

Trenco

818 Soundside Rd Edenton, NC 27932

RE: P20-04027 - RICHARDSON

Site Information:

Project Customer: **Project Name:**

Lot/Block: Subdivision:

Model: Address:

State: City:

General Truss Engineering Criteria & Design Loads (Individual Truss Design **Drawings Show Special Loading Conditions):**

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.3

Wind Code: N/A Wind Speed: 130 mph Design Method: User defined

Roof Load: 40.0 psf Floor Load: N/A psf

Mean Roof Height (feet): 12 Exposure Category: B

No. 1 2	Seal# E14419867 E14419868 E14419869	Truss Name G01 PB01 PB02	Date 5/19/20 5/19/20 5/19/20
12345678910	E14419870 E14419871 E14419872 E14419873	PB03 PB04 PB05	5/19/20 5/19/20 5/19/20 5/19/20 5/19/20
11 12	E14419875 E14419876 E14419877 E14419878	PB08 PB09 T01 T01GE	5/19/20 5/19/20 5/19/20 5/19/20 5/19/20
13 14	E14419879 E14419880 E14419881		5/19/20 5/19/20 5/19/20
16 17	E14419882 E14419883	T04 T05	5/19/20 5/19/20
18 19 20	E14419884 E14419885 E14419886	T06 T07 T08	5/19/20 5/19/20 5/19/20
21 22 23	E14419888 E14419889		5/19/20 5/19/20 5/19/20
25 26 27	E14419890 E14419891 E14419892		5/19/20 5/19/20 5/19/20
27 28	E14419893 E14419894	T15 T17	5/19/20 5/19/20

The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision based on the parameters

My license renewal date for the state of North Carolina is December 31, 2020.

IMPORTANT NOTE: The seal on these truss component designs is a certificate that the engineer named is licensed in the jurisdiction/oxide. shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

May 19,2020

Job Truss Truss Type Qty Ρlγ RICHARDSON E14419867 G01 P20-04027 Piggyback Base Girder 2 Job Reference (optional)

Longleaf Truss Company,

West End, NC - 27376,

4x8 =

8.330 s Mar 23 2020 MiTek Industries, Inc. Tue May 19 07:20:33 2020 Page 1 ID:gkUVx24QO5glBKvEjRcThWzFI?4-tOcX8xu2wazwHzOB6EBSfHf8wkR0cpwmHmaF4HzF?pi

<u>14-0-1</u> 18-1-12 4-8-10 9-10-5 4-8-10 4-1-12 5-1-11 4-5-4

> Scale = 1:67.7 4x4 =

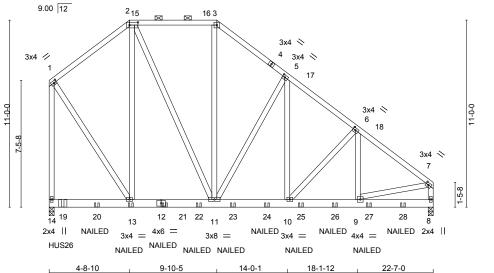


Plate Offsets (X,Y)-- [1:0-1-12,0-1-8], [2:0-6-0,0-2-0], [5:0-1-12,0-1-8], [6:0-1-12,0-1-8], [7:0-1-12,0-1-8]

4-8-10

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0						111	(/			-	
- (,	5/15.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	-0.03	10-11	>999	240	MT20	244/190
- ' (),		Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.04	10-11	>999	180		
TCDL	10.0	Rep Stress Incr	NO	_		Horz(CT)						
BCLL	0.0 *	- P		WB	0.31	HOIZ(CT)	0.01	0	n/a	n/a		
BCDI	10.0	Code IRC2018/TF	PI2014	Matri	x-S						Weight: 415 lb	FT = 20%
BUIL	10.0	I		1		1					1	

4-1-12

5-1-11

LUMBER-

WFBS

TOP CHORD 2x4 SP No 1 BOT CHORD 2x6 SP No 1 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.): 2-3.

BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

4-5-4

REACTIONS. (size) 14=0-3-8, 8=0-3-8

Max Horz 14=-282(LC 10)

Max Uplift 14=-212(LC 12), 8=-190(LC 12) Max Grav 14=2757(LC 34), 8=1794(LC 34)

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

TOP CHORD 1-2=-987/212, 2-3=-968/229, 3-5=-1320/256, 5-6=-1799/261, 6-7=-1983/239,

1-14=-1748/212, 7-8=-1631/186

BOT CHORD 11-13=-57/722, 10-11=-59/1363, 9-10=-120/1545

2-13=-348/129, 2-11=-117/641, 3-11=-180/510, 5-11=-809/163, 5-10=-151/620, **WEBS**

6-10=-270/88, 1-13=-147/1239, 7-9=-113/1484

NOTES-

1) 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 0-8-0 oc.

Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

- 2) 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.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=12ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 6) Unbalanced snow loads have been considered for this design.
- 7) Provide adequate drainage to prevent water ponding.
- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=212, 8=190.
- 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.

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

WARNING - Verify design parameters and HEAD NOTES ON THIS AND INCLUDE MITER REPEBLICE FACE MITERS AND INCLUDE MITER REPEBLICE FACE MITERS AND INCLUDE MITERS AND INCL fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Que Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.





Job	Truss	Truss Type	Qty	Ply	RICHARDSON	
P20-04027	G01	Piggyback Base Girder	1	2	Job Reference (optional)	E14419867

Longleaf Truss Company,

West End, NC - 27376,

8.330 s Mar 23 2020 MiTek Industries, Inc. Tue May 19 07:20:33 2020 Page 2 ID:gkUVx24QO5glBKvEjRcThWzFI?4-tOcX8xu2wazwHzOB6EBSfHf8wkR0cpwmHmaF4HzF?pi

NOTES-

13) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent at 0-9-10 from the left end to connect truss(es) to back face of bottom chord.

14) Fill all nail holes where hanger is in contact with lumber.

15) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-2=-43, 2-3=-53, 3-7=-43, 8-14=-20

Concentrated Loads (lb)

Vert: 12=-152(B) 13=-152(B) 19=-1106(B) 20=-152(B) 22=-152(B) 23=-152(B) 24=-164(B) 25=-164(B) 26=-164(B) 27=-164(B) 28=-164(B) 28=-164(B) 26=-164(B) 27=-164(B) 28=-164(B) 28=-



Job Truss Truss Type Qty Ply RICHARDSON E14419868 PB01 P20-04027 21 Piggyback Job Reference (optional) Longleaf Truss Company, West End, NC - 27376, 8.330 s Mar 23 2020 MiTek Industries, Inc. Tue May 19 07:20:34 2020 Page 1 ID:gkUVx24QO5glBKvEjRcThWzFI?4-LaAvLHughu5nv7zOgxjhCUBMJ7qtLJCwWQJocjzF?ph 8-11-0 8-11-0 Scale = 1:40.6 4x4 = 9.00 12 1.5x4 || 1.5x4 II 3 6-6-10 3-8-4 0.4-10 3x4 = 11 10 9 15 8 3x4 = 1.5x4 || 1.5x4 II 1.5x4 || 17-10-0 17-10-0 LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defl L/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.18 Vert(LL) 0.00 n/r 120 MT20 244/190 Snow (Pf/Pg) 11.6/15.0 Lumber DOL 1.15 вс 0.12 Vert(CT) 0.01 n/r 120 TCDL 10.0 WB Rep Stress Incr YES 0.11 Horz(CT) 0.00 6 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-S Weight: 75 lb FT = 20% BCDL 10.0

LUMBER-

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

2x4 SP No.3

BRACING-

TOP CHORD BOT CHORD

Sheathed or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 16-5-6

Max Horz 2=-129(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 11, 8

Max Grav All reactions 250 lb or less at joint(s) 2, 6 except 9=330(LC 24), 11=496(LC 24), 8=495(LC 25)

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

WEBS 3-11=-306/117, 5-8=-305/117

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=12ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; 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 1.00 times flat roof load of 11.6 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, with BCDL = 10.0psf.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 8.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTesk go connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and property incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPII Quality Criteria, DSB-89 and BCSI Building Component Settly Information, such part of the property of the stability of the property described by the property described and property described by the prope fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Qua Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job Truss Truss Type Qty Ply RICHARDSON E14419869 PB02 P20-04027 Piggyback Job Reference (optional) Longleaf Truss Company, West End, NC - 27376, 8.330 s Mar 23 2020 MiTek Industries, Inc. Tue May 19 07:20:35 2020 Page 1 ID:gkUVx24QO5glBKvEjRcThWzFI?4-pmklZdvlSCDeWHYaEfEwkikW4X9h4nl3k43L89zF?pg Scale = 1:24.2 4x4 = 3 9.00 12 0-4-10 0-1-10 2x4 = 1.5x4 || 10-5-12 10-5-12 LOADING (psf) SPACING-2-0-0 CSL DEFL. in (loc) I/defl L/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.24 Vert(LL) 0.01 5 n/r 120 MT20 244/190 Snow (Pf/Pg) 11.6/15.0 Lumber DOL 1.15 вс 0.15 Vert(CT) 0.01 5 n/r 120 TCDL 10.0 WB 0.06 Rep Stress Incr YES Horz(CT) 0.00 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-S Weight: 38 lb FT = 20% BCDL 10.0

LUMBER-

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

2x4 SP No.3 **OTHERS**

BRACING-

TOP CHORD BOT CHORD Sheathed or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=9-1-2, 4=9-1-2, 6=9-1-2

Max Horz 2=74(LC 11)

Max Uplift 2=-26(LC 12), 4=-26(LC 12)

Max Grav 2=216(LC 2), 4=216(LC 2), 6=348(LC 2)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=12ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; 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 1.00 times flat roof load of 11.6 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job Truss Truss Type Qty Ply RICHARDSON E14419870 PB03 P20-04027 Piggyback Job Reference (optional) Longleaf Truss Company, West End, NC - 27376, 8.330 s Mar 23 2020 MiTek Industries, Inc. Tue May 19 07:20:36 2020 Page 1 ID:gkUVx24QO5glBKvEjRcThWzFl?4-HzHgmzwxCVLV8R7mnMl9HvHipxWKpDiCzkovgczF?pf 8-11-0 8-11-0 17-10-0 Scale = 1:40.6 4x4 = 9.00 12 1.5x4 || 1.5x4 II 6-6-10 3-8-4 0.4-10 3x4 = 11 10 9 15 8 3x4 = 1.5x4 || 1.5x4 II 1.5x4 || 17-10-0 17-10-0 LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defl L/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.18 Vert(LL) 0.00 n/r 120 MT20 244/190 Snow (Pf/Pg) 11.6/15.0 Lumber DOL 1.15 вс 0.12 Vert(CT) 0.01 n/r 120 TCDL 10.0 WB Rep Stress Incr YES 0.11 Horz(CT) 0.00 6 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-S Weight: 75 lb FT = 20% BCDL 10.0

LUMBER-

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

BRACING-

TOP CHORD Sheathed or 6-0-0 oc purlins. BOT CHORD

Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 16-5-6

Max Horz 2=-129(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 11, 8

Max Grav All reactions 250 lb or less at joint(s) 2, 6 except 9=330(LC 24), 11=496(LC 24), 8=495(LC 25)

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

WEBS 3-11=-306/117, 5-8=-305/117

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=12ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; 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 1.00 times flat roof load of 11.6 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, with BCDL = 10.0psf.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 8.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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ANSI/TPII Quality Criteria, DSB-89 and BCSI Building Component Settly Information, such part of the property of the stability of the property described by the property described and property described by the prope fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Qua Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job Truss Truss Type Qty Ply RICHARDSON E14419871 PB04 P20-04027 Piggyback Job Reference (optional) Longleaf Truss Company, West End, NC - 27376, 8.330 s Mar 23 2020 MiTek Industries, Inc. Tue May 19 07:20:37 2020 Page 1 ID:gkUVx24QO5glBKvEjRcThWzFl?4-l9r2_JxZzpTMmaizL4GOq7psaLq8YhoMCOYSD2zF?pe Scale = 1:24.2 4x4 = 3 9.00 12 3-11-3 0-4-10 0-1-10 2x4 = 1.5x4 || 10-5-12 10-5-12 LOADING (psf) SPACING-2-0-0 CSL DEFL. in (loc) I/defl L/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.24 Vert(LL) 0.01 5 n/r 120 MT20 244/190 Snow (Pf/Pg) 11.6/15.0 Lumber DOL 1.15 вс 0.15 Vert(CT) 0.01 5 n/r 120 TCDL 10.0 WB 0.06 Rep Stress Incr YES Horz(CT) 0.00 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-S Weight: 38 lb FT = 20% BCDL 10.0

LUMBER-

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

2x4 SP No.3 **OTHERS**

BRACING-

TOP CHORD BOT CHORD Sheathed or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=9-1-2, 4=9-1-2, 6=9-1-2

Max Horz 2=74(LC 11)

Max Uplift 2=-26(LC 12), 4=-26(LC 12)

Max Grav 2=216(LC 2), 4=216(LC 2), 6=348(LC 2)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=12ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
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- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

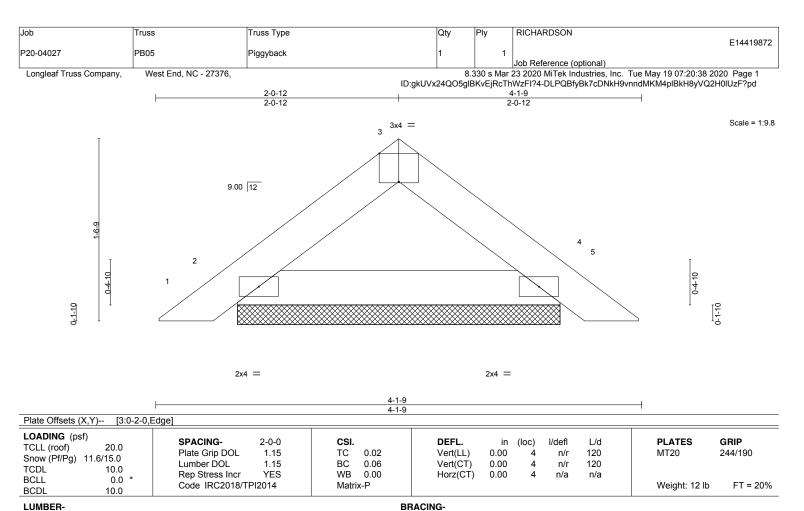


MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.





TOP CHORD

BOT CHORD

Sheathed or 4-1-9 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

LUMBER-

REACTIONS.

2x4 SP No.1

TOP CHORD BOT CHORD 2x4 SP No.1

(size) 2=2-8-14, 4=2-8-14

Max Horz 2=-27(LC 10) Max Uplift 2=-11(LC 12), 4=-11(LC 12)

Max Grav 2=136(LC 2), 4=136(LC 2)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=12ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; 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 1.00 times flat roof load of 11.6 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

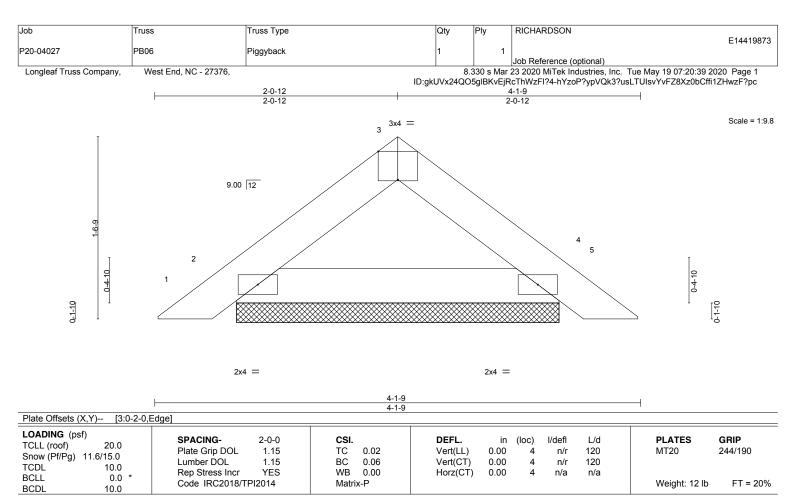


MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.





BRACING-

TOP CHORD

BOT CHORD

Sheathed or 4-1-9 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

LUMBER-

REACTIONS.

TOP CHORD 2x4 SP No.1

BOT CHORD 2x4 SP No.1

(size) 2=2-8-14, 4=2-8-14

Max Horz 2=-27(LC 10) Max Uplift 2=-11(LC 12), 4=-11(LC 12)

Max Grav 2=136(LC 2), 4=136(LC 2)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=12ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; 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 1.00 times flat roof load of 11.6 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



E14419874 PB07 P20-04027 Piggyback Job Reference (optional) Longleaf Truss Company, West End, NC - 27376, 8.330 s Mar 23 2020 MiTek Industries, Inc. Tue May 19 07:20:40 2020 Page 1 ID:gkUVx24QO5glBKvEjRcThWzFl?4-AkXAcLzRGkswd2RX0Cp5RlRQxYuol2CouMm6pNzF?pb 2-6-13 2-6-13 2-6-13 Scale = 1:13.7 4x4 = 3 9.00 12 0-4-10 0-4-10 0-1-10 6 2x4 = 1.5x4 || 2x4 = 5-1-11 LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defl L/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.04 Vert(LL) 0.00 n/r 120 MT20 244/190 Snow (Pf/Pg) 11.6/15.0 Lumber DOL 1.15 вс 0.03 Vert(CT) 0.00 5 n/r 120 TCDL 10.0 WB 0.02 Rep Stress Incr YES Horz(CT) 0.00 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-P Weight: 17 lb FT = 20% BCDL 10.0 LUMBER-BRACING-2x4 SP No.1 TOP CHORD Sheathed or 5-1-11 oc purlins. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

Qty

Ply

RICHARDSON

REACTIONS.

Job

TOP CHORD BOT CHORD 2x4 SP No.1

2x4 SP No.3 **OTHERS**

(size) 2=3-9-0, 4=3-9-0, 6=3-9-0

Max Horz 2=-34(LC 10)

Truss

Truss Type

Max Uplift 2=-23(LC 12), 4=-23(LC 12)

Max Grav 2=115(LC 17), 4=115(LC 18), 6=125(LC 2)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=12ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; 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 1.00 times flat roof load of 11.6 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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P20-04027 PB08 Piggyback Job Reference (optional)

8.330 s Apr 21 2020 MiTek Industries, Inc. Tue May 19 08:53:19 2020 Page 1
ID:gkUVx24QO5glBKvEjRcThWzFl?4-AM6xglRXwUwxd1JMmjpmos4BZEV7F1D8MepG5KzF?L_ Longleaf Truss Company, West End, N.C 5-1-11 2-6-13 2-6-13 Scale = 1:14.5 4x4 = 3 9.00 12 12 12 6 2x4 = 1.5x4 || 2x4 = 5-1-11 LOADING (psf) SPACING-2-0-0 CSI. DEFL. I /d **PLATES** GRIP in (loc) I/defl TCLL (roof) Plate Grip DOL 244/190 TC Vert(LL) 1.15 0.04n/a n/a 999 MT20 Snow (Pf/Pg) 11.6/15.0 Lumber DOL 1.15 RC. 0.03 Vert(CT) n/a n/a 999 **TCDL** 10.0 Rep Stress Incr YES WB 0.01 Horz(CT) 0.00 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-P Weight: 17 lb FT = 20% BCDL 10.0 LUMBER-**BRACING-**

TOP CHORD

BOT CHORD

Qty

RICHARDSON

Sheathed or 5-1-11 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

E14419875

TOP CHORD

REACTIONS.

Job

2x4 SP No.1 2x4 SP No.1

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

(size) 1=5-1-11, 5=5-1-11, 2=5-1-11, 4=5-1-11, 6=5-1-11

Max Horz 1=-34(LC 10)

Truss

Max Uplift 1=-51(LC 24), 5=-35(LC 25), 2=-32(LC 12), 4=-32(LC 12)

Max Grav 1=24(LC 9), 5=20(LC 12), 2=171(LC 24), 4=166(LC 18), 6=117(LC 7)

Truss Type

FORCES. (lb) - Maximum Compression/Maximum Tension TOP CHORD 1-2=-40/66, 2-3=-59/17, 3-4=-58/17, 4-5=-10/38

BOT CHORD 2-6=-10/20, 4-6=-10/20

WEBS 3-6=-68/2

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=12ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; 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.
- * 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 51 lb uplift at joint 1, 35 lb uplift at joint 5 32 lb uplift at joint 2 and 32 lb uplift at joint 4.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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Job Truss Type Truss Qty Ply RICHARDSON E14419876 P20-04027 PB09 Piggyback 2 Job Reference (optional)

8.330 s Apr 21 2020 MiTek Industries, Inc. Tue May 19 08:53:31 2020 Page 1
ID:gkUVx24QO5glBKvEjRcThWzFI?4-pgqTBPb35AQE3tEfTE1aHOaFs4b73Tlv7VjvVdzF?Ko Longleaf Truss Company, West End, N.C 5-1-11 2-6-13 2-6-13 Scale = 1:14.5 4x4 = 3 9.00 12 12.15 6 2x4 = 1.5x4 || 2x4 = 5-1-11 LOADING (psf) SPACING-CSI. DEFL. I/d **PLATES** GRIP 2-0-0 in (loc) I/defl TCLL (roof) 20.0 Plate Grip DOL TC Vert(LL) 1 15 0.02n/a n/a 999 MT20 244/190 Snow (Pf/Pg) 11.6/15.0 Lumber DOL 1 15 RC. 0.01 Vert(CT) n/a n/a 999 **TCDL** 10.0 Rep Stress Incr YES WB 0.01 Horz(CT) 0.00 5 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-P Weight: 34 lb FT = 20% BCDL 10.0 **BRACING-**

TOP CHORD

BOT CHORD

Sheathed or 5-1-11 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing

LUMBER-

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

2x4 SP No.3

REACTIONS. (size) 1=5-1-11, 5=5-1-11, 2=5-1-11, 4=5-1-11, 6=5-1-11

Max Horz 1=-34(LC 10) Max Uplift 1=-51(LC 24), 5=-35(LC 25), 2=-32(LC 12), 4=-32(LC 12)

Max Grav 1=24(LC 9), 5=20(LC 12), 2=171(LC 24), 4=166(LC 18), 6=117(LC 7)

FORCES. (lb) - Maximum Compression/Maximum Tension TOP CHORD 1-2=-40/66, 2-3=-59/17, 3-4=-58/17, 4-5=-10/38

BOT CHORD 2-6=-10/20, 4-6=-10/20

WEBS 3-6=-68/2

NOTES-

1) 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.

- 2) 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.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=12ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 6) Unbalanced snow loads have been considered for this design.
- 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.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 51 lb uplift at joint 1, 35 lb uplift at joint 5, 32 lb uplift at joint 2 and 32 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.



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

WARNING - Verify design parameters and HEAD NOTES ON THIS AND INCLUDED WITTER REFERENCE FACE MILE TO THE THE REFERENCE FACE MILE TO THE MILE TO THE MILE TO THE MILE TO THE MILE T fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Qua Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



10-5-12

Scale = 1:70.6

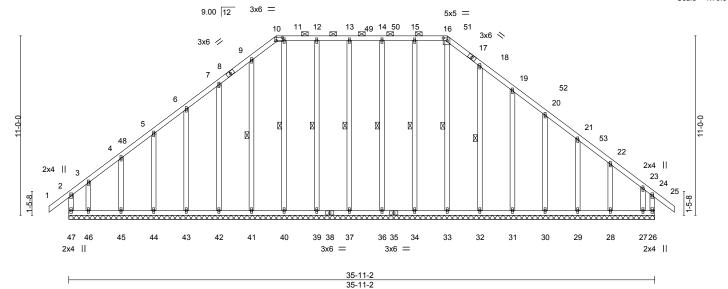


Plate Offsets (X,Y)--[10:0-4-8,0-2-4], [16:0-3-0,0-2-0] LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defl L/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.25 Vert(LL) -0.01 25 n/r 120 MT20 244/190 Snow (Pf/Pg) 16.5/15.0 Lumber DOL 1.15 BC 0.10 Vert(CT) -0.01 25 120 n/r **TCDL** 10.0 Rep Stress Incr YES WB 0.21 Horz(CT) -0.01 26 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-R Weight: 313 lb FT = 20% **BCDL** 10.0

LUMBER-

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

2x4 SP No.3 WERS

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.): 10-16.

BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. **WEBS**

1 Row at midpt 16-33, 15-34, 14-36, 13-37, 12-39, 11-40,

ORTH

9-41, 18-32

12-8-11

All bearings 35-11-2. REACTIONS.

(lb) - Max Horz 47=-254(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 36, 39, 42, 43, 44, 45, 32, 31, 30, 29, 28 except 47=-168(LC 10), 26=-254(LC 11), 46=-134(LC 11), 27=-207(LC 10)

12-8-11

All reactions 250 lb or less at joint(s) 33, 34, 36, 37, 39, 40, 41, 42, 43, 44, 45, 32, 31, 30, 29, 28 except 47=283(LC 25), 26=331(LC 24), 46=260(LC 10), 27=317(LC 11)

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

TOP CHORD 9-10=-66/252, 16-18=-61/263

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=12ft; B=45ft; L=36ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber 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=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; 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 1.00 times flat roof load of 11.6 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 requires continuous bottom chord bearing.
- 10) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 11) Gable studs spaced at 2-0-0 oc.
- 12) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 13) * 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.
- 14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 36, 39, 42, 43, 44, 45, 32, 31, 30, 29, 28 except (jt=lb) 47=168, 26=254, 46=134, 27=207.
- 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



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

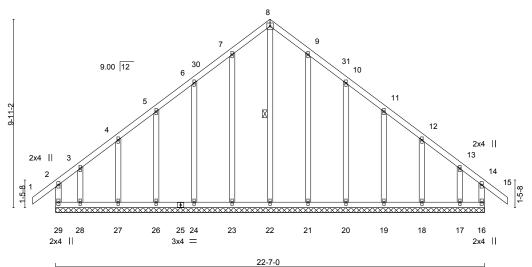
ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Que Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Edenton, NC 27932

May 19,2020

Job Truss Truss Type Qty Ply RICHARDSON E14419878 T01GE P20-04027 Common Supported Gable 1 Job Reference (optional) Longleaf Truss Company, West End, NC - 27376, 8.330 s Mar 23 2020 MiTek Industries, Inc. Tue May 19 07:20:47 2020 Page 1 ID:gkUVx24QO5glBKvEjRcThWzFl?4-S4Sq4k2qdukxy7TuxARlDEEZVNGYu93qVxz_ZTzF?pU Scale = 1:60.7 4x4 =



LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 11.6/15.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.21 BC 0.08 WB 0.20	DEFL. in (loc) l/defl L/d Vert(LL) -0.01 15 n/r 120 Vert(CT) -0.01 15 n/r 120 Horz(CT) -0.00 16 n/a n/a	PLATES GRIP MT20 244/190
BCLL 0.0 * BCDL 10.0	Code IRC2018/TPI2014	Matrix-R		Weight: 170 lb FT = 20%

22-7-0

LUMBER-

TOP CHORD 2x4 SP No.1 BOT CHORD 2x4 SP No.1 2x4 SP No 3 WFBS OTHERS 2x4 SP No.3 BRACING-

TOP CHORD **BOT CHORD** WFBS

Sheathed or 6-0-0 oc purlins, except end verticals. Rigid ceiling directly applied or 6-0-0 oc bracing.

1 Row at midpt 8-22

REACTIONS. All bearings 22-7-0

(lb) - Max Horz 29=220(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 16, 23, 24, 26, 27, 21, 20, 19, 18, 17 except 29=-125(LC 10),

28=-101(LC 11)

All reactions 250 lb or less at joint(s) 29, 16, 23, 24, 26, 27, 28, 21, 20, 19, 18, 17 except Max Grav 22=265(LC 12)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=12ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; 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 1.00 times flat roof load of 11.6 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 23, 24, 26, 27, 21, 20, 19, 18, 17 except (jt=lb) 29=125, 28=101.
- 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.



May 19,2020

🛝 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job Truss Truss Type Qty Ply RICHARDSON E14419879 T01SGE Piggyback Base Structural Gable COMMON P20-04027 1 Job Reference (optional) 8.330 s Mar 23 2020 MiTek Industries, Inc. Tue May 19 07:20:49 2020 Page 1

Longleaf Truss Company, West End, NC - 27376,

ID:gkUVx24QO5glBKvEjRcThWzFI?4-PTaaVQ449V_fCRdG2bUDJfJqlAufMwz7yFS5eLzF?pS 17-10-6 24-0-15 30-7-0 5-1-11 6-2-9 6-6-1

Scale = 1:69.0 4x8 = 4x4 = 9.00 12 550 6 51 3x4 / 3x4 💸 2x4 52 3x4 // 49 3x4 3 Ø 53 x4 II 2x4 || 3x4 / 4x4 🚿 10 \times ₩ 11 14 55 56 15 13 12 2x4 3x4 = 2x4 || 18 17 16 3x4 = 3x8 = 4x4 =

12-8-11 1-5-15 6-6-1 4-8-11 5-1-11 6-2-9 Plate Offsets (X,Y)- [2:0-0-12,0-1-8], [3:0-1-12,0-1-8], [5:0-6-0,0-2-0], [6:0-2-4,0-2-0], [8:0-1-12,0-1-8], [9:0-1-0,0-1-12]

12-8-11

6-2-9

LOADING (psf) TCLL (roof) 20.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.51	DEFL. in (loc) I/defl L/d Vert(LL) -0.05 12-13 >999 240	PLATES GRIP MT20 244/190
Snow (Pf/Pg) 16.5/15.0 TCDL 10.0	Lumber DOL 1.15 Rep Stress Incr YES	BC 0.36 WB 0.81	Vert(CT) -0.09 12-13 >999 180 Horz(CT) 0.01 11 n/a n/a	
BCLL 0.0 * BCDL 10.0	Code IRC2018/TPI2014	Matrix-S		Weight: 330 lb FT = 20%

17-10-6

LUMBER-

2x4 SP No 1

TOP CHORD BOT CHORD 2x4 SP No 1

2x4 SP No.3 WFBS **OTHERS** 2x4 SP No.3 **BRACING-**TOP CHORD

Sheathed or 5-4-7 oc purlins, except end verticals, and 2-0-0 oc

30-7-0

6-6-1

purlins (6-0-0 max.): 5-6.

24-0-15

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. **WEBS**

1 Row at midpt 5-15, 8-13

REACTIONS. All bearings 8-3-8 except (jt=length) 11=0-3-8.

(lb) - Max Horz 18=250(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 18, 17, 11

Max Grav All reactions 250 lb or less at joint(s) 16, 16 except 18=396(LC 50), 17=1403(LC 43), 11=1199(LC 45)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 3-5=-789/125, 5-6=-674/131, 6-8=-957/122, 8-9=-1302/52, 2-18=-336/73,

9-11=-1099/69

17-18=-199/314, 13-15=0/570, 12-13=0/959

BOT CHORD **WEBS** 3-17=-1186/63, 3-15=0/588, 5-13=-6/406, 8-13=-525/89, 9-12=0/870

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=12ft; B=45ft; L=31ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; 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 1.00 times flat roof load of 11.6 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.
- * 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 11) will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18, 17, 11.
- 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.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 19,2020

🗥 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job Truss Truss Type Qty Ply RICHARDSON E14419880 T02 P20-04027 6 Piggyback Base 1 Job Reference (optional) Longleaf Truss Company, West End, NC - 27376, 8.330 s Mar 23 2020 MiTek Industries, Inc. Tue May 19 07:20:52 2020 Page 1 ID:gkUVx24QO5glBKvEjRcThWzFl?4-p2Fj7R6zRQMD3uLrjj1wwHxLUOuJZLeZeDhlFgzF?pP 12-8-11 17-11-9 23-2-7 5-2-14 29-5-0 35-11-2

5-2-14

6-2-9

Scale = 1:73.7 5x10 = 5x10 = 1.5x4 II

6-6-1

Sheathed or 4-3-13 oc purlins, except end verticals, and 2-0-0 oc

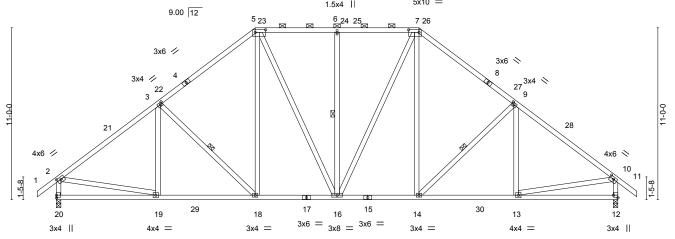
3-18, 6-16, 9-14

Rigid ceiling directly applied or 10-0-0 oc bracing.

purlins (5-2-5 max.): 5-7.

1 Row at midpt

6-2-9



17-11-9 23-2-7 29-5-0 35-11-2 6-6-1 6-2-9 5-2-14 5-2-14 6-2-9 6-6-1 Plate Offsets (X,Y)--[2:0-3-0,0-1-12], [3:0-1-12,0-1-8], [5:0-8-0,0-2-0], [7:0-8-0,0-2-0], [9:0-1-12,0-1-8], [10:0-3-0,0-1-12], [12:Edge,0-3-8]

LOADING (psf) TCLL (roof) 20.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.52	DEFL. in (loc) I/defl L/d Vert(LL) -0.08 13-14 >999 240	PLATES GRIP MT20 244/190
Snow (Pf/Pg) 16.5/15.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	BC 0.52 BC 0.43 WB 0.56 Matrix-S	Vert(LL) -0.08 13-14 >999 240 Vert(CT) -0.15 13-14 >999 180 Horz(CT) 0.05 12 n/a n/a	M120 244/190 Weight: 265 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

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

WFBS 2x4 SP No 3

REACTIONS. (size) 20=0-3-8, 12=0-3-8

Max Horz 20=254(LC 11)

Max Uplift 20=-33(LC 12), 12=-33(LC 12) Max Grav 20=1734(LC 24), 12=1734(LC 25)

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

TOP CHORD 2-3=-1962/49. 3-5=-1702/118. 5-6=-1387/128. 6-7=-1387/128. 7-9=-1702/118.

9-10=-1962/49, 2-20=-1632/66, 10-12=-1632/66

BOT CHORD 19-20=-193/342, 18-19=0/1649, 16-18=0/1378, 14-16=0/1317, 13-14=0/1483 **WEBS** 3-18=-442/90, 5-18=0/545, 5-16=-30/396, 6-16=-491/59, 7-16=-30/396, 7-14=0/546,

9-14=-442/90, 2-19=0/1387, 10-13=0/1390

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=12ft; B=45ft; L=36ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; 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.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 12.
- 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.



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

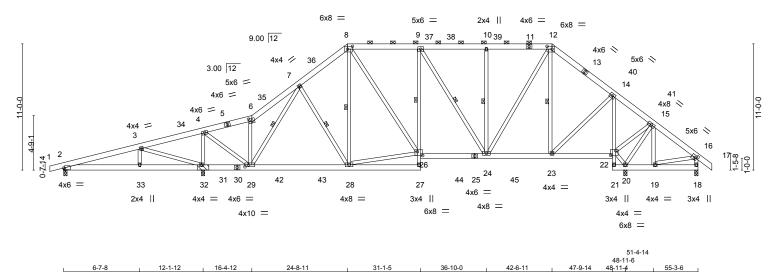
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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



ID:gkUVx24QO5glBKvEjRcThWzFl?4-ipVEzp9TVftfYVfcyZ6s5766??ATV4z9ZrfzORzF?pL 47-9-14 5-3-2 51-4-14 55-3-6 56-5-14 3-7-0 3-10-8 1-2-8

Scale = 1:100.4



	0-1-0	0-0-4	4-0-0	0-0-10	0-7-10	0-0-11	0-0-11	0-0-2	1-1-7 2-0-0	0
									0-0-2	
Plate Offsets (X,Y)	[2:0-0-14.0-1-1	11. [6:0-3-0.0-2	2-12]. [8:0-5-4.0-3	-01. [12:0-5-4.0-3-0]. [[16:0-2-8.0-2-8]. [2	22:0-5-8.0-4-121.	[26:0-5-8.0-4-0]	[29:0-3-	12.0-2-01	

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL (roof) 20.0			(/	
Snow (Pf/Pg) 16.5/15.0	Plate Grip DOL 1.15	TC 0.23	Vert(LL) -0.08 28-29 >999 240	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.74	Vert(CT) -0.14 28-29 >999 180	
	Rep Stress Incr YES	WB 0.86	Horz(CT) 0.04 20 n/a n/a	
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-S	` '	Weight: 492 lb FT = 20%
BCDL 10.0	0000 11(02010/11 12014	Wattix O		VVCIgitt. 432 Ib 1 1 - 2070

BRACING-

TOP CHORD

BOT CHORD

LUMBER-TOP CHORD 2x6 SP No 1

BOT CHORD 2x6 SP No.1 *Except*

9-27.14-21: 2x4 SP No.3

WFBS 2x4 SP No.3

WEBS REACTIONS. All bearings 0-3-8 except (jt=length) 32=0-4-0 (input: 0-3-8 + bearing block).

(lb) - Max Horz 2=233(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 2, 18, 32

Max Grav All reactions 250 lb or less at joint(s) 18 except 2=345(LC 54), 32=2566(LC 24), 20=2054(LC 25)

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

TOP CHORD 2-3=-258/183, 3-4=0/1005, 4-6=-913/33, 6-7=-1114/107, 7-8=-1509/126, 8-9=-1604/114,

9-10=-1417/116, 10-12=-1420/116, 12-14=-1170/109, 14-15=-255/66

29-32=-894/73, 28-29=0/1232, 9-26=-252/148, 24-26=0/1685, 23-24=0/920,

21-22=-259/0, 14-22=-1436/28

WEBS 3-33=0/256, 3-32=-988/8, 4-32=-2072/40, 4-29=0/2176, 6-29=-587/90, 7-29=-601/0, 26-28=0/1227, 8-26=0/755, 9-24=-404/0, 10-24=-487/66, 12-24=0/1062, 12-23=-516/5,

14-23=0/1048, 20-22=-957/66, 15-22=0/868, 15-20=-967/0

NOTES-

BOT CHORD

- 1) 2x6 SP No.1 bearing block 12" long at jt. 32 attached to front face with 3 rows of 10d (0.131"x3") nails spaced 3" o.c. 12 Total fasteners. User Defined Bearing crushing capacity= 425psi.
- Unbalanced roof live loads have been considered for this design.
- 3) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=12ft; B=45ft; L=55ft; eave=7ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; 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 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 7) Provide adequate drainage to prevent water ponding.
- 8) 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.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 18, 32.
- 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.



Sheathed or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc

7-29, 7-28, 8-28, 9-24, 10-24, 12-23

Rigid ceiling directly applied or 6-0-0 oc bracing. Except: 9-26

purlins (6-0-0 max.): 8-12.

1 Row at midpt

1 Row at midpt

May 19,2020

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

WARNING - Verify design parameters and HEAD NOTES ON THIS AND INCLUDE MITER REPEBLICE FACE MITERS AND INCLUDE MITER REPEBLICE FACE MITERS AND INCLUDE MITERS AND INCL

fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Que Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Sheathed or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc

7-28, 7-27, 8-27, 9-23, 10-23, 12-22

Rigid ceiling directly applied or 6-0-0 oc bracing. Except: 9-25

purlins (6-0-0 max.): 8-12.

1 Row at midpt

1 Row at midpt

ID:gkUVx24QO5glBKvEjRcThWzFl?4-2nl70WDcKBVyeHXal6i1oBpym0ugAKCuj7Mj3fzF?pG

Scale = 1:100.3

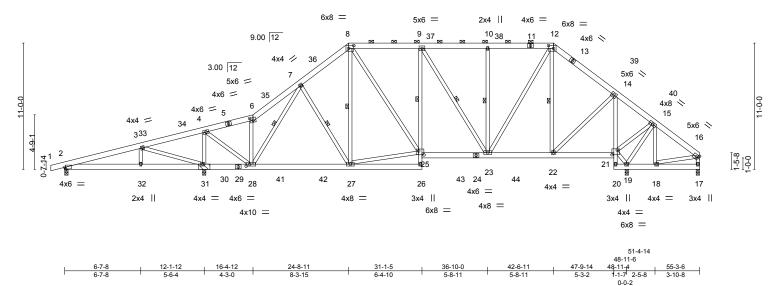


Plate Offsets (X,Y)-- [2:0-0-14,0-1-11], [6:0-3-0,0-2-12], [8:0-5-4,0-3-0], [12:0-5-4,0-3-0], [21:0-5-8,0-4-12], [25:0-5-8,0-4-0], [28:0-3-12,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20	.0				0.00		0.00	(/			_	
Snow (Pf/Pg) 16.5/15.	n	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	-0.08	27-28	>999	240	MT20	244/190
	-	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.14	27-28	>999	180		
TCDL 10	-	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.04	19	n/a	n/a		
BCLL 0	.0 *					11012(01)	0.04	10	TI/ CI	11/4	144 : 14 400 !!	FT 000/
BCDL 10	.0	Code IRC2018/TF	212014	Matr	IX-S						Weight: 488 lb	FT = 20%

BOT CHORD

WEBS

LUMBER-**BRACING-**TOP CHORD 2x6 SP No 1 TOP CHORD

BOT CHORD 2x6 SP No.1 *Except*

9-26.14-20: 2x4 SP No.3

WFBS 2x4 SP No.3

REACTIONS. All bearings 0-3-8 except (jt=length) 31=0-4-0 (input: 0-3-8 + bearing block).

(lb) - Max Horz 2=224(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 2, 31

Max Grav All reactions 250 lb or less at joint(s) 17 except 2=345(LC 54), 31=2565(LC 24), 19=2065(LC 25)

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

TOP CHORD 3-4=-3/1001, 4-6=-911/18, 6-7=-1111/89, 7-8=-1511/117, 8-9=-1605/110,

9-10=-1416/110. 10-12=-1419/110. 12-14=-1168/100. 14-15=-254/51 BOT CHORD 28-31=-890/52, 27-28=0/1225, 9-25=-252/147, 23-25=0/1676, 22-23=0/912

20-21=-261/0, 14-21=-1434/35

WEBS 3-32=0/256, 3-31=-988/8, 4-31=-2072/43, 4-28=0/2175, 6-28=-589/83, 7-28=-599/0,

25-27=0/1220, 8-25=0/756, 9-23=-403/0, 10-23=-486/67, 12-23=0/1061, 12-22=-516/12,

14-22=0/1045, 19-21=-952/57, 15-21=0/860, 15-19=-981/0

NOTES-

- 1) 2x6 SP No.1 bearing block 12" long at jt. 31 attached to front face with 3 rows of 10d (0.131"x3") nails spaced 3" o.c. 12 Total fasteners. User Defined Bearing crushing capacity= 425psi.
- Unbalanced roof live loads have been considered for this design.
- 3) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=12ft; B=45ft; L=55ft; eave=7ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; 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 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 7) Provide adequate drainage to prevent water ponding.
- 8) 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.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 31.
- 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.



M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Que Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job Truss Truss Type Qty Ply RICHARDSON E14419883 T05 P20-04027 Piggyback Base Job Reference (optional) Longleaf Truss Company, West End, NC - 27376, 8.330 s Mar 23 2020 MiTek Industries, Inc. Tue May 19 07:21:04 2020 Page 1 ID:gkUVx24QO5glBKvEjRcThWzFI?4-TL_FeYGVc6tWVkG9QEFkQpRJ3Dw2Nj3KP5bOg_zF?pD 12-8-11 5-2-9 14-9-9 22-8-2 7-10-9 30-6-11 7-10-9 2-0-14 6-6-7 Scale = 1:75.5 5x10 = 9.00 12 2x4 || 3x4 = 3x6 =5x10 = 8 10 26 27 28 3x6 // 3x4 / 4x6 × 4x6 // 6-1-3 1-5-8 9 18 20 19 ⊠ 14 ₁₃ 16 30 3x4 = 6x8 = 1712 23 15 3x6 =4x6 =3x4 = 2.5x63x4 = 2.5x6 II 4x8 = 2-3-8 2-3-8 12-8-11 14-9-9 22-8-2 37-1-2 5-2-9 5-2-9 2-0-14 7-10-9 6-11-15 0-10-10 6-6-7 Plate Offsets (X,Y)-[2:0-2-14,0-2-0], [3:0-1-8,0-2-0], [4:0-1-12,0-1-8], [6:0-8-0,0-2-0], [10:0-8-0,0-2-0], [11:0-3-0,0-1-12], [17:0-3-0,0-0-12], [18:0-2-0,0-2-12], [21:0-3-4,0-1-8]LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defl L/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.86 Vert(LL) -0.13 15-17 >999 240 MT20 244/190 Snow (Pf/Pg) 16.5/15.0 Lumber DOL 1.15 BC 0.69 Vert(CT) -0.27 15-17 >999 180 **TCDL** 10.0 WB Rep Stress Incr YES 0.73 Horz(CT) 0.11 12 n/a n/a Weight: 301 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

BCLL 0.0 Code IRC2018/TPI2014 Matrix-S **BCDL** 10.0

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

3-22: 2x6 SP No.1, 7-17: 2x4 SP No.3

WEBS 2x4 SP No.3

REACTIONS. (size) 23=0-3-8, 12=Mechanical, 14=0-3-8

Max Horz 23=289(LC 11)

Max Uplift 23=-36(LC 12), 12=-21(LC 12)

Max Grav 23=1622(LC 24), 12=1255(LC 25), 14=563(LC 42)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1384/36, 3-4=-2086/58, 4-6=-1694/117, 6-7=-1415/126, 7-8=-1416/127,

8-10=-1261/134, 10-11=-859/119, 2-23=-1653/48, 11-12=-1108/58

22-23=-263/232, 21-22=-539/0, 3-21=-471/22, 20-21=-181/1940, 19-20=-47/1723, 18-19=-12/1377, 7-18=-484/63, 14-15=-7/628, 13-14=-7/628

WEBS 4-20=0/288, 4-19=-620/81, 6-19=-5/620, 6-18=-32/549, 15-18=-19/1119, 8-18=-22/390,

8-15=-850/90, 10-15=0/1136, 10-13=-770/39, 2-22=0/1161, 11-13=0/822

NOTES-

BOT CHORD

LUMBER-

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=12ft; B=45ft; L=37ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; 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 1.00 times flat roof load of 11.6 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.

Refer to girder(s) for truss to truss connections.

- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 23, 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.



Sheathed or 4-3-9 oc purlins, except end verticals, and 2-0-0 oc

Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

7-18

8-15, 10-13, 11-12

purlins (3-11-2 max.): 6-10.

6-0-0 oc bracing: 21-22. 1 Row at midpt

1 Row at midpt

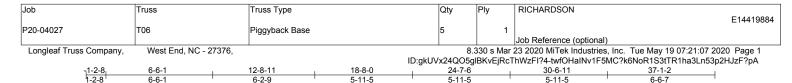
May 19,2020

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

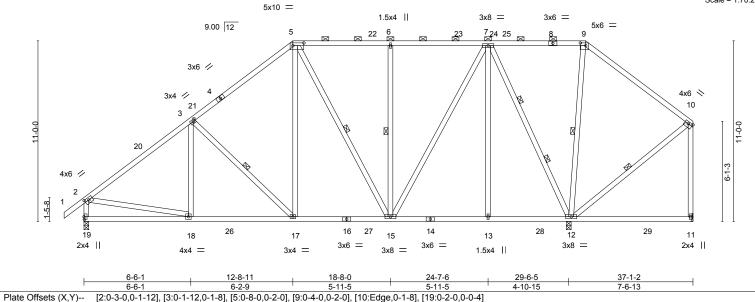
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.









LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defl L/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.66 Vert(LL) -0.09 11-12 >976 240 MT20 244/190 Snow (Pf/Pg) 16.5/15.0 Lumber DOL 1.15 BC 0.37 Vert(CT) -0.16 11-12 >558 180 **TCDL** 10.0 WB Rep Stress Incr YES 0.82 Horz(CT) 0.02 11 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-S Weight: 288 lb FT = 20% **BCDL** 10.0

LUMBER-

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

2x4 SP No 3 WFBS

BRACING-

TOP CHORD

BOT CHORD **WEBS**

Sheathed or 4-11-4 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-9.

Rigid ceiling directly applied or 10-0-0 oc bracing. 1 Row at midpt 3-17, 5-15, 6-15, 9-12, 10-12

2 Rows at 1/3 pts 7-12

REACTIONS. (size) 19=0-3-8, 11=Mechanical, 12=0-3-8

Max Horz 19=289(LC 11)

Max Uplift 19=-29(LC 12), 11=-120(LC 50), 12=-9(LC 12) Max Grav 19=1387(LC 24), 11=153(LC 39), 12=2213(LC 42)

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

TOP CHORD 2-3=-1504/44, 3-5=-1192/112, 5-6=-850/121, 6-7=-850/121, 9-10=-39/360,

2-19=-1287/62

BOT CHORD 18-19=-238/318, 17-18=-71/1256, 15-17=-36/954, 13-15=-43/492, 12-13=-43/492 WEBS 3-17=-505/91, 5-17=0/599, 5-15=-339/38, 6-15=-519/72, 7-15=-2/859, 7-13=0/285,

7-12=-1567/13, 9-12=-477/30, 2-18=0/980, 10-12=-291/77

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=12ft; B=45ft; L=37ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; 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 1.00 times flat roof load of 11.6 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) Refer to girder(s) for truss to truss connections.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 12 except (jt=lb) 11=120.
- 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.



🛝 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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ID:gkUVx24QO5glBKvEjRcThWzFl?4-pJn8hFKdReVpbV86Dorv7t88iEev2wS3ZMl9LBzF?p8 6-6-1 6-6-1 12-8-11 21-1-2 29-<u>5-9</u> <u>37-1-2</u> 6-2-9 6-6-7

Scale = 1:74.8 5x10 = 1.5x4 II 3x6 =3x6 = 9.00 12 5x6 🜣 6 8 9 21 3x6 / 4x6 🔌 1 3x4 20 10 3 11-0-0 6-1-3 4x6 / 1-5-8 28 25 15 26 13 27 12 17 16 14 11 18 3x6 = 3x6 =

	6-6-1	12-8-11	21-1-2	29-5-9	29-6-5	37-1-2	1
	6-6-1	6-2-9	8-4-7	8-4-7	0-0-11	7-6-13	1
. [2:0-3-0,0-1-12], [3:0-1-12,	0-1-8], [5:0-8-0,0-2-0], [8:	0-2-4,0-1-8], [9:0-3-0,0-2-2], [10:	:0-3-0,0-1-12], [14:0-2-0,0	-2-0]		

3x4 =

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL (roof) 20.0			(/	
Snow (Pf/Pg) 16.5/15.0	Plate Grip DOL 1.15	TC 1.00		MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.58	Vert(CT) -0.23 14-16 >999 180	
	Rep Stress Incr YES	WB 0.97	Horz(CT) 0.02 11 n/a n/a	
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-S	` '	Weight: 275 lb FT = 20%
BCDL 10.0	0000 11(02010/11 12014	Watrix 6		Weight: 270 lb 11 - 2070

LUMBER-

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

WFBS 2x4 SP No 3

BRACING-

4x8 =

TOP CHORD Sheathed or 4-10-13 oc purlins, except end verticals, and 2-0-0 oc

3x8 =

2x4 ||

purlins (2-2-0 max.): 5-9.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

6-0-0 oc bracing: 12-14.

WEBS 3-16, 5-14, 6-14, 8-12, 9-12, 10-12 1 Row at midpt

REACTIONS. (size) 18=0-3-8, 11=Mechanical, 12=0-3-8

Max Horz 18=289(LC 11)

2x4 |

Max Uplift 18=-29(LC 12), 11=-86(LC 50), 12=-6(LC 12) Max Grav 18=1406(LC 24), 11=184(LC 39), 12=2154(LC 42)

4x4 =

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1523/45, 3-5=-1229/111, 5-6=-798/122, 6-8=-798/122, 9-10=-70/304,

2-18=-1301/64

BOT CHORD 17-18=-237/325, 16-17=-70/1271, 14-16=-31/987

WEBS 3-16=-485/93, 5-16=0/652, 5-14=-440/17, 6-14=-776/108, 8-14=-5/1479, 8-12=-1669/56,

9-12=-425/23, 2-17=0/989

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=12ft; B=45ft; L=37ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; 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 1.00 times flat roof load of 11.6 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) Refer to girder(s) for truss to truss connections.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18, 11, 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.



May 19,2020

🛝 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

WARNING - Verify design parameters and HEAD NOTES ON THIS AND INCLUDED WITTER REFERENCE FACE MILE TO THE THE REFERENCE FACE MILE TO THE MILE TO THE MILE TO THE MILE TO THE MILE T fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Qua Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job Truss Truss Type Qty Ply RICHARDSON E14419886 T08 P20-04027 Piggyback Base Supported Gable Job Reference (optional) Longleaf Truss Company, West End, NC - 27376, 8.330 s Mar 23 2020 MiTek Industries, Inc. Tue May 19 07:21:11 2020 Page 1 ID:gkUVx24QO5glBKvEjRcThWzFI?4-livv6xLuzGmXrpIVLDtNCIEg02SyW06M0gnFQ4zF?p6 12-8-11 12-8-11 16-10-4 29-8-1 4-1-9 12-9-13 9.00 12 _{4x4} = Scale = 1:67.0 4x4 = 3x4 // 10 11 12 43 \bowtie M 3x4 ❖ 42 8 ⁹ 13 14 15 44 41 16 6 1-0-0 X 17 45 40 2x4 || 2x4 || 19 20 21 01-4-1 1-5-8 39 38 36 35 34 33 32 31 30 28 26 25 23 22

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 16.5/15.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.24 BC 0.10 WB 0.19	Vert(CT) -0.01 2	c) l/defl 21 n/r 21 n/r 22 n/a	L/d 120 120 n/a	PLATES MT20	GRIP 244/190
BCLL 0.0 * BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	(0.1)			Weight: 246 lb	FT = 20%

29-8-1

3x4 =

LUMBER-

OTHERS

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

2x4 SP No 3 2x4 SP No 3 BRACING-

TOP CHORD

Sheathed or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc

2x4

purlins (6-0-0 max.): 10-12.

BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

WFBS 1 Row at midpt 12-29, 11-30, 10-32, 8-33, 14-28

REACTIONS. All bearings 29-8-1.

(lb) - Max Horz 39=-249(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 33, 34, 35, 36, 37, 28, 27, 26, 25, 24 except 39=-237(LC 10), 22=-203(LC 11), 38=-193(LC 11), 23=-164(LC 10)

Max Grav All reactions 250 lb or less at joint(s) 29, 30, 32, 33, 34, 35, 36, 37, 28, 27, 26, 25, 24 except 39=324(LC 25), 22=296(LC 24), 38=302(LC 10), 23=273(LC 11)

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

8-10=-67/268, 12-14=-58/269

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

2x4

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=12ft; B=45ft; L=30ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; 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 1.00 times flat roof load of 11.6 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 requires continuous bottom chord bearing.
- 10) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 11) Gable studs spaced at 2-0-0 oc.
- 12) 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 13) will fit between the bottom chord and any other members.
- 14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 33, 34, 35, 36, 37, 28, 27, 26, 25, 24 except (jt=lb) 39=237, 22=203, 38=193, 23=164.
- 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.



May 19,2020

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job Truss Truss Type Qty Ply RICHARDSON E14419887 T09 P20-04027 Common 1 Job Reference (optional) Longleaf Truss Company, West End, NC - 27376, 8.330 s Mar 23 2020 MiTek Industries, Inc. Tue May 19 07:21:13 2020 Page 1 ID:gkUVx24QO5glBKvEjRcThWzFI?4-i40fXdN8Vt0F47StSdvrHjJ_2r35_vqfU_GMUyzF?p4 11-3-8 16-9-8 22-7-0 5-6-0 5-9-8 5-6-0 Scale = 1:59.3 4x4 = 9.00 12 4x4 / 4x4 < 5 2.5x6 II 2.5x6 II Ķ 10 9 11 15 16 12 3x4 = 3x4 =3x4 =3x4 3x4 = 7-7-8 14-11-8 7-7-8 7-7-8 7-4-0

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

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 11.6/15.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.34 BC 0.44 WB 0.31	DEFL. in (loc) I/defl L/d Vert(LL) -0.09 9-11 >999 240 Vert(CT) -0.14 11-12 >999 180 Horz(CT) 0.02 8 n/a n/a	PLATES GRIP MT20 244/190
BCLL 0.0 * BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	,	Weight: 152 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SP No 1 BOT CHORD 2x4 SP No 1 2x4 SP No 3 WFBS

BRACING-TOP CHORD

WERS

Sheathed or 5-11-13 oc purlins, except end verticals. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. 1 Row at midpt 3-12 5-8

REACTIONS. (size) 12=0-3-8, 8=0-3-8

Max Horz 12=220(LC 11)

Max Uplift 12=-33(LC 12), 8=-33(LC 12) Max Grav 12=1077(LC 24), 8=1077(LC 25)

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

TOP CHORD 2-3=-305/122, 3-4=-1045/132, 4-5=-1045/132, 5-6=-304/122, 2-12=-368/125,

6-8=-368/125

BOT CHORD 11-12=0/913, 9-11=0/656, 8-9=0/816

WEBS 4-9=-41/533, 4-11=-41/533, 3-12=-950/0, 5-8=-950/0

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=12ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; 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 1.00 times flat roof load of 11.6 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.
- * 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 8.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 19,2020

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job Truss Truss Type Qty Ply RICHARDSON E14419888 T10 2 P20-04027 Common 1 Job Reference (optional) Longleaf Truss Company, West End, NC - 27376, 8.330 s Mar 23 2020 MiTek Industries, Inc. Tue May 19 07:21:14 2020 Page 1 ID:gkUVx24QO5glBKvEjRcThWzFI?4-AHa1lzNmGB86iG140LQ4pwr8nFPKjM4oie0w0PzF?p3 11-3-8 16-9-8 22-7-0 23-9-8 1-2-8 5-6-0 5-9-8 5-6-0 Scale = 1:59.3 4x4 = 9.00 12 4x4 / 4x4 < 5 2.5x6 II 2.5x6 II Ķ 10 9 11 15 16 12 3x4 = 3x4 =3x4 =3x4 3x4 = 7-7-8 14-11-8 7-7-8 7-7-8 7-4-0

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

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 11.6/15.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.34 BC 0.44 WB 0.31	DEFL. in (loc) l/defl L/d Vert(LL) -0.09 9-11 >999 240 Vert(CT) -0.14 11-12 >999 180 Horz(CT) 0.02 8 n/a n/a	PLATES GRIP MT20 244/190
BCLL 0.0 * BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	. ,	Weight: 152 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SP No 1 BOT CHORD 2x4 SP No 1 2x4 SP No 3 WFBS

BRACING-

Sheathed or 5-11-13 oc purlins, except end verticals. TOP CHORD **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. WERS 1 Row at midpt 3-12 5-8

REACTIONS.

(size) 12=0-3-8, 8=0-3-8 Max Horz 12=220(LC 11)

Max Uplift 12=-33(LC 12), 8=-33(LC 12) Max Grav 12=1077(LC 24), 8=1077(LC 25)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-305/122, 3-4=-1045/132, 4-5=-1045/132, 5-6=-304/122, 2-12=-368/125,

6-8=-368/125

BOT CHORD 11-12=0/913, 9-11=0/656, 8-9=0/816

WEBS 4-9=-41/533, 4-11=-41/533, 3-12=-950/0, 5-8=-950/0

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=12ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; 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 1.00 times flat roof load of 11.6 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.
- * 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 8.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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Job Truss Truss Type Qty Ply RICHARDSON E14419889 T11 P20-04027 Piggyback Base Job Reference (optional) Longleaf Truss Company, West End, NC - 27376, 8.330 s Mar 23 2020 MiTek Industries, Inc. Tue May 19 07:21:16 2020 Page 1 ID:gkUVx24QO5glBKvEjRcThWzFI?4-6finAeP0ooOpxaBS7mTYvLxRO34qB8d5AyV05HzF?p1 24-0-15 30-7-0 12-8-11 6-2-9 6-2-9 6-6-1 Scale = 1:68.3 4x4 = 4x8 = 9.00 12 5₁₉ 6 20 3x6 <> 3x4 // 21 4x8 1 18 3x4 💉 3 3x6 × 2.5x6 II 9 1-5-8 1-5-8 ₩ 15 ₩ 10 ⊠ 16 23 24 13 25 14 12 11 3x8 = 3x4 =3x6 =1.5x4 \\ 2x4 II 3x4 = 4x4 = 8-1-12 12-8-11 17-10-6 24-0-15 30-7-0 8-1-12 4-6-14 5-1-11 6-2-9 6-6-1 Plate Offsets (X,Y)--[5:0-2-4,0-2-0], [6:0-6-0,0-2-0], [8:0-1-12,0-1-8], [9:Edge,0-1-8] LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defl L/d **PLATES** GRIP 20.0 TCLL (roof) Plate Grip DOL 1.15 TC 0.52 Vert(LL) -0.14 15-16 >710 240 MT20 244/190 Snow (Pf/Pg) 16.5/15.0 Lumber DOL 1.15 BC 0.44 Vert(CT) -0.23 15-16 >426 180 **TCDL** 10.0 WB Rep Stress Incr YES 0.82 Horz(CT) 0.02 10 n/a n/a **BCLL** 0.0

LUMBER-

BCDL

WFBS

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

10.0

2x4 SP No 3

BRACING-

Matrix-S

TOP CHORD

BOT CHORD

Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

6-0-0 oc bracing: 14-15.

WEBS

1 Row at midpt

purlins (6-0-0 max.): 5-6.

5-14, 6-14, 8-12, 3-16

Sheathed or 5-4-7 oc purlins, except end verticals, and 2-0-0 oc

REACTIONS.

(size) 15=0-3-8, 16=0-3-8, 10=0-3-8 Max Horz 16=242(LC 11)

Max Uplift 16=-48(LC 12), 10=-5(LC 12)

Max Grav 15=1364(LC 43), 16=539(LC 24), 10=1100(LC 45)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-345/137, 3-5=-695/132, 5-6=-436/138, 6-8=-903/127, 8-9=-1250/54,

2-16=-403/136, 9-10=-1000/38

BOT CHORD 15-16=-66/345, 12-14=0/632, 11-12=0/918

WEBS 3-15=-1102/72, 3-14=0/669, 6-14=-482/0, 6-12=0/619, 8-12=-537/91, 9-11=0/835

Code IRC2018/TPI2014

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=12ft; B=45ft; L=31ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate $DOL=1.15);\ Is=1.0;\ Rough\ Cat\ B;\ Partially\ Exp.;\ Ce=1.0;\ Cs=1.00;\ Ct=1.10,\ Lu=50-0-0;\ Min.\ flat\ roof\ snow\ load\ governs.\ Rain\ Partially\ Exp.;\ Ce=1.0;\ Cs=1.00;\ Ct=1.10,\ Lu=50-0-0;\ Min.\ flat\ roof\ snow\ load\ governs.\ Rain\ Partially\ Exp.;\ Rain\ Partiall\ Partial$ 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 1.00 times flat roof load of 11.6 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10.
- 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.



FT = 20%

Weight: 218 lb

🛝 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

WARNING - Verify design parameters and HEAD NOTES ON THIS AND INCLUDE MITCH DEFINED AND INCLUDE fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Qua Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job Truss Truss Type Qty Ply RICHARDSON E14419890 T12 P20-04027 3 Piggyback Base Job Reference (optional)

Longleaf Truss Company,

West End, NC - 27376,

4-8-10 4-8-10

8.330 s Mar 23 2020 MiTek Industries, Inc. Tue May 19 07:21:18 2020 Page 1 ID:gkUVx24QO5glBKvEjRcThWzFl?4-22qYaKQHJPeXAuLrFBV0_m0nwsnZf8nOdG_79AzF?p?

Sheathed or 5-6-7 oc purlins, except end verticals, and 2-0-0 oc

2-11, 3-9, 5-9, 1-12

Rigid ceiling directly applied or 10-0-0 oc bracing.

purlins (6-0-0 max.): 2-3.

1 Row at midpt

9-10-5 16-0-15 22-7-0 6-6-1

Scale: 3/16"=1'

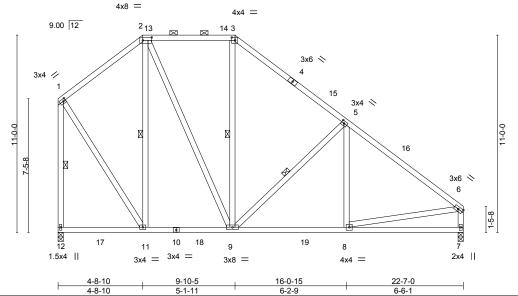


Plate Offsets (X,Y)-- [1:0-1-8,0-1-8], [2:0-6-0,0-2-0], [3:0-2-4,0-2-0], [5:0-1-12,0-1-8], [6:Edge,0-1-8]

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 16.5/15.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.52 BC 0.35 WB 0.33	DEFL. i Vert(LL) -0.09 Vert(CT) -0.09 Horz(CT) 0.0	8-9	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 244/190
BCLL 0.0 * BCDI 10.0	Code IRC2018/TPI2014	Matrix-S	,				Weight: 177 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

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

WFBS 2x4 SP No.3

REACTIONS. 12=0-3-8, 7=0-3-8 (size)

Max Horz 12=-284(LC 10) Max Uplift 12=-5(LC 12)

Max Grav 12=1102(LC 44), 7=1046(LC 44)

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

TOP CHORD 1-2=-583/118, 2-3=-565/121, 3-5=-834/112, 5-6=-1181/40, 1-12=-1006/39, 6-7=-947/28

BOT CHORD 9-11=0/469 8-9=0/895

WFBS 2-11=-386/82, 2-9=-39/502, 5-9=-543/92, 1-11=-15/718, 6-8=0/820

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=12ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; 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
- * 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 19,2020

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Sheathed or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc

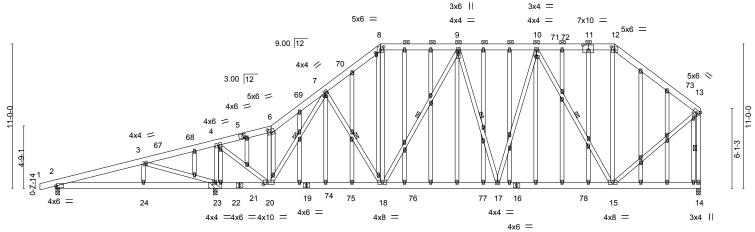
7-20, 7-18, 9-18, 9-17, 10-15, 13-14

Rigid ceiling directly applied or 6-0-0 oc bracing.

purlins (6-0-0 max.): 8-12.

ID:gkUVx24QO5glBKvEjRcThWzFl?4-tCBprOV2vFOhupo?bRcQD1GsnHqa3kjH?CRRMqzF?ov 49-1-2 <u>20-6</u>-11 24-8-11 30-8-0 16-4-12 42-6-11 5-6-14 4-1-13 4-2-0 4-2-0 6-6-7

Scale = 1:87.7



12-3-8 16-4-12 24-8-11 49-1-2 6-8-2 5-6-14 0-0-9 4-1-4 8-3-15 8-11-0 8-11-0 6-6-7

Plate Offsets (X,Y)--[2:0-0-14,0-1-11], [5:0-2-3,0-2-0], [6:0-3-0,0-2-12], [6:0-2-0,0-0-14], [7:0-2-0,0-0-8], [8:0-3-0,0-2-12], [9:0-1-9,0-1-8], [10:0-1-8,0-1-5], [11:0-5-0,0-4-8], [10:0-1-8,0-1-5], [10:0-1-8,0-[12:0-3-0,0-2-12], [20:0-3-12,0-2-0], [45:0-1-13,0-1-0]

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 16.5/15.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.37 BC 0.38 WB 0.87	DEFL. in (loc) l/defl L/d Vert(LL) -0.08 15-17 >999 240 Vert(CT) -0.14 15-17 >999 180 Horz(CT) 0.03 14 n/a n/a	PLATES GRIP MT20 244/190
BCLL 0.0 * BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	,	Weight: 621 lb FT = 20%

TOP CHORD

BOT CHORD

WEBS

LUMBER-BRACING-

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

OTHERS 2x4 SP No.3 REACTIONS.

(size) 2=0-3-8, 14=0-3-8, 23=(0-3-8 + bearing block) (req. 0-4-2) Max Horz 2=264(LC 11)

Max Uplift 2=-25(LC 12), 23=-8(LC 12)

Max Grav 2=354(LC 54), 14=1616(LC 25), 23=2614(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 3-4=-25/972. 4-6=-943/8. 6-7=-1157/76. 7-8=-1589/109. 8-9=-1275/110.

9-10=-1486/108, 10-12=-954/116, 12-13=-1198/96, 13-14=-1538/32

20-23=-892/46, 18-20=-19/1270, 17-18=0/1532, 15-17=0/1396

WEBS 3-24=0/256, 3-23=-994/10, 4-23=-2111/46, 4-20=0/2200, 6-20=-604/77, 7-20=-652/0,

8-18=-3/684, 9-18=-504/26, 10-17=0/460, 10-15=-983/15, 12-15=0/406, 13-15=0/1193

NOTES-

BOT CHORD

- 1) 2x6 SP No.1 bearing block 12" long at jt. 23 attached to front face with 3 rows of 10d (0.131"x3") nails spaced 3" o.c. 12 Total fasteners. User Defined Bearing crushing capacity= 425psi.
- 2) Unbalanced roof live loads have been considered for this design.
- 3) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=12ft; B=45ft; L=49ft; eave=6ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 4) 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.
- 5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; 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.
- 6) Unbalanced snow loads have been considered for this design.
- 7) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 8) Provide adequate drainage to prevent water ponding.
- 9) All plates are 2x4 MT20 unless otherwise indicated.
- 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, with BCDL = 10.0psf.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 23.

ORTH

May 19,2020

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, or a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Que Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job	Truss	Truss Type	Qty	Ply	RICHARDSON	
P20-04027	T13	Piggyback Base Structural Gable COMMON I I Gal	ile I Gable	1		E14419891
		33,		1	Job Reference (optional)	

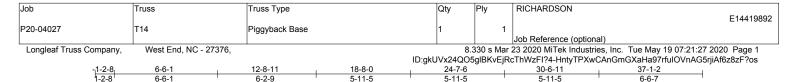
NOTES-

8.330 s Mar 23 2020 MiTek Industries, Inc. Tue May 19 07:21:25 2020 Page 2

Longleaf Truss Company, West End, NC - 27376, ID:gkUVx24QO5glBKvEjRcThWzFI?4-LOIB2jWggZXYWzNB997fmEp1XhApoByQEsA?uGzF?ou

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.





Scale = 1:72.6 5x5 = 3x6 =3x4 3x4 = 9.00 12 5x6 = 5 9 22 6 23 724 25 \boxtimes 3x6 // 4x6 🔌 1 3x4 21 10 3 20 4x6 / 2 1-5-8 26 27 16 28 15 14 30 19 18 17 3x8 2x4 || 2x4 3x6 =3x4 = 13 12 31 11 4x4 = 3x8 = 3x6 =

Plate Offsets (X,Y) [2:0-3-0,0-1-12], [3:0-1-12,0-1-8], [5:0-3-0,0-2-0], [9:0-4-0,0-2-0], [10:Edge,0-1-8]									
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 16.5/15.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.66 BC 0.64 WB 0.85	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) -0.19 15-17 -0.32 15-17 0.03 11	I/defl L/d >999 240 >999 180 n/a n/a	PLATES MT20	GRIP 244/190		
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-S	, ,			Weight: 271 lb	FT = 20%		

8-11-0

LUMBER-

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

2x4 SP No 3 WFBS

BRACING-

WEBS

TOP CHORD **BOT CHORD** Sheathed or 4-10-8 oc purlins, except end verticals, and 2-0-0 oc

purlins (6-0-0 max.): 5-9.

29-8-1

8-0-6

Rigid ceiling directly applied or 10-0-0 oc bracing. 1 Row at midpt 3-17, 6-17, 6-15, 9-12, 10-12

0-10-10

6-6-7

2 Rows at 1/3 pts 7-12

REACTIONS. All bearings 0-3-8 except (jt=length) 11=7-8-9, 12=7-8-9.

6-6-1

(lb) - Max Horz 19=289(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 19, 12 except 11=-150(LC 50)

12-8-11

6-2-9

Max Grav All reactions 250 lb or less at joint(s) 11 except 19=1422(LC 24), 12=1982(LC 42), 13=284(LC 19)

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

TOP CHORD 2-3=-1544/48, 3-5=-1256/113, 5-6=-949/123, 6-7=-767/116, 9-10=-26/372,

2-19=-1316/66. 10-11=-61/262

BOT CHORD 18-19=-237/324, 17-18=-72/1288, 15-17=-28/956, 13-15=-46/563, 12-13=-46/563 **WEBS** 3-17=-480/96, 5-17=0/420, 6-17=-47/355, 6-15=-531/59, 7-15=0/945, 7-12=-1524/22,

9-12=-484/29, 2-18=0/1004, 10-12=-318/78

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=12ft; B=45ft; L=37ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; 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 1.00 times flat roof load of 11.6 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 12 except (it=lb) 11=150.
- 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.



M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not Design Valid to to set only with release controlled in the control

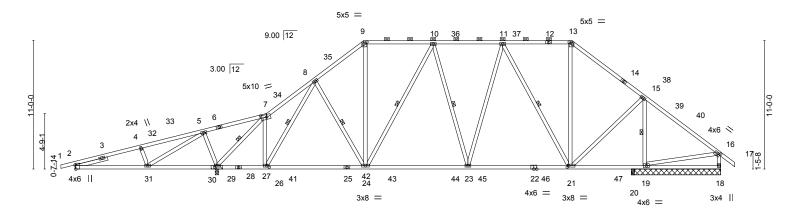


Job Truss Truss Type Qty Ply RICHARDSON E14419893 P20-04027 T15 Piggyback Base 1 Job Reference (optional)

Longleaf Truss Company, West End, NC - 27376,

8.330 s Mar 23 2020 MiTek Industries, Inc. Tue May 19 07:21:30 2020 Page 1 ID:gkUVx24QO5glBKvEjRcThWzFI?4-iMY46RaoV59qdkF8yijqTlWoxinvTTT9O8umaTzF?op

Scale = 1:98.6



6	-2-10	12-0-0 12-1 _{lT} 12 16-4-	2 1	24-8-11	3	i3-7-11	42-6	-11	1 47-11-2	48-9-p	55-3-6	
6	i-2-10	5-9-6 0-1 ¹ 12 4-3-) '	8-3-15	1 8	8-11-0	8-11	-0	5-4-7	0-10-3	6-6-1	
Plate Offsets (X,Y)	[2:0-4-4,E	dge], [7:0-5-12,0-2-8], [9	:0-3-0,0-2-0], [[13:0-3-0,0-2-0)], [16:0-3-0,	0-1-12], [21:0-1-	8,0-1-8], [26	0-2-12,0-1-	3], [29:0-2-8,	0-1-8]		
Snow (Pf/Pg) 16.5/19 TCDL 1 BCLL	0.0 0.0 *	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TF	2-0-0 1.15 1.15 YES	BC (0.64 0.70 0.79	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (lo -0.20 21-2 -0.32 21-2 0.04	3 >999	L/d 240 180 n/a	M ⁻	ATES Γ20 eight: 368 lb	GRIP 244/190
BCDL 1	0.0	Code II(C2010/11	12014	IVIALITA-C	١ ا					***	eigitt. 300 ib	11-20/

BRACING-

LUMBER-

TOP CHORD 2x4 SP No 1

BOT CHORD 2x4 SP No 1 2x4 SP No 3 WERS

SLIDER Left 2x4 SP No.3 -x 2-10-5 TOP CHORD

Sheathed or 5-3-8 oc purlins, except end verticals, and 2-0-0 oc

purlins (5-3-6 max.): 9-13.

BOT CHORD Rigid ceiling directly applied or 4-5-5 oc bracing. **WEBS** 1 Row at midpt

7-29, 8-26, 8-24, 10-24, 10-23, 11-21, 15-19

REACTIONS. All bearings 0-3-8 except (jt=length) 29=0-4-10 (input: 0-3-8 + bearing block), 19=7-7-12, 18=7-7-12.

(lb) - Max Horz 29=236(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 18, 20 except 29=-286(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 18, 20 except 29=2937(LC 27), 19=2005(LC 25)

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

TOP CHORD 2-4=-242/906, 4-5=-230/1021, 5-7=-452/2136, 7-8=-785/457, 8-9=-1429/2,

9-10=-1143/24, 10-11=-1329/60, 11-13=-788/105, 13-15=-1004/90, 15-16=-65/283 BOT CHORD $2-31 = -820/241,\ 29-31 = -1835/470,\ 26-29 = -310/732,\ 24-26 = 0/1112,\ 23-24 = 0/1417,$

21-23=0/1274

WEBS 4-31=-407/95, 5-31=-236/1075, 5-29=-686/149, 7-29=-3048/193, 7-26=-171/1467,

8-26=-1385/301, 8-24=-97/402, 9-24=0/581, 10-24=-539/79, 11-23=0/481,

11-21=-1014/0, 13-21=0/311, 15-21=0/1291, 15-19=-1719/0, 16-19=-280/75

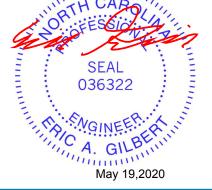
NOTES-

- 1) 2x4 SP No.1 bearing block 12" long at jt. 29 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. User Defined Bearing crushing capacity= 425psi.
- Unbalanced roof live loads have been considered for this design.
- 3) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=12ft; B=45ft; L=55ft; eave=7ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; 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 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 7) Provide adequate drainage to prevent water ponding.
- 8) All plates are 3x6 MT20 unless otherwise indicated.
- 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.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18, 20 except (it=lb) 29=286.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and

ian parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Qua Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.





Job	Truss	Truss Type	Qty	Ply	RICHARDSON
P20-04027	T15	Piggyback Base	1	1	E14419893
1 20-04021	110	l iggyback base		'	Job Reference (optional)

Longleaf Truss Company,

West End, NC - 27376,

8.330 s Mar 23 2020 MiTek Industries, Inc. Tue May 19 07:21:30 2020 Page 2 ID:gkUVx24QO5glBKvEjRcThWzFI?4-iMY46RaoV59qdkF8yijqTlWoxinvTTT9O8umaTzF?op

NOTES-

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



Job Truss Truss Type Qty Ply RICHARDSON E14419894 T17 P20-04027 Piggyback Base Girder Job Reference (optional) Longleaf Truss Company, West End, NC - 27376, 8.330 s Mar 23 2020 MiTek Industries, Inc. Tue May 19 07:21:33 2020 Page 1 ID:gkUVx24QO5glBKvEjRcThWzFI?4-6xEDkTchn0XPUB_jdqGX5w8M7vyGgxHb456QAozF?om <u>12-8</u>-11 17-1Ŏ-6 22-0-1 4-1-12 26-1-13 30-7-0 4-1-12 4-1-12 Scale = 1:65.8 4x8 = 9.00 12 4x4 = 623 7 24 9 25 22 10 26 3 21 -2-8 • 16 27 28 29 30 31 32 33 20 18 19 17 15 14 13 12 2x4 || 4x6 = 2x4 || 4x4 = 3x8 = 4x4 = 8-1-12 12-8-11 17-10-6 22-0-1 26-1-13 30-7-0 4-5-4 3-8-9 4-6-14 5-1-11 4-1-12 4-1-12 [2:0-1-12,0-1-8], [3:0-1-12,0-1-8], [4:0-1-8,0-1-8], [6:0-6-0,0-2-0], [9:0-1-12,0-1-8], [10:0-1-12,0-1-8], [11:0-1-8,0-1-8]

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL (roof) 20.0			()	
Snow (Pf/Pg) 16.5/15.0	Plate Grip DOL 1.15	TC 0.45	Vert(LL) -0.03 14 >999 240	MT20 244/190
	Lumber DOL 1.15	BC 0.15	Vert(CT) -0.05 14 >999 180	
TCDL 10.0	Rep Stress Incr NO	WB 0.34	Horz(CT) 0.01 12 n/a n/a	
BCLL 0.0 *			11012(01) 0.01 12 1114 1114	Mainte 005 Ib ET - 000/
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S		Weight: 265 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

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

WFBS 2x4 SP No 3

REACTIONS. 20=0-3-8, 18=0-3-8, 12=0-3-8 (size)

Max Horz 20=240(LC 11)

Max Uplift 20=-32(LC 12), 18=-58(LC 12)

Max Grav 20=732(LC 2), 18=1628(LC 98), 12=1064(LC 45)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-511/23 4-6=-625/123 6-7=-599/123 7-9=-824/124 9-10=-1089/80 10-11=-1172/31, 2-20=-544/43, 11-12=-984/18

BOT CHORD $19 - 20 = -215/264,\ 18 - 19 = -81/443,\ 15 - 17 = 0/462,\ 14 - 15 = 0/779,\ 13 - 14 = 0/871$

3-19=-12/301, 3-18=-455/83, 4-18=-1010/35, 4-17=0/550, 6-17=-313/5, 6-15=-11/450, **WEBS**

9-15=-515/83, 9-14=0/270, 2-19=-1/329, 11-13=0/835

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=12ft; B=45ft; L=31ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=16.5 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 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 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) All plates are 3x4 MT20 unless otherwise indicated.
- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 18.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 129 lb down and 17 lb up at 0-9-11, 125 lb down and 20 lb up at 2-9-11, and 125 lb down and 20 lb up at 4-9-11, and 125 lb down and 20 lb up at 6-9-11 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

JORTH 036322

Sheathed or 5-9-5 oc purlins, except end verticals, and 2-0-0 oc

4-18, 6-17, 9-15

Rigid ceiling directly applied or 10-0-0 oc bracing.

purlins (6-0-0 max.): 6-7.

1 Row at midpt

May 19,2020

M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not Design Valid to to set only with release controlled in the control



Job	Truss	Truss Type	Qty	Ply	RICHARDSON
P20-04027	T17	Piggyback Base Girder	1	1	E14419894
1 20-04021	117	l iggyback base Girder	<u>'</u>	'	Job Reference (optional)

Longleaf Truss Company,

West End, NC - 27376,

8.330 s Mar 23 2020 MiTek Industries, Inc. Tue May 19 07:21:33 2020 Page 2 ID:gkUVx24QO5glBKvEjRcThWzFI?4-6xEDkTchn0XPUB_jdqGX5w8M7vyGgxHb456QAozF?om

LOAD CASE(S) Standard

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

Vert: 1-2=-43, 2-6=-43, 6-7=-53, 7-11=-43, 12-20=-20

Concentrated Loads (lb)

Vert: 27=-107 28=-104 29=-104 30=-104

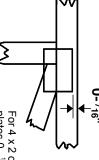


Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated.
Dimensions are in ft-in-sixteenths.
Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- ¹/16" from outside edge of truss.

This symbol indicates the required direction of slots in connector plates.

* Plate location details available in MiTek 20/20 software or upon request.

PLATE SIZE



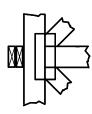
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING



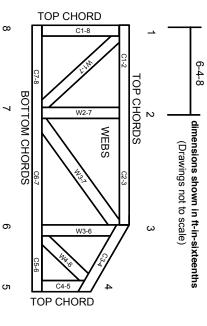
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

National Design Specification for Metal Plate Connected Wood Truss Construction. Design Standard for Bracing.
Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

ANSI/TPI1: DSB-89:

Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988 ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

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MiTek Engineering Reference Sheet: MII-7473 rev. 10/03/2015

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
 Truss bracing must be designed by an engineer. For
- Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other
- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.

Connections not shown are the responsibility of others.

- Do not cut or alter truss member or plate without prior approval of an engineer
- approval of an engineer.
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.