 to 11-5-8, Exterior(2R) 11-5-8 to 14-5-8, Interior (1) 14-5-8 to 22-10-10 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.

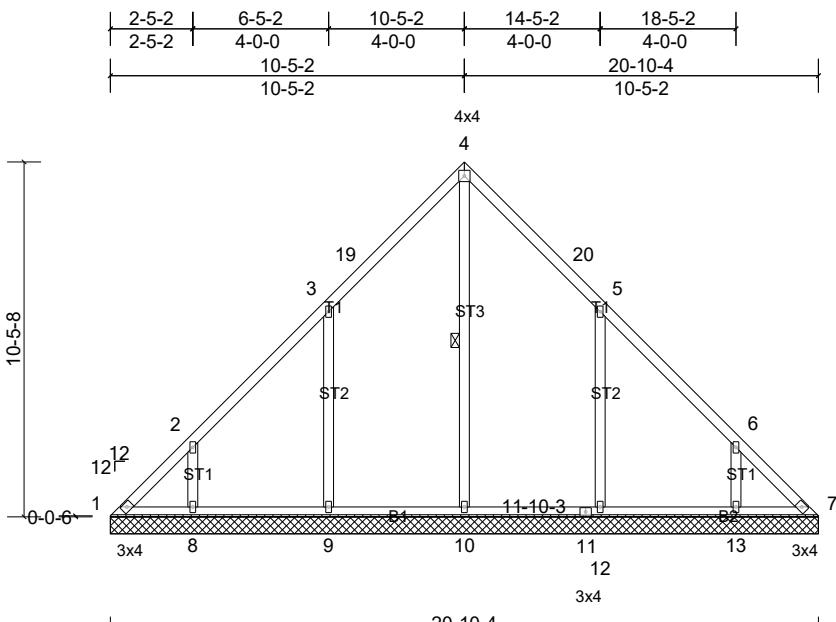
Job 251198-A	Truss VA3	Truss Type Valley	Qty 1	Ply 1	Temms Residence Job Reference (optional)
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Scale = 1:68.2

20-10-4

Loading	(psf)	Spacing	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	2-0-0	TC	0.19	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL		BC	0.08	n/a	-	n/a	999	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.25	0.00	7	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS					Weight: 111 lb	FT = 25%

#### 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 Structural wood sheathing directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 4-10

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

#### LOAD CASE(S)

Standard

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 0.0psf on the bottom chord in all areas where a rectangle 0-00 tall by 0-00 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, 10, 7 except (jt=lb) 1=215, 9=312, 8=217, 12=334, 13=174.

#### REACTIONS

All bearings 20-10-4.

(lb) - Max Horiz 1=307 (LC 11)

Max Uplift All uplift 100 (lb) or less at joint(s)  
7, 10 except 1=216 (LC 10),  
8=218 (LC 12), 9=312 (LC 12),  
12=335 (LC 13), 13=174 (LC 13)

Max Grav All reactions 250 (lb) or less at joint  
(s) 1, 7 except 8=309 (LC 19),  
9=420 (LC 19), 10=621 (LC 22),  
12=415 (LC 20), 13=324 (LC 20)

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

TOP CHORD 1-2=-352/414, 2-3=-273/361, 3-19=-216/458,  
4-19=-185/489, 4-20=-185/445,  
5-20=-216/415

WEBS 4-10=-549/108, 3-9=-337/360, 2-8=-242/265,  
5-12=-334/368, 6-13=-250/249

#### NOTES

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

2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat.  
II; Exp C; Enclosed; MWFRS (envelope) exterior zone  
and C-C Exterior(2E) 0-0-6 to 3-0-6, Interior (1) 3-0-6 to  
10-5-8, Exterior(2R) 10-5-8 to 13-5-8, Interior (1) 13-5-8  
to 20-10-10 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.

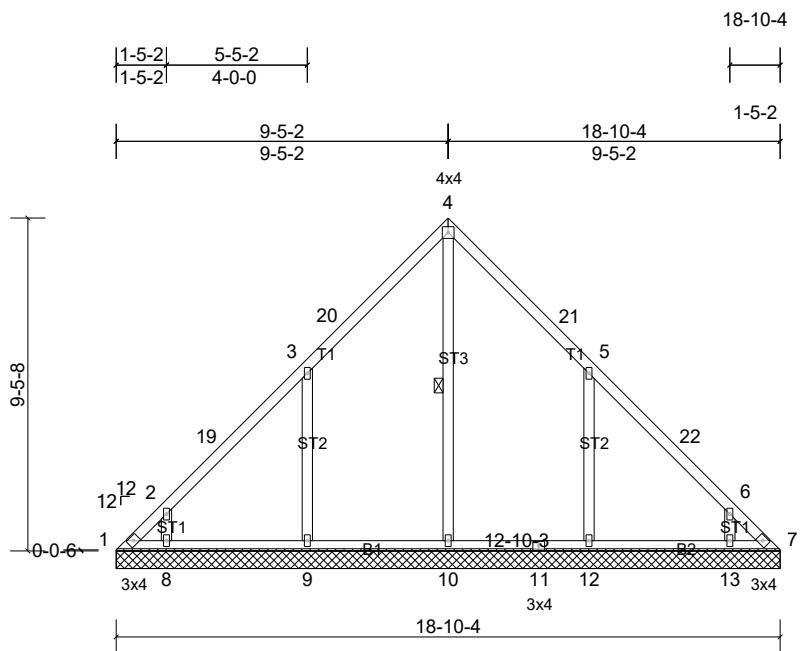
Job 251198-A	Truss VA4	Truss Type Valley	Qty 1	Ply 1	Temms Residence Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, user

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Scale = 1:65.7

Loading	(psf)	Spacing	CSI	DEFL	in	(loc)	l/defl	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	2-0-0	TC	0.19	n/a	-	n/a	999
TCDL	10.0	Lumber DOL	1.15	BC	0.10	n/a	-	n/a	999
BCLL	0.0*	Rep Stress Incr	YES	WB	0.16	Horiz(TL)	0.00	n/a	n/a
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS				Weight: 97 lb	FT = 25%

#### 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 Structural wood sheathing directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 4-10

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

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 0.0psf on the bottom chord in all areas where a rectangle 0-00 tall by 0-00 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, 10, 13, 7 except (j=lb) 1=197, 9=313, 8=187, 12=351.

#### LOAD CASE(S) Standard

#### REACTIONS

All bearings 18-10-4.

(lb) - Max Horiz 1=277 (LC 8)

Max Uplift All uplift 100 (lb) or less at joint(s)  
7, 10, 13 except 1=-197 (LC 10),  
8=-188 (LC 12), 9=-314 (LC 12),  
12=-352 (LC 13)

Max Grav All reactions 250 (lb) or less at joint  
(s) 1, 7 except 8=292 (LC 19),  
9=419 (LC 19), 10=491 (LC 13),  
12=427 (LC 20), 13=289 (LC 1)

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

TOP CHORD 1-2=-353/335, 2-19=-293/268,  
3-19=-242/289, 3-20=-244/377,  
4-20=-213/408, 4-21=-214/365,  
5-21=-245/334

WEBS 4-10=-436/139, 3-9=-335/359, 2-8=-254/284,  
5-12=-337/374

#### NOTES

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

2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-6 to 3-0-6, Interior (1) 3-0-6 to 9-5-8, Exterior(2R) 9-5-8 to 12-5-8, Interior (1) 12-5-8 to 18-10-10 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.

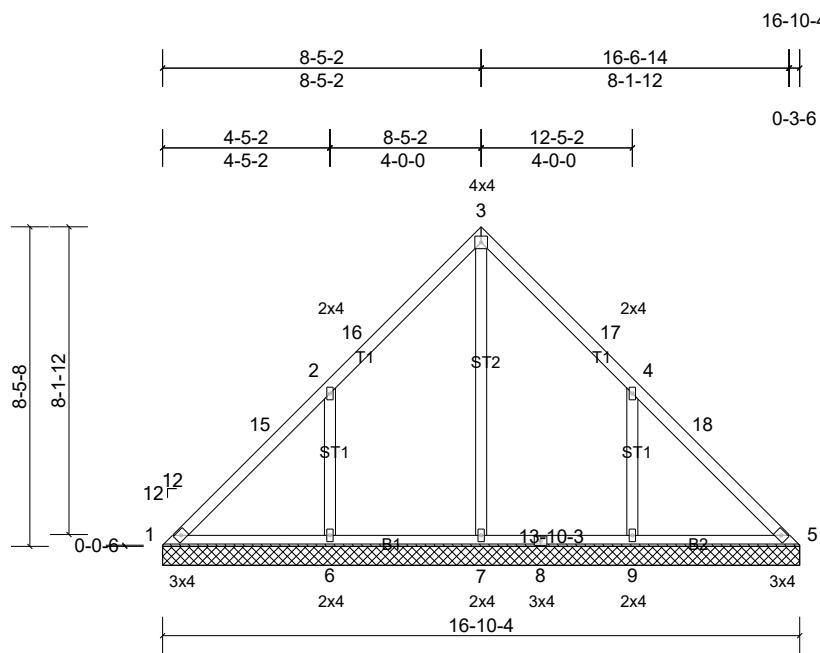
Job 251198-A	Truss VA5	Truss Type Valley	Qty 1	Ply 1	Temms Residence Job Reference (optional)
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Page: 1



Scale = 1:61.2

Loading	(psf)	Spacing	CSI	DEFL	in	(loc)	l/defl	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	2-0-0	TC	0.22	n/a	-	n/a	999
TCDL	10.0	Lumber DOL	1.15	BC	0.11	n/a	-	n/a	999
BCLL	0.0*	Rep Stress Incr	YES	WB	0.61	Horiz(TL)	0.00	n/a	n/a
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS				Weight: 82 lb	FT = 25%

**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 10-0-0 oc purlins.  
 BOT CHORD Structural wood sheathing 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.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 5 except (jt=lb) 1=135, 6=342, 9=332.

**LOAD CASE(S)** Standard

**REACTIONS** All bearings 16-10-4.

(lb) - Max Horiz 1=247 (LC 10)  
 Max Uplift All uplift 100 (lb) or less at joint(s) 5 except 1=-135 (LC 10), 6=-342 (LC 12), 9=-333 (LC 13)  
 Max Grav All reactions 250 (lb) or less at joint(s) 1, 5 except 6=465 (LC 19), 7=603 (LC 22), 9=466 (LC 20)

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

TOP CHORD 1-15=-202/362, 2-15=-173/443, 2-16=-60/275, 3-16=-18/365, 3-17=0/330, 4-18=-31/312

WEBS 3-7=-534/0, 2-6=-349/363, 4-9=-350/360

**NOTES**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
 $V_{as}=103\text{mph}$ ;  $TCDL=6.0\text{psf}$ ;  $BCDL=6.0\text{psf}$ ;  $h=15\text{ft}$ ; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-6 to 3-0-6, Interior (1) 3-0-6 to 8-5-8, Exterior(2R) 8-5-8 to 11-5-8, Interior (1) 11-5-8 to 16-10-10 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 0.0psf on the bottom chord in all areas where a rectangle 0-00 tall by 0-00 wide will fit between the bottom chord and any other members.

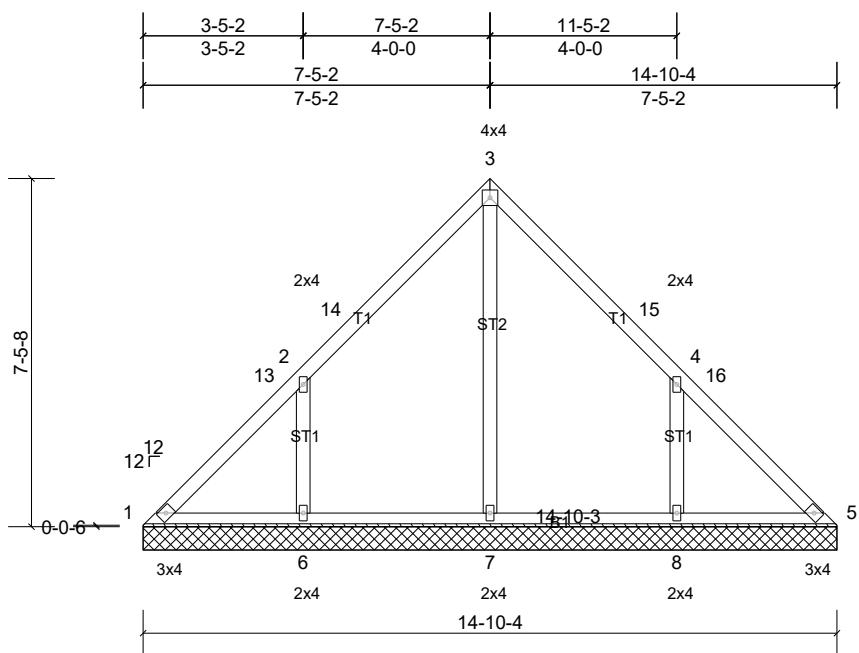
Job 251198-A	Truss VA6	Truss Type Valley	Qty 1	Ply 1	Temms Residence Job Reference (optional)
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Scale = 1:49.5

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.13	n/a	-	n/a	999	
TCDL	10.0	Lumber DOL	1.15	BC	0.07	n/a	-	n/a	999	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.19	0.00	5	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS					Weight: 71 lb	FT = 25%

#### 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.  
BOT CHORD Structural wood sheathing directly applied.

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

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

#### LOAD CASE(S)

Standard

#### REACTIONS

All bearings 14-10-4.  
(lb) - Max Horiz 1=-217 (LC 8)  
Max Uplift All uplift 100 (lb) or less at joint(s)  
1, 5 except 6=-286 (LC 12), 8=-280  
(LC 13)  
Max Grav All reactions 250 (lb) or less at joint  
(s) 1, 5 except 6=412 (LC 19),  
7=286 (LC 1), 8=406 (LC 20)

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

**WEBS** 2-6=-312/318, 4-8=-309/315

#### NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-6 to 3-0-6, Interior (1) 3-0-6 to 7-5-8, Exterior(2R) 7-5-8 to 10-5-8, Interior (1) 10-5-8 to 14-10-10 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 0.0psf on the bottom chord in all areas where a rectangle 0-0 tall by 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, 5 except (j=t=lb) 6=286, 8=280.

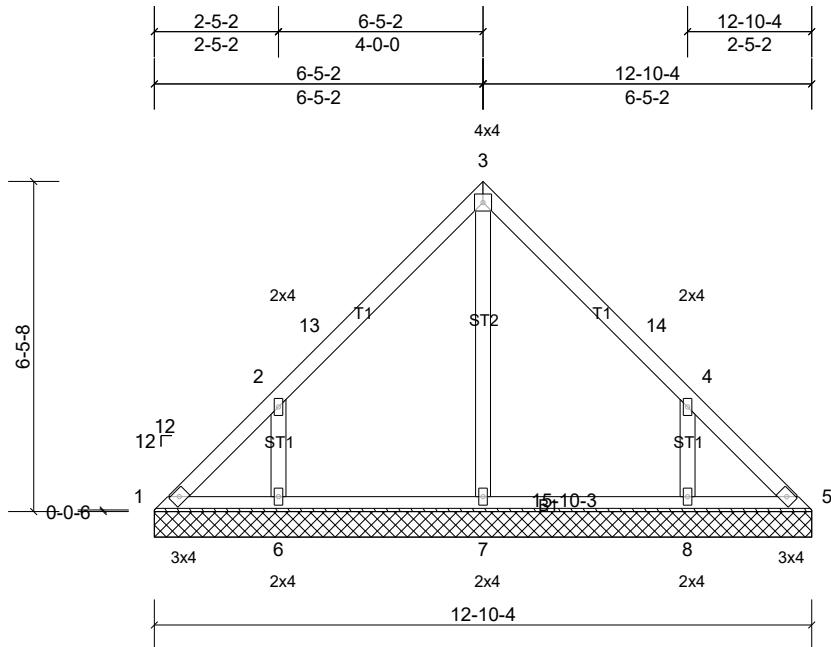
Job 251198-A	Truss VA7	Truss Type Valley	Qty 1	Ply 1	Temms Residence Job Reference (optional)
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Scale = 1:45.3

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.16	n/a	-	n/a	999	
TCDL	10.0	Lumber DOL	1.15	BC	0.08	n/a	-	n/a	999	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.10	0.00	5	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MS					Weight: 59 lb	FT = 25%

#### 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 Structural wood sheathing 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.

#### LOAD CASE(S)

Standard

#### REACTIONS

All bearings 12-10-4.  
(lb) - Max Horiz 1=187 (LC 10)  
Max Uplift All uplift 100 (lb) or less at joint(s)  
1, 5 except 6=260 (LC 12), 8=254 (LC 13)  
Max Grav All reactions 250 (lb) or less at joint  
(s) 1, 5, 7 except 6=372 (LC 19),  
8=365 (LC 20)

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

**WEBS** 2-6=299/338, 4-8=297/337

#### NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-6 to 3-0-6, Interior (1) 3-0-6 to 6-5-8, Exterior(2R) 6-5-8 to 9-5-8, Interior (1) 9-5-8 to 12-10-10 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 0.0psf on the bottom chord in all areas where a rectangle 0-0 tall by 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, 5 except (jt=lb) 6=259, 8=253.

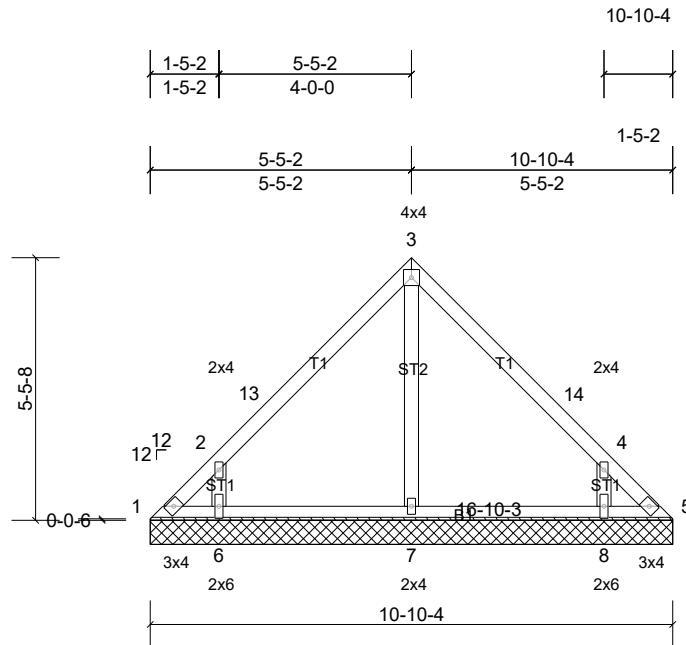
Job	Truss	Truss Type	Qty	Ply	Temms Residence
251198-A	VA8	Valley	1	1	Job Reference (optional)

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Scale = 1:48.1

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2021/TP12014	Matrix-MS						Weight: 48 lb	FT = 25%

## LUMBER

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

## BRACING

**BRACING**  
**TOP CHORD** Structural wood sheathing directly applied on 6-0-0 oc purlins.

**BOT CHORD** Structural wood sheathing directly applied on 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 10-10-4

(b) - Max Horiz. 1=157 (I.C. 8)

Max Horiz 1=-157 (LC 8)  
Max Uplift All uplift 100 (lb) or less at joint(s)  
1, 5 except 6=-250 (LC 12), 8=-242  
(LC 13)

Max Grav All reactions 250 (lb) or less at joint  
(s) 1, 5, 7 except 6=362 (LC 19),  
8=353 (LC 20)

## FORCES

**FORCES** (lb) - Max. Comp./Max. Tens. - All forces 250  
(lb) or less except when shown.  
**WEBS** 2-6=-348/459, 4-8=-348/458

## WEBS NOTES

**NOTES**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-6 to 3-0-6, Interior (1) 3-0-6 to 5-5-8, Exterior(2R) 5-5-8 to 8-5-8, Interior (1) 8-5-8 to 10-10-10 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 0.0psf on the bottom chord in all areas where a rectangle 0-00 tall by 0-00 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, 5 except ( $i=lb$ ) 6=249, 8=241.

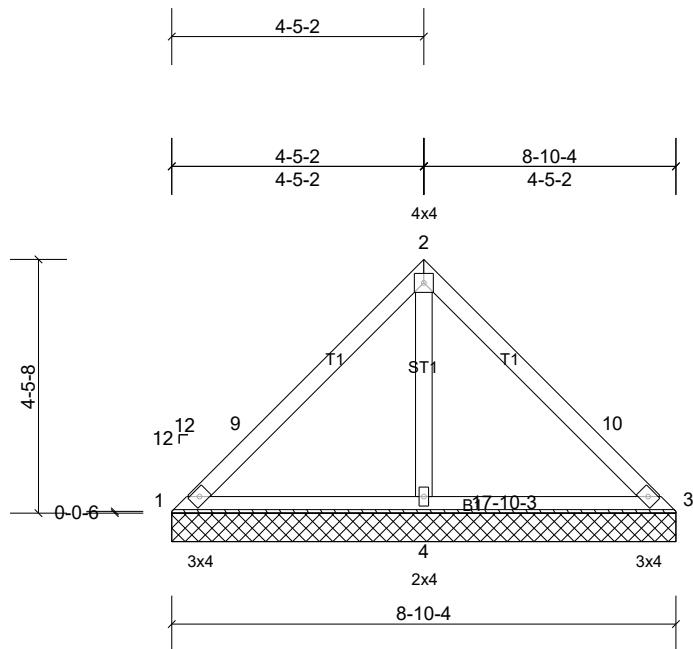
Job 251198-A	Truss VA9	Truss Type Valley	Qty 1	Ply 1	Temms Residence Job Reference (optional)
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Scale = 1:40.6

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.22	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.24	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.14	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS						Weight: 36 lb	FT = 25%

#### 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.  
BOT CHORD Structural wood sheathing directly applied.

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

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

#### LOAD CASE(S)

Standard

**REACTIONS** (lb/size) 1=37/8-10-4, (min. 0-1-8),  
3=37/8-10-4, (min. 0-1-8),  
4=635/8-10-4, (min. 0-1-8)

Max Horiz 1=127 (LC 9)  
Max Uplift 1=-17 (LC 26), 3=-17 (LC 25),  
4=-230 (LC 12)  
Max Grav 1=71 (LC 25), 3=71 (LC 26), 4=635  
(LC 1)

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

TOP CHORD 2-9=-210/256

BOT CHORD 1-4=-244/313, 3-4=-244/313

WEBS 2-4=-495/447

#### NOTES

1) Unbalanced roof live loads have been considered for this design.  
2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-6 to 3-0-6, Interior (1) 3-0-6 to 4-5-8, Exterior(2R) 4-5-8 to 7-5-8, Interior (1) 7-5-8 to 8-10-10 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 0.0psf on the bottom chord in all areas where a rectangle 0-0 tall by 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 17 lb uplift at joint 1, 17 lb uplift at joint 3 and 230 lb uplift at joint 4.

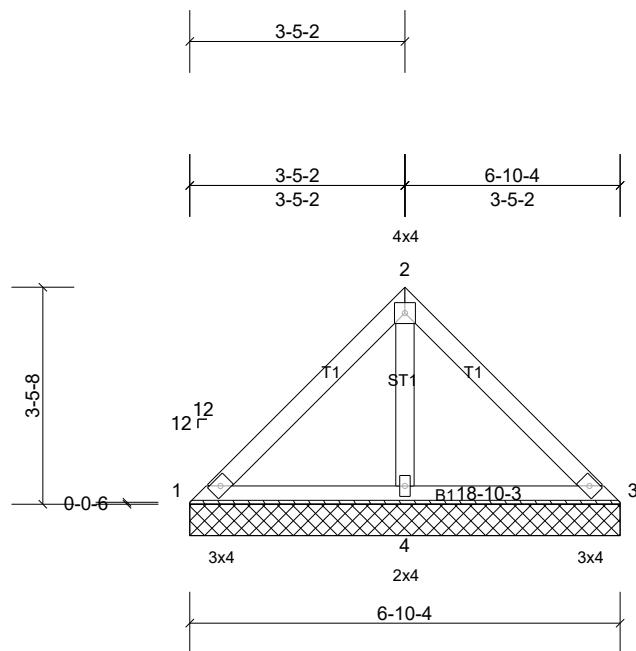
Job 251198-A	Truss VA10	Truss Type Valley	Qty 1	Ply 1	Temms Residence Job Reference (optional)
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Scale = 1:36.9

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.15	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	3	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MP						Weight: 28 lb	FT = 25%

#### LUMBER

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

#### LOAD CASE(S)

Standard

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 6-10-4 oc purlins.  
BOT CHORD Structural wood sheathing 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** (lb/size) 1=50/6-10-4, (min. 0-1-8),  
3=50/6-10-4, (min. 0-1-8),  
4=449/6-10-4, (min. 0-1-8)

Max Horiz 1=97 (LC 9)

Max Uplift 4=-148 (LC 12)

Max Grav 1=71 (LC 25), 3=71 (LC 26), 4=449 (LC 1)

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

BOT CHORD 1-4=-169/251, 3-4=-169/251

WEBS 2-4=-329/329

#### NOTES

1) Unbalanced roof live loads have been considered for this design.  
2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-6 to 3-0-6, Interior (1) 3-0-6 to 3-5-8, Exterior(2R) 3-5-8 to 6-2-9, Interior (1) 6-2-9 to 6-10-10 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 0.0psf on the bottom chord in all areas where a rectangle 0-00 tall by 0-00 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 148 lb uplift at joint 4.

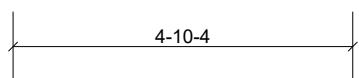
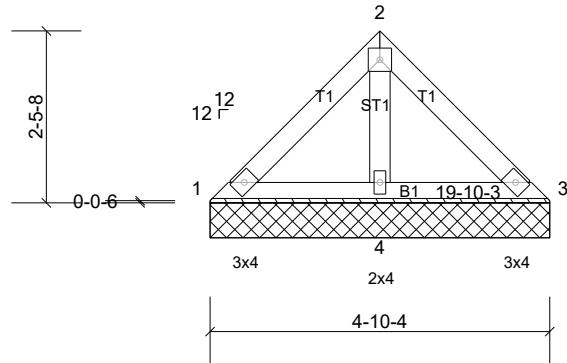
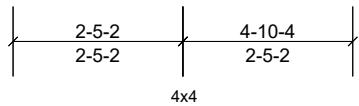
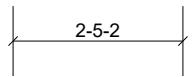
Job 251198-A	Truss VA11	Truss Type Valley	Qty 1	Ply 1	Temms Residence Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, user

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Page: 1



Scale = 1:33.1

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MP						Weight: 19 lb	FT = 25%

#### 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 4-10-4 oc purlins.  
BOT CHORD Structural wood sheathing 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** (lb/size) 1=54/4-10-4, (min. 0-1-8),  
3=54/4-10-4, (min. 0-1-8),  
4=281/4-10-4, (min. 0-1-8)  
Max Horiz 1=68 (LC 9)  
Max Uplift 1=-2 (LC 13), 3=-5 (LC 13), 4=-79 (LC 12)  
Max Grav 1=64 (LC 25), 3=64 (LC 26), 4=281 (LC 1)

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

#### NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 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 0.0psf on the bottom chord in all areas where a rectangle 0-0 tall by 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 2 lb uplift at joint 1, 5 lb uplift at joint 3 and 79 lb uplift at joint 4.

**LOAD CASE(S)** Standard

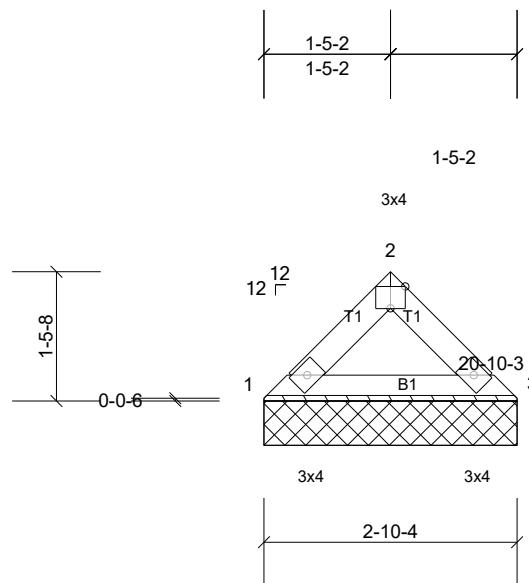
Job 251198-A	Truss VA12	Truss Type Valley	Qty 1	Ply 1	Temms Residence Job Reference (optional)
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2-10-4



Scale = 1:26.1

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.04	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MP						Weight: 9 lb	FT = 25%

#### LUMBER

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

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 2-10-4 oc purlins.  
BOT CHORD Structural wood sheathing directly applied or 10-0-0 oc bracing.

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

**REACTIONS** (lb/size) 1=114/2-10-4, (min. 0-1-8),  
3=114/2-10-4, (min. 0-1-8)

Max Horiz 1=-38 (LC 8)

Max Uplift 1=-20 (LC 12), 3=-20 (LC 13)

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

#### NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 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 0.0psf on the bottom chord in all areas where a rectangle 0-0 tall by 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 20 lb uplift at joint 1 and 20 lb uplift at joint 3.

**LOAD CASE(S)** Standard

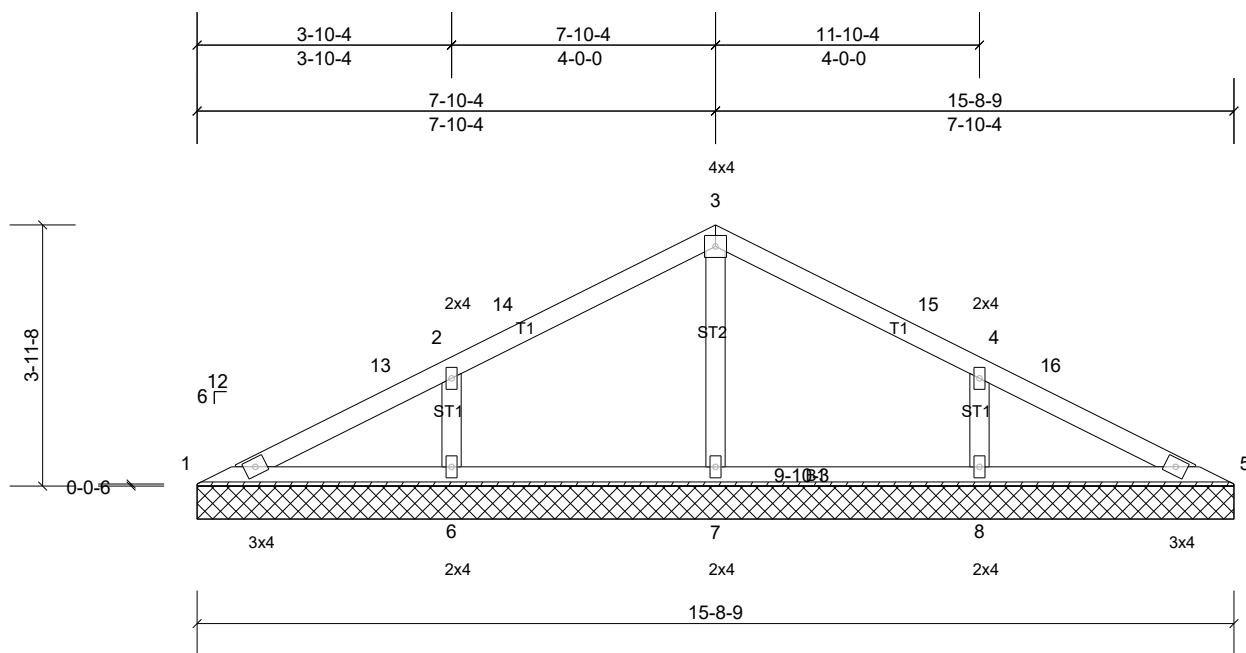
Job 251198-A	Truss VP1	Truss Type Valley	Qty 1	Ply 1	Temms Residence Job Reference (optional)
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Loading	(psf)	Spacing	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	2-0-0	TC	0.15	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.08	n/a	-	n/a	999	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	5	n/a	n/a
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS					Weight: 57 lb	FT = 25%

#### 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.  
BOT CHORD Structural wood sheathing directly applied.

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

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

#### LOAD CASE(S)

Standard

#### REACTIONS

All bearings 15-8-9.  
(lb) - Max Horiz 1=-77 (LC 13)  
Max Uplift All uplift 100 (lb) or less at joint(s)  
1, 5, 7 except 6=-157 (LC 12),  
8=-155 (LC 13)  
Max Grav All reactions 250 (lb) or less at joint  
(s) 1, 5 except 6=365 (LC 25),  
7=350 (LC 1), 8=365 (LC 26)

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

**WEBS** 3-7=-280/105, 2-6=-262/219, 4-8=-262/219

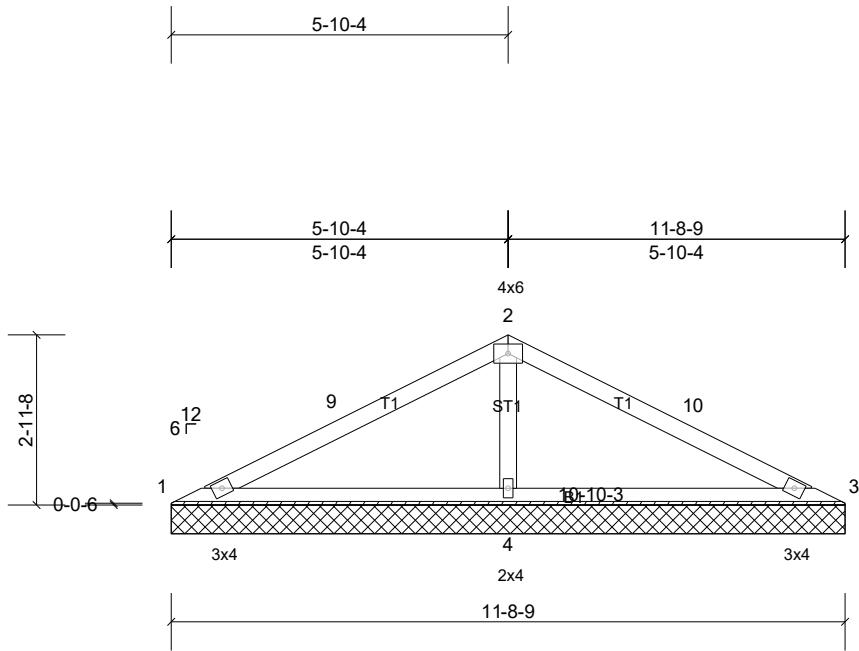
#### NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-12 to 3-0-12, Interior (1) 3-0-12 to 7-11-0, Exterior(2R) 7-11-0 to 10-11-0, Interior (1) 10-11-0 to 15-9-5 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 3-06-00 tall by 2-00-00 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, 5, 7 except (jt=lb) 6=156, 8=155.

Job 251198-A	Truss VP2	Truss Type Valley	Qty 1	Ply 1	Temms Residence Job Reference (optional)
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Scale = 1:40.2

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.26	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(TL)	n/a	-	n/a	999	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.10	Horiz(TL)	0.00	3	n/a	n/a	
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS						Weight: 38 lb	FT = 25%

**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.  
 BOT CHORD Structural wood sheathing directly applied.

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

- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 1, 29 lb uplift at joint 3 and 162 lb uplift at joint 4.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard

**REACTIONS** (lb/size) 1=46/11-8-9, (min. 0-1-8),  
 3=46/11-8-9, (min. 0-1-8),  
 4=845/11-8-9, (min. 0-1-8)

Max Horiz 1=57 (LC 13)

Max Uplift 1=24 (LC 26), 3=29 (LC 13),  
 4=162 (LC 12)

Max Grav 1=93 (LC 25), 3=93 (LC 26), 4=845 (LC 1)

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

TOP CHORD 1-9=-202/356, 2-9=-190/433, 2-10=-185/433,  
 3-10=-197/353

BOT CHORD 1-4=-320/257, 3-4=-320/257

WEBS 2-4=-657/426

**NOTES**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
 $V_{ASD}=103\text{mph}$ ;  $TCDL=6.0\text{psf}$ ;  $BCDL=6.0\text{psf}$ ;  $h=15\text{ft}$ ; Cat. II; Exp. C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-12 to 3-0-12, Interior (1) 3-0-12 to 5-11-0, Exterior(2R) 5-11-0 to 8-11-0, Interior (1) 8-11-0 to 11-9-5 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 3-0-6-0 tall by 2-0-0-0 wide will fit between the bottom chord and any other members.

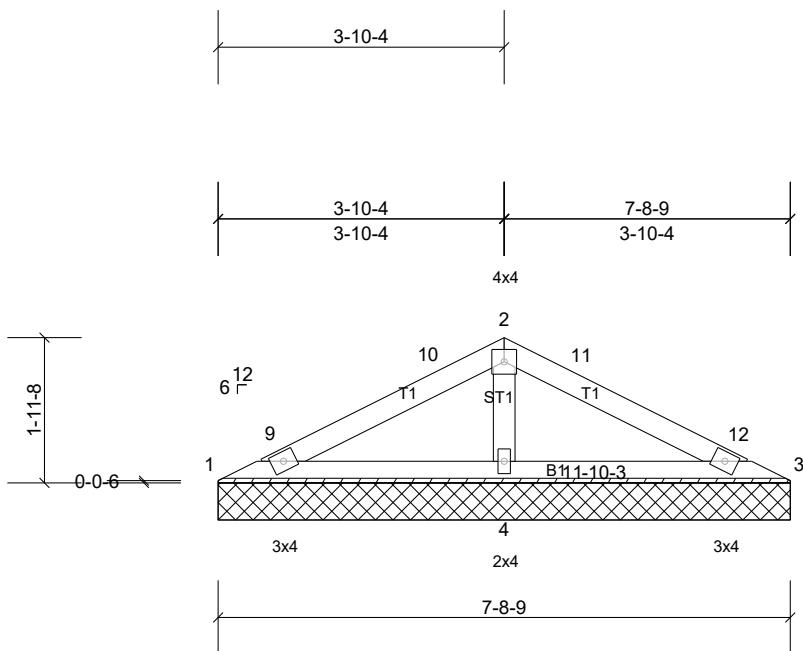
Job 251198-A	Truss VP3	Truss Type Valley	Qty 1	Ply 1	Temms Residence Job Reference (optional)
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Scale = 1:31.2

Loading	(psf)	Spacing	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	2-0-0	TC	0.12	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL		BC	0.13	n/a	-	n/a	999	
BCLL	0.0*	Rep Stress Incr		WB	0.05	Horiz(TL)	0.00	3	n/a	n/a
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS					Weight: 24 lb	FT = 25%

#### 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.  
BOT CHORD Structural wood sheathing directly applied.

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

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

#### LOAD CASE(S)

Standard

**REACTIONS** (lb/size) 1=57/7-8-9, (min. 0-1-8),  
3=57/7-8-9, (min. 0-1-8),  
4=503/7-8-9, (min. 0-1-8)

Max Horiz 1=-36 (LC 13)

Max Uplift 1=-17 (LC 12), 3=-25 (LC 13),  
4=-94 (LC 12)

Max Grav 1=81 (LC 25), 3=81 (LC 26), 4=503  
(LC 1)

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

WEBS 2-4=-346/295

#### NOTES

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

2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat.  
II; Exp C; Enclosed; MWFRS (envelope) exterior zone  
and C-C Exterior(2E) 0-0-12 to 3-0-12, Interior (1) 3-0-12  
to 3-11-0, Exterior(2R) 3-11-0 to 6-11-0, Interior (1)  
6-11-0 to 7-9-5 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  
3-0-6-0 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 17 lb uplift at joint  
1, 25 lb uplift at joint 3 and 94 lb uplift at joint 4.

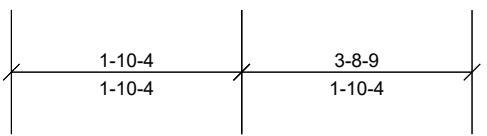
Job 251198-A	Truss VP4	Truss Type Valley	Qty 1	Ply 1	Temms Residence Job Reference (optional)
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Comtech, Inc., Fayetteville, NC 28309, user

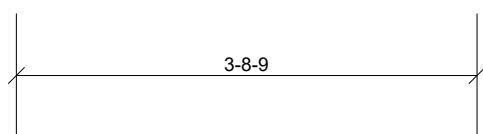
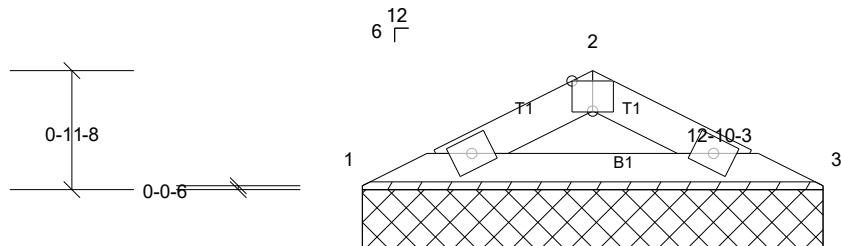
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3x4



Scale = 1:18.6

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MP						Weight: 10 lb	FT = 25%

#### LUMBER

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

#### BRACING

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

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

**REACTIONS** (lb/size) 1=148/3-8-9, (min. 0-1-8),  
3=148/3-8-9, (min. 0-1-8)

Max Horiz 1=16 (LC 16)

Max Uplift 1=31 (LC 12), 3=31 (LC 13)

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

TOP CHORD 1-2=250/211

#### NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)  
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 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 3-06-00 tall by 2-00-00 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 31 lb uplift at joint 1 and 31 lb uplift at joint 3.

**LOAD CASE(S)** Standard