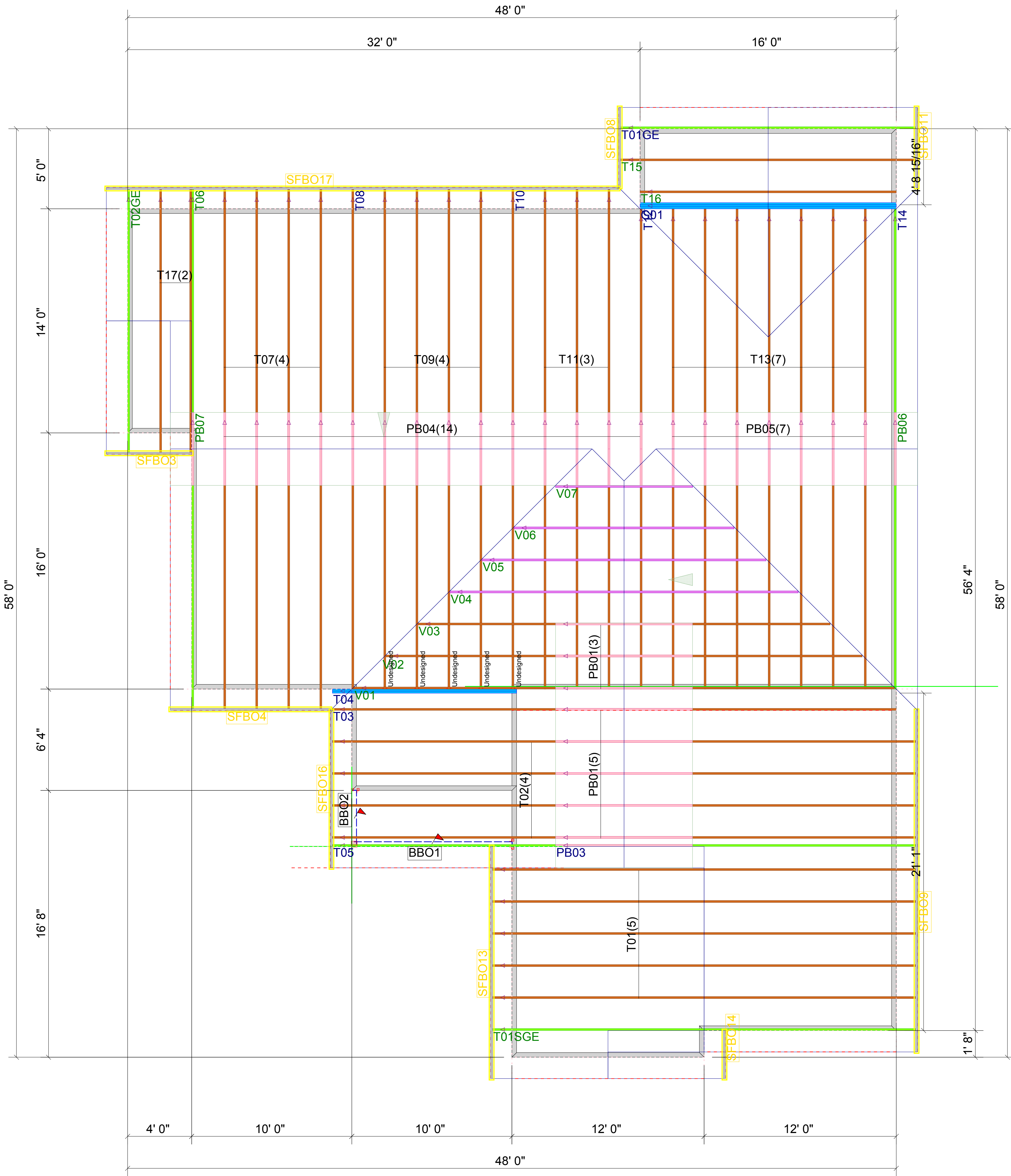


Floor Area: 0 SF  
 Floor Plywood: 0  
 Roof Area: 3018.42 SF  
 Roof Plywood: 90 sheets  
 Roof Shingles: 38 Squares



**ROOF TRUSS LAYOUT**  
 1/4" = 1'-0"

Client: **J.E. WOMBLE AND SONS**

Project: **LOT 2**

Model:

Lot #: Subdivision:

Order #: Designer:

Date: / /

**P20-07029**



4476 Hwy. 21 W  
 West End, NC 27376  
 (910) 673-4711

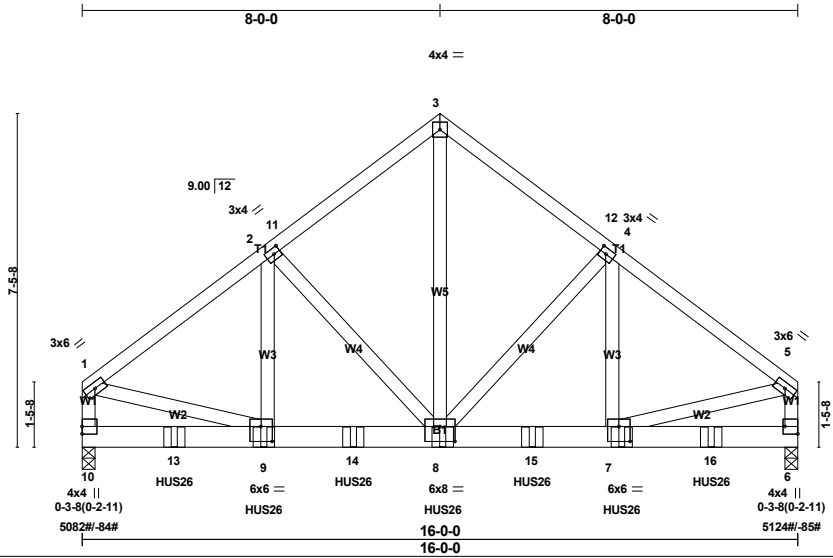
**NOTE**

IT IS THE RESPONSIBILITY OF THE BUILDING DESIGNER OR ARCHITECT TO PROVIDE AN APPROPRIATE CONNECTION FOR TRUSSES TO SUPPORTING STRUCTURE PERFECTIONS SHOWN ON TRUSS ENGINEERING SPECIAL CONSIDERATIONS FOR MECHANICAL EQUIPMENT AND/OR PLUMBING (AND THEIR CONNECTIONS) IN TRUSS SPACE MUST BE DIAGRAMMED BY BUILDER ON APPROVED TRUSS LAYOUT PRIOR TO FABRICATION. THIS COMPANY IS A TRUSS MANUFACTURER WHOSE RESPONSIBILITIES ARE LIMITED TO THOSE DESCRIBED IN WTCAT-1995 "DESIGN RESPONSIBILITIES". ACCORDINGLY, IT DISCLAIMS ANY RESPONSIBILITIES AND/OR LIABILITY FOR THE CONSTRUCTION, DESIGN, DRAWINGS, DOCUMENTS INCLUDING THE INSTALLATION AND BRACING OF TRUSSES MANUFACTURED BY THIS COMPANY. SEE <http://support.sbindustry.com/pubs/TBDResp-D>

Job P20-07029	Truss G01	Truss Type COMMON GIRDER	Qty 1	Ply 3	LOT 2 Job Reference (optional)
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Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:09:41 2020 Page 1  
ID:tcvVaC6QQtNBdXb5xYEux9yt8Zw-SIALYzcWVPJEICELdVfub0RcJBe4V3f6KhfWG\_gysZWu



Scale = 1:51.5

Plate Offsets (X,Y)-- [2:0-1-12,0-1-8], [4:0-1-12,0-1-8], [6:Edge,0-3-8], [7:0-3-0,0-4-0], [8:0-4-0,0-4-0], [9:0-3-0,0-4-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.49	Vert(LL)	-0.04	8-9	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.38	Vert(CT)	-0.07	8-9	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.65	Horz(CT)	0.01	6	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						
								Weight: 356 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.3

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

**REACTIONS.** (size) 10=0-3-8 (min. 0-2-11), 6=0-3-8 (min. 0-2-11)  
Max Horz 10=-126(LC 10)  
Max Uplift 10=-84(LC 12), 6=-85(LC 12)  
Max Grav 10=5082(LC 5), 6=5124(LC 6)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-5358/118, 2-3=-4162/146, 3-4=-4162/146, 4-5=-5356/118,  
1-10=-4410/92, 5-6=-4407/92  
BOT CHORD 9-10=-112/411, 8-9=-50/4242, 7-8=-50/4241, 6-7=-15/335  
WEBS 3-8=-120/4741, 4-8=-1389/79, 4-7=-33/1609, 2-8=-1390/79, 2-9=-32/1611,  
1-9=-37/4078, 5-7=-36/4074

**JOINT STRESS INDEX**

1 = -nan(ind), 2 = -nan(ind), 3 = -nan(ind), 4 = -nan(ind), 5 = -nan(ind), 6 = -nan(ind), 7 = -nan(ind), 8 = -nan(ind), 9 = -nan(ind) and 10 = -nan(ind)

**NOTES-**

- 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-5-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=14ft; B=61ft; L=51ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=10.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be User Defined crushing capacity of 425 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 84 lb uplift at joint 10 and 85 lb uplift at joint 6.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Lot 2
P20-07029	G01	COMMON GIRDER	1	3	Job Reference (optional)

Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:09:42 2020 Page 2  
ID:tcvVaC6QQtNBDXb5xYEux9yt82w-wUkjJd9A0M9qCwq3MPqZf9Ux1Qko6MUwJFpVW6ysZWt

**NOTES-**

- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 14-0-12 to connect truss(es) T13 (1 ply 2x4 SP) to front face of bottom chord.
- 13) Fill all nail holes where hanger is in contact with lumber.

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-3=-41, 3-5=-41, 6-10=-20

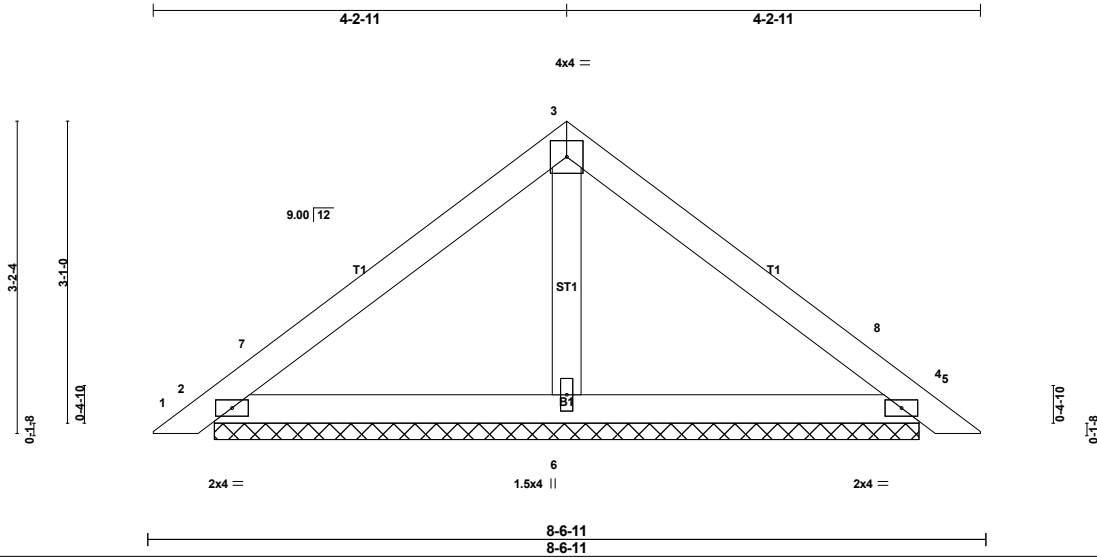
Concentrated Loads (lb)

Vert: 8=-1205(F) 7=-1205(F) 9=-1205(F) 13=-1205(F) 14=-1205(F) 15=-1205(F) 16=-1205(F)

Job P20-07029	Truss PB01	Truss Type Piggyback	Qty 8	Ply 1	Lot 2
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Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:09:42 2020 Page 1  
ID:tcvVaC6QQtNBDXb5xYEUx9yt82w-wUkjJd9A0M9qOwq3MPqZF9YM1VEoG0UwJFpW6ysZWt



Scale = 1:23.5

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.21	Vert(LL)	0.01	5	n/r	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.10	Vert(CT)	0.01	5	n/r		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.04	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P						
	Code IRC2018/TPI2014						Weight: 30 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 OTHERS 2x4 SP No.3

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

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

**REACTIONS.** (size) 2=7-2-5 (min. 0-1-8), 4=7-2-5 (min. 0-1-8), 6=7-2-5 (min. 0-1-8)  
 Max Horz 2=-68(LC 10)  
 Max Uplift 2=-38(LC 12), 4=-38(LC 12)  
 Max Grav 2=188(LC 2), 4=188(LC 2), 6=246(LC 2)

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

**JOINT STRESS INDEX**

2 = -nan(ind), 3 = -nan(ind), 4 = -nan(ind) and 6 = -nan(ind)

**NOTES-**

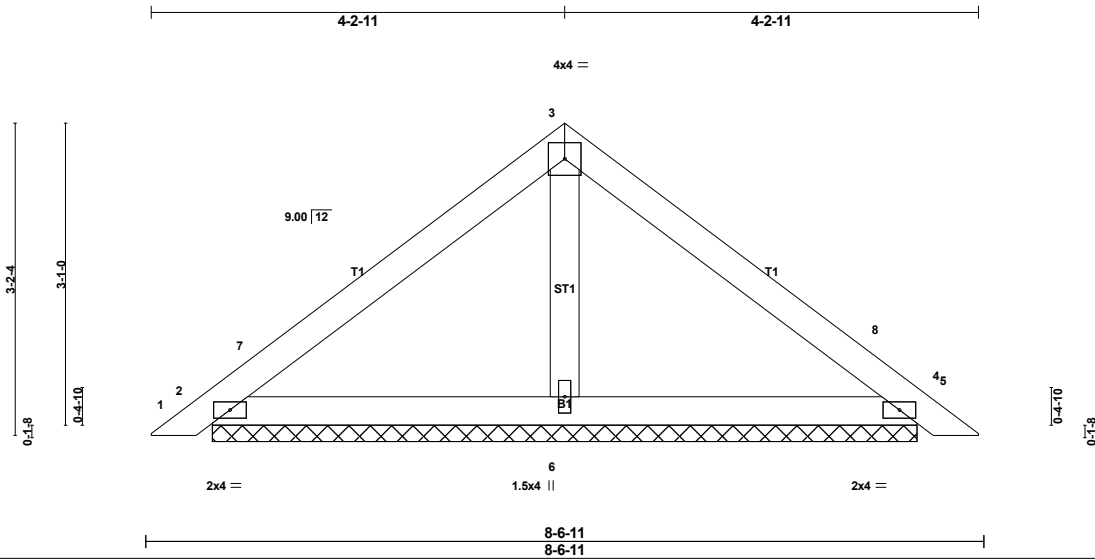
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=22ft; B=61ft; L=51ft; eave=3ft; Cat. II; Exp B; Enclosed; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=10.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 10.4 psf on overhangs non-concurrent with other live loads.
- 6) Gable requires continuous bottom chord bearing.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) All bearings are assumed to be User Defined crushing capacity of 425 psi.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 38 lb uplift at joint 2 and 38 lb uplift at joint 4.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard

Job P20-07029	Truss PB02	Truss Type Piggyback	Qty 1	Ply 2	LOT 2 Job Reference (optional)
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Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:09:43 2020 Page 1  
ID:tcvVaC6QQtNBDXb5xYEux9yt82w-Pgl5zfdnxKU0SYV0c4w35sillRsDXjad8z?N2YysZWw



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.10	Vert(LL)	0.00	5	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	0.00	5	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 60 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.3

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

**REACTIONS.** (size) 2=7-2-5 (min. 0-1-8), 4=7-2-5 (min. 0-1-8), 6=7-2-5 (min. 0-1-8)  
Max Horz 2=-68(LC 10)  
Max Uplift 2=-38(LC 12), 4=-38(LC 12)  
Max Grav 2=188(LC 2), 4=188(LC 2), 6=246(LC 2)

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

**JOINT STRESS INDEX**

2 = -nan(ind), 3 = -nan(ind), 4 = -nan(ind) and 6 = -nan(ind)

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=22ft; B=61ft; L=51ft; eave=10ft; Cat. II; Exp B; Enclosed; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=10.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 10.4 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be User Defined crushing capacity of 425 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 38 lb uplift at joint 2 and 38 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Lot 2
P20-07029	PB02	Piggyback	1	2	Job Reference (optional)

Longleaf Truss Company, West End, N.C.

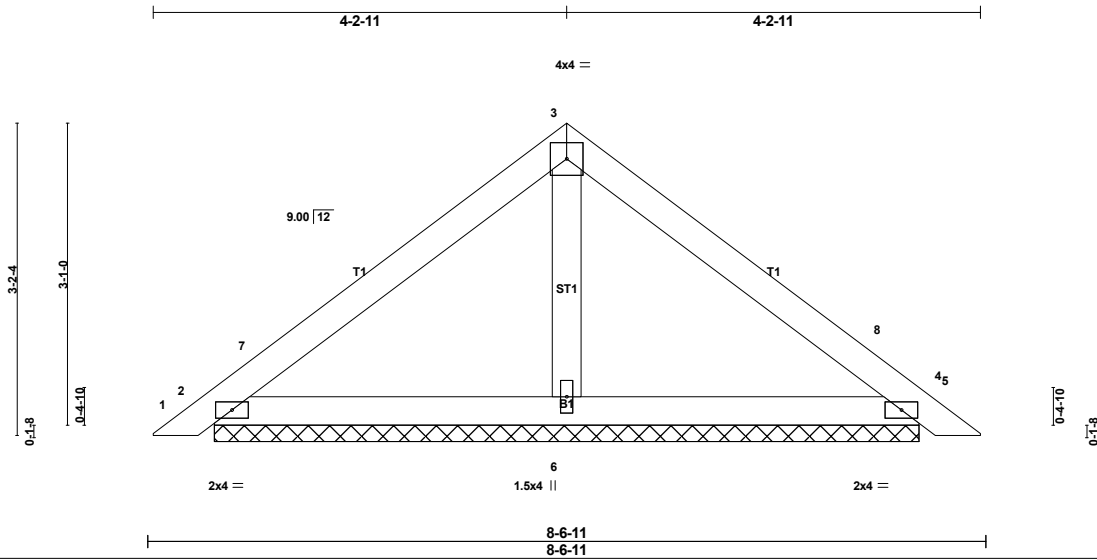
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**LOAD CASE(S)** Standard

Job P20-07029	Truss PB03	Truss Type Piggyback	Qty 1	Ply 1	Lot 2 1	Job Reference (optional)
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Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:09:44 2020 Page 1  
ID:tcvVaC6QQtNBDXb5xYEux9yt82w-ftsUA\_ePiecs3i4CAnRle4EurriBiGAWnNdkwb\_ysZW



Scale = 1:23.5

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.21	Vert(LL)	0.01	5	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	0.01	5	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 30 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 OTHERS 2x4 SP No.3

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

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

**REACTIONS.** (size) 2=7-2-5 (min. 0-1-8), 4=7-2-5 (min. 0-1-8), 6=7-2-5 (min. 0-1-8)  
 Max Horz 2=-68(LC 10)  
 Max Uplift 2=-38(LC 12), 4=-38(LC 12)  
 Max Grav 2=188(LC 2), 4=188(LC 2), 6=246(LC 2)

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

**JOINT STRESS INDEX**

2 = -nan(ind), 3 = -nan(ind), 4 = -nan(ind) and 6 = -nan(ind)

**NOTES-**

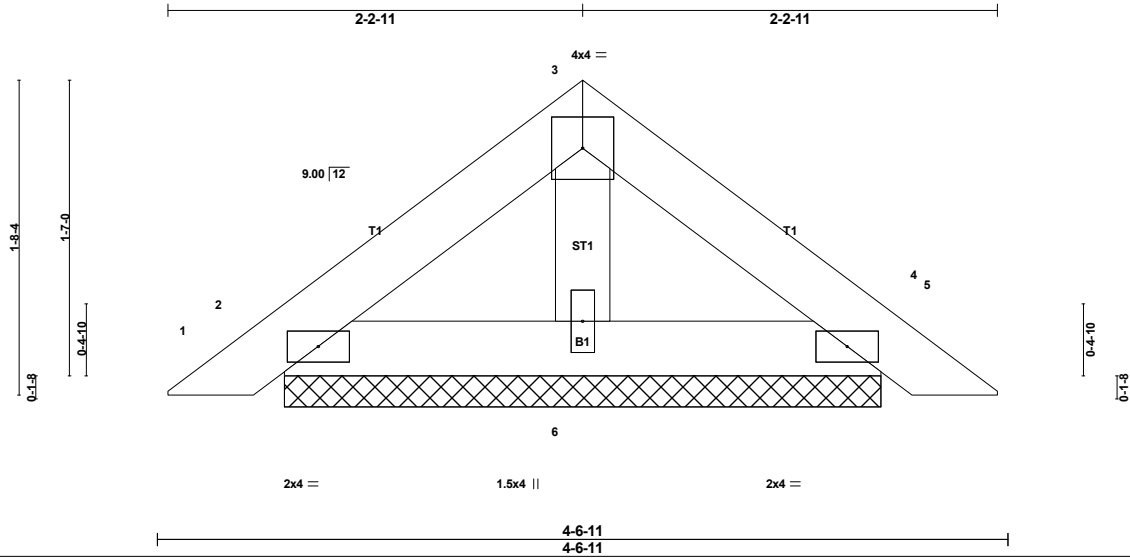
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=22ft; B=61ft; L=51ft; eave=0ft; Cat. II; Exp B; Enclosed; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=10.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 10.4 psf on overhangs non-concurrent with other live loads.
- 6) Gable requires continuous bottom chord bearing.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) All bearings are assumed to be User Defined crushing capacity of 425 psi.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 38 lb uplift at joint 2 and 38 lb uplift at joint 4.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard

Job P20-07029	Truss PB04	Truss Type Piggyback	Qty 14	Ply 1	Lot 2
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Longleaf Truss Company, West End, N.C.

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Scale = 1:12.3

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.03	Vert(LL)	0.00	4	n/r	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.02	Vert(CT)	0.00	4	n/r		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.01	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P						
	Code IRC2018/TPI2014						Weight: 14 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.3

**BRACING-**  
TOP CHORD Sheathed or 4-6-11 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (size) 2=3-2-5 (min. 0-1-8), 4=3-2-5 (min. 0-1-8), 6=3-2-5 (min. 0-1-8)  
Max Horz 2=34(LC 11)  
Max Uplift 2=-25(LC 12), 4=-25(LC 12)  
Max Grav 2=99(LC 2), 4=99(LC 2), 6=106(LC 2)

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

**JOINT STRESS INDEX**

2 = -nan(ind), 3 = -nan(ind), 4 = -nan(ind) and 6 = -nan(ind)

**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=21ft; B=61ft; L=51ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=10.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 10.4 psf on overhangs non-concurrent with other live loads.
- 6) Gable requires continuous bottom chord bearing.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) All bearings are assumed to be User Defined crushing capacity of 425 psi.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 2 and 25 lb uplift at joint 4.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

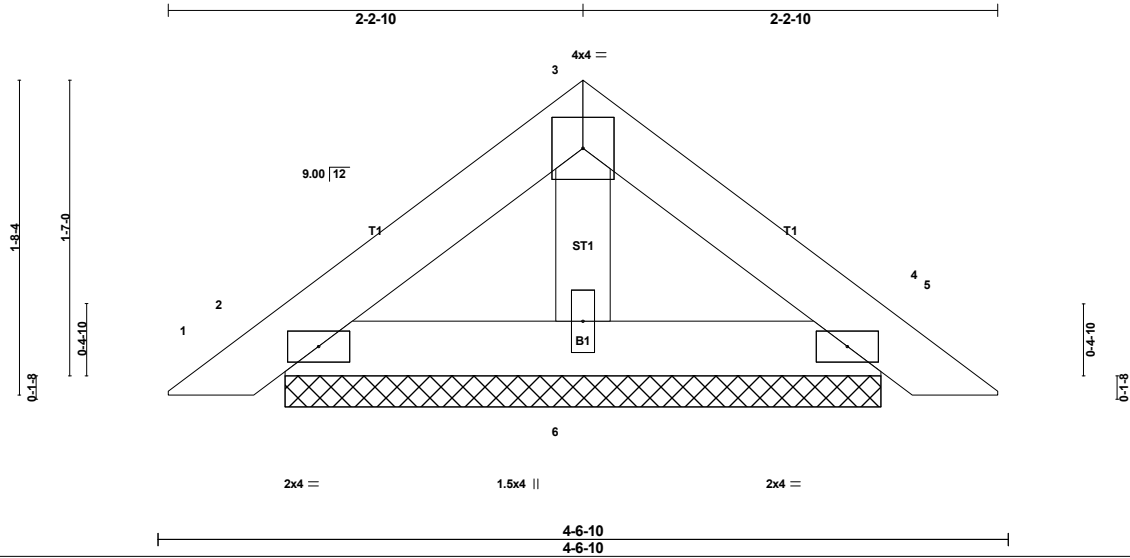
**LOAD CASE(S)** Standard



Job P20-07029	Truss PB05	Truss Type Piggyback	Qty 7	Ply 1	Lot 2
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Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:09:45 2020 Page 1  
ID:tcvVaC6QQQtNBDXb5xYEux9yt82w-L3PsOKf1TxjhstOkVYXAHn6MFY8?d6wchUT7RysZWq



Scale = 1:12.3

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.03	Vert(LL)	0.00	4	n/r	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.02	Vert(CT)	0.00	4	n/r		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.01	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P						
	Code IRC2018/TPI2014						Weight: 14 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 OTHERS 2x4 SP No.3

**BRACING-**  
 TOP CHORD Sheathed or 4-6-10 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (size) 2=3-2-5 (min. 0-1-8), 4=3-2-5 (min. 0-1-8), 6=3-2-5 (min. 0-1-8)  
 Max Horz 2=-34(LC 10)  
 Max Uplift 2=-25(LC 12), 4=-25(LC 12)  
 Max Grav 2=99(LC 2), 4=99(LC 2), 6=106(LC 2)

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

**JOINT STRESS INDEX**

2 = -nan(ind), 3 = -nan(ind), 4 = -nan(ind) and 6 = -nan(ind)

**NOTES-**

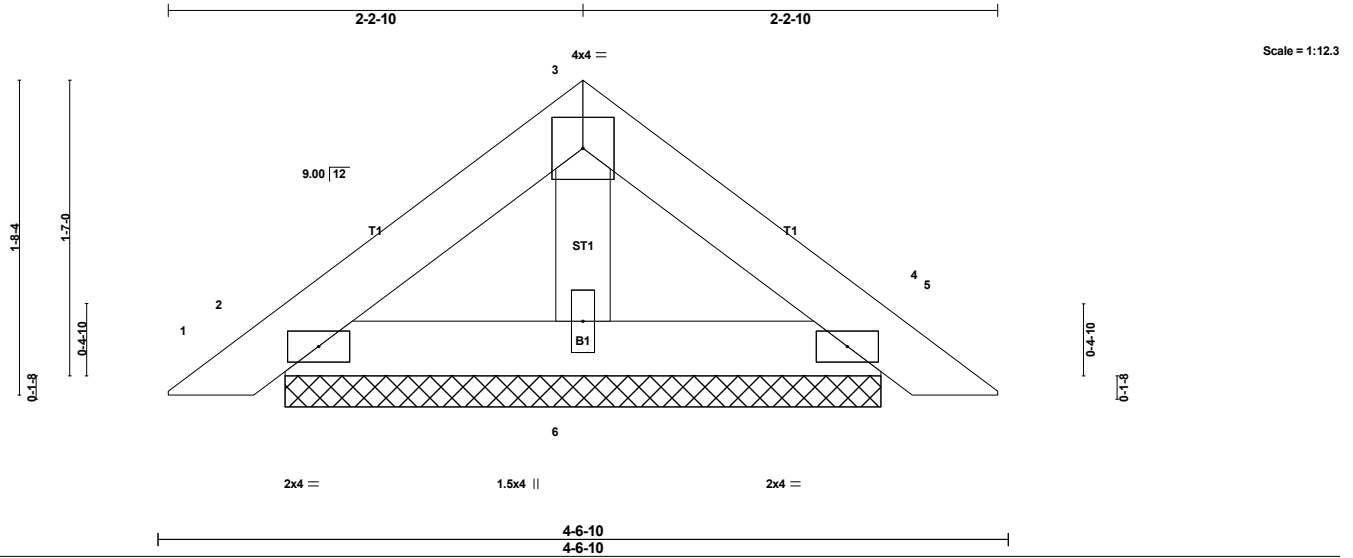
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=21ft; B=61ft; L=51ft; eave=11ft; Cat. II; Exp B; Enclosed; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=10.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 10.4 psf on overhangs non-concurrent with other live loads.
- 6) Gable requires continuous bottom chord bearing.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) All bearings are assumed to be User Defined crushing capacity of 425 psi.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 2 and 25 lb uplift at joint 4.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard

Job P20-07029	Truss PB06	Truss Type Piggyback	Qty 1	Ply 1	Lot 2 1	Job Reference (optional)
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Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:09:46 2020 Page 1  
ID:tcvVaC6QQtNBDXb5xYEux9yt82w-pFzEbggfEFtaJ?EblCUMjVKH6fuNk3M3rxD1ftysZWp



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.03	Vert(LL)	0.00	4	n/r	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.02	Vert(CT)	0.00	4	n/r		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.01	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P						
	Code IRC2018/TPI2014						Weight: 14 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 OTHERS 2x4 SP No.3

**BRACING-**  
 TOP CHORD Sheathed or 4-6-10 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (size) 2=3-2-5 (min. 0-1-8), 4=3-2-5 (min. 0-1-8), 6=3-2-5 (min. 0-1-8)  
 Max Horz 2=-34(LC 10)  
 Max Uplift 2=-25(LC 12), 4=-25(LC 12)  
 Max Grav 2=99(LC 2), 4=99(LC 2), 6=106(LC 2)

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

**JOINT STRESS INDEX**

2 = -nan(ind), 3 = -nan(ind), 4 = -nan(ind) and 6 = -nan(ind)

**NOTES-**

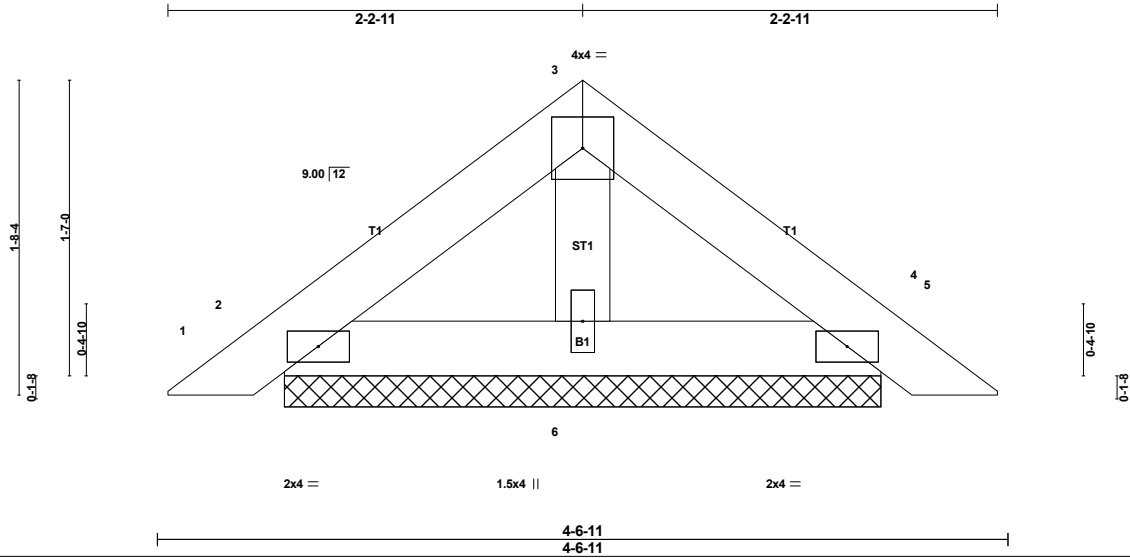
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=21ft; B=61ft; L=51ft; eave=1ft; Cat. II; Exp B; Enclosed; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=10.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 10.4 psf on overhangs non-concurrent with other live loads.
- 6) Gable requires continuous bottom chord bearing.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) All bearings are assumed to be User Defined crushing capacity of 425 psi.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 2 and 25 lb uplift at joint 4.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard

Job P20-07029	Truss PB07	Truss Type Piggyback	Qty 1	Ply 1	Lot 2 Job Reference (optional)
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Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:09:46 2020 Page 1  
ID:tcvVaC6QQtNBDXb5xYEux9yt82w-pFzEbggfEFtaJ?EblCUmjVKH6fuNk3M3rxD1ftysZWp



Scale = 1:12.3

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.03	Vert(LL)	0.00	4	n/r	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.02	Vert(CT)	0.00	4	n/r		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.01	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P						
	Code IRC2018/TPI2014						Weight: 14 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.3

**BRACING-**  
TOP CHORD Sheathed or 4-6-11 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (size) 2=3-2-5 (min. 0-1-8), 4=3-2-5 (min. 0-1-8), 6=3-2-5 (min. 0-1-8)  
Max Horz 2=34(LC 11)  
Max Uplift 2=-25(LC 12), 4=-25(LC 12)  
Max Grav 2=99(LC 2), 4=99(LC 2), 6=106(LC 2)

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

**JOINT STRESS INDEX**

2 = -nan(ind), 3 = -nan(ind), 4 = -nan(ind) and 6 = -nan(ind)

**NOTES-**

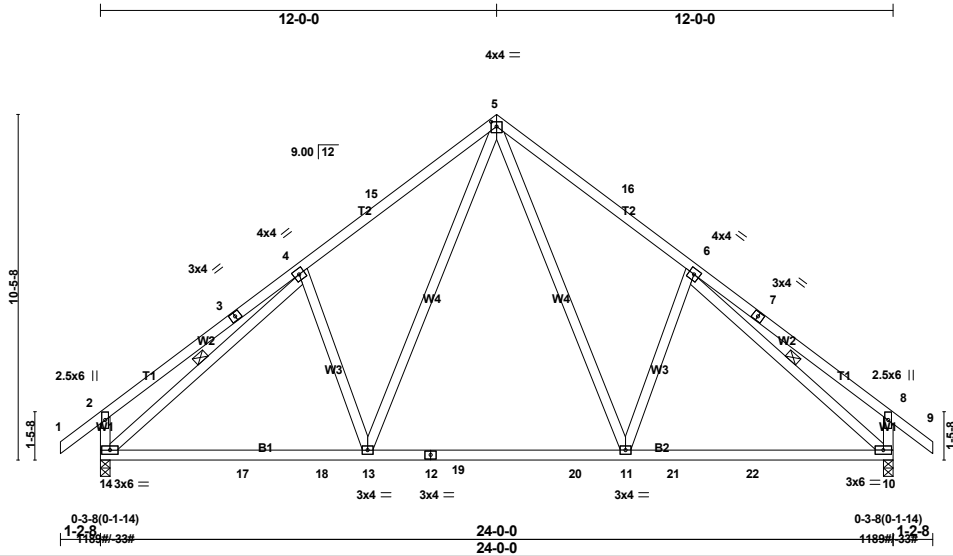
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=21ft; B=61ft; L=51ft; eave=0ft; Cat. II; Exp B; Enclosed; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=10.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 10.4 psf on overhangs non-concurrent with other live loads.
- 6) Gable requires continuous bottom chord bearing.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) All bearings are assumed to be User Defined crushing capacity of 425 psi.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 2 and 25 lb uplift at joint 4.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

**LOAD CASE(S)** Standard

Job P20-07029	Truss T01	Truss Type Common	Qty 5	Ply 1	Lot 2
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Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:09:48 2020 Page 1  
ID:tcvVaC6QQtNBDXb5xYEuX9yt82w-le5\_0MhvlS71YJOzPdWEowPXoSRqCuRMIFJ8kmysZWn



Scale = 1:69.8

Plate Offsets (X,Y)-- [5:0-2-0,0-1-12]

<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.40	Vert(LL) -0.11 13-14 >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.53	Vert(CT) -0.20 10-11 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.36	Horz(CT) 0.03 10 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S			
				Weight: 160 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
WEBS 2x4 SP No.3

**BRACING-**  
TOP CHORD Sheathed or 5-6-10 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 4-14, 6-10

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

**REACTIONS.** (size) 14=0-3-8 (min. 0-1-14), 10=0-3-8 (min. 0-1-14)  
Max Horz 14=211(LC 11)  
Max Uplift 14=-33(LC 12), 10=-33(LC 12)  
Max Grav 14=1189(LC 24), 10=1189(LC 25)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-350/115, 4-5=-1171/136, 5-6=-1171/136, 6-8=-350/115,  
2-14=-406/122, 8-10=-406/122  
BOT CHORD 13-14=0/1019, 11-13=0/724, 10-11=0/910  
WEBS 5-11=-42/608, 5-13=-42/608, 4-14=-1033/0, 6-10=-1032/0

**JOINT STRESS INDEX**  
2 = -nan(ind), 3 = -nan(ind), 4 = -nan(ind), 5 = -nan(ind), 6 = -nan(ind), 7 = -nan(ind), 8 = -nan(ind), 10 = -nan(ind), 11 = -nan(ind), 12 = -nan(ind), 13 = -nan(ind) and 14 = -nan(ind)

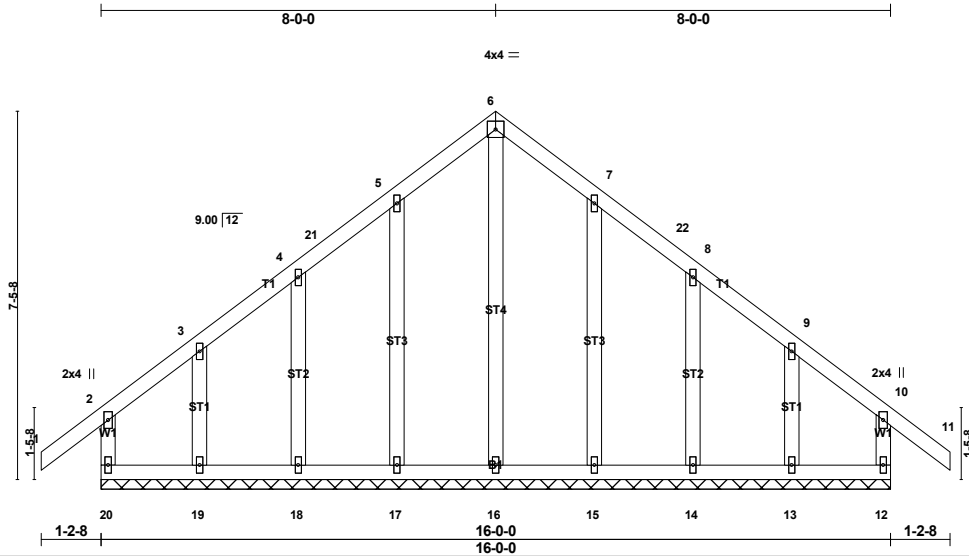
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; B=61ft; L=51ft; eave=3ft; Cat. II; Exp B; Enclosed; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=10.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 10.4 psf on overhangs non-concurrent with other live loads.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - All bearings are assumed to be User Defined crushing capacity of 425 psi.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 33 lb uplift at joint 14 and 33 lb uplift at joint 10.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job P20-07029	Truss T01GE	Truss Type Common Structural Gable	Qty 1	Ply 1	Lot 2
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Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:09:49 2020 Page 1  
ID:tcvVaC6QQQtNBDXb5xYEux9yt82w-DqfNDiiYWAF9ATzAzK1TL7ymUsvUxOpWxvShGCysZWm



Scale = 1:46.7

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.15	Vert(LL)	-0.01 11	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	-0.01 11	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.16	Horz(CT)	-0.00 12	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R					Weight: 107 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 WEBS 2x4 SP No.3  
 OTHERS 2x4 SP No.3

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

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

**REACTIONS.** All bearings 16-0-0.  
 (lb) - Max Horz 20=-148(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 20, 12, 17, 18, 19, 15, 14, 13  
 Max Grav All reactions 250 lb or less at joint(s) 20, 12, 16, 17, 18, 19, 15, 14, 13

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

**JOINT STRESS INDEX**

2 = -nan(ind), 3 = -nan(ind), 4 = -nan(ind), 5 = -nan(ind), 6 = -nan(ind), 7 = -nan(ind), 8 = -nan(ind), 9 = -nan(ind), 10 = -nan(ind), 12 = -nan(ind), 13 = -nan(ind), 14 = -nan(ind), 15 = -nan(ind), 16 = -nan(ind), 17 = -nan(ind), 18 = -nan(ind), 19 = -nan(ind) and 20 = -nan(ind)

**NOTES-**

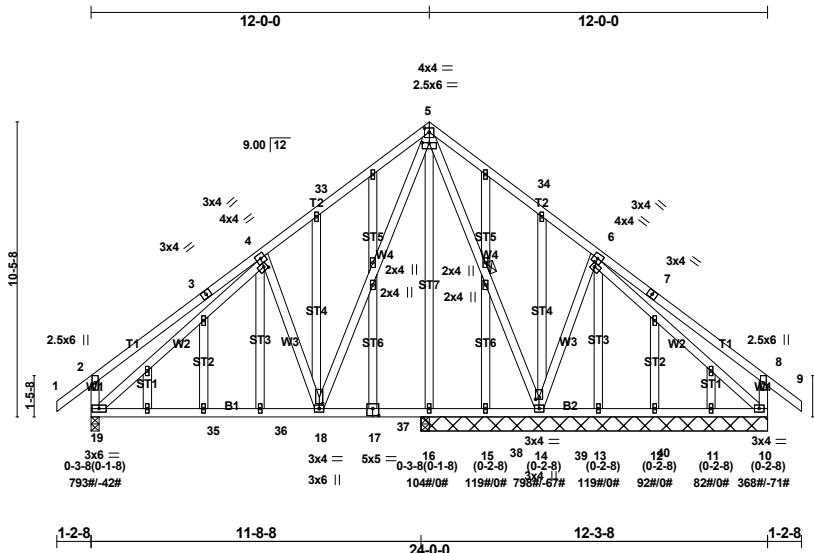
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=13ft; B=61ft; L=51ft; eave=1ft; Cat. II; Exp B; Enclosed; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=10.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 10.4 psf on overhangs non-concurrent with other live loads.
- 7) All plates are 1.5x4 MT20 unless otherwise indicated.
- 8) Gable requires continuous bottom chord bearing.
- 9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 10) Gable studs spaced at 2-0-0 oc.
- 11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 12) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 13) All bearings are assumed to be User Defined crushing capacity of 425 psi.
- 14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 12, 17, 18, 19, 15, 14, 13.
- 15) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job P20-07029	Truss T01SGE	Truss Type Common Structural Gable	Qty 1	Ply 1	LOT 2
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Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:09:50 2020 Page 1  
ID:tcvVaC6QQtNBDXb5xYEux9yt82w-h0DIR2JAHUN0ndXMX2YtLutyG9hgkVfmZCEoysZWI



Scale = 1:81.7

Plate Offsets (X,Y)-- [4:0-1-8,0-1-8], [5:0-3-0,0-0-4], [5:0-2-0,0-1-12], [6:0-1-8,0-1-8], [14:0-0-13,0-1-8], [17:0-2-8,0-3-0], [18:0-2-2,0-1-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.42	Vert(LL)	-0.13 18-19	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.44	Vert(CT)	-0.22 18-19	>631	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.58	Horz(CT)	0.01 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 247 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 WEBS 2x4 SP No.3  
 OTHERS 2x4 SP No.3

**BRACING-**

TOP CHORD Sheathed or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 5-14

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

**REACTIONS.**

All bearings 12-3-8 except (jt=length) 19=0-3-8, 16=0-3-8, 16=0-3-8.  
 (lb) - Max Horz 19=211(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) 19, 10, 14  
 Max Grav All reactions 250 lb or less at joint(s) 15, 13, 12, 11, 16, 16 except 19=793(LC 24),  
 10=368(LC 2), 14=798(LC 25)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-336/114, 4-5=-618/149, 2-19=-395/121, 8-10=-315/137  
 BOT CHORD 18-19=-11/601, 16-18=-24/275, 15-16=-24/275, 14-15=-24/275  
 WEBS 5-14=-573/0, 6-14=-357/147, 5-18=-48/626, 4-18=-305/144, 4-19=-465/0

**JOINT STRESS INDEX**

2 = -nan(ind), 3 = -nan(ind), 4 = -nan(ind), 4 = -nan(ind), 5 = -nan(ind), 5 = -nan(ind), 6 = -nan(ind), 6 = -nan(ind), 7 = -nan(ind), 8 = -nan(ind), 10 = -nan(ind), 11 = -nan(ind), 12 = -nan(ind), 13 = -nan(ind), 14 = -nan(ind), 14 = -nan(ind), 15 = -nan(ind), 16 = -nan(ind), 17 = -nan(ind), 18 = -nan(ind), 18 = -nan(ind), 19 = -nan(ind), 20 = -nan(ind), 20 = -nan(ind), 21 = -nan(ind), 22 = -nan(ind), 23 = -nan(ind), 24 = -nan(ind), 25 = -nan(ind), 26 = -nan(ind), 27 = -nan(ind), 28 = -nan(ind), 29 = -nan(ind), 29 = -nan(ind), 30 = -nan(ind), 31 = -nan(ind) and 32 = -nan(ind)

**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; B=61ft; L=51ft; eave=1ft; Cat. II; Exp B; Enclosed; MWFRS (directional); 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=10.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 10.4 psf on overhangs non-concurrent with other live loads.
- 7) All plates are 1.5x4 MT20 unless otherwise indicated.
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Lot 2
P20-07029	T01SGE	Common Structural Gable	1	1	Job Reference (optional)

Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:09:51 2020 Page 2  
ID:tcvVaC6QQQtNBDXb5xYEux9yt82w-ADn7eOko2nVtPn6Y4I3xQY12igVwPBko\_DxoL4ysZWk

**NOTES-**

- 11) All bearings are assumed to be User Defined crushing capacity of 425 psi.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 10, 14.
- 13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job P20-07029	Truss T02	Truss Type Piggyback Base	Qty 4	Ply 1	LOT 2
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Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:09:53 2020 Page 1  
ID:tcvVaC6QQtNBDXb5xYEuX9yt82w-6but33i2aPlbe4GxCA6PVz6NDT9Dt8r5SXQvPzysZWI

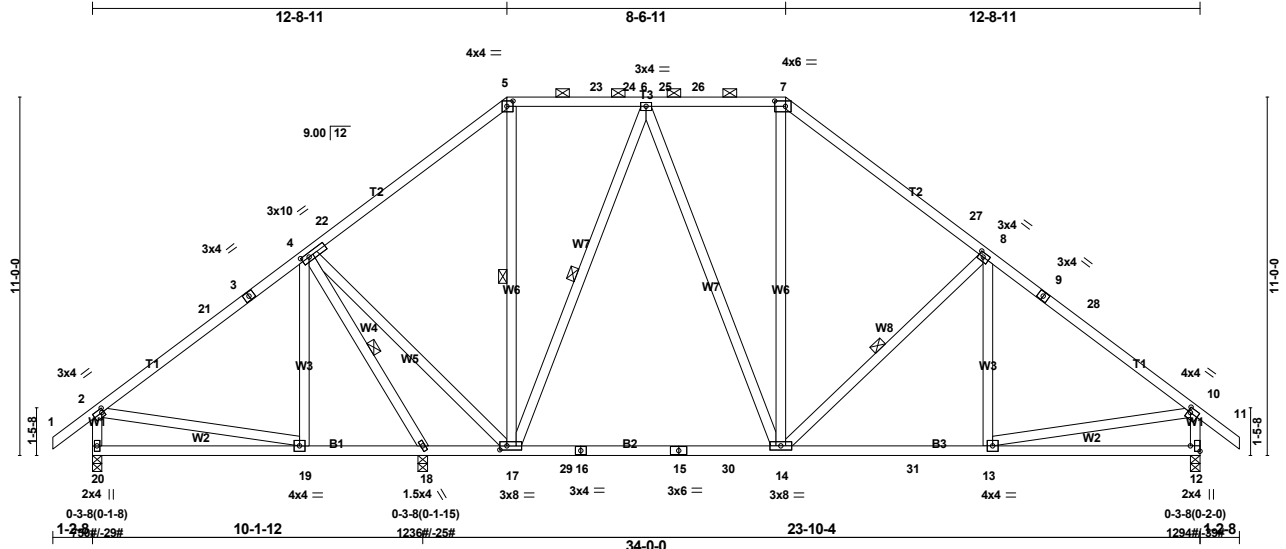


Plate Offsets (X,Y)-- [2:0-0-12,0-1-8], [4:0-2-14,0-1-8], [5:0-2-4,0-2-0], [7:0-4-0,0-2-0], [8:0-1-12,0-1-8], [10:0-1-0,0-1-12], [12:Edge,0-3-8], [17:0-2-8,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.48	Vert(LL)	-0.17 14-17	>999	240	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.52	Vert(CT)	-0.28 14-17	>999	180		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.41	Horz(CT)	0.02 12	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 254 lb	FT = 20%
	Code IRC2018/TPI2014							

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Sheathed or 5-2-2 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-7.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 17-18.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 4-18, 5-17, 6-17, 8-14

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

**REACTIONS.** (size) 20=0-3-8 (min. 0-1-8), 18=0-3-8 (min. 0-1-15), 12=0-3-8 (min. 0-2-0)  
 Max Horz 20=226(LC 11)  
 Max Uplift 20=-29(LC 12), 18=-25(LC 12), 12=-39(LC 12)  
 Max Grav 20=750(LC 24), 18=1236(LC 43), 12=1294(LC 25)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-685/38, 4-5=-703/110, 5-6=-467/122, 6-7=-791/128, 7-8=-1064/117, 8-10=-1371/52, 2-20=-643/64, 10-12=-1188/73  
 BOT CHORD 19-20=-176/317, 18-19=0/600, 17-18=-345/98, 14-17=0/693, 13-14=0/1010  
 WEBS 4-18=-1416/30, 4-17=0/984, 6-17=-564/32, 6-14=0/414, 7-14=0/317, 8-14=-486/100, 2-19=0/418, 10-13=0/895

**JOINT STRESS INDEX**  
 2 = -nan(ind), 3 = -nan(ind), 4 = -nan(ind), 5 = -nan(ind), 6 = -nan(ind), 7 = -nan(ind), 8 = -nan(ind), 9 = -nan(ind), 10 = -nan(ind), 12 = -nan(ind), 13 = -nan(ind), 14 = -nan(ind), 15 = -nan(ind), 16 = -nan(ind), 17 = -nan(ind), 18 = -nan(ind), 19 = -nan(ind) and 20 = -nan(ind)

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=17ft; B=61ft; L=51ft; eave=8ft; Cat. II; Exp B; Enclosed; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 10.4 psf on overhangs non-concurrent with other live loads.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

Continued on page 2



Job	Truss	Truss Type	Qty	Ply	Lot 2
P20-07029	T02	Piggyback Base	4	1	Job Reference (optional)

Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:09:53 2020 Page 2  
ID:tcvVaC6QQtNBDXb5xYEux9yt82w-6but3312aPlbe4GxCA6PVz6NDT9Dt8r5SXQvPzysZWI

**NOTES-**

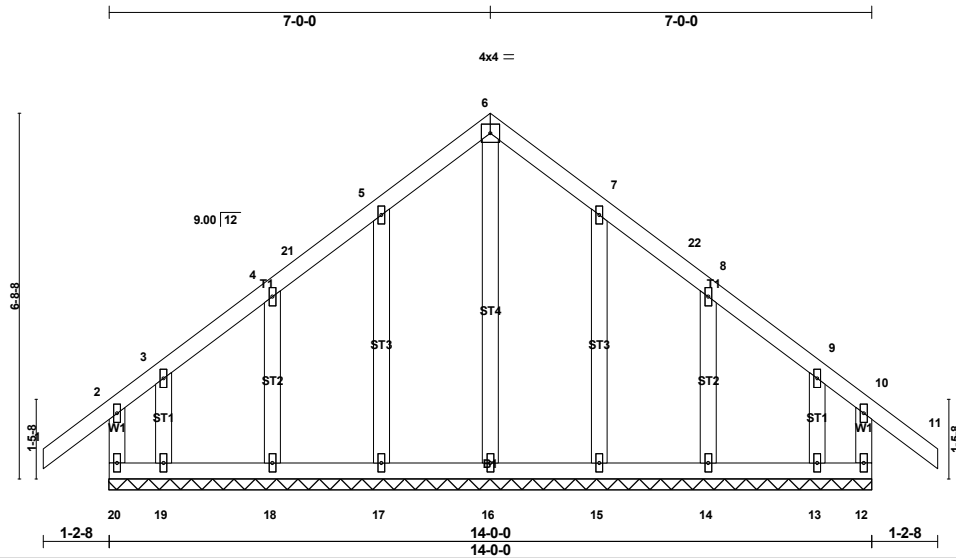
- 9) All bearings are assumed to be User Defined crushing capacity of 425 psi.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 18, 12.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

Job P20-07029	Truss T02GE	Truss Type Common Supported Gable	Qty 1	Ply 1	Lot 2
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Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:09:54 2020 Page 1  
ID:tcvVaC6QQtNBDXb5xYEux9yt82w-aoSFHPmgLitSGEr7mtde2BfdOtcckgqFgBASxPysZW



Scale = 1:42.3

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL)	-0.01 11	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	-0.01 11	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.11	Horz(CT)	-0.00 12	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R					Weight: 92 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
WEBS 2x4 SP No.3  
OTHERS 2x4 SP No.3

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

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

**REACTIONS.** All bearings 14-0-0.  
(lb) - Max Horz 20=-133(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 20, 12, 17, 18, 19, 15, 14, 13  
Max Grav All reactions 250 lb or less at joint(s) 20, 12, 16, 17, 18, 19, 15, 14, 13

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

**JOINT STRESS INDEX**

2 = -nan(ind), 3 = -nan(ind), 4 = -nan(ind), 5 = -nan(ind), 6 = -nan(ind), 7 = -nan(ind), 8 = -nan(ind), 9 = -nan(ind), 10 = -nan(ind), 12 = -nan(ind), 13 = -nan(ind), 14 = -nan(ind), 15 = -nan(ind), 16 = -nan(ind), 17 = -nan(ind), 18 = -nan(ind), 19 = -nan(ind) and 20 = -nan(ind)

**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=13ft; B=61ft; L=51ft; eave=1ft; Cat. II; Exp B; Enclosed; MWFRS (directional); 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.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=10.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 10.4 psf on overhangs non-concurrent with other live loads.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be User Defined crushing capacity of 425 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 12, 17, 18, 19, 15, 14, 13.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job P20-07029	Truss T03	Truss Type Piggyback Base	Qty 1	Ply 1	Lot 2
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Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:09:56 2020 Page 1  
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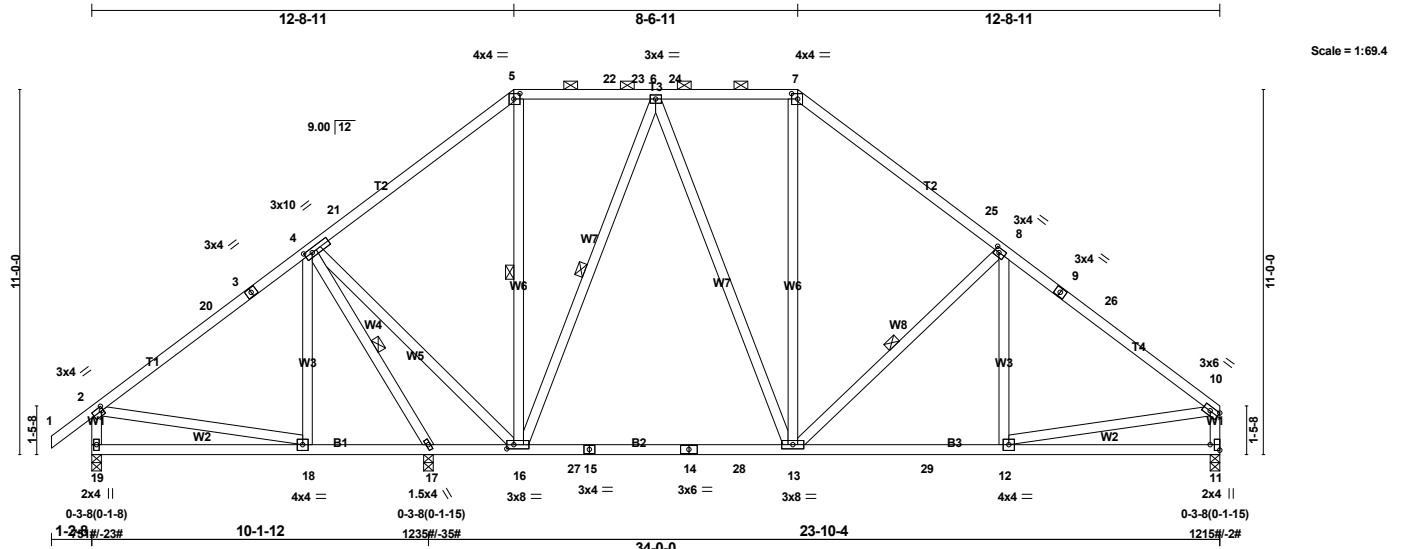


Plate Offsets (X,Y)-- [2:0-0-12,0-1-8], [4:0-2-14,0-1-8], [5:0-2-4,0-2-0], [7:0-2-4,0-2-0], [8:0-1-12,0-1-8], [10:Edge,0-1-8], [11:Edge,0-3-8], [16:0-2-8,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.50	Vert(LL)	-0.17 13-16	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.52	Vert(CT)	-0.28 13-16	>999	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.41	Horz(CT)	0.02 11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S					Weight: 251 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 WEBS 2x4 SP No.3

**BRACING-**  
 TOP CHORD Sheathed or 5-0-5 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-7.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 16-17.  
 WEBS 1 Row at midpt 4-17, 5-16, 6-16, 8-13

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

**REACTIONS.** (size) 19=0-3-8 (min. 0-1-8), 17=0-3-8 (min. 0-1-15), 11=0-3-8 (min. 0-1-15)  
 Max Horz 19=218(LC 11)  
 Max Uplift 19=-23(LC 12), 17=-35(LC 12), 11=-2(LC 12)  
 Max Grav 19=751(LC 24), 17=1235(LC 43), 11=1215(LC 25)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-683/30, 4-5=-702/104, 5-6=-466/117, 6-7=-791/125, 7-8=-1068/114, 8-10=-1373/46, 2-19=-644/58, 10-11=-1110/37  
 BOT CHORD 18-19=-168/308, 17-18=-15/592, 16-17=-343/78, 13-16=0/685, 12-13=0/1022  
 WEBS 4-17=-1415/41, 4-16=0/989, 6-16=-566/35, 6-13=0/416, 7-13=0/319, 8-13=-494/102, 2-18=0/417, 10-12=0/916

**JOINT STRESS INDEX**

2 = -nan(ind), 3 = -nan(ind), 4 = -nan(ind), 5 = -nan(ind), 6 = -nan(ind), 7 = -nan(ind), 8 = -nan(ind), 9 = -nan(ind), 10 = -nan(ind), 11 = -nan(ind), 12 = -nan(ind), 13 = -nan(ind), 14 = -nan(ind), 15 = -nan(ind), 16 = -nan(ind), 17 = -nan(ind), 18 = -nan(ind) and 19 = -nan(ind)

**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=17ft; B=61ft; L=51ft; eave=10ft; Cat. II; Exp B; Enclosed; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 10.4 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Lot 2
P20-07029	T03	Piggyback Base	1	1	Job Reference (optional)

Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:09:56 2020 Page 2  
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**NOTES-**

- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) All bearings are assumed to be User Defined crushing capacity of 425 psi.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 17, 11.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

Job P20-07029	Truss T04	Truss Type Monopitch Girder	Qty 1	Ply 2	LOT 2 Job Reference (optional)
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Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:09:57 2020 Page 1  
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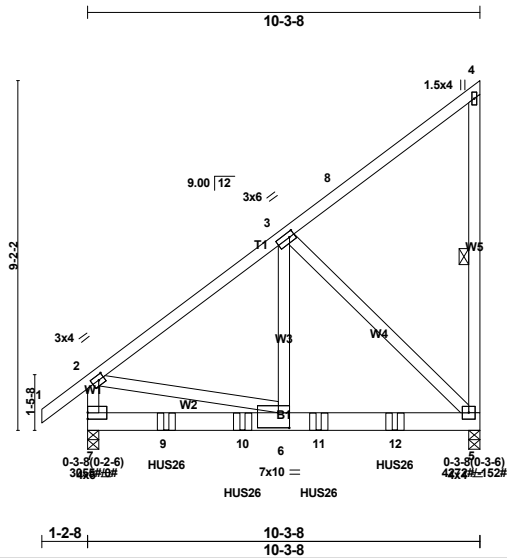


Plate Offsets (X,Y)-- [2:0-1-12,0-1-8], [3:0-1-12,0-1-8], [6:0-3-8,0-4-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.76	Vert(LL)	-0.04 5-6	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.84	Vert(CT)	-0.08 5-6	>999	180		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.73	Horz(CT)	0.01 5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S						
							Weight: 166 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Sheathed or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 4-5

**REACTIONS.** (size) 5=0-3-8 (min. 0-3-6), 7=0-3-8 (min. 0-2-6)  
 Max Horz 7=217(LC 12)  
 Max Uplift 5=-152(LC 12)  
 Max Grav 5=4272(LC 5), 7=3055(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2753/0, 2-7=-2212/4  
 BOT CHORD 6-7=-212/437, 5-6=-97/2156  
 WEBS 3-6=-22/3513, 3-5=-3000/134, 2-6=0/1844

**JOINT STRESS INDEX**  
 2 = -nan(ind), 3 = -nan(ind), 4 = -nan(ind), 5 = -nan(ind), 6 = -nan(ind) and 7 = -nan(ind)

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=14ft; B=61ft; L=51ft; eave=11ft; Cat. II; Exp B; Enclosed; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=10.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 10.4 psf on overhangs non-concurrent with other live loads.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - All bearings are assumed to be User Defined crushing capacity of 425 psi.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=152.

Job	Truss	Truss Type	Qty	Ply	Lot 2
P20-07029	T04	Monopitch Girder	1	2	Job Reference (optional)

Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:09:57 2020 Page 2  
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**NOTES-**

- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 8-0-12 to connect truss(es) T09 (1 ply 2x4 SP) to back face of bottom chord.
- 13) Fill all nail holes where hanger is in contact with lumber.
- 14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1332 lb down and 22 lb up at 10-1-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-2=-41, 2-4=-41, 5-7=-20

Concentrated Loads (lb)

Vert: 5=-1213 9=-1203(B) 10=-1203(B) 11=-1203(B) 12=-1203(B)

Job P20-07029	Truss T05	Truss Type Piggyback Base Structural Gable	Qty 1	Ply 1	Lot 2 Job Reference (optional)
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Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:10:00 2020 Page 1  
ID:tcvVaC6QQtNBDXb5xYEux9yt82w-PypXXTrRxYdb\_9IH68k2HSvZLXI?BR736dm93ysZWb

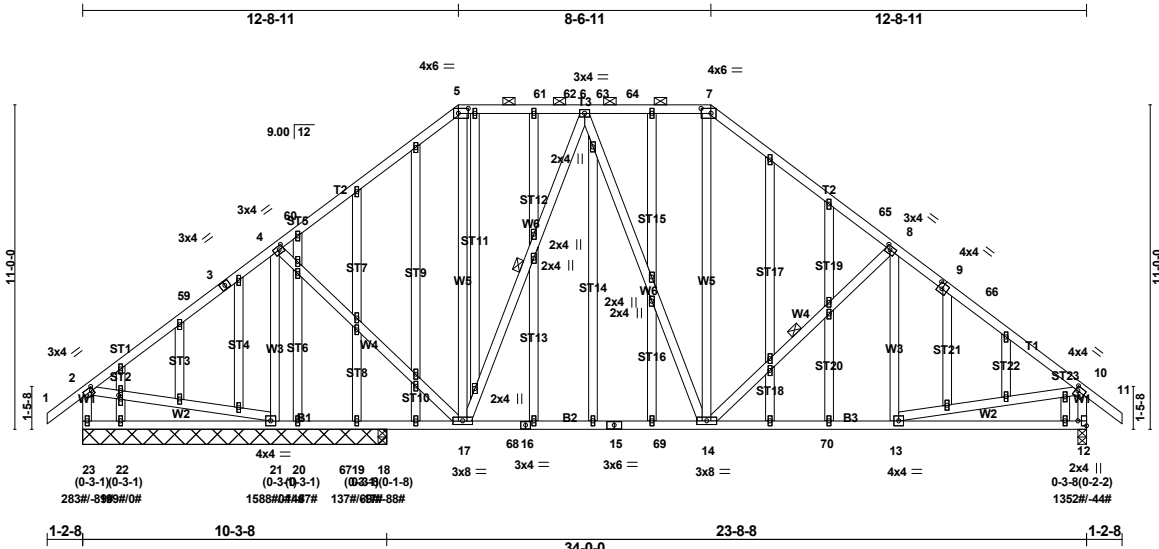


Plate Offsets (X,Y)-- [2:0-0-12,0-1-8], [4:0-1-12,0-1-8], [5:0-4-0,0-2-0], [7:0-4-0,0-2-0], [8:0-1-12,0-1-8], [9:0-1-12,0-2-4], [9:0-0-0,0-1-12], [10:0-1-0,0-1-12], [12:Edge,0-3-8], [45:0-1-9,0-0-12], [54:0-2-3,0-0-0]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.49	Vert(LL)	-0.17 14-17	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.53	Vert(CT)	-0.28 14-17	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.93	Horz(CT)	0.02 12	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 385 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
WEBS 2x4 SP No.3  
OTHERS 2x4 SP No.3

**BRACING-**  
TOP CHORD Sheathed or 5-0-8 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-7.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 6-17, 8-14

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

**REACTIONS.** All bearings 10-3-8 except (jt=length) 12=0-3-8, 18=0-3-8.  
(lb) - Max Horz 23=-226(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 23, 21, 12, 19, 20, 18  
Max Grav All reactions 250 lb or less at joint(s) 19, 22, 18 except 23=283(LC 50), 21=1588(LC 43), 12=1352(LC 25)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 4-5=-844/123, 5-6=-588/132, 6-7=-859/134, 7-8=-1149/125, 8-10=-1448/59, 2-23=-297/71, 10-12=-1246/79  
BOT CHORD 22-23=-205/277, 21-22=-205/277, 14-17=0/795, 13-14=0/1071  
WEBS 4-21=-1363/67, 4-17=0/796, 6-17=-510/26, 6-14=0/353, 7-14=0/365, 8-14=-476/99, 10-13=0/962

**JOINT STRESS INDEX**

2 = -nan(ind), 3 = -nan(ind), 4 = -nan(ind), 5 = -nan(ind), 6 = -nan(ind), 7 = -nan(ind), 8 = -nan(ind), 9 = -nan(ind), 9 = -nan(ind), 10 = -nan(ind), 12 = -nan(ind), 13 = -nan(ind), 14 = -nan(ind), 15 = -nan(ind), 16 = -nan(ind), 17 = -nan(ind), 19 = -nan(ind), 20 = -nan(ind), 21 = -nan(ind), 22 = -nan(ind), 23 = -nan(ind), 24 = -nan(ind), 25 = -nan(ind), 26 = -nan(ind), 26 = -nan(ind), 27 = -nan(ind), 28 = -nan(ind), 29 = -nan(ind), 29 = -nan(ind), 30 = -nan(ind), 31 = -nan(ind), 32 = -nan(ind), 33 = -nan(ind), 34 = -nan(ind), 34 = -nan(ind), 35 = -nan(ind), 36 = -nan(ind), 37 = -nan(ind), 37 = -nan(ind), 38 = -nan(ind), 39 = -nan(ind), 39 = -nan(ind), 40 = -nan(ind), 41 = -nan(ind), 42 = -nan(ind), 43 = -nan(ind), 44 = -nan(ind), 45 = -nan(ind), 45 = -nan(ind), 46 = -nan(ind), 47 = -nan(ind), 48 = -nan(ind), 49 = -nan(ind), 49 = -nan(ind), 50 = -nan(ind), 51 = -nan(ind), 52 = -nan(ind), 52 = -nan(ind), 53 = -nan(ind), 54 = -nan(ind), 55 = -nan(ind), 56 = -nan(ind), 57 = -nan(ind) and 58 = -nan(ind)

**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=17ft; B=61ft; L=51ft; eave=1ft; Cat. II; Exp B; Enclosed; MWFRS (directional); 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.

Job	Truss	Truss Type	Qty	Ply	Lot 2
P20-07029	T05	Piggyback Base Structural Gable	1	1	Job Reference (optional)

Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:10:00 2020 Page 2  
ID:tcvVaC6QQtNBDXb5xYEux9yt82w-PypXXTrRxYdb\_9IH68k2HSvZLIXI?BR736dm93ysZWb

**NOTES-**

- 4) TCLK: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 10.4 psf on overhangs non-concurrent with other live loads.
- 7) Provide adequate drainage to prevent water ponding.
- 8) All plates are 1.5x4 MT20 unless otherwise indicated.
- 9) Gable studs spaced at 2-0-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 12) All bearings are assumed to be User Defined crushing capacity of 425 psi.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 23, 21, 12, 19, 20, 18.
- 14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 15) 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 P20-07029	Truss T06	Truss Type Piggyback Base Structural Gable	Qty 1	Ply 1	Lot 2
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Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:10:03 2020 Page 1  
ID:tcvVaC6QQQtNBDXb5xYEuX9yt82w-pXVfAUtKDT0Ard1snGHlv4X4ZVcYcG0al4rQmOysZWY

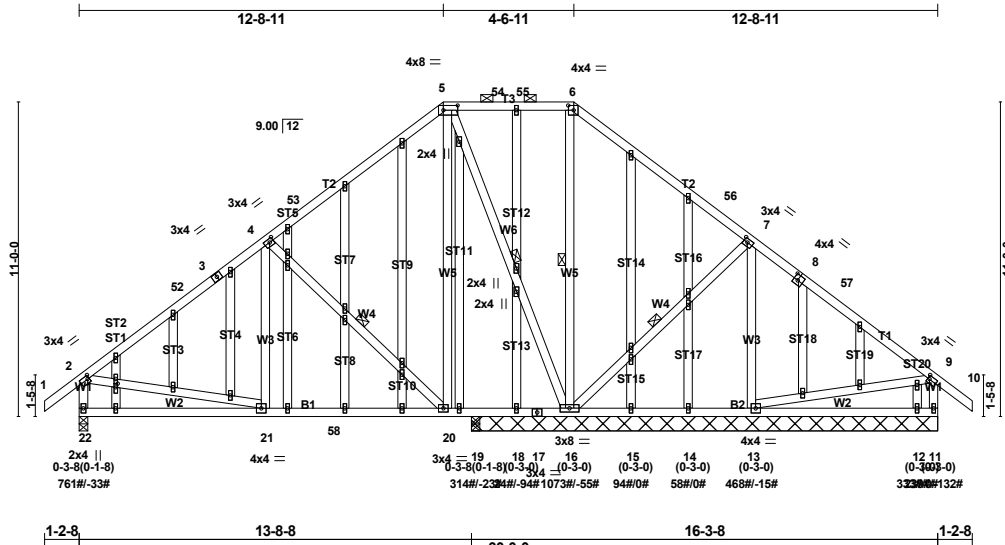


Plate Offsets (X,Y)-- [2:0-0-12,0-1-8], [4:0-1-12,0-1-8], [5:0-6-0,0-2-0], [6:0-2-4,0-2-0], [7:0-1-12,0-1-8], [8:0-1-12,0-2-4], [8:0-0-0,0-1-12], [9:0-0-12,0-1-8], [40:0-1-9,0-0-12], [48:0-2-3,0-0-0]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.49	Vert(LL)	-0.05 20-21	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.33	Vert(CT)	-0.09 20-21	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.43	Horz(CT)	0.01 11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 327 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
WEBS 2x4 SP No.3  
OTHERS 2x4 SP No.3

**BRACING-**  
TOP CHORD Sheathed or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 5-6.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 15-16,14-15,13-14.  
WEBS 1 Row at midpt 4-20, 5-16, 6-16, 7-16

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

**REACTIONS.** All bearings 16-3-8 except (jt=length) 22=0-3-8, 19=0-3-8.  
(lb) - Max Horz 22=-226(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 22, 16, 13, 18, 19 except 11=-132(LC 12)  
Max Grav All reactions 250 lb or less at joint(s) 11, 18, 15, 14 except 22=761(LC 24), 16=1073(LC 43), 13=468(LC 45), 12=333(LC 7), 19=314(LC 43)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-693/42, 4-5=-313/111, 2-22=-667/66, 9-11=-307/70  
BOT CHORD 21-22=-181/307, 20-21=-6/644  
WEBS 4-21=0/277, 4-20=-609/96, 5-20=0/422, 5-16=-656/0, 6-16=-344/7, 7-13=-297/55, 2-21=0/444

**JOINT STRESS INDEX**  
2 = -nan(ind), 3 = -nan(ind), 4 = -nan(ind), 5 = -nan(ind), 6 = -nan(ind), 7 = -nan(ind), 8 = -nan(ind), 8 = -nan(ind), 9 = -nan(ind), 11 = -nan(ind), 12 = -nan(ind), 13 = -nan(ind), 14 = -nan(ind), 15 = -nan(ind), 16 = -nan(ind), 17 = -nan(ind), 18 = -nan(ind), 20 = -nan(ind), 21 = -nan(ind), 22 = -nan(ind), 23 = -nan(ind), 24 = -nan(ind), 24 = -nan(ind), 25 = -nan(ind), 26 = -nan(ind), 27 = -nan(ind), 27 = -nan(ind), 28 = -nan(ind), 29 = -nan(ind), 30 = -nan(ind), 30 = -nan(ind), 31 = -nan(ind), 32 = -nan(ind), 33 = -nan(ind), 33 = -nan(ind), 34 = -nan(ind), 35 = -nan(ind), 36 = -nan(ind), 37 = -nan(ind), 38 = -nan(ind), 39 = -nan(ind), 40 = -nan(ind), 40 = -nan(ind), 41 = -nan(ind), 42 = -nan(ind), 43 = -nan(ind), 44 = -nan(ind), 44 = -nan(ind), 45 = -nan(ind), 46 = -nan(ind), 46 = -nan(ind), 47 = -nan(ind), 48 = -nan(ind), 49 = -nan(ind), 50 = -nan(ind) and 51 = -nan(ind)

**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=17ft; B=61ft; L=51ft; eave=1ft; Cat. II; Exp B; Enclosed; MWFRS (directional); 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.

Job	Truss	Truss Type	Qty	Ply	Lot 2
P20-07029	T06	Piggyback Base Structural Gable	1	1	Job Reference (optional)

Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:10:03 2020 Page 2  
ID:tcvVaC6QQtNBDXb5xYEux9yt82w-pXVfAUtKDT0Ard1snGHlv4X4ZVcYcG0al4rQmOysZWY

**NOTES-**

- 4) TCELL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 10.4 psf on overhangs non-concurrent with other live loads.
- 7) Provide adequate drainage to prevent water ponding.
- 8) All plates are 1.5x4 MT20 unless otherwise indicated.
- 9) Gable studs spaced at 2-0-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 12) All bearings are assumed to be User Defined crushing capacity of 425 psi.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 22, 16, 13, 18, 19 except (jt=lb) 11=132.
- 14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 15) 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 P20-07029	Truss T07	Truss Type Piggyback Base	Qty 4	Ply 1	Lot 2
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Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:10:05 2020 Page 1  
ID:tcvVaC6QQtNBDXb5xYEux9yt82w-lvdQaAual5Gu5wBEvhJD\_VcQ1JHlgYzsCOKXqHysZWW

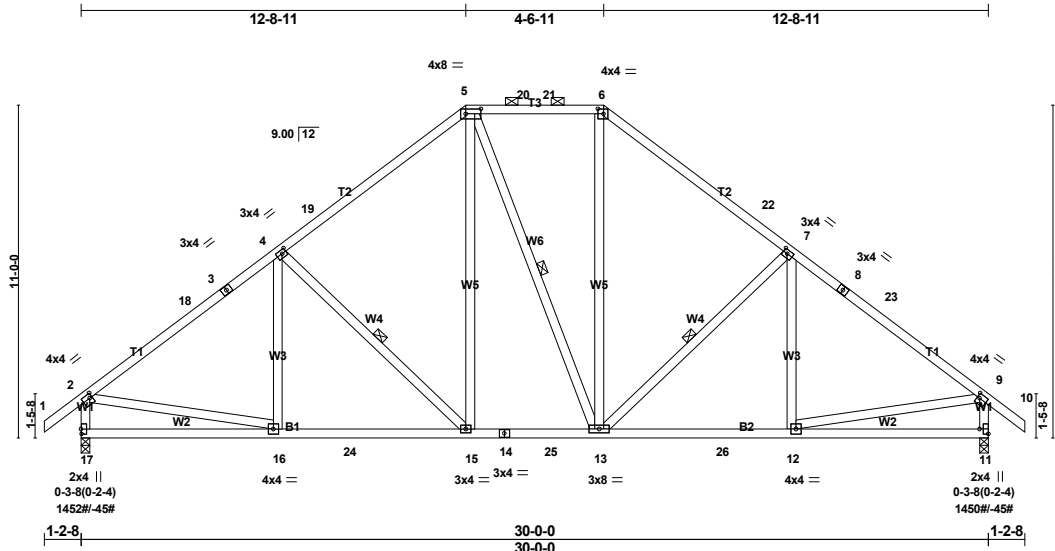


Plate Offsets (X,Y)-- [2:0-1-0,0-1-12], [4:0-1-12,0-1-8], [5:0-6-0,0-2-0], [6:0-2-4,0-2-0], [7:0-1-12,0-1-8], [9:0-1-0,0-1-12], [11:Edge,0-3-8], [17:0-2-0,0-0-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.49	Vert(LL)	-0.07 15-16	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.41	Vert(CT)	-0.13 15-16	>999	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.47	Horz(CT)	0.03 11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S					Weight: 215 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
WEBS 2x4 SP No.3

**BRACING-**  
TOP CHORD Sheathed or 4-9-6 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 4-15, 5-13, 7-13

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

**REACTIONS.** (size) 17=0-3-8 (min. 0-2-4), 11=0-3-8 (min. 0-2-4)  
Max Horz 17=-226(LC 10)  
Max Uplift 17=-45(LC 12), 11=-45(LC 12)  
Max Grav 17=1452(LC 43), 11=1450(LC 45)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-1638/58, 4-5=-1339/130, 5-6=-985/138, 6-7=-1337/130, 7-9=-1635/58,  
2-17=-1353/78, 9-11=-1350/78  
BOT CHORD 16-17=-173/324, 15-16=0/1399, 13-15=0/1059, 12-13=0/1252  
WEBS 4-15=-479/93, 5-15=-4/539, 6-13=-4/506, 7-13=-477/93, 2-16=0/1168,  
9-12=0/1167

**JOINT STRESS INDEX**

2 = -nan(ind), 3 = -nan(ind), 4 = -nan(ind), 5 = -nan(ind), 6 = -nan(ind), 7 = -nan(ind), 8 = -nan(ind), 9 = -nan(ind), 11 = -nan(ind), 12 = -nan(ind), 13 = -nan(ind), 14 = -nan(ind), 15 = -nan(ind), 16 = -nan(ind) and 17 = -nan(ind)

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=17ft; B=61ft; L=51ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 10.4 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) All bearings are assumed to be User Defined crushing capacity of 425 psi.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Lot 2
P20-07029	T07	Piggyback Base	4	1	Job Reference (optional)

Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:10:05 2020 Page 2  
ID:tcvVaC6QQtNBDXb5xYEux9yt82w-lvdQaAual5Gu5wBEvhJD\_VcQ1JHigYzsCOKXqHysZWW

**NOTES-**

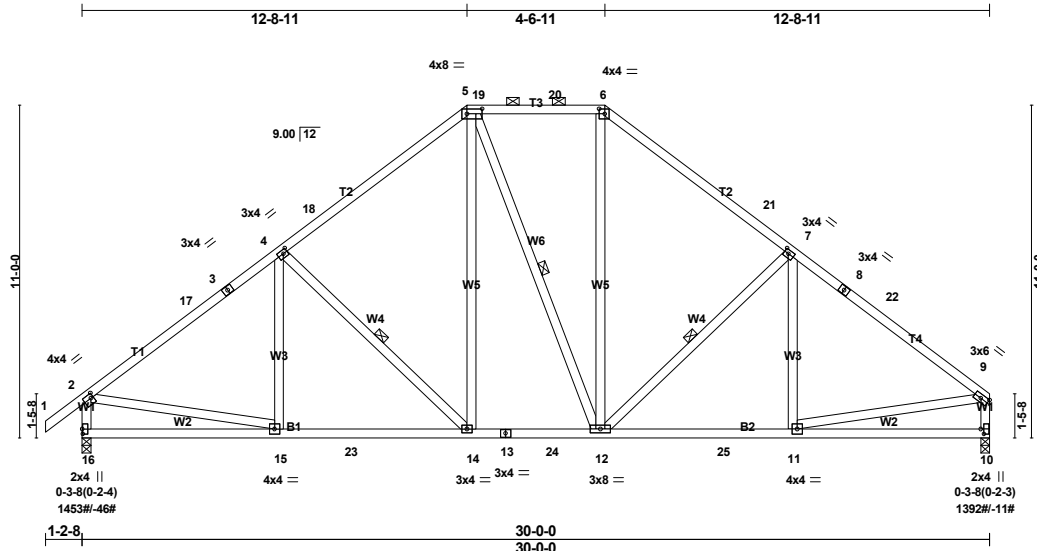
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 11.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

Job P20-07029	Truss T08	Truss Type Piggyback Base	Qty 1	Ply 1	LOT 2
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Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:10:06 2020 Page 1  
ID:tcvVaC6QQtNBDXb5xYEux9yt82w-D5BooWvCWOOI4mRTPrSXj9bdjd\_P?60R245MjysZWW



Scale = 1:76.2

Plate Offsets (X,Y)-- [2:0-1-0,0-1-12], [4:0-1-12,0-1-8], [5:0-6-0,0-2-0], [6:0-2-4,0-2-0], [7:0-1-12,0-1-8], [9:Edge,0-1-8], [10:0-2-0,0-1-4], [16:0-2-0,0-0-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.50	Vert(LL)	-0.07 14-15	>999	240	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.41	Vert(CT)	-0.13 14-15	>999	180		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.47	Horz(CT)	0.03 10	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S						
	Code IRC2018/TPI2014						Weight: 213 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 WEBS 2x4 SP No.3

**BRACING-**  
 TOP CHORD Sheathed or 4-7-15 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 4-14, 5-12, 7-12

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

**REACTIONS.** (size) 16=0-3-8 (min. 0-2-4), 10=0-3-8 (min. 0-2-3)  
 Max Horz 16=218(LC 11)  
 Max Uplift 16=-46(LC 12), 10=-11(LC 12)  
 Max Grav 16=1453(LC 43), 10=1392(LC 45)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-1640/59, 4-5=-1341/130, 5-6=-986/138, 6-7=-1340/131, 7-9=-1637/56,  
 2-16=-1354/79, 9-10=-1293/44  
 BOT CHORD 15-16=-165/314, 14-15=0/1390, 12-14=0/1050, 11-12=0/1248  
 WEBS 4-14=-478/94, 5-14=-4/539, 6-12=-6/510, 7-12=-485/95, 2-15=0/1169,  
 9-11=0/1178

**JOINT STRESS INDEX**

2 = -nan(ind), 3 = -nan(ind), 4 = -nan(ind), 5 = -nan(ind), 6 = -nan(ind), 7 = -nan(ind), 8 = -nan(ind), 9 = -nan(ind), 10 = -nan(ind), 11 = -nan(ind), 12 = -nan(ind), 13 = -nan(ind), 14 = -nan(ind), 15 = -nan(ind) and 16 = -nan(ind)

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=17ft; B=61ft; L=51ft; eave=10ft; Cat. II; Exp B; Enclosed; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 10.4 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) All bearings are assumed to be User Defined crushing capacity of 425 psi.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Lot 2
P20-07029	T08	Piggyback Base	1	1	Job Reference (optional)

Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:10:07 2020 Page 2  
ID:tcvVaC6QQtNBDXb5xYEux9yt82w-llIA?swqHiWcKELd06Mh3whmN6yD8SM9gipev9ysZWU

**NOTES-**

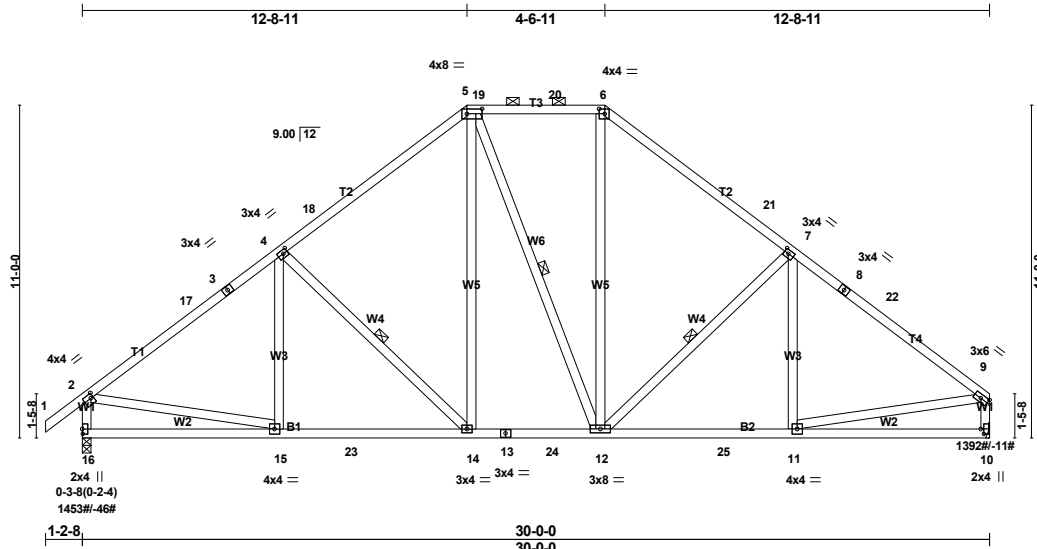
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

Job P20-07029	Truss T09	Truss Type Piggyback Base	Qty 4	Ply 1	Lot 2
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Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:10:08 2020 Page 1  
ID:tcvVaC6GQtNBDXb5xYEux9yt82w-AUIYDCxS20eTyOwpaqtwc8Ex7WlStvcJuMZBRbysZWT



Scale = 1:76.2

Plate Offsets (X,Y)-- [2:0-1-0,0-1-12], [4:0-1-12,0-1-8], [5:0-6-0,0-2-0], [6:0-2-4,0-2-0], [7:0-1-12,0-1-8], [9:Edge,0-1-8], [10:0-2-0,0-1-4], [16:0-2-0,0-0-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.50	Vert(LL)	-0.07 14-15	>999	240	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.41	Vert(CT)	-0.13 14-15	>999	180		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.47	Horz(CT)	0.03 10	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 213 lb	FT = 20%
	Code IRC2018/TPI2014							

**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 WEBS 2x4 SP No.3

**BRACING-**  
 TOP CHORD Sheathed or 4-7-15 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 4-14, 5-12, 7-12

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

**REACTIONS.** (size) 16=0-3-8 (min. 0-2-4), 10=Mechanical  
 Max Horz 16=218(LC 11)  
 Max Uplift 16=-46(LC 12), 10=-11(LC 12)  
 Max Grav 16=1453(LC 43), 10=1392(LC 45)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-1640/59, 4-5=-1341/130, 5-6=-986/138, 6-7=-1340/131, 7-9=-1637/56,  
 2-16=-1354/79, 9-10=-1293/44  
 BOT CHORD 15-16=-165/314, 14-15=0/1390, 12-14=0/1050, 11-12=0/1248  
 WEBS 4-14=-478/94, 5-14=-4/539, 6-12=-6/510, 7-12=-485/95, 2-15=0/1169,  
 9-11=0/1178

**JOINT STRESS INDEX**

2 = -nan(ind), 3 = -nan(ind), 4 = -nan(ind), 5 = -nan(ind), 6 = -nan(ind), 7 = -nan(ind), 8 = -nan(ind), 9 = -nan(ind), 10 = -nan(ind), 11 = -nan(ind), 12 = -nan(ind), 13 = -nan(ind), 14 = -nan(ind), 15 = -nan(ind) and 16 = -nan(ind)

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=17ft; B=61ft; L=51ft; eave=7ft; Cat. II; Exp B; Enclosed; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 10.4 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) All bearings are assumed to be User Defined crushing capacity of 425 psi.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Lot 2
P20-07029	T09	Piggyback Base	4	1	Job Reference (optional)

Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:10:08 2020 Page 2  
ID:tcvVaC6QQtNBDXb5xYEux9yt82w-AUIYDCxS20eTyOwpaqtwc8Ex7WISlvcJuMZBRbysZWT

**NOTES-**

- 10) Refer to girder(s) for truss to truss connections.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

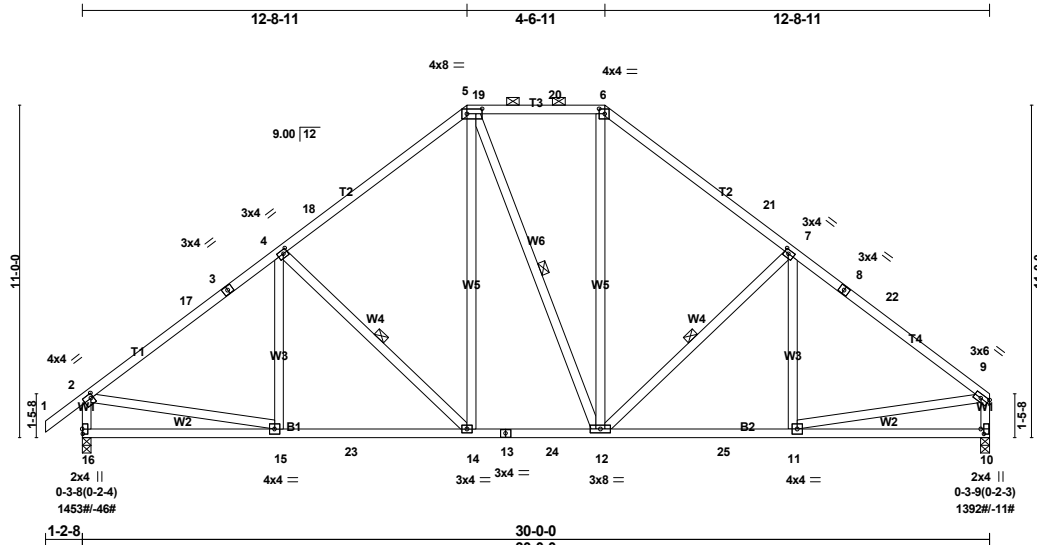
**LOAD CASE(S)** Standard



Job P20-07029	Truss T10	Truss Type Piggyback Base	Qty 1	Ply 1	LOT 2
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Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:10:10 2020 Page 1  
ID:tcvVaC6QQtNBDXb5xYEux9yt82w-6tQJetyjaduABh3CiFvOhZJHck\_wLp6bMg2IVUysZWR



Scale = 1:76.2

Plate Offsets (X,Y)-- [2:0-1-0,0-1-12], [4:0-1-12,0-1-8], [5:0-6-0,0-2-0], [6:0-2-4,0-2-0], [7:0-1-12,0-1-8], [9:Edge,0-1-8], [10:0-2-0,0-1-4], [16:0-2-0,0-0-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.50	Vert(LL)	-0.07 14-15	>999	240	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.41	Vert(CT)	-0.13 14-15	>999	180		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.47	Horz(CT)	0.03 10	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S						
	Code IRC2018/TPI2014						Weight: 213 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 WEBS 2x4 SP No.3

**BRACING-**  
 TOP CHORD Sheathed or 4-7-15 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 4-14, 5-12, 7-12

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

**REACTIONS.** (size) 16=0-3-8 (min. 0-2-4), 10=0-3-9 (min. 0-2-3)  
 Max Horz 16=218(LC 11)  
 Max Uplift 16=-46(LC 12), 10=-11(LC 12)  
 Max Grav 16=1453(LC 43), 10=1392(LC 45)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-1640/59, 4-5=-1341/130, 5-6=-986/138, 6-7=-1340/131, 7-9=-1637/56,  
 2-16=-1354/79, 9-10=-1293/44  
 BOT CHORD 15-16=-165/314, 14-15=0/1390, 12-14=0/1050, 11-12=0/1248  
 WEBS 4-14=-478/94, 5-14=-4/539, 6-12=-6/510, 7-12=-485/95, 2-15=0/1169,  
 9-11=0/1178

**JOINT STRESS INDEX**

2 = -nan(ind), 3 = -nan(ind), 4 = -nan(ind), 5 = -nan(ind), 6 = -nan(ind), 7 = -nan(ind), 8 = -nan(ind), 9 = -nan(ind), 10 = -nan(ind), 11 = -nan(ind), 12 = -nan(ind), 13 = -nan(ind), 14 = -nan(ind), 15 = -nan(ind) and 16 = -nan(ind)

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=17ft; B=61ft; L=51ft; eave=3ft; Cat. II; Exp B; Enclosed; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 10.4 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) All bearings are assumed to be User Defined crushing capacity of 425 psi.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Lot 2
P20-07029	T10	Piggyback Base	1	1	Job Reference (optional)

Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:10:10 2020 Page 2  
ID:tcvVaC6QQtNBDXb5xYEux9yt82w-6tQJetyjaduABh3CiFvOhZJHcK\_wLp6bMg2IVUysZWR

**NOTES-**

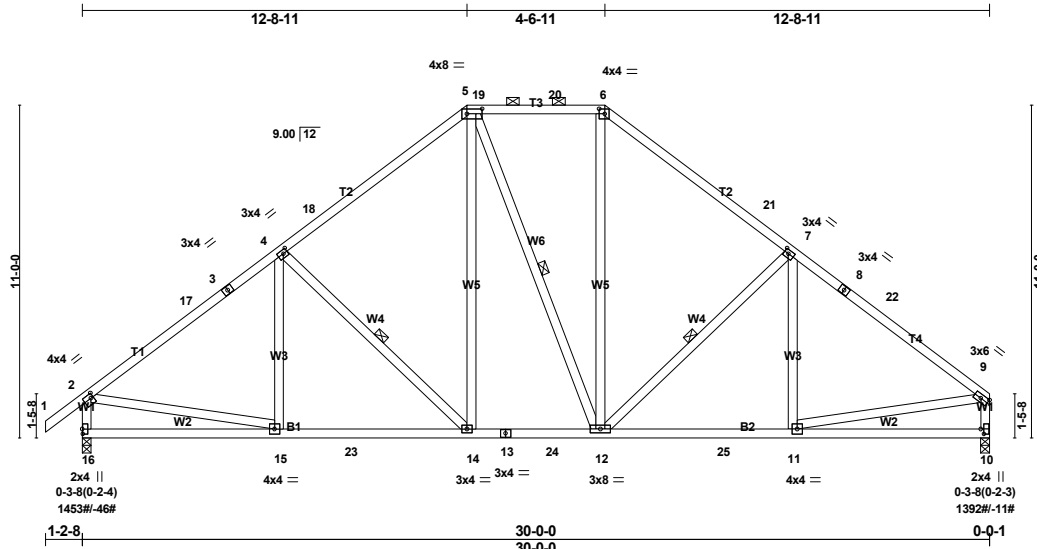
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

Job P20-07029	Truss T11	Truss Type Piggyback Base	Qty 3	Ply 1	Lot 2
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Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:10:12 2020 Page 1  
ID:tcvVaC6QQtNBDXb5xYEuX9yt82w-2FY3Z2\_z6E8uQ?Ddpfxsm\_Pc67gOpjbup\_XPaNysZWP



Scale = 1:76.2

Plate Offsets (X,Y)-- [2:0-1-0,0-1-12], [4:0-1-12,0-1-8], [5:0-6-0,0-2-0], [6:0-2-4,0-2-0], [7:0-1-12,0-1-8], [9:Edge,0-1-8], [10:0-2-0,0-1-4], [16:0-2-0,0-0-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.50	Vert(LL)	-0.07 14-15	>999	240	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.41	Vert(CT)	-0.13 14-15	>999	180		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.47	Horz(CT)	0.03 10	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 213 lb	FT = 20%
	Code IRC2018/TPI2014							

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
WEBS 2x4 SP No.3

**BRACING-**  
TOP CHORD Sheathed or 4-7-15 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 4-14, 5-12, 7-12

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

**REACTIONS.** (size) 16=0-3-8 (min. 0-2-4), 10=0-3-8 (min. 0-2-3)  
Max Horz 16=218(LC 11)  
Max Uplift 16=-46(LC 12), 10=-11(LC 12)  
Max Grav 16=1453(LC 43), 10=1392(LC 45)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-1640/59, 4-5=-1341/130, 5-6=-986/138, 6-7=-1340/131, 7-9=-1637/56,  
2-16=-1354/79, 9-10=-1293/44  
BOT CHORD 15-16=-165/314, 14-15=0/1390, 12-14=0/1050, 11-12=0/1248  
WEBS 4-14=-478/94, 5-14=-4/539, 6-12=-6/510, 7-12=-485/95, 2-15=0/1169,  
9-11=0/1178

**JOINT STRESS INDEX**

2 = -nan(ind), 3 = -nan(ind), 4 = -nan(ind), 5 = -nan(ind), 6 = -nan(ind), 7 = -nan(ind), 8 = -nan(ind), 9 = -nan(ind), 10 = -nan(ind), 11 = -nan(ind), 12 = -nan(ind), 13 = -nan(ind), 14 = -nan(ind), 15 = -nan(ind) and 16 = -nan(ind)

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=17ft; B=61ft; L=51ft; eave=1ft; Cat. II; Exp B; Enclosed; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 10.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be User Defined crushing capacity of 425 psi.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Lot 2
P20-07029	T11	Piggyback Base	3	1	Job Reference (optional)

Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:10:12 2020 Page 2  
ID:tcvVaC6QQtNBDXb5xYEux9yt82w-2FY32Z\_z6E8uQ?Dbpfxsm\_Pc67gOpjbup\_XPaNysZWP

**NOTES-**

- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

Job P20-07029	Truss T12	Truss Type Piggyback Base	Qty 1	Ply 1	Lot 2
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Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:10:13 2020 Page 1  
ID:tcvVaC6QQtNBdXb5xYEux9yt82w-WS6RGv?btYGI29onNNT5JBxnqX?cYAp22eGy6pysZWO

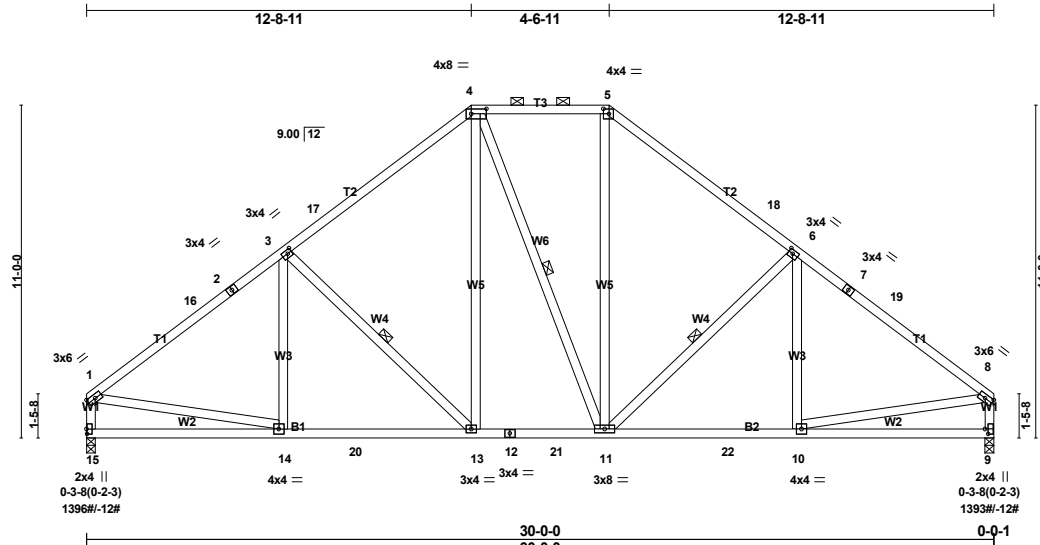


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [3:0-1-12,0-1-8], [4:0-6-0,0-2-0], [5:0-2-4,0-2-0], [6:0-1-12,0-1-8], [8:Edge,0-1-8], [9:0-2-0,0-1-4], [15:0-2-0,0-0-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.51	Vert(LL)	-0.07 13-14	>999	240	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.41	Vert(CT)	-0.13 13-14	>999	180		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.48	Horz(CT)	0.03 9	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 210 lb	FT = 20%
	Code IRC2018/TPI2014							

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Sheathed or 4-7-13 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.); 4-5.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 3-13, 4-11, 6-11

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

**REACTIONS.** (size) 15=0-3-8 (min. 0-2-3), 9=0-3-8 (min. 0-2-3)  
 Max Horz 15=205(LC 11)  
 Max Uplift 15=-12(LC 12), 9=-12(LC 12)  
 Max Grav 15=1396(LC 42), 9=1393(LC 44)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-3=-1641/57, 3-4=-1344/132, 4-5=-987/139, 5-6=-1342/132, 6-8=-1638/57,  
 1-15=-1296/45, 8-9=-1294/45  
 BOT CHORD 14-15=-162/288, 13-14=0/1398, 11-13=0/1052, 10-11=0/1249  
 WEBS 3-13=-486/96, 4-13=-6/544, 5-11=-6/510, 6-11=-485/96, 1-14=0/1180,  
 8-10=0/1179

**JOINT STRESS INDEX**  
 1 = -nan(ind), 2 = -nan(ind), 3 = -nan(ind), 4 = -nan(ind), 5 = -nan(ind), 6 = -nan(ind), 7 = -nan(ind), 8 = -nan(ind), 9 = -nan(ind), 10 = -nan(ind), 11 = -nan(ind), 12 = -nan(ind), 13 = -nan(ind), 14 = -nan(ind) and 15 = -nan(ind)

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=17ft; B=61ft; L=51ft; eave=3ft; Cat. II; Exp B; Enclosed; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
  - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
  - 4) Unbalanced snow loads have been considered for this design.
  - 5) Provide adequate drainage to prevent water ponding.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 8) All bearings are assumed to be User Defined crushing capacity of 425 psi.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 9.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Lot 2
P20-07029	T12	Piggyback Base	1	1	Job Reference (optional)

Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:10:14 2020 Page 2  
ID:tcvVaC6QQtNBDXb5xYEux9yt82w-\_egpTF?DesOcgJNzx4\_KsPUyaxLrHd3BH10WfFysZWN

**NOTES-**

- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

Job P20-07029	Truss T13	Truss Type Piggyback Base	Qty 7	Ply 1	Lot 2
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Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:10:15 2020 Page 1  
ID:tcvVaC6QQtNBDXb5xYEux9yt82w-TqDChb0rO9WHTHTy9UoVZoc17KLh404JLVy3BhysZWM

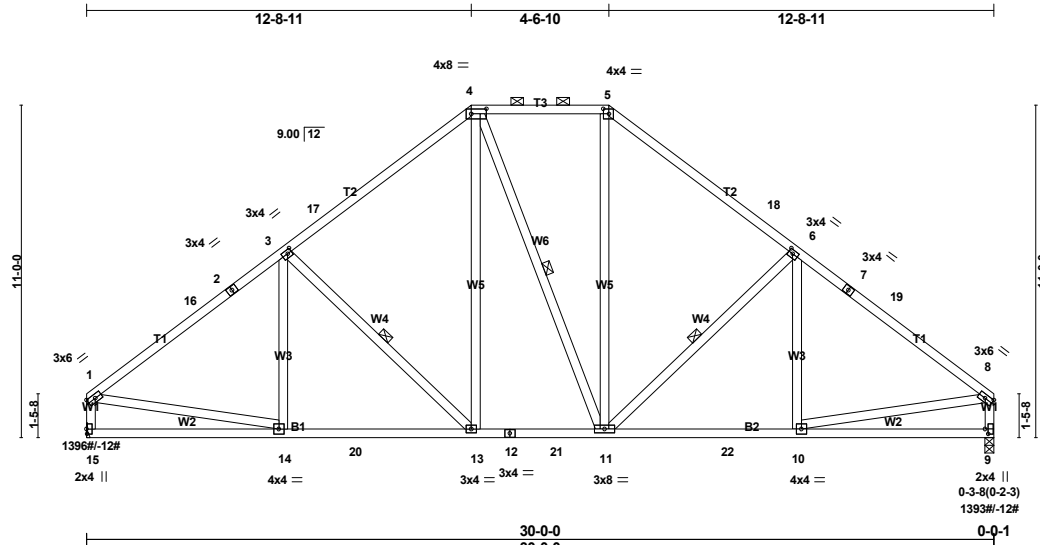


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [3:0-1-12,0-1-8], [4:0-6-0,0-2-0], [5:0-2-4,0-2-0], [6:0-1-12,0-1-8], [8:Edge,0-1-8], [9:0-2-0,0-1-4], [15:0-2-0,0-0-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.51	Vert(LL)	-0.07 13-14	>999	240	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.41	Vert(CT)	-0.13 13-14	>999	180		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.48	Horz(CT)	0.03 9	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 210 lb	FT = 20%
	Code IRC2018/TPI2014							

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Sheathed or 4-7-13 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 3-13, 4-11, 6-11

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

**REACTIONS.** (size) 15=Mechanical, 9=0-3-8 (min. 0-2-3)  
 Max Horz 15=205(LC 11)  
 Max Uplift 15=-12(LC 12), 9=-12(LC 12)  
 Max Grav 15=1396(LC 42), 9=1393(LC 44)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-3=-1641/57, 3-4=-1344/132, 4-5=-987/139, 5-6=-1342/132, 6-8=-1639/57,  
 1-15=-1296/45, 8-9=-1294/45  
 BOT CHORD 14-15=-162/288, 13-14=0/1398, 11-13=0/1052, 10-11=0/1249  
 WEBS 3-13=-486/96, 4-13=-6/544, 5-11=-6/510, 6-11=-485/96, 1-14=0/1180,  
 8-10=0/1179

**JOINT STRESS INDEX**  
 1 = -nan(ind), 2 = -nan(ind), 3 = -nan(ind), 4 = -nan(ind), 5 = -nan(ind), 6 = -nan(ind), 7 = -nan(ind), 8 = -nan(ind), 9 = -nan(ind), 10 = -nan(ind), 11 = -nan(ind), 12 = -nan(ind), 13 = -nan(ind), 14 = -nan(ind) and 15 = -nan(ind)

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=17ft; B=61ft; L=51ft; eave=3ft; Cat. II; Exp B; Enclosed; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
  - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
  - 4) Unbalanced snow loads have been considered for this design.
  - 5) Provide adequate drainage to prevent water ponding.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 8) All bearings are assumed to be User Defined crushing capacity of 425 psi.
  - 9) Refer to girder(s) for truss to truss connections.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Lot 2
P20-07029	T13	Piggyback Base	7	1	Job Reference (optional)

Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:10:15 2020 Page 2  
ID:tcvVaC6QQtNBDXb5xYEux9yt82w-TqDChb0rO9WHTHTy9UoVZOc17KLh404JLVyI3BhysZWM

**NOTES-**

- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 9.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard



Job P20-07029	Truss T14	Truss Type Piggyback Base Supported Gable	Qty 1	Ply 1	LOT 2
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Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:10:18 2020 Page 1  
ID:tcvVaC6QQtNBDXb5xYEux9yt82w-tPvKJd3kh4v28wgkAw2G0FeisYomDVHnCw\_jo0ysZWJ

Job Reference (optional)

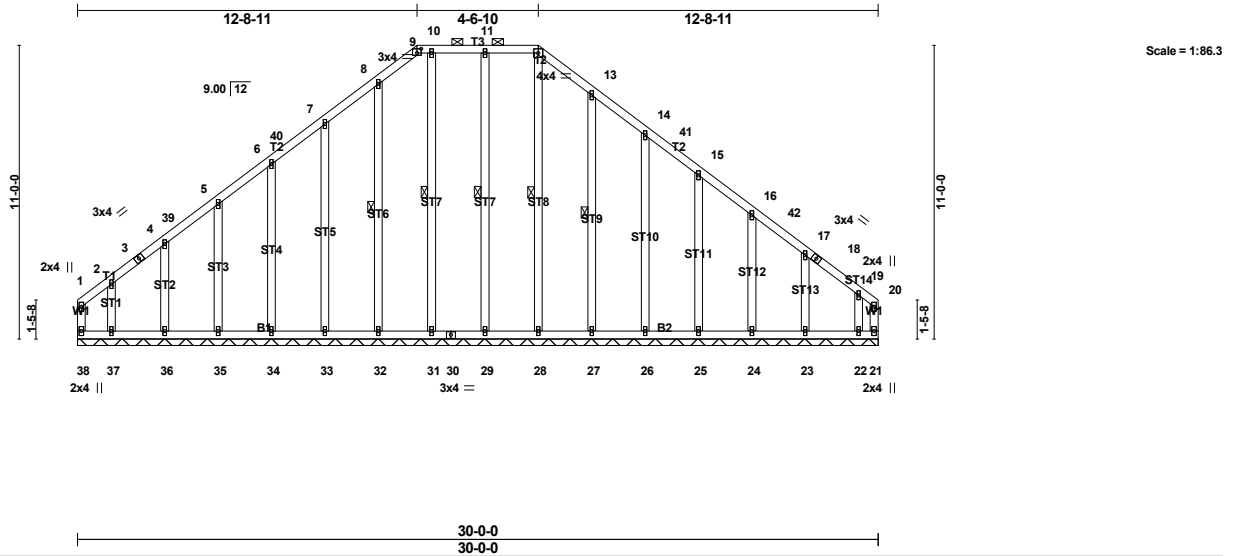


Plate Offsets (X,Y)-- [9:0-2-0,0-2-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.23	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.21	Horz(CT)	-0.00	21	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						
								Weight: 245 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 WEBS 2x4 SP No.3  
 OTHERS 2x4 SP No.3

**BRACING-**  
 TOP CHORD Sheathed or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 9-12.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 12-28, 11-29, 10-31, 8-32, 13-27

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

**REACTIONS.** All bearings 30-0-0.  
 (lb) - Max Horz 38=-205(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 29, 33, 34, 35, 36, 27, 26, 25, 24, 23 except 38=-187(LC 10), 21=-322(LC 11), 37=-108(LC 9), 22=-197(LC 10)  
 Max Grav All reactions 250 lb or less at joint(s) 38, 28, 29, 31, 32, 33, 34, 35, 36, 27, 26, 25, 24, 23 except 21=311(LC 10), 37=251(LC 23), 22=342(LC 11)

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

**JOINT STRESS INDEX**

1 = -nan(ind), 2 = -nan(ind), 3 = -nan(ind), 4 = -nan(ind), 5 = -nan(ind), 6 = -nan(ind), 7 = -nan(ind), 8 = -nan(ind), 9 = -nan(ind), 10 = -nan(ind), 11 = -nan(ind), 12 = -nan(ind), 13 = -nan(ind), 14 = -nan(ind), 15 = -nan(ind), 16 = -nan(ind), 17 = -nan(ind), 18 = -nan(ind), 19 = -nan(ind), 20 = -nan(ind), 21 = -nan(ind), 22 = -nan(ind), 23 = -nan(ind), 24 = -nan(ind), 25 = -nan(ind), 26 = -nan(ind), 27 = -nan(ind), 28 = -nan(ind), 29 = -nan(ind), 30 = -nan(ind), 31 = -nan(ind), 32 = -nan(ind), 33 = -nan(ind), 34 = -nan(ind), 35 = -nan(ind), 36 = -nan(ind), 37 = -nan(ind) and 38 = -nan(ind)

**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=17ft; B=61ft; L=51ft; eave=1ft; Cat. II; Exp B; Enclosed; MWFRS (directional); 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.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Lot 2
P20-07029	T14	Piggyback Base Supported Gable	1	1	Job Reference (optional)

Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:10:19 2020 Page 2  
ID:tcvVaC6QQtNBDXb5xYEux9yt82w-LcTiWY3MSO1vm4FxeZVZSBtcy7?yyXwQajHKTysZWI

**NOTES-**

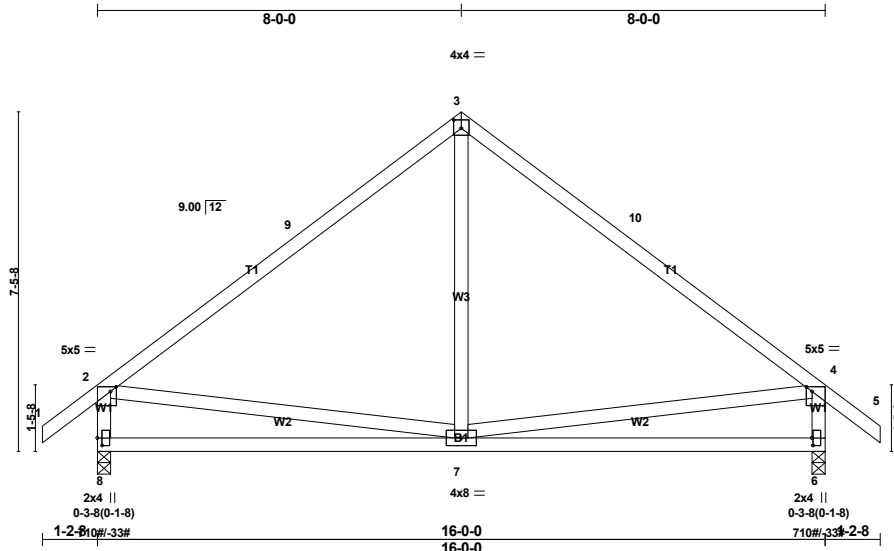
- 12) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 13) All bearings are assumed to be User Defined crushing capacity of 425 psi.
- 14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 29, 33, 34, 35, 36, 27, 26, 25, 24, 23 except (jt=lb) 38=187, 21=322, 37=108, 22=197.
- 15) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 16) 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 P20-07029	Truss T15	Truss Type Common	Qty 1	Ply 1	Lot 2
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Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:10:19 2020 Page 1  
ID:tcvVaC6QQtNBDXb5xYEux9yt82w-LcTiWY3MSO1vm4FxeZVZSBnhy27y\_vwQajHKTysZWI



Scale = 1:50.6

Plate Offsets (X,Y)-- [2:0-1-8,0-1-4], [3:0-2-0,0-2-4], [4:0-1-8,0-1-4], [6:0-2-0,0-0-4], [8:0-2-0,0-1-4]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.61	Vert(LL)	-0.07	6-7	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.40	Vert(CT)	-0.14	6-7	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.12	Horz(CT)	0.01	6	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 95 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
WEBS 2x4 SP No.3 \*Except\*  
W1: 2x4 SP No.2

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

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

**REACTIONS.** (size) 8=0-3-8 (min. 0-1-8), 6=0-3-8 (min. 0-1-8)  
Max Horz 8=-148(LC 10)  
Max Uplift 8=-33(LC 12), 6=-33(LC 12)  
Max Grav 8=710(LC 2), 6=710(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-627/48, 3-4=-627/48, 2-8=-640/73, 4-6=-640/73  
BOT CHORD 7-8=-113/393, 6-7=-53/284  
WEBS 3-7=0/308

**JOINT STRESS INDEX**  
2 = -nan(ind), 3 = -nan(ind), 4 = -nan(ind), 6 = -nan(ind), 7 = -nan(ind) and 8 = -nan(ind)

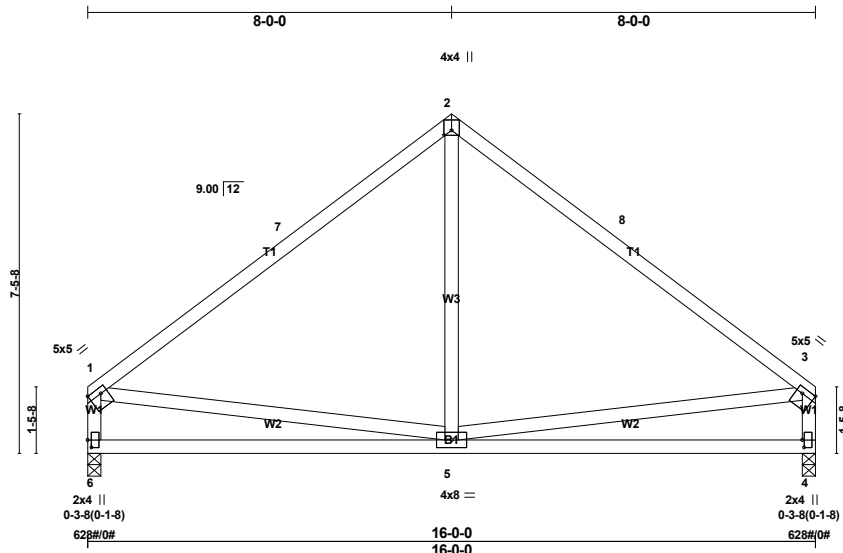
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=13ft; B=61ft; L=51ft; eave=3ft; Cat. II; Exp B; Enclosed; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
  - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=10.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
  - 4) Unbalanced snow loads have been considered for this design.
  - 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 10.4 psf on overhangs non-concurrent with other live loads.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 8) All bearings are assumed to be User Defined crushing capacity of 425 psi.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.
  - 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job P20-07029	Truss T16	Truss Type Common	Qty 1	Ply 1	Lot 2 Job Reference (optional)
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Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:10:20 2020 Page 1  
ID:tcvVaC6QQtNBDXb5xYEux9yt82w-po15k14\_Di9mOEQ7HL5k5gkwcMOOhRC4fETqsvysZWH



Scale = 1:50.6

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [2:0-1-4,0-2-0], [3:Edge,0-1-8], [4:0-2-0,0-0-8], [6:0-2-0,0-1-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0 Plate Grip DOL 1.15	TC 0.73	Vert(LL)	-0.07	4-5	>999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.40	Vert(CT)	-0.14	4-5	>999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.11	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S					Weight: 90 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 WEBS 2x4 SP No.3

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

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

**REACTIONS.** (size) 6=0-3-8 (min. 0-1-8), 4=0-3-8 (min. 0-1-8)  
 Max Horz 6=-126(LC 10)  
 Max Grav 6=628(LC 2), 4=628(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-630/44, 2-3=-630/44, 1-6=-559/40, 3-4=-559/40  
 BOT CHORD 5-6=-95/300  
 WEBS 2-5=0/300, 1-5=-1/269, 3-5=-3/271

**JOINT STRESS INDEX**  
 1 = -nan(ind), 2 = -nan(ind), 3 = -nan(ind), 4 = -nan(ind), 5 = -nan(ind) and 6 = -nan(ind)

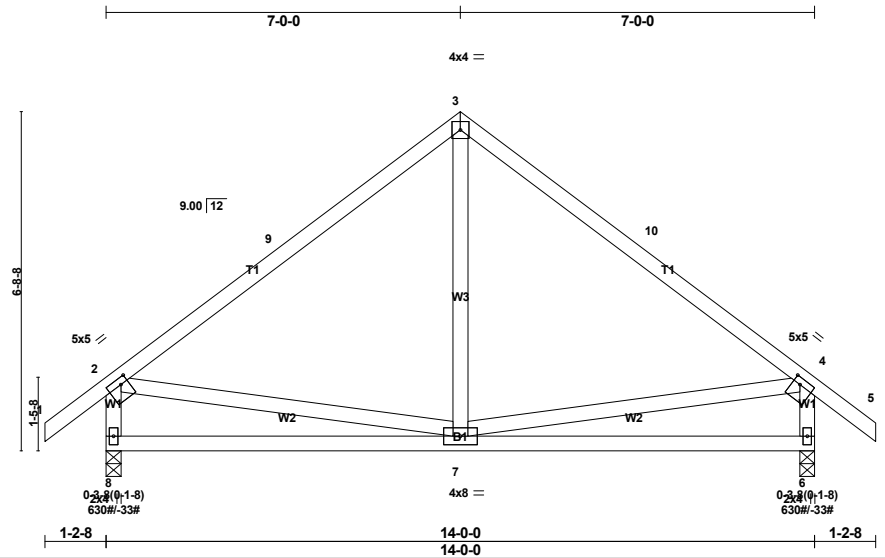
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=14ft; B=61ft; L=51ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=10.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - All bearings are assumed to be User Defined crushing capacity of 425 psi.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job P20-07029	Truss T17	Truss Type Common	Qty 2	Ply 1	Lot 2	Job Reference (optional)
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Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:10:21 2020 Page 1  
ID:tcvVaC6QQtNBDXb5xYEux9yt82w-H\_bTxe5c\_?Hc?OPJr2czetG5Ulm7QuiDuuCNOLysZWG



Scale = 1:45.5

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 20.0	Plate Grip DOL	1.15	TC 0.72	Vert(LL)	-0.04	6-7	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.30	Vert(CT)	-0.08	6-7	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.10	Horz(CT)	0.00	6	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 84 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 WEBS 2x4 SP No.3

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

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

**REACTIONS.** (size) 8=0-3-8 (min. 0-1-8), 6=0-3-8 (min. 0-1-8)  
 Max Horz 8=-133(LC 10)  
 Max Uplift 8=-33(LC 12), 6=-33(LC 12)  
 Max Grav 8=630(LC 2), 6=630(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-534/43, 3-4=-534/43, 2-8=-568/68, 4-6=-568/68  
 BOT CHORD 7-8=-91/299  
 WEBS 3-7=0/258

**JOINT STRESS INDEX**  
 2 = -nan(ind), 3 = -nan(ind), 4 = -nan(ind), 6 = -nan(ind), 7 = -nan(ind) and 8 = -nan(ind)

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=13ft; B=61ft; L=51ft; eave=0ft; Cat. II; Exp B; Enclosed; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
  - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=10.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
  - 4) Unbalanced snow loads have been considered for this design.
  - 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 10.4 psf on overhangs non-concurrent with other live loads.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 8) All bearings are assumed to be User Defined crushing capacity of 425 psi.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.
  - 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job P20-07029	Truss V01	Truss Type Roof Special	Qty 1	Ply 1	LOT 2
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Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:10:22 2020 Page 1  
ID:tcvVaC6QQtNBDXb5xYEux9yt82w-IA9r9\_6EIJPTdY\_WPm7CA5pO498q9HKM6YyxxnysZWF

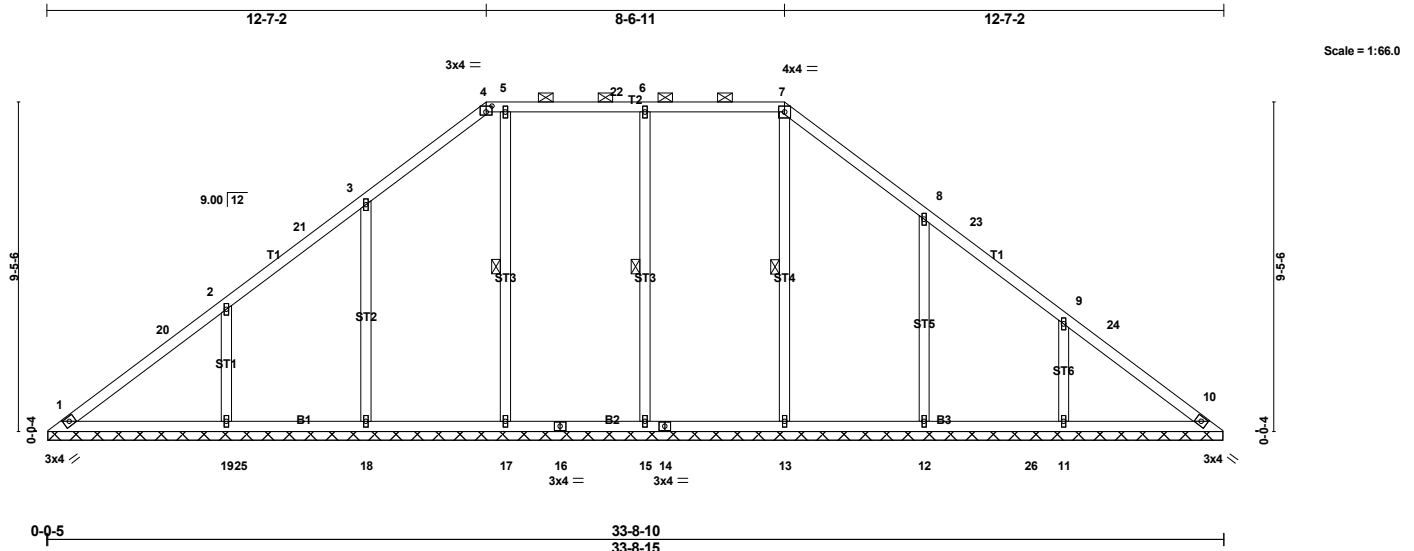


Plate Offsets (X,Y)-- [4:0-2-0,0-2-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.22	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.27	Horz(CT)	0.00	10	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 175 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.3

**BRACING-**  
TOP CHORD Sheathed or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-7.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 7-13, 6-15, 5-17

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

**REACTIONS.** All bearings 33-8-4.  
(lb) - Max Horz 1=-199(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 15, 18, 19, 12, 11  
Max Grav All reactions 250 lb or less at joint(s) 1, 10 except 13=371(LC 52), 15=501(LC 43), 17=415(LC 41), 18=511(LC 42), 19=557(LC 42), 12=543(LC 44), 11=493(LC 44)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 6-15=-367/58, 3-18=-323/95, 2-19=-351/130, 8-12=-351/113, 9-11=-311/116

**JOINT STRESS INDEX**  
1 = -nan(ind), 2 = -nan(ind), 3 = -nan(ind), 4 = -nan(ind), 5 = -nan(ind), 6 = -nan(ind), 7 = -nan(ind), 8 = -nan(ind), 9 = -nan(ind), 10 = -nan(ind), 11 = -nan(ind), 12 = -nan(ind), 13 = -nan(ind), 14 = -nan(ind), 15 = -nan(ind), 16 = -nan(ind), 17 = -nan(ind), 18 = -nan(ind) and 19 = -nan(ind)

- 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=17ft; B=61ft; L=51ft; eave=11ft; Cat. II; Exp B; Enclosed; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
  - Unbalanced snow loads have been considered for this design.
  - Provide adequate drainage to prevent water ponding.
  - All plates are 1.5x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - All bearings are assumed to be User Defined crushing capacity of 425 psi.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 18, 19, 12, 11.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Lot 2
P20-07029	V01	Roof Special	1	1	Job Reference (optional)

Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:10:23 2020 Page 2  
 ID:tcvVaC6QQtNBDXb5xYEux9yt82w-ENiDMK6sWcXKfhZiyTeRjIMZpZU3ukZWLBhUTEysZWE

**NOTES-**

- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

Job P20-07029	Truss V02	Truss Type Roof Special	Qty 1	Ply 1	Lot 2
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Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:10:24 2020 Page 1  
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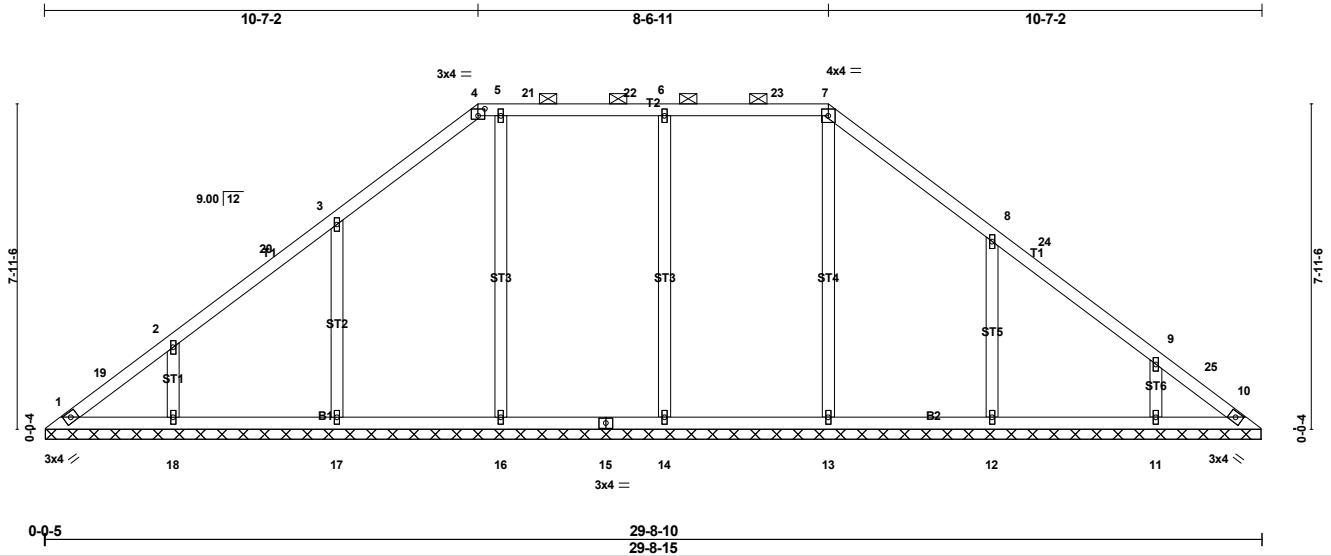


Plate Offsets (X,Y)-- [4:0-2-0,0-2-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.22	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.42	Horz(CT)	0.00	10	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 146 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.3

**BRACING-**  
TOP CHORD Sheathed or 6-0-0 oc purlins, except  
2-0-0 oc purlins (6-0-0 max.); 4-7.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** All bearings 29-8-4.  
(b) - Max Horz 1=-167(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 10, 14, 17, 18, 12, 11  
Max Grav All reactions 250 lb or less at joint(s) 1, 10 except 13=374(LC 24), 14=500(LC 43),  
16=414(LC 41), 17=512(LC 42), 18=413(LC 42), 12=535(LC 44), 11=375(LC 44)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 6-14=-368/61, 3-17=-339/106, 2-18=-286/101, 8-12=-361/120,  
9-11=-260/91

**JOINT STRESS INDEX**

1 = -nan(ind), 2 = -nan(ind), 3 = -nan(ind), 4 = -nan(ind), 5 = -nan(ind), 6 = -nan(ind), 7 = -nan(ind), 8 = -nan(ind), 9 = -nan(ind), 10 = -nan(ind), 11 = -nan(ind), 12 = -nan(ind), 13 = -nan(ind), 14 = -nan(ind), 15 = -nan(ind), 16 = -nan(ind), 17 = -nan(ind) and 18 = -nan(ind)

**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=17ft; B=61ft; L=51ft; eave=11ft; Cat. II; Exp B; Enclosed; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) Provide adequate drainage to prevent water ponding.
- 6) All plates are 1.5x4 MT20 unless otherwise indicated.
- 7) Gable requires continuous bottom chord bearing.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 10) All bearings are assumed to be User Defined crushing capacity of 425 psi.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 10, 14, 17, 18, 12, 11.

Continued on page 2



Job	Truss	Truss Type	Qty	Ply	Lot 2
P20-07029	V02	Roof Special	1	1	Job Reference (optional)

Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:10:25 2020 Page 2  
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**NOTES-**

- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

Job P20-07029	Truss V03	Truss Type Roof Special	Qty 1	Ply 1	Lot 2
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Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:10:26 2020 Page 1  
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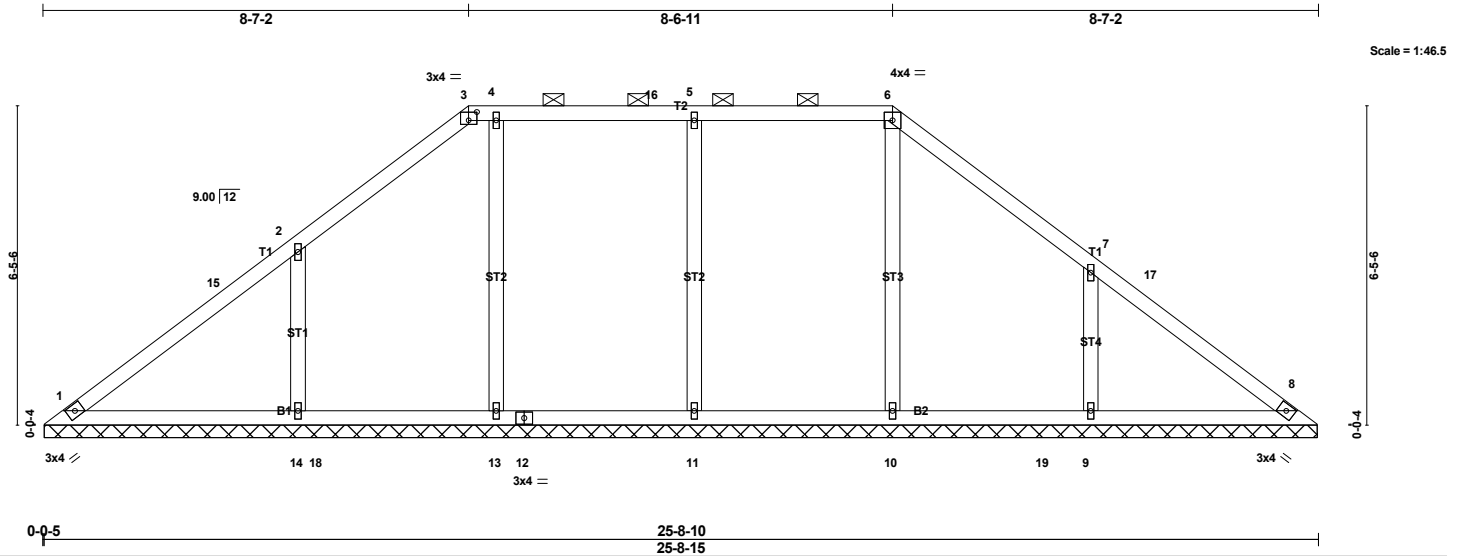


Plate Offsets (X,Y)-- [3:0-2-0,0-2-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.29	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.15	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.27	Horz(CT)	0.00	8	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 117 lb	FT = 20%
	Code IRC2018/TPI2014							

**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 OTHERS 2x4 SP No.3

**BRACING-**  
 TOP CHORD Sheathed or 6-0-0 oc purlins, except  
 2-0-0 oc purlins (6-0-0 max.): 3-6.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

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

**REACTIONS.** All bearings 25-8-4.  
 (lb) - Max Horz 1=-135(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 11, 14, 9  
 Max Grav All reactions 250 lb or less at joint(s) 1, 8 except 10=369(LC 24), 11=506(LC 43),  
 13=396(LC 41), 14=619(LC 42), 9=578(LC 44)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 5-11=-370/63, 2-14=-407/129, 7-9=-391/129

**JOINT STRESS INDEX**

1 = -nan(ind), 2 = -nan(ind), 3 = -nan(ind), 4 = -nan(ind), 5 = -nan(ind), 6 = -nan(ind), 7 = -nan(ind), 8 = -nan(ind), 9 = -nan(ind), 10 = -nan(ind), 11 = -nan(ind), 12 = -nan(ind), 13 = -nan(ind) and 14 = -nan(ind)

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=18ft; B=61ft; L=51ft; eave=9ft; Cat. II; Exp B; Enclosed; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) Provide adequate drainage to prevent water ponding.
- 6) All plates are 1.5x4 MT20 unless otherwise indicated.
- 7) Gable requires continuous bottom chord bearing.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 10) All bearings are assumed to be User Defined crushing capacity of 425 psi.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 14, 9.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	Lot 2
P20-07029	V03	Roof Special	1	1	Job Reference (optional)

Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:10:26 2020 Page 2  
ID:tcvVaC6QQtNBDXb5xYEux9yt82w-eyOM\_M9lpXvv69IHecB8Lx\_3zmVf55By19w84ZysZWB

**NOTES-**

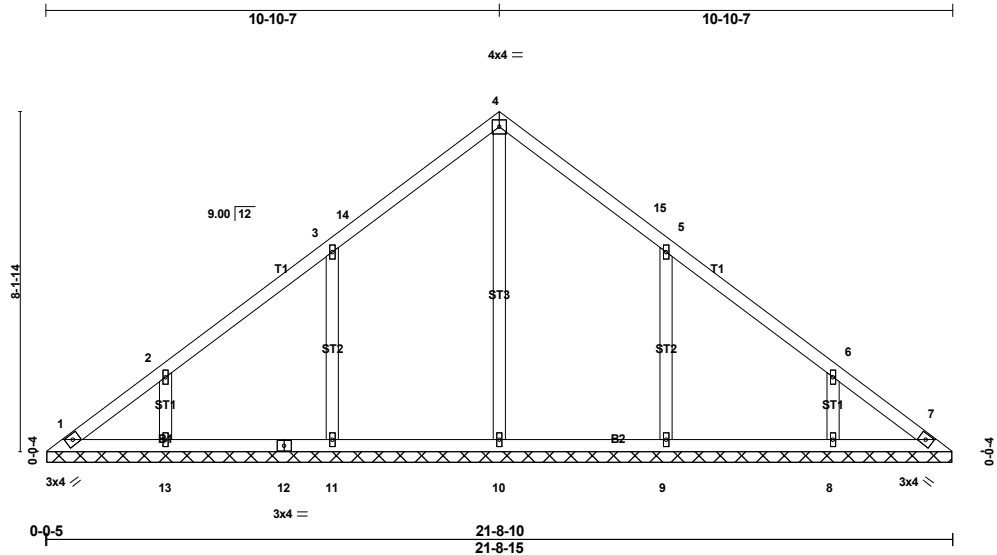
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

**LOAD CASE(S)** Standard

Job P20-07029	Truss V04	Truss Type Valley	Qty 1	Ply 1	Lot 2
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Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:10:27 2020 Page 1  
ID:tcvVaC6QQtNBDXb5xYEux9yt82w-68ykCi9Nar1mjJtTBjJNt8WGmAslqaq6Gpfic?ysZWA



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.16	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.13	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.19	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 7 n/a n/a		
	Code IRC2018/TPI2014			Weight: 101 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 OTHERS 2x4 SP No.3

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

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

**REACTIONS.** All bearings 21-8-4.  
 (lb) - Max Horz 1=-174(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 11, 13, 9, 8  
 Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=359(LC 23), 11=461(LC 23), 13=350(LC 23), 9=460(LC 24), 8=351(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 3-11=-288/122, 5-9=-288/122

**JOINT STRESS INDEX**  
 1 = -nan(ind), 2 = -nan(ind), 3 = -nan(ind), 4 = -nan(ind), 5 = -nan(ind), 6 = -nan(ind), 7 = -nan(ind), 8 = -nan(ind), 9 = -nan(ind), 10 = -nan(ind), 11 = -nan(ind), 12 = -nan(ind) and 13 = -nan(ind)

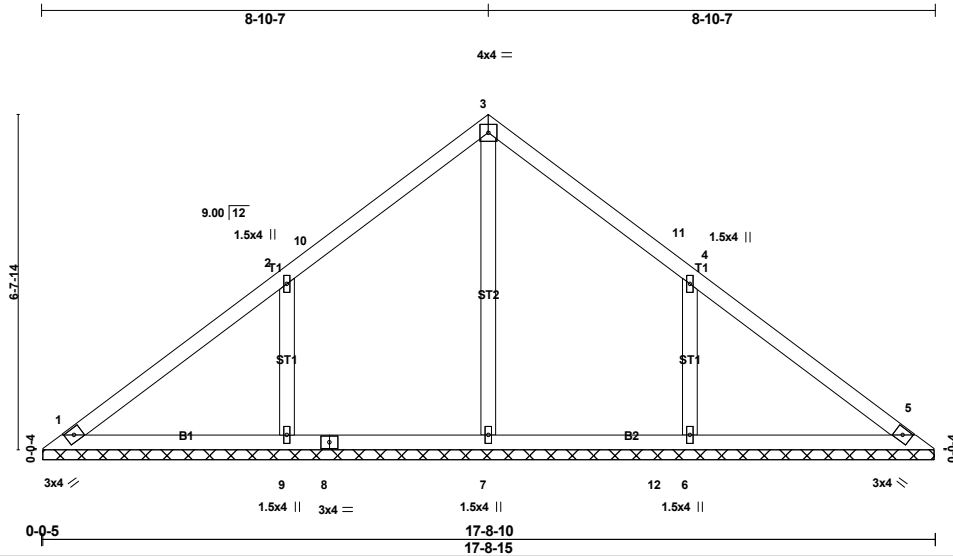
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=19ft; B=61ft; L=51ft; eave=7ft; Cat. II; Exp B; Enclosed; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=10.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - All plates are 1.5x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - All bearings are assumed to be User Defined crushing capacity of 425 psi.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 11, 13, 9, 8.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job P20-07029	Truss V05	Truss Type Valley	Qty 1	Ply 1	Lot 2
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Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:10:28 2020 Page 1  
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.20	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.13	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.11	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 76 lb	FT = 20%
	Code IRC2018/TPI2014							

**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 OTHERS 2x4 SP No.3

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

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

**REACTIONS.** All bearings 17-8-4.  
 (lb) - Max Horz 1=-141(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 9, 6  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=325(LC 23), 9=523(LC 23), 6=526(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-9=-328/138, 4-6=-328/138

**JOINT STRESS INDEX**  
 1 = -nan(ind), 2 = -nan(ind), 3 = -nan(ind), 4 = -nan(ind), 5 = -nan(ind), 6 = -nan(ind), 7 = -nan(ind), 8 = -nan(ind) and 9 = -nan(ind)

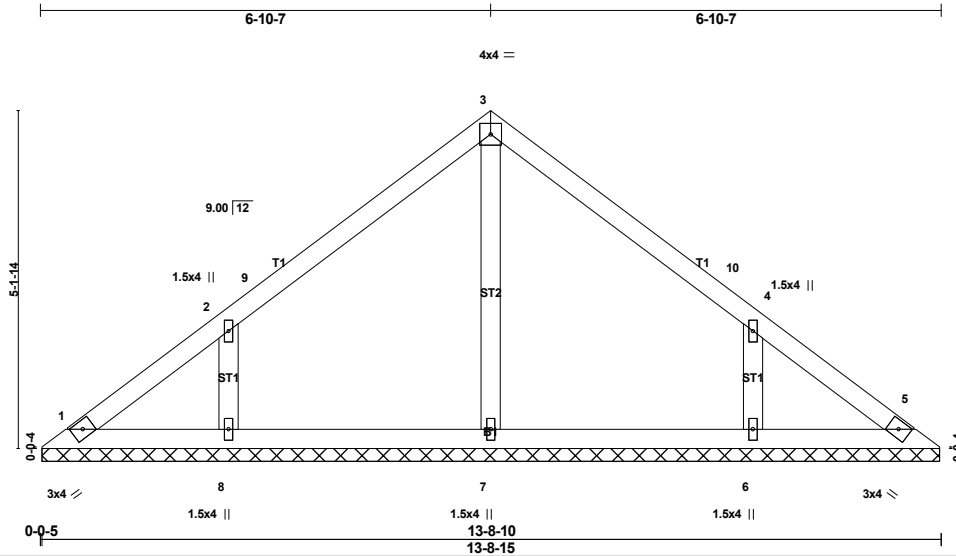
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=61ft; L=51ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=10.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - All bearings are assumed to be User Defined crushing capacity of 425 psi.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 6.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job P20-07029	Truss V06	Truss Type Valley	Qty 1	Ply 1	Lot 2
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Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:10:29 2020 Page 1  
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Scale = 1:35.1

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.16	Vert(LL)	n/a	-	n/a	999	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	n/a	-	n/a	999	
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.08	Horz(CT)	0.00	5	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						
								Weight: 56 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.3

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

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

**REACTIONS.** All bearings 13-8-4.  
(lb) - Max Horz 1=108(LC 11)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 8, 6  
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=329(LC 23), 6=329(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 2-8=-257/111, 4-6=-257/111

**JOINT STRESS INDEX**  
1 = -nan(ind), 2 = -nan(ind), 3 = -nan(ind), 4 = -nan(ind), 5 = -nan(ind), 6 = -nan(ind), 7 = -nan(ind) and 8 = -nan(ind)

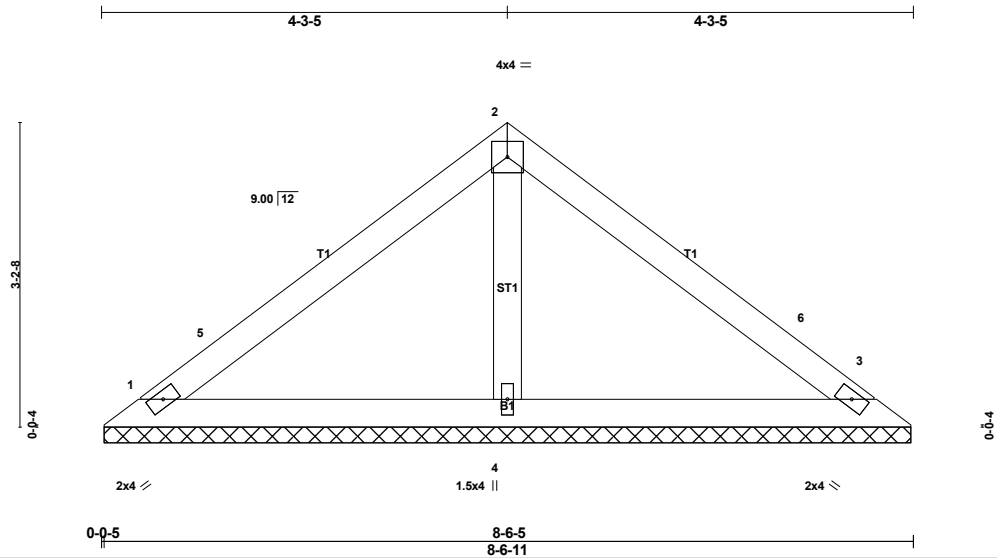
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=21ft; B=61ft; L=51ft; eave=3ft; Cat. II; Exp B; Enclosed; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
  - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=10.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
  - 4) Unbalanced snow loads have been considered for this design.
  - 5) Gable requires continuous bottom chord bearing.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 8) All bearings are assumed to be User Defined crushing capacity of 425 psi.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 8, 6.
  - 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

Job P20-07029	Truss V07	Truss Type Valley	Qty 1	Ply 1	Lot 2
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Longleaf Truss Company, West End, N.C.

Run: 8.330 s Jun 11 2020 Print: 8.330 s Jun 11 2020 MiTek Industries, Inc. Fri Jul 31 12:10:29 2020 Page 1  
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Scale = 1:24.3

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.23	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.11	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.04	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 31 lb	FT = 20%
	Code IRC2018/TPI2014							

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.3

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

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

**REACTIONS.** (size) 1=8-6-0 (min. 0-1-8), 3=8-6-0 (min. 0-1-8), 4=8-6-0 (min. 0-1-8)  
Max Horz 1=65(LC 11)  
Max Uplift 1=-25(LC 12), 3=-25(LC 12)  
Max Grav 1=174(LC 2), 3=174(LC 2), 4=266(LC 2)

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

**JOINT STRESS INDEX**  
1 = -nan(ind), 2 = -nan(ind), 3 = -nan(ind) and 4 = -nan(ind)

- 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=22ft; B=61ft; L=51ft; eave=0ft; Cat. II; Exp B; Enclosed; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
  - 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=10.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
  - 4) Unbalanced snow loads have been considered for this design.
  - 5) Gable requires continuous bottom chord bearing.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 8) All bearings are assumed to be User Defined crushing capacity of 425 psi.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
  - 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard