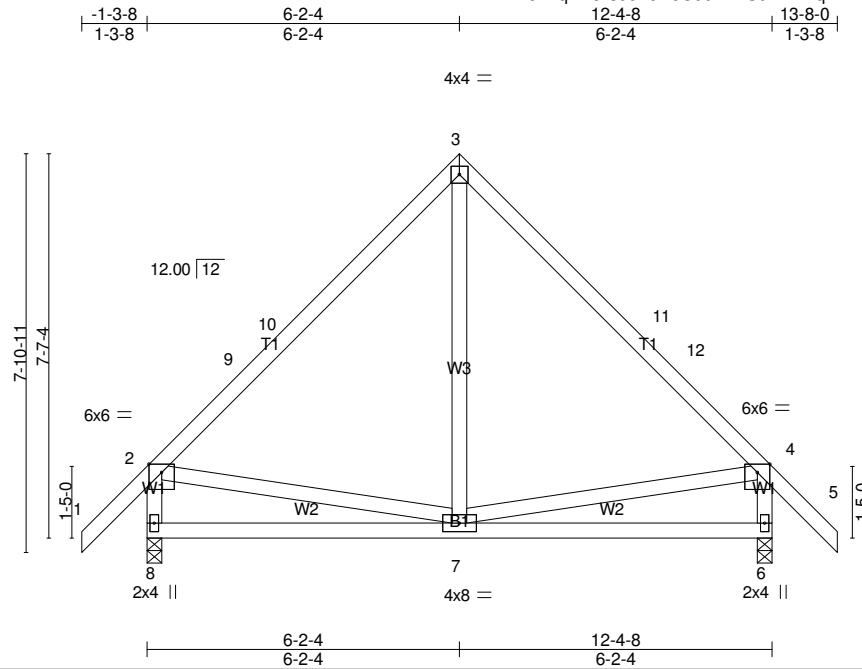


Job 1625532	Truss A01	Truss Type Common	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

ID:WDvc2XqYPcks0eFcMJOUuu1zNC97-E12qLliEvLdPjR\_tcDzK9QOj?p7vXB38n7?xS2zNAAM  
8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:00:45 2019 Page 1



Scale = 1:45.6

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.57	Vert(LL)	-0.03	6-7	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.30	Vert(CT)	-0.05	6-7	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.09	Horz(CT)	0.00	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.00	7-8	>999		
								Weight: 81 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied, except end verticals.  
BOT CHORD Rigid ceiling directly applied.

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

**REACTIONS.** (lb/size) 8=359/0-3-8 (min. 0-1-8), 6=359/0-3-8 (min. 0-1-8)  
Max Horz 8=-195(LC 12)  
Max Uplift 8=-28(LC 14), 6=-28(LC 15)  
Max Grav 8=570(LC 2), 6=570(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-9=-445/57, 9-10=-333/63, 3-10=-314/91, 3-11=-314/91, 11-12=-333/63, 4-12=-445/57,  
2-8=-513/131, 4-6=-513/131  
BOT CHORD 7-8=-199/299

**NOTES-** (11)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-3-8 to 2-1-5, Interior(1) 2-1-5 to 6-2-4, Exterior(2) 6-2-4 to 9-7-1 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=5.9 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
- Roof design snow load has been reduced to account for slope.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

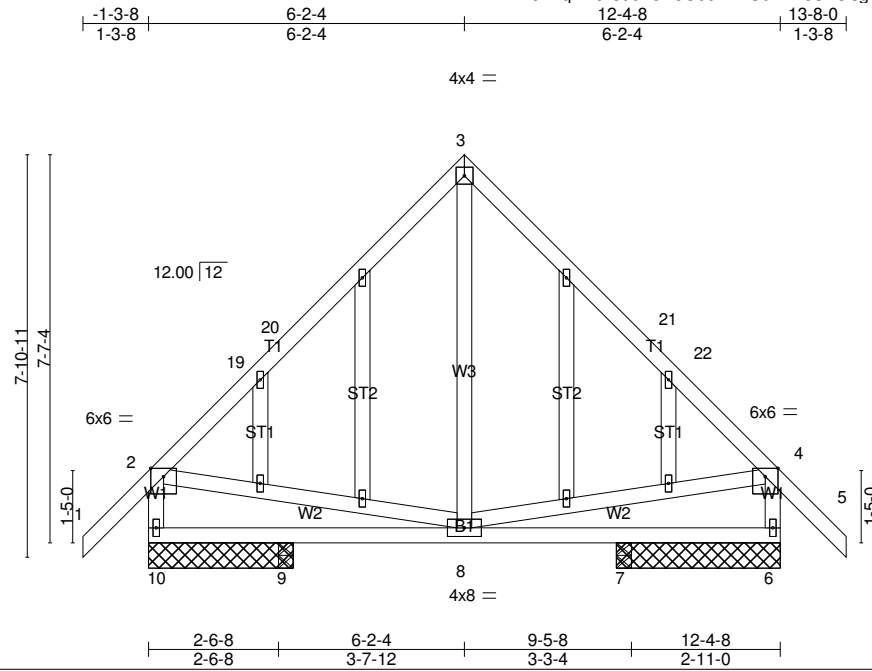
**LOAD CASE(S)** Standard

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	A01E	GABLE	1	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:00:46 2019 Page 1

ID:WDvc2XqYPcks0eFcMjOuu1zNC97-iDcCY5isgflGLbZ39xUJZhdxcupCWVGdXH?nV\_UzNAAI



Scale = 1:45.2

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.56	Vert(LL)	-0.00	8-9	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	-0.01	8-9	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.08	Horz(CT)	0.00	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.00	8	>999		
								Weight: 101 lb	FT = 20%

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

**BRACING-**  
TOP CHORD  
BOT CHORD

Structural wood sheathing directly applied, except end verticals.  
Rigid ceiling directly applied.

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

**REACTIONS.** All bearings 0-3-8 except (jt=length) 10=2-10-0, 6=3-2-8.  
(lb) - Max Horz 10=195(LC 13)  
Max Uplift All uplift 100 lb or less at joint(s) 10, 6  
Max Grav All reactions 250 lb or less at joint(s) 9, 7 except 10=500(LC 2), 6=505(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-19=-398/85, 19-20=-286/91, 3-20=-268/120, 3-21=-267/120, 21-22=-286/91,  
4-22=-398/85, 2-10=-478/152, 4-6=-478/152  
BOT CHORD 9-10=-216/271, 8-9=-216/271

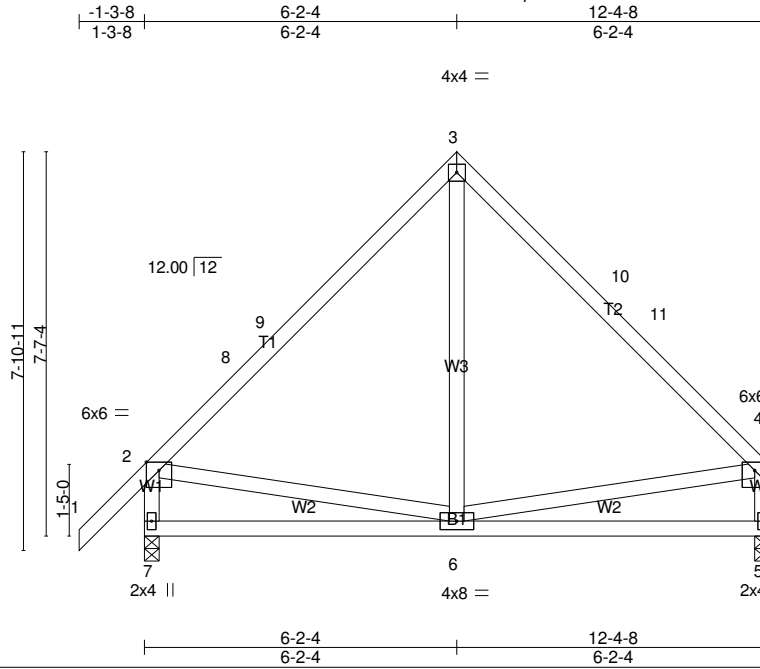
- NOTES-** (14)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-3-8 to 2-1-5, Interior(1) 2-1-5 to 6-2-4, Exterior(2) 6-2-4 to 9-7-1 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=5.9 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
  - Roof design snow load has been reduced to account for slope.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
  - All plates are 1.5x4 MT20 unless otherwise indicated.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 6.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

Job 1625532	Truss A02	Truss Type COMMON	Qty 4	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

ID:WDvc2XqYPcks0eFcMJOUuu1zNC97-eckyznk6BG?\_avjSHMX1m20ES09ckXqaT5Eb3NzNAAJ  
8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:00:48 2019 Page 1



Scale = 1:45.6

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.56	Vert(LL)	-0.03	5-6	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.30	Vert(CT)	-0.05	6-7	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.09	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.00	6-7	>999		
								Weight: 79 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied, except end verticals.  
BOT CHORD Rigid ceiling directly applied.

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

**REACTIONS.** (lb/size) 7=362/0-3-8 (min. 0-1-8), 5=311/0-3-8 (min. 0-1-8)  
Max Horz 7=168(LC 11)  
Max Uplift 7=-26(LC 14), 5=-19(LC 14)  
Max Grav 7=575(LC 2), 5=478(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-8=-451/54, 8-9=-339/60, 3-9=-319/89, 3-10=-300/89, 10-11=-322/62, 4-11=-445/60,  
2-7=-518/129, 4-5=-421/79  
BOT CHORD 6-7=-198/270

**NOTES-** (11)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-3-8 to 2-1-5, Interior(1) 2-1-5 to 6-2-4, Exterior(2) 6-2-4 to 9-7-1 zone; cantilever left exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=5.9 psf (roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
- Roof design snow load has been reduced to account for slope.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 5.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

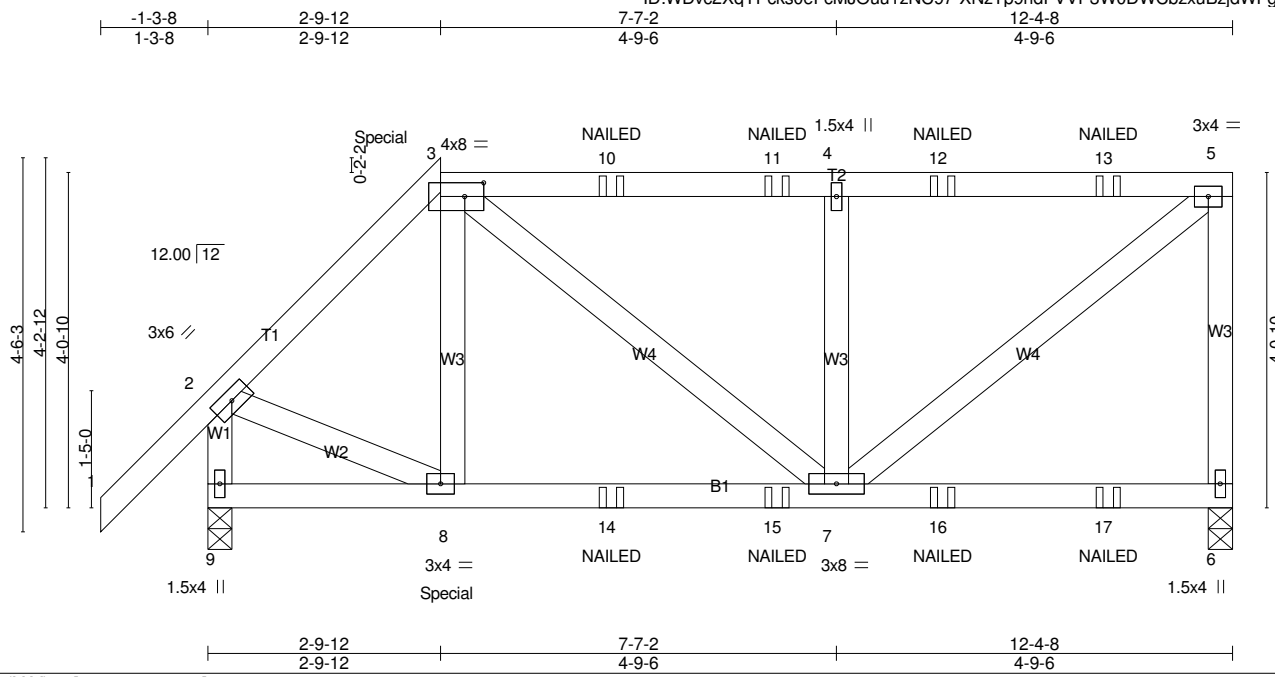
**LOAD CASE(S)** Standard

Job 1625532	Truss B01	Truss Type MONOPITCH GIRDER	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:00:52 2019 Page 1

ID:WDvc2XqYPcks0eFcMJOUu1zNC97-XNzTp9ndFVVP3W0DWCBzXuBzdWFGJWAOjCpC8zNAAF



Scale = 1:27.8

Plate Offsets (X,Y)-- [3-0-2-12,0-2-0]	
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0
TCLL 20.0	Plate Grip DOL 1.15
TCDL 10.0	Lumber DOL 1.15
BCLL 0.0 *	Rep Stress Incr NO
BCDL 10.0	Code IRC2015/TPI2014
	<b>CSI.</b>
	TC 0.35
	BC 0.26
	WB 0.24
	Matrix-MS
	<b>DEFL.</b> in (loc) l/defl L/d
	Vert(LL) -0.01 6-7 >999 360
	Vert(CT) -0.03 6-7 >999 240
	Horz(CT) -0.00 6 n/a n/a
	Wind(LL) 0.02 7-8 >999 240
	<b>PLATES</b> MT20
	<b>GRIP</b> 244/190
	Weight: 79 lb FT = 20%

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

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

**REACTIONS.** (lb/size) 6=401/0-3-8 (min. 0-1-8), 9=424/0-3-8 (min. 0-1-8)  
 Max Horz 9=111(LC 10)  
 Max Uplift 6=-310(LC 7), 9=-271(LC 10)  
 Max Grav 6=527(LC 48), 9=623(LC 45)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-500/290, 3-10=-460/287, 10-11=-460/287, 4-11=-461/288, 4-12=-460/287,  
 12-13=-460/287, 5-13=-460/287, 5-6=-473/309, 2-9=-605/287  
 BOT CHORD 8-14=-227/334, 14-15=-227/334, 7-15=-227/334  
 WEBS 4-7=-337/269, 5-7=-358/574, 2-8=-229/403

- NOTES-** (15)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone; cantilever left exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - \*\* TCCL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps= varies (min. roof snow=5.9 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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.
  - Roof design snow load has been reduced to account for slope.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=310, 9=271.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 161 lb down and 158 lb up at 2-9-12 on top chord, and 55 lb down and 51 lb up at 2-9-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	B01	MONOPITCH GIRDER	1	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:00:52 2019 Page 2  
 ID:WDvc2XqYPcks0eFcMJOuu1zNC97-XNzTp9ndFVVP3W0DWCbzxBzjdWfJWAOjCpC8zNAAf

15) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

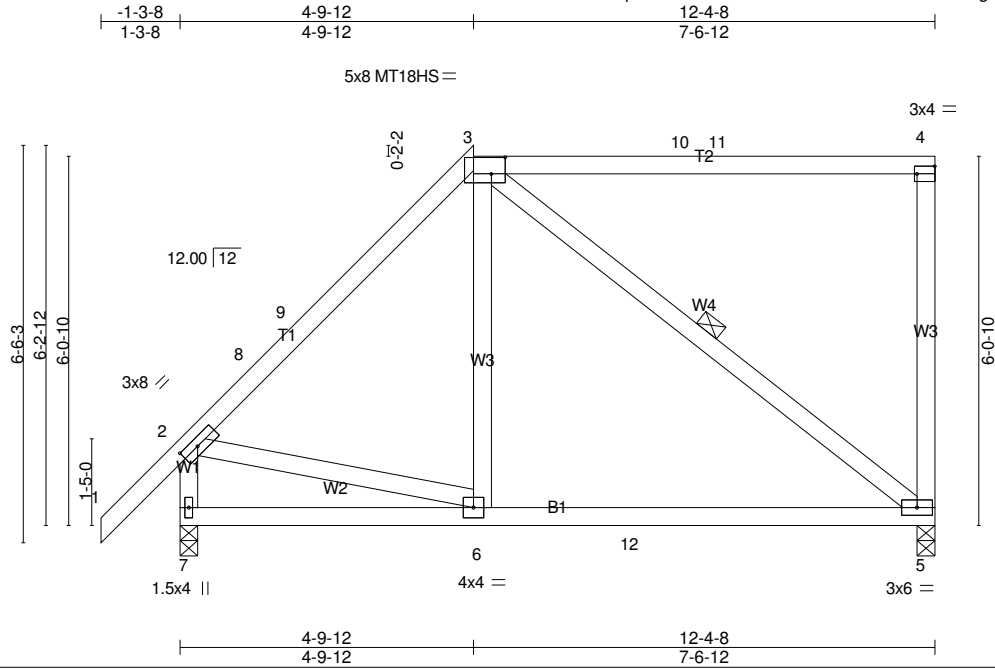
Vert: 1-2=-32, 2-3=-32, 3-5=-45, 6-9=-20

Concentrated Loads (lb)

Vert: 3=-1(B) 8=-8(B) 10=-0(B) 11=-0(B) 12=-0(B) 13=-0(B) 14=-4(B) 15=-4(B) 16=-4(B) 17=-4(B)

Job 1625532	Truss B02	Truss Type MONOPITCH	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
Builders Firstsource, Albemarle, NC 28001					Job Reference (optional)

ID:WDvc2XqYPcks0eFcMJOUu1zNC97-?ZXr0VoF0odGhgbP4v7CT6j1n1qyPnBjCnXmKazNAAe  
8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:00:53 2019 Page 1



Scale = 1:37.8

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.77	Vert(LL) -0.07	5-6	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.42	Vert(CT) -0.15	5-6	>997	240	MT18HS	244/190
BCLL 0.0 *	Lumber DOL 1.15	WB 0.14	Horz(CT) 0.00	5	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Wind(LL) -0.01	5-6	>999	240		
	Code IRC2015/TPI2014						Weight: 81 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.  
BOT CHORD Rigid ceiling directly applied.  
WEBS 1 Row at midpt 3-5

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

**REACTIONS.** (lb/size) 7=393/0-3-8 (min. 0-1-8), 5=380/0-3-8 (min. 0-1-8)  
Max Horz 7=177(LC 14)  
Max Uplift 7=-2(LC 14), 5=-67(LC 11)  
Max Grav 7=575(LC 2), 5=478(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-8=-470/5, 8-9=-391/17, 3-9=-345/40, 2-7=-539/85  
BOT CHORD 6-12=-83/283, 5-12=-83/283  
WEBS 3-5=-316/98, 2-6=-41/331

**NOTES-** (14)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-3-8 to 2-1-5, Interior(1) 2-1-5 to 4-9-12, Exterior(2) 4-9-12 to 8-2-9 zone; cantilever left exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- \*\* TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps= varies (min. roof snow=5.9 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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.
- Roof design snow load has been reduced to account for slope.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 5.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	B02	MONOPITCH	1	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:00:53 2019 Page 2  
ID:WDvc2XqYPcks0eFcMJOUu1zNC97-?ZXr0VoF0odGhgbP4v7CT6j1n1qyPnBjCnXmkazNAAe

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

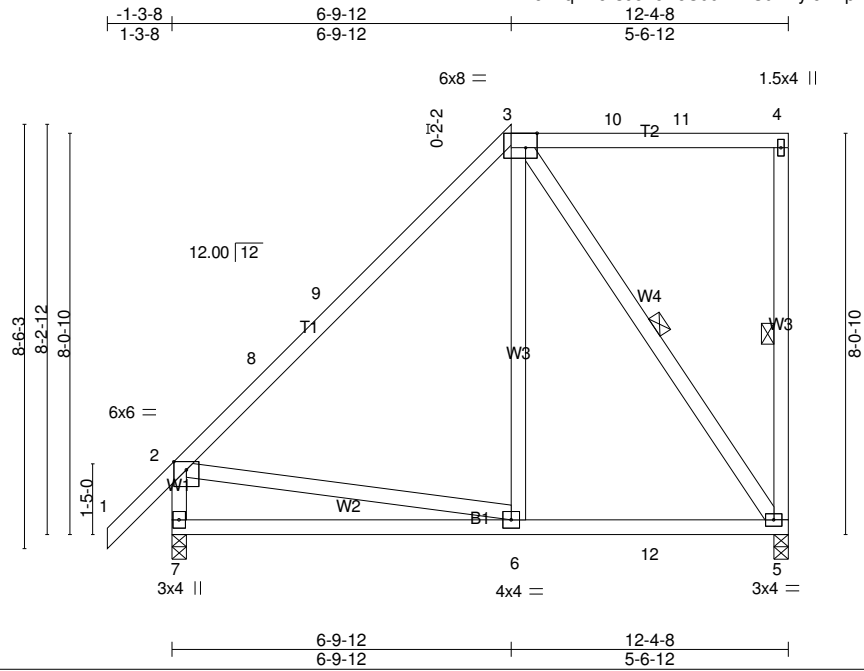
Vert: 1-2=-32, 2-3=-32, 3-4=-45, 5-7=-20

Job 1625532	Truss B03	Truss Type MONOPITCH	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
					Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:00:55 2019 Page 1

ID:WDvc2XqYPcks0eFcmJOUuu1zNC97-xyfcRAPVYQt\_wzloBK9gZXpN2rWhtgfc4hQTpTzNAAC



Scale = 1:46.3

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.72	Vert(LL)	-0.05	6-7	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.34	Vert(CT)	-0.09	6-7	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.21	Horz(CT)	-0.01	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.00	6	>999	240		
									Weight: 91 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.  
BOT CHORD Rigid ceiling directly applied.  
WEBS 1 Row at midpt 4-5, 3-5

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

**REACTIONS.** (lb/size) 7=378/0-3-8 (min. 0-1-8), 5=367/0-3-8 (min. 0-1-8)  
Max Horz 7=243(LC 14)  
Max Uplift 5=-75(LC 11)  
Max Grav 7=575(LC 2), 5=478(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-8=-441/0, 8-9=-304/0, 3-9=-294/9, 2-7=-508/67  
BOT CHORD 6-7=-351/436  
WEBS 3-6=0/269, 3-5=-378/135, 2-6=-232/289

**NOTES-** (13)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-3-8 to 2-1-5, Interior(1) 2-1-5 to 6-9-12, Exterior(2) 6-9-12 to 10-2-9 zone; cantilever left exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- \*\* TCLL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps= varies (min. roof snow=5.9 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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.
- Roof design snow load has been reduced to account for slope.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCCL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard  
Continued on page 2



Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	B03	MONOPITCH	1	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:00:55 2019 Page 2  
ID:WDvc2XqYPcks0eFcMJOUu1zNC97-xyfcRApVYQt\_wzloBK9gZxpN2rWhtgfc4hQTpTzNAAc

**LOAD CASE(S)** Standard

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

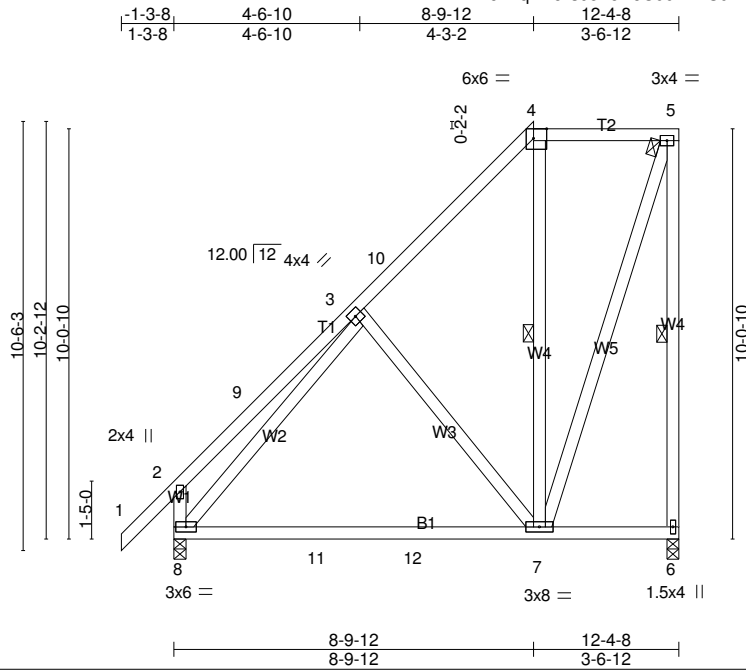
Uniform Loads (plf)

Vert: 1-2=-32, 2-3=-32, 3-4=-45, 5-7=-20

Job 1625532	Truss B04	Truss Type MONOPITCH	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL Job Reference (optional)
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Builders Firstsource, Albemarle, NC 28001

ID:WDvc2XqYPcks0eFcmJOUu1zNC97-P8D\_eWq7Jj?rY7K\_11gv5kLdAEotc6SILLA0LvzNAAB  
8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:00:56 2019 Page 1



Scale = 1:56.5

Plate Offsets (X,Y)-- [4:0-3-14,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.44	Vert(LL) -0.15	7-8	>948	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.60	Vert(CT) -0.31	7-8	>470	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.30	Horz(CT) 0.00	6	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Wind(LL) 0.01	7-8	>999	240		
	Code IRC2015/TPI2014						Weight: 110 lb	FT = 20%

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

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

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

**REACTIONS.** (lb/size) 6=350/0-3-8 (min. 0-1-8), 8=368/0-3-8 (min. 0-1-8)  
 Max Horz 8=309(LC 14)  
 Max Uplift 6=-140(LC 14)  
 Max Grav 6=478(LC 2), 8=575(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-9=-277/95, 3-10=-288/0, 5-6=-483/180, 2-8=-343/158  
 BOT CHORD 8-11=-179/306, 11-12=-179/306, 7-12=-179/306  
 WEBS 3-7=-254/208, 5-7=-150/463, 3-8=-261/64

**NOTES-** (12)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-3-8 to 2-1-5, Interior(1) 2-1-5 to 8-9-12, Exterior(2) 8-9-12 to 12-2-12 zone; cantilever left exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- \*\* TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps= varies (min. roof snow=5.9 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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.
- Roof design snow load has been reduced to account for slope.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=140.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	B04	MONOPITCH	1	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:00:56 2019 Page 2  
ID:WDvc2XqYPcks0eFcMJOUu1zNC97-P8D\_eWq7Jj?rY7K\_11gv5kLdAEotc6SII LA0LvzNAAb

**LOAD CASE(S)** Standard

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

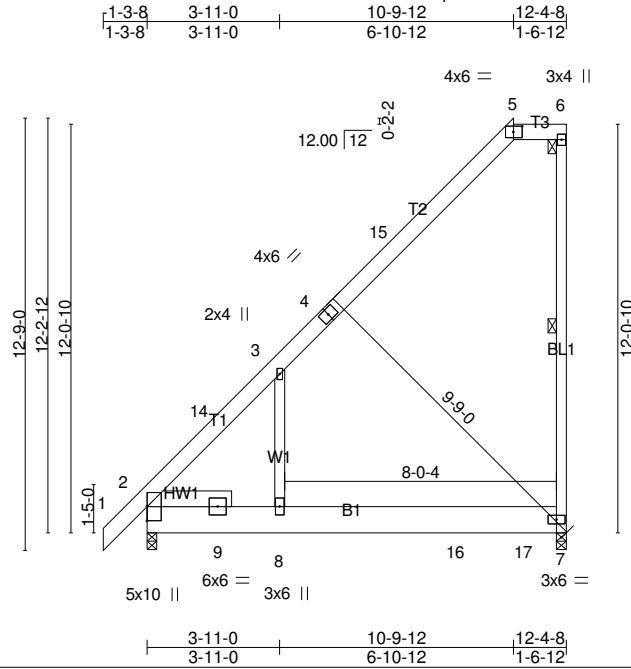
Uniform Loads (plf)

Vert: 1-2=-32, 2-4=-32, 4-5=-45, 6-8=-20

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	B05	MONOPITCH	1	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

ID:WDvc2XqYPcks0eFcMJUuu1zNC97-MXKk3CsOrLFZnRUNsSiNA9RyJ2T?4202mef7QozNAAZ  
8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:00:58 2019 Page 1



Scale = 1:68.0

Plate Offsets (X,Y)-- [5:0-3-2,0-2-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.47	Vert(LL) -0.10	7-8	>999	360		MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.69	Vert(CT) -0.24	7-8	>620	240			
BCLL 0.0 *	Lumber DOL 1.15	WB 0.17	Horz(CT) 0.05	2	n/a	n/a			
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Wind(LL) 0.20	7-8	>750	240			
	Code IRC2015/TPI2014							Weight: 121 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.2  
BOT CHORD 2x10 SP No.2  
WEBS 2x4 SP No.3  
OTHERS 2x4 SP No.2  
SLIDER Left 2x6 SP No.2 2-6-0

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-6.  
BOT CHORD Rigid ceiling directly applied or 6-7-14 oc bracing.  
WEBS 1 Row at midpt 6-7

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

**REACTIONS.** (lb/size) 2=380/0-3-8 (min. 0-1-8), 7=415/0-3-8 (min. 0-1-8)  
Max Horz 2=390(LC 14)  
Max Uplift 7=-128(LC 14)  
Max Grav 2=589(LC 2), 7=572(LC 26)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-14=-453/324, 3-14=-428/361  
BOT CHORD 2-9=-349/406  
WEBS 3-8=-485/405

**NOTES-** (14)

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-3-8 to 2-1-5, Interior(1) 2-1-5 to 10-9-12, Exterior(2) 10-9-12 to 12-2-12 zone; cantilever left exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) \*\* TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps= varies (min. roof snow=5.9 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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) Roof design snow load has been reduced to account for slope.
- 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 7.7 psf on overhangs non-concurrent with other live loads.
- 6) 100.0lb AC unit load placed on the bottom chord, 10-0-0 from left end, supported at two points, 2-0-0 apart.
- 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.
- 10) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=128.
- 12) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 14) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	B05	MONOPITCH	1	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:00:58 2019 Page 2  
ID:WDvc2XqYPcks0eFcMJOUu1zNC97-MXKk3CsOrLFZnRUNsSiNA9RyJ2T?4202mef7QozNAAZ

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-5=-32, 5-6=-45, 7-10=-20

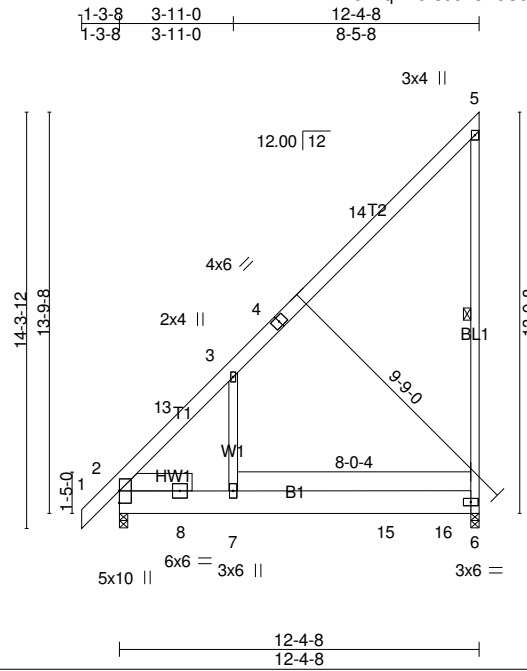
Concentrated Loads (lb)

Vert: 16=-50 17=-50

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	B06	MONOPITCH	1	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

ID:WDvc2XqYPcks0eFcmJOUu1zNC97-qju7HYs0ceNQPb3ZQADcjNz6LSp\_pV8C?IOhyEzNAAy  
8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:00:59 2019 Page 1



Scale = 1:79.2

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.51	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.70	Vert(LL) 0.21 6-7 >706 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.18	Vert(CT) -0.24 6-7 >604 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.05 2 n/a n/a		
	Code IRC2015/TPI2014			Weight: 127 lb FT = 20%	

**LUMBER-**

TOP CHORD 2x6 SP No.2  
 BOT CHORD 2x10 SP No.2  
 WEBS 2x4 SP No.3  
 OTHERS 2x4 SP No.2  
 SLIDER Left 2x8 SP DSS 2-6-0

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 6-2-6 oc bracing.  
 WEBS 1 Row at midpt 5-6

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

**REACTIONS.** (lb/size) 2=379/0-3-8 (min. 0-1-8), 6=396/0-3-8 (min. 0-1-8)  
 Max Horz 2=439(LC 14)  
 Max Uplift 6=196(LC 14)  
 Max Grav 2=589(LC 2), 6=620(LC 26)

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

TOP CHORD 2-13=-534/394, 3-13=-509/433, 5-6=-284/198  
 BOT CHORD 2-8=-391/516  
 WEBS 3-7=-510/426

**NOTES-** (11)

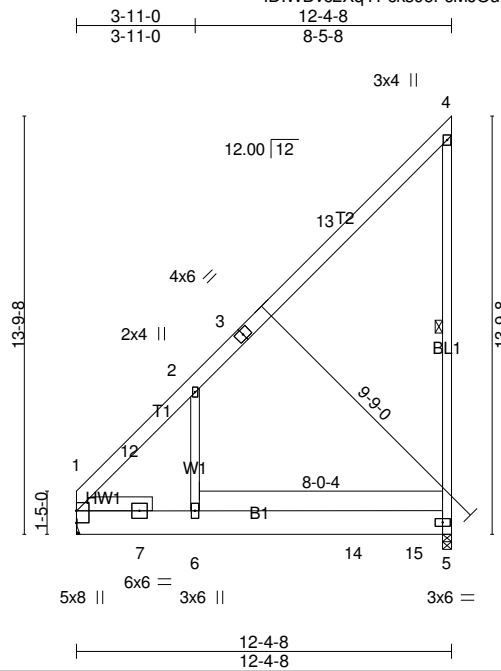
- 1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-3-8 to 2-1-5, Interior(1) 2-1-5 to 12-2-9 zone; cantilever left exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=5.9 psf (roof snow); Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
- 3) Roof design snow load has been reduced to account for slope.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- 5) 100.0lb AC unit load placed on the bottom chord, 10-0-0 from left end, supported at two points, 2-0-0 apart.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=196.
- 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

Job 1625532	Truss B07	Truss Type MONOPITCH	Qty 4	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL Job Reference (optional)
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Builders Firstsource, Albemarle, NC 28001

ID:WDvc2XqYPcks0eFcMJOUu1zNC97-m60tiEuG7Ge8euCyYbG4oo3SoFTFHPUSctn06zNAAW  
8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:01 2019 Page 1



Scale = 1:76.0

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.52	Vert(LL) 0.21	5-6	>696	240	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.71	Vert(CT) -0.25	5-6	>592	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.18	Horz(CT) 0.05	1	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS						
	Code IRC2015/TPI2014							
							Weight: 121 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.2  
 BOT CHORD 2x10 SP No.2  
 WEBS 2x4 SP No.3  
 OTHERS 2x4 SP No.2  
 SLIDER Left 2x6 SP No.2 2-6-0

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 6-2-6 oc bracing.  
 WEBS 1 Row at midpt 4-5

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

**REACTIONS.** (lb/size) 1=335/Mechanical, 5=398/0-3-8 (min. 0-1-8)  
 Max Horz 1=402(LC 14)  
 Max Uplift 5=197(LC 14)  
 Max Grav 1=507(LC 2), 5=624(LC 25)

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

TOP CHORD 1-12=-532/393, 2-12=-507/431, 4-5=-284/198  
 BOT CHORD 1-7=-392/446  
 WEBS 2-6=-507/423

**NOTES-** (11)

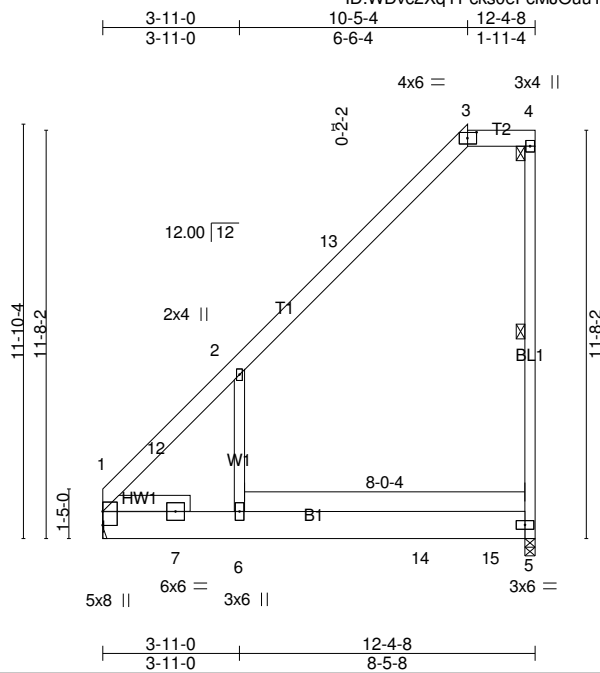
- 1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-0-0 to 3-4-13, Interior(1) 3-4-13 to 12-2-9 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=5.9 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
- 3) Roof design snow load has been reduced to account for slope.
- 4) 100.0lb AC unit load placed on the bottom chord, 10-0-0 from left end, supported at two points, 2-0-0 apart.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 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.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=197.
- 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

Job 1625532	Truss B08	Truss Type MONOPITCH	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:02 2019 Page 1  
 ID:WDvc2XqYPcks0eFcmJOUuu1zNC97-ElaFvZvuuZm?G2n85InJL?bbnfqj0s2ehGdLZZzNAAV



Scale = 1:65.9

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.69	Vert(LL)	-0.11	5-6	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.70	Vert(CT)	-0.24	5-6	>607	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.17	Horz(CT)	0.05	1	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.19	5-6	>753	240		
									Weight: 116 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.2  
 BOT CHORD 2x10 SP No.2  
 WEBS 2x4 SP No.3  
 OTHERS 2x4 SP No.3  
 SLIDER Left 2x6 SP No.2 2-6-0

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 3-4.  
 BOT CHORD Rigid ceiling directly applied or 6-9-5 oc bracing.  
 WEBS 1 Row at midpt 4-5

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

**REACTIONS.** (lb/size) 1=337/Mechanical, 5=421/0-3-8 (min. 0-1-8)  
 Max Horz 1=341(LC 14)  
 Max Uplift5=-113(LC 14)  
 Max Grav 1=507(LC 2), 5=571(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-12=-434/309, 2-12=-410/345  
 BOT CHORD 1-7=-342/405  
 WEBS 2-6=-480/399

**NOTES-** (14)

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-0-0 to 3-4-13, Interior(1) 3-4-13 to 10-5-4, Exterior(2) 10-5-4 to 12-2-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) \*\* TCLL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps= varies (min. roof snow=5.9 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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) Roof design snow load has been reduced to account for slope.
- 5) 100.0lb AC unit load placed on the bottom chord, 10-0-0 from left end, supported at two points, 2-0-0 apart.
- 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.
- 9) Refer to girder(s) for truss to truss connections.
- 10) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=113.
- 12) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 14) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard  
 Continued on page 2



Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	B08	MONOPITCH	1	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:02 2019 Page 2  
ID:WDvc2XqYPcks0eFcMJOUu1zNC97-ElaFvZvuuZm?G2n85InJL?bbnfqj0s2ehGdLZZzNAAV

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-3=-32, 3-4=-45, 5-8=-20

Concentrated Loads (lb)

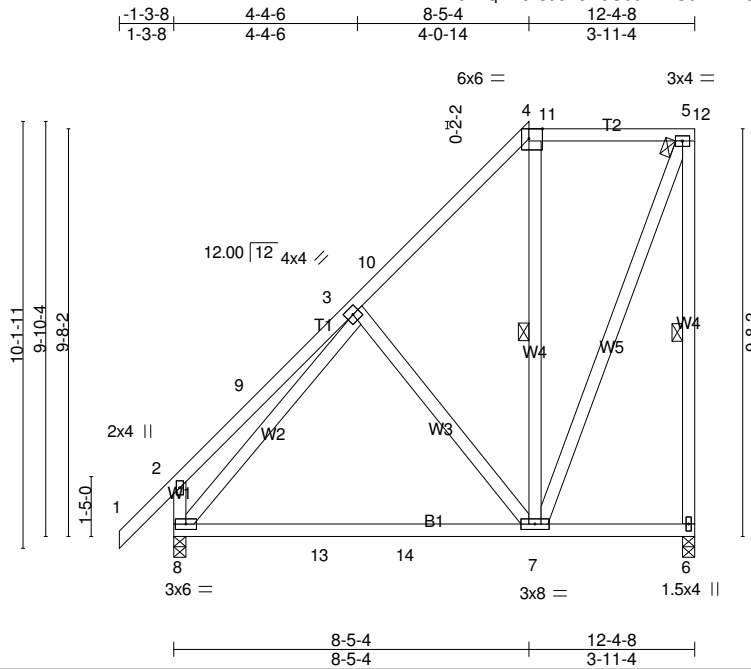
Vert: 14=-50 15=-50

Job 1625532	Truss B09	Truss Type MONOPITCH	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
Builders Firstsource, Albemarle, NC 28001					Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:04 2019 Page 1

ID:WDvc2XqYPcks0eFcMJOUu1zNC97-Ahh0KFw9QB0iVMxWDjpnQQHzTTZCUjlx8a6SdRzNAAT



Scale = 1:54.7

Plate Offsets (X,Y)-- [4:0-3-14,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.55	Vert(LL) -0.12	7-8	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.51	Vert(CT) -0.23	7-8	>623	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.28	Horz(CT) 0.00	6	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Wind(LL) 0.01	7-8	>999	240		
	Code IRC2015/TPI2014						Weight: 107 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.  
 BOT CHORD Rigid ceiling directly applied.  
 WEBS 1 Row at midpt 5-6, 4-7

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

**REACTIONS.** (lb/size) 6=354/0-3-8 (min. 0-1-8), 8=370/0-3-8 (min. 0-1-8)  
 Max Horz 8=296(LC 14)  
 Max Uplift 6=-126(LC 14)  
 Max Grav 6=478(LC 2), 8=575(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-9=-299/76, 3-10=-297/0, 5-6=-467/179, 2-8=-358/142  
 BOT CHORD 8-13=-175/306, 13-14=-175/306, 7-14=-175/306  
 WEBS 5-7=-147/428

**NOTES-** (13)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-3-8 to 2-1-5, Interior(1) 2-1-5 to 8-5-4, Exterior(2) 8-5-4 to 11-10-1 zone; cantilever left exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- \*\* TCLL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps= varies (min. roof snow=5.9 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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.
- Roof design snow load has been reduced to account for slope.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=126.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard  
 Continued on page 2

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	B09	MONOPITCH	1	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:04 2019 Page 2  
ID:WDvc2XqYPcks0eFcMJOuu1zNC97-Ahh0KFw9QB0iVMxWDjpnQQhzTTZCUjlx8a6SdRzNAAT

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-2=-32, 2-4=-32, 4-5=-45, 6-8=-20



Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	B10	Monopitch	1	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:05 2019 Page 2  
ID:WDvc2XqYPcks0eFcMJOUu1zNC97-etFOXbnBU8Z7WWjnQK0zeD6Tx8DCe4NEr?9uzNAAS

**LOAD CASE(S)** Standard

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

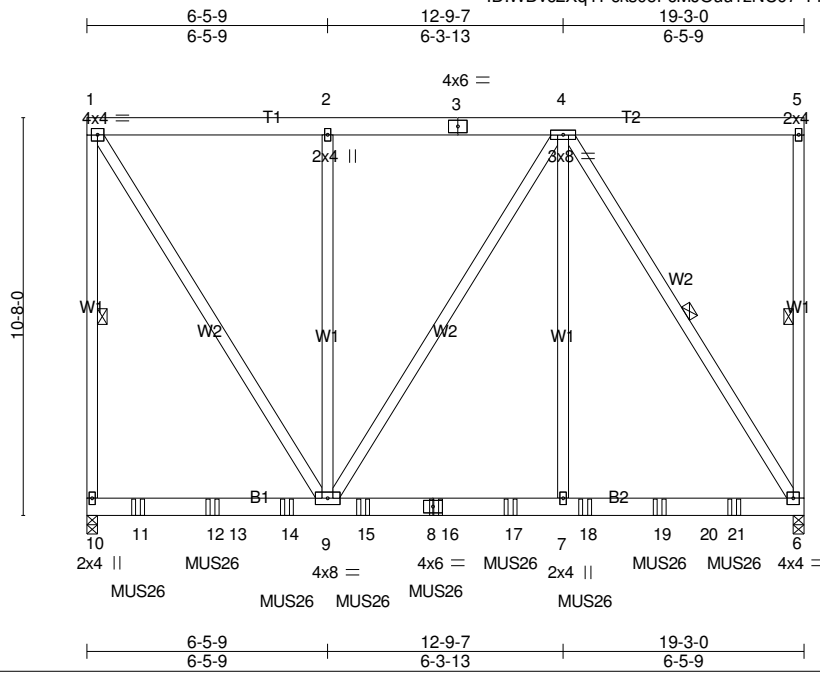
Uniform Loads (plf)

Vert: 1-2=-32, 2-3=-32, 3-4=-45, 5-7=-20

Job 1625532	Truss BG01	Truss Type FLAT GIRDER	Qty 1	Ply 2	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:11 2019 Page 1  
 ID:WDvc2XqYPcks0eFcmJOUu1zNC97-T1dfoe0YnKujrRzt7hRQCvTAIHxOdq7ziAIJNXzNAAM



Scale = 1:61.8

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.45	Vert(LL)	-0.06	9-10	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.53	Vert(CT)	-0.10	9-10	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.56	Horz(CT)	0.01	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.05	9-10	>999		
								Weight: 398 lb	FT = 20%

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

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

**REACTIONS.** (lb/size) 10=1942/0-3-8 (min. 0-1-8), 6=1824/0-3-8 (min. 0-1-8)  
 Max Uplift 10=-651(LC 6), 6=-398(LC 6)  
 Max Grav 10=2469(LC 2), 6=2317(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-10=-1929/464, 1-2=-1102/255, 2-3=-1102/255, 3-4=-1102/255  
 BOT CHORD 9-15=-197/1099, 15-16=-197/1099, 8-16=-197/1099, 8-17=-197/1099, 7-17=-197/1099, 7-18=-197/1099, 18-19=-197/1099,  
 19-20=-197/1099, 20-21=-197/1099, 6-21=-197/1099  
 WEBS 1-9=-477/2074, 2-9=-399/143, 4-7=-74/1503, 4-6=-2071/371

**NOTES-** (15)

- 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, 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load); Lumber DOL=1.15 Plate DOL=1.15; Pg=10.0 psf (ground snow); Ps=12.7 psf (roof snow); Lumber DOL=1.15 Plate DOL=1.15; Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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.
- Roof design snow load has been reduced to account for slope.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=651, 6=398.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Use Simpson Strong-Tie MUS26 (6-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent spaced at 6-0-0 oc max. starting at 1-4-8 from the left end to 17-4-8 to connect truss(es) D03 (1 ply 2x6 SP), D05 (1 ply 2x4 SP) to front face of bottom chord.
- Use Simpson Strong-Tie MUS26 (6-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-8 oc max. starting at 5-4-8 from the left end to 7-5-0 to connect truss(es) D03 (1 ply 2x6 SP), D04 (1 ply 2x4 SP) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.
- This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Continued on page 2

Job 1625532	Truss BG01	Truss Type FLAT GIRDER	Qty 1	Ply <b>2</b>	STURTZ HOMES - 23 LEIGH LAUREL Job Reference (optional)
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:11 2019 Page 2  
ID:WDvc2XqYPcks0eFcMJOUu1zNC97-T1dfoe0YnKujrRzt7hRQCvTAIHxOdq7zIAIJNXzNAAM

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-5=-45, 6-10=-20

Concentrated Loads (lb)

Vert: 8=-273(F) 11=-301(F) 12=-301(F) 14=-301(F) 15=-257(F) 17=-273(F) 18=-273(F) 19=-273(F) 21=-273(F)

Job 1625532	Truss BG02	Truss Type FLAT GIRDER	Qty 1	Ply 2	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:16 2019 Page 1  
ID:WDvc2XqYPcks0eFcMJOUu1zNC97-q?QYrM4gbtX0xCsqwE1bvyA0\_IzSI3OivS042IzNAAH

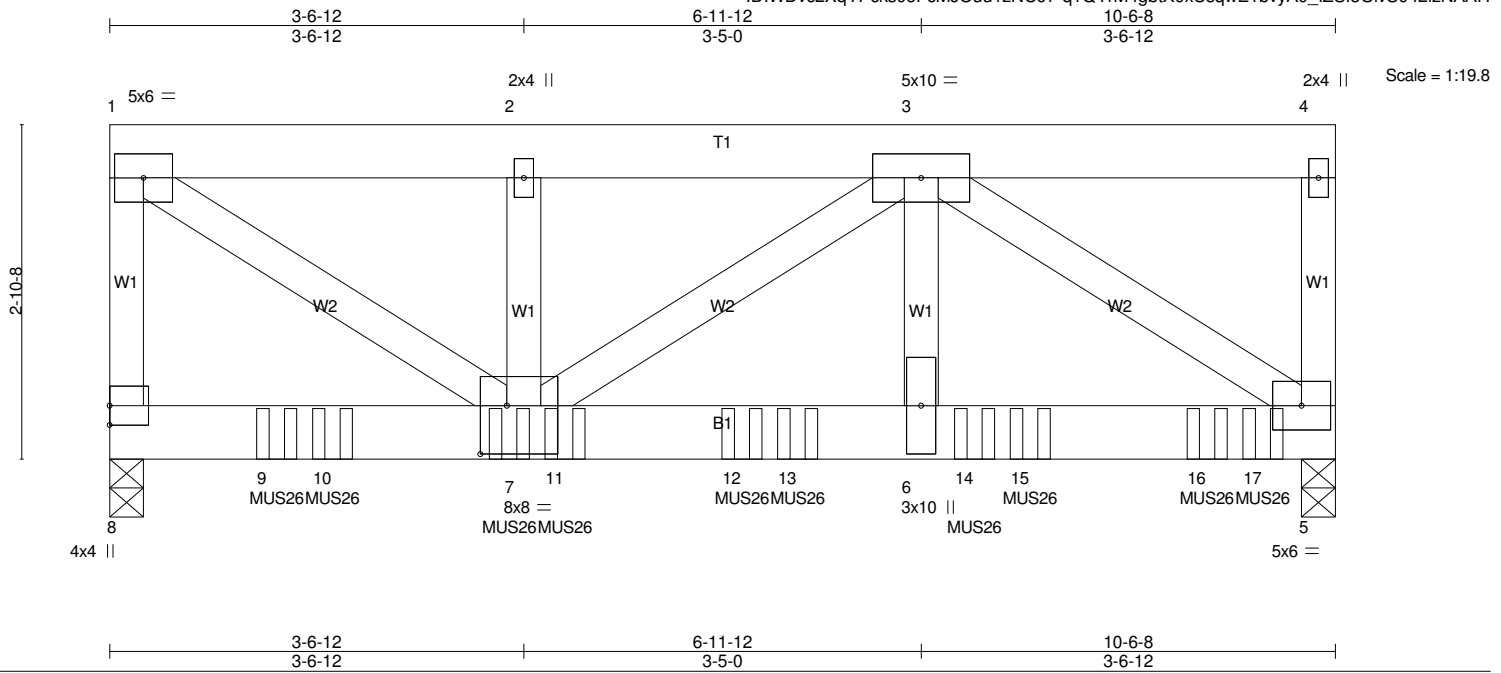


Plate Offsets (X,Y)-- [7:0-2-12,0-5-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.52	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.86	Vert(LL) -0.04 6-7 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.69	Vert(CT) -0.08 6-7 >999 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS	Horz(CT) 0.02 5 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.03 6-7 >999 240		
				Weight: 155 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.2  
 BOT CHORD 2x6 SP No.2  
 WEBS 2x4 SP No.3 \*Except\*  
 W2: 2x4 SP No.2

**BRACING-**  
 TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-4, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 8=3082/0-3-8 (min. 0-2-7), 5=3742/0-3-8 (min. 0-3-0)  
 Max Uplift 8=379(LC 6), 5=440(LC 6)  
 Max Grav 8=4162(LC 2), 5=5072(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-8=-3412/326, 1-2=-4692/419, 2-3=-4692/419  
 BOT CHORD 7-11=-420/4695, 11-12=-420/4695, 12-13=-420/4695, 6-13=-420/4695, 6-14=-420/4695,  
 14-15=-420/4695, 15-16=-420/4695, 16-17=-420/4695, 5-17=-420/4695  
 WEBS 1-7=-499/5602, 3-6=-222/3125, 3-5=-5586/501

- NOTES-** (16)
- 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, 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-6-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=12.7 psf (roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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.
  - Roof design snow load has been reduced to account for slope.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=379, 5=440.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Use Simpson Strong-Tie MUS26 (6-10d Girder, 6-10d Truss, Single Ply Girder) or equivalent spaced at 6-0-0 oc max. starting at 1-11-0 from the left end to 7-11-0 to connect truss(es) D07 (1 ply 2x4 SP) to front face of bottom chord.
  - Use Simpson Strong-Tie MUS26 (6-10d Girder, 6-10d Truss, Single Ply Girder) or equivalent spaced at 4-0-0 oc max. starting at 3-11-0 from the left end to 9-11-0 to connect truss(es) D07 (1 ply 2x4 SP) to front face of bottom chord.



Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	BG02	FLAT GIRDER	1	2	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:16 2019 Page 2  
 ID:WDvc2XqYPcks0eFcMJOUu1zNC97-q?QYrM4gbtX0xCsqwE1bvyA0\_IZSI3OivS042IzNAAH

**NOTES-** (16)

- 14) Use Simpson Strong-Tie MUS26 (6-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 1-5-4 from the left end to 9-5-4 to connect truss(es) H03 (1 ply 2x4 SP), H04 (1 ply 2x4 SP) to back face of bottom chord.
- 15) Fill all nail holes where hanger is in contact with lumber.
- 16) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-4=-45, 5-8=-20

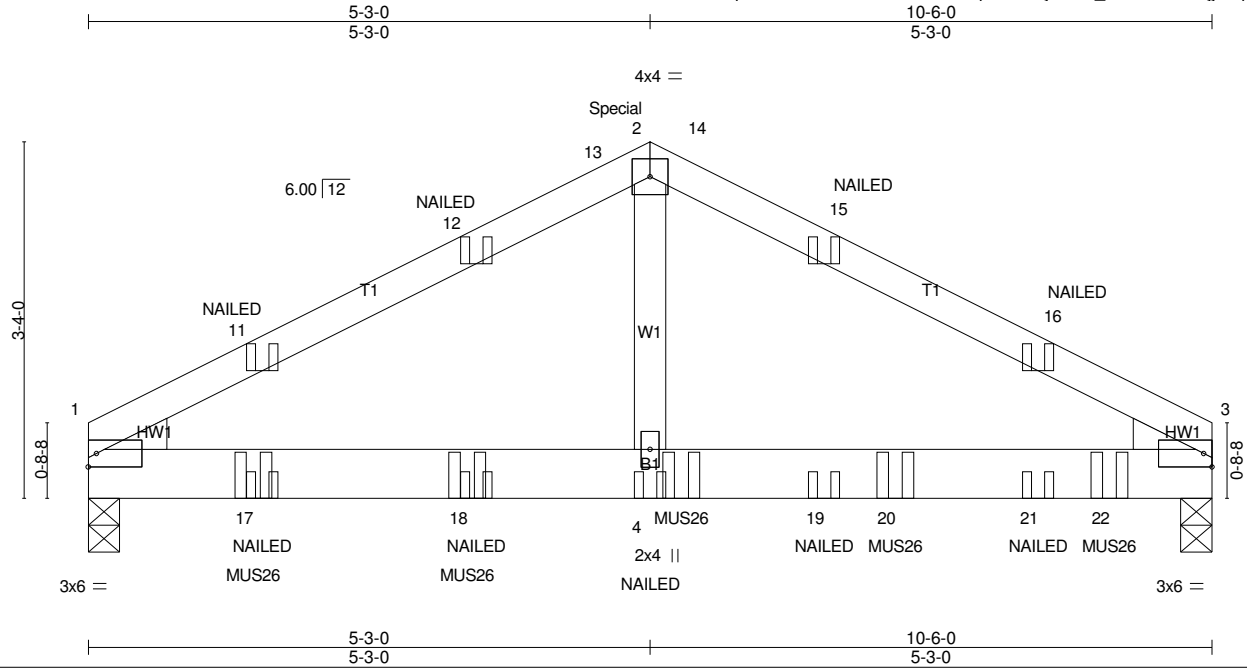
Concentrated Loads (lb)

Vert: 7=-275(B) 9=-275(B) 10=-954(F) 11=-954(F) 12=-275(B) 13=-954(F) 14=-275(B) 15=-954(F) 16=-279(B) 17=-959(F)

Job 1625532	Truss C01	Truss Type Common Girder	Qty 1	Ply 2	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:22 2019 Page 1  
ID:WDvc2XqYPcks0eFcMJOUu1zNC97-f8np6P8RBjH97J\_GV8?9DQ7FjjTitqaHNTOGPzNAAB



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.21	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.44	Vert(LL) -0.02 4-7 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.31	Vert(CT) -0.04 4-7 >999 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS	Horz(CT) 0.01 3 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.00 4-7 >999 240	Weight: 96 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x6 SP No.2  
WEBS 2x4 SP No.3  
WEDGE  
Left: 2x4 SP No.2, Right: 2x4 SP No.2

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

**REACTIONS.** (lb/size) 1=1054/0-3-8 (min. 0-1-8), 3=1126/0-3-8 (min. 0-1-8)  
Max Horz 1=37(LC 12)  
Max Grav 1=1589(LC 2), 3=1698(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-11=-2049/0, 11-12=-1977/0, 12-13=-1956/0, 2-13=-1912/0, 2-14=-1912/0, 14-15=-1956/0,  
15-16=-1977/0, 3-16=-2049/0  
BOT CHORD 1-17=0/1768, 17-18=0/1768, 4-18=0/1768, 4-19=0/1768, 19-20=0/1768, 20-21=0/1768,  
21-22=0/1768, 3-22=0/1768  
WEBS 2-4=0/1479

- NOTES-** (15)
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=7.7 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
  - Roof design snow load has been reduced to account for slope.
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Use Simpson Strong-Tie MUS26 (6-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 1-6-8 from the left end to 9-6-8 to connect truss(es) B07 (1 ply 2x10 SP), B08 (1 ply 2x10 SP) to back face of bottom chord.
  - Fill all nail holes where hanger is in contact with lumber.
  - "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 65 lb down and 68 lb up at 5-3-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	C01	Common Girder	1	2	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:22 2019 Page 2  
 ID:WDvc2XqYPcks0eFcMJOUu1zNC97-f8np6P8RBjH9f7J\_GV8?9DQ7FjjTitqaHNTOGPzNAAB

15) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-2=-35, 2-3=-35, 5-8=-20

Concentrated Loads (lb)

Vert: 4=-315(F=0, B=-315) 11=-5(F) 16=-5(F) 17=-317(F=-1, B=-315) 18=-319(F=-4, B=-315) 19=-4(F) 20=-315(B) 21=-1(F) 22=-317(B)



Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	D01	PIGGYBACK BASE	1	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:24 2019 Page 2  
ID:WDvc2XqYPcks0eFcMJOUu1zNC97-bXvZW5AhjKXtvRTMOwATEeWLPXINAI3tlhyVKHzNAA9

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-3=-32, 3-5=-45, 5-7=-32, 8-14=-20

Job 1625532	Truss D02	Truss Type PIGGYBACK BASE	Qty 2	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

Job Reference (optional)

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:26 2019 Page 1

ID:WDvc2XqYPcks0eFcMJOUuu1zNC97-Xw1KxnByFxn8kdVLcXJ3bkGK?Zea9AC?RcPAzNAA7

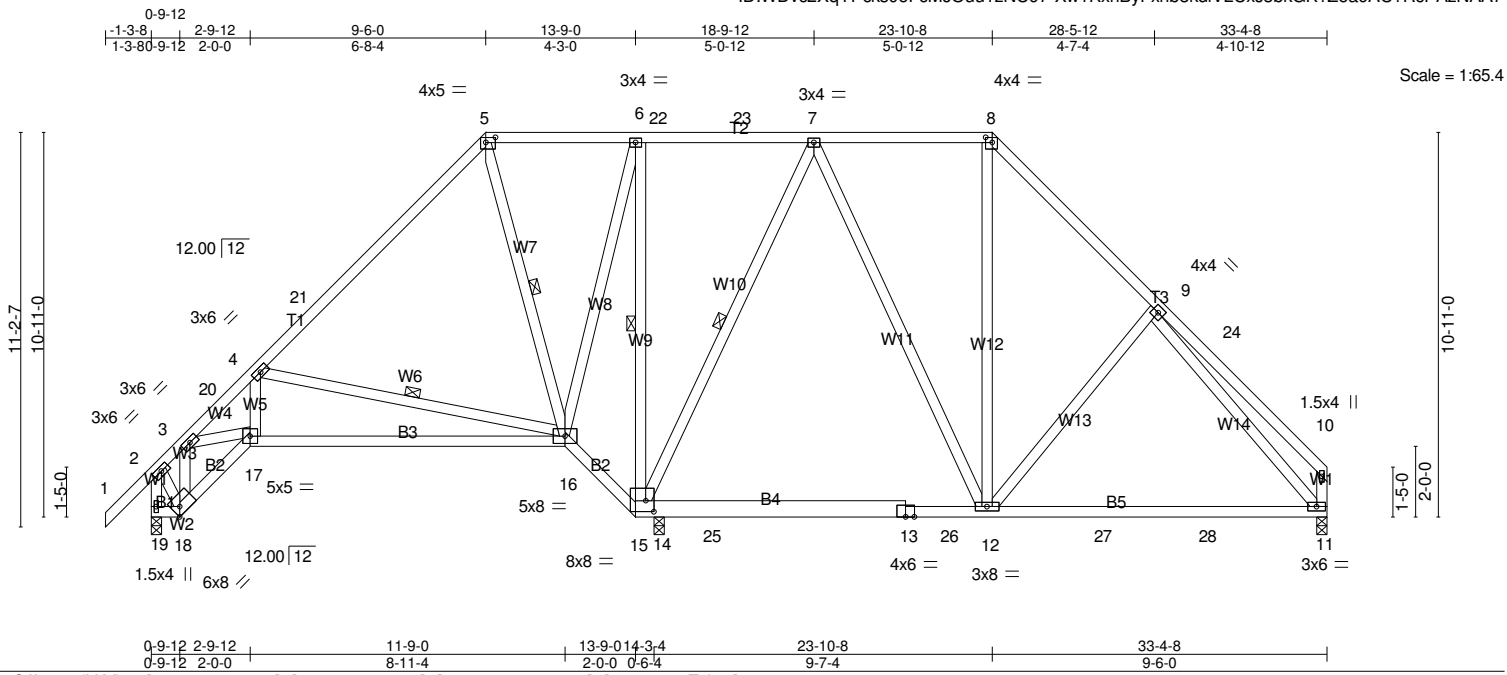


Plate Offsets (X, Y)-- [5:0-3-4.0-1-12], [8:0-2-4.0-1-12], [15:0-2-12,0-3-12], [18:0-2-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.53	Vert(LL)	-0.23 16-17	>754	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.81	Vert(CT)	-0.47 16-17	>362	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.67	Horz(CT)	0.09 11	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS	Wind(LL)	-0.05 12-14	>999	240		
							Weight: 261 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-10-12 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-8.
BOT CHORD 2x4 SP No.2 *Except* B4: 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 9-9-4 oc bracing: 16-17 6-0-0 oc bracing: 15-16.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 4-16, 5-16, 6-15, 7-15

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

**REACTIONS.** (lb/size) 19=494/0-3-8 (min. 0-1-8), 11=569/0-3-8 (min. 0-1-8), 14=894/0-3-8 (min. 0-1-8)  
 Max Horz 19=240(LC 11)  
 Max Uplift 19=-67(LC 14), 11=-115(LC 15), 14=-37(LC 14)  
 Max Grav 19=755(LC 2), 11=834(LC 31), 14=1288(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-370/124, 3-20=-1203/263, 4-20=-1127/270, 4-21=-548/132, 5-21=-397/182,  
 5-6=-272/192, 7-8=-421/232, 8-9=-707/249, 10-24=-317/81, 2-19=-703/160, 10-11=-291/97  
 BOT CHORD 17-18=-251/418, 16-17=-325/876, 15-16=-119/306, 14-15=-73/401, 14-25=-71/372,  
 13-25=-71/372, 13-26=-71/371, 12-26=-71/371, 12-27=-49/516, 27-28=-49/516,  
 11-28=-49/516  
 WEBS 3-18=-502/73, 3-17=-198/699, 4-17=-90/422, 4-16=-709/337, 6-16=-92/552, 6-15=-802/178,  
 7-15=-544/65, 7-12=0/314, 9-11=-632/88, 2-18=-37/287

- NOTES-** (12)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-3-8 to 2-1-5, Interior(1) 2-1-5 to 9-6-0, Exterior(2) 9-6-0 to 28-7-11, Interior(1) 28-7-11 to 33-2-12 zone; cantilever left exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - \*\* TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps= varies (min. roof snow=5.9 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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.
  - Roof design snow load has been reduced to account for slope.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 14 except (jt=lb) 11=115.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	D02	PIGGYBACK BASE	2	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:26 2019 Page 2  
 ID:WDvc2XqYPcks0eFcMJOUu1zNC97-Xw1KxnByFxb8kdVLCxJ3bkGK?Zea9AC?RcPAzNAA7

**NOTES-** (12)

- 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

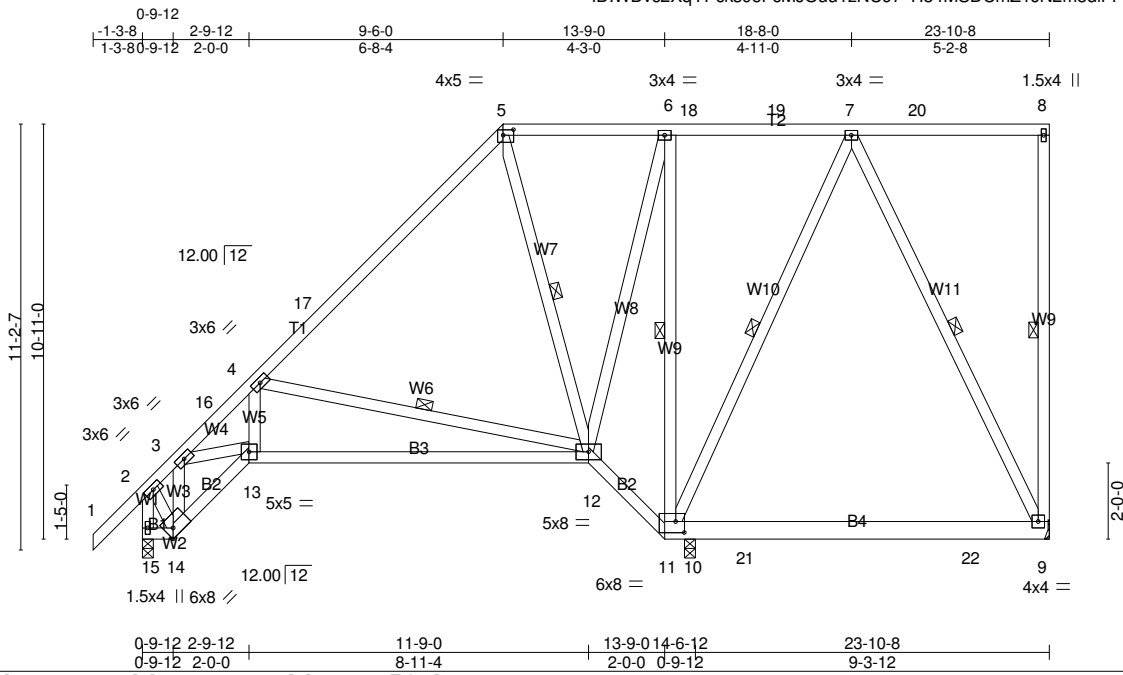
- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
  - Vert: 1-2=-32, 2-5=-32, 5-8=-45, 8-10=-32, 18-19=-20, 17-18=-20, 16-17=-20, 15-16=-20, 11-15=-20

Job 1625532	Truss D03	Truss Type PIGGYBACK BASE	Qty 3	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:28 2019 Page 1

ID:WDvc2XqYPcks0eFcMJOUu1zNC97-Tl84MSDCmZ1JN2m8dlFPOUg4A8gL6YPTfJwjT2zNAA5



Scale = 1:60.6

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

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.50	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.79	Vert(LL) -0.22 12-13 >768 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.43	Vert(CT) -0.46 12-13 >371 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.07 9 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) -0.05 9-10 >999 240		
				Weight: 205 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2 \*Except\*  
 B4: 2x6 SP No.2  
 WEBS 2x4 SP No.3

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-1-15 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-8.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS 1 Row at midpt 8-9, 4-12, 5-12, 6-11, 7-11, 7-9

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

**REACTIONS.** (lb/size) 9=321/Mechanical, 15=441/0-3-8 (min. 0-1-8), 10=699/0-3-8 (min. 0-1-8)  
 Max Horz 15=337(LC 14)  
 Max Uplift 9=-163(LC 11), 15=-31(LC 14), 10=-11(LC 14)  
 Max Grav 9=427(LC 2), 15=697(LC 2), 10=1095(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-339/86, 3-16=-1089/450, 4-16=-1013/457, 4-17=-460/73, 5-17=-309/153, 2-15=-648/82  
 BOT CHORD 14-15=-337/294, 13-14=-407/516, 12-13=-618/927  
 WEBS 3-14=-480/170, 3-13=-335/642, 4-13=-196/474, 4-12=-785/467, 6-12=-199/512, 6-11=-744/267, 7-11=-268/0, 7-9=-276/192, 2-14=0/251

- NOTES-** (12)
- 1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-3-8 to 2-1-5, Interior(1) 2-1-5 to 9-6-0, Exterior(2) 9-6-0 to 14-3-11 zone; cantilever left exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) \*\* TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps= varies (min. roof snow=5.9 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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.
  - 3) Roof design snow load has been reduced to account for slope.
  - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
  - 5) Provide adequate drainage to prevent water ponding.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 8) Refer to girder(s) for truss to truss connections.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 10 except (jt=lb) 9=163.
  - 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 12) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	D03	PIGGYBACK BASE	3	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:28 2019 Page 2  
ID:WDvc2XqYPcks0eFcMJOuu1zNC97-Tl84MSDCmZ1JN2m8dlFPOUg4A8gL6YPTfJwJT2zNAA5

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-2=-32, 2-5=-32, 5-8=-45, 14-15=-20, 13-14=-20, 12-13=-20, 11-12=-20, 9-11=-20

Job 1625532	Truss D04	Truss Type PIGGYBACK BASE	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:30 2019 Page 1

ID:WDvc2XqYPcks0eFcMJOUuu1zNC97-QhGrn8ESIAH0dMwWkAHtTviSPxRNaTem7dPqYxzNAA3

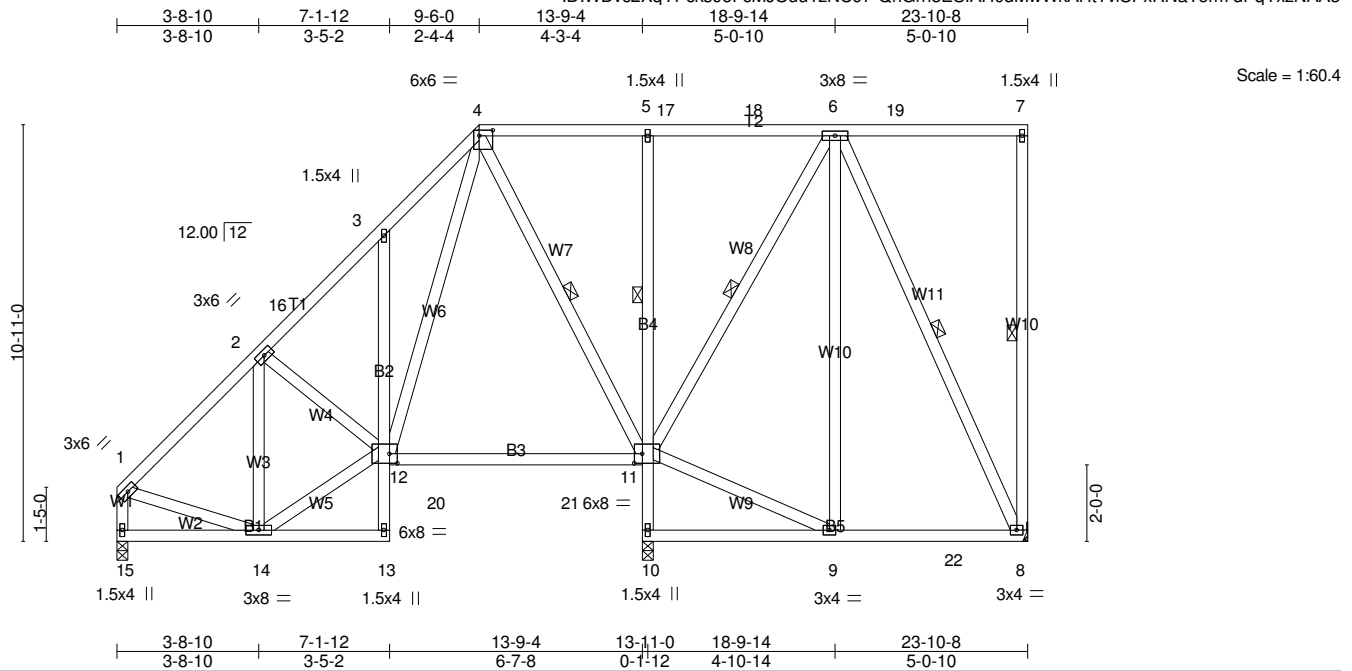


Plate Offsets (X,Y)-- [4:0-4-4,0-1-12], [11:0-2-8,0-3-0], [12:0-2-8,0-3-0]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.33	Vert(LL)	-0.11 11-12	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.50	Vert(CT)	-0.18 11-12	>898	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.38	Horz(CT)	-0.01 8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.02 3	>999	240		
								Weight: 225 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-7.  
BOT CHORD Rigid ceiling directly applied or 5-7-6 oc bracing. Except:  
1 Row at midpt 5-11  
WEBS 1 Row at midpt 7-8, 4-11, 6-11, 6-8

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

**REACTIONS.** (lb/size) 8=277/Mechanical, 15=335/0-3-8 (min. 0-1-8), 10=803/0-3-8 (min. 0-1-8)  
Max Horz 15=296(LC 14)  
Max Uplift 8=64(LC 10), 10=-197(LC 14)  
Max Grav 8=336(LC 3), 15=503(LC 2), 10=1057(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-476/0, 2-16=-463/43, 3-16=-399/67, 3-4=-488/192, 1-15=-470/0  
BOT CHORD 14-15=-316/293, 10-11=-1016/221, 5-11=-292/103  
WEBS 12-14=-231/449, 4-12=-254/613, 4-11=-462/205, 6-11=-280/7, 1-14=0/267

**NOTES-** (11)

- 1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 3-8-10, Interior(1) 3-8-10 to 9-6-0, Exterior(2) 9-6-0 to 14-3-11 zone; cantilever left exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) \*\* TCCL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps= varies (min. roof snow=5.9 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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.
- 3) Roof design snow load has been reduced to account for slope.
- 4) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 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.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb) 10=197.
- 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	D04	PIGGYBACK BASE	1	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:30 2019 Page 2  
 ID:WDvc2XqYPcks0eFcMJOUu1zNC97-QhGrm8ESIAH0dMwWkAHtVlSPxRNaTem7dPqYxzNAA3

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

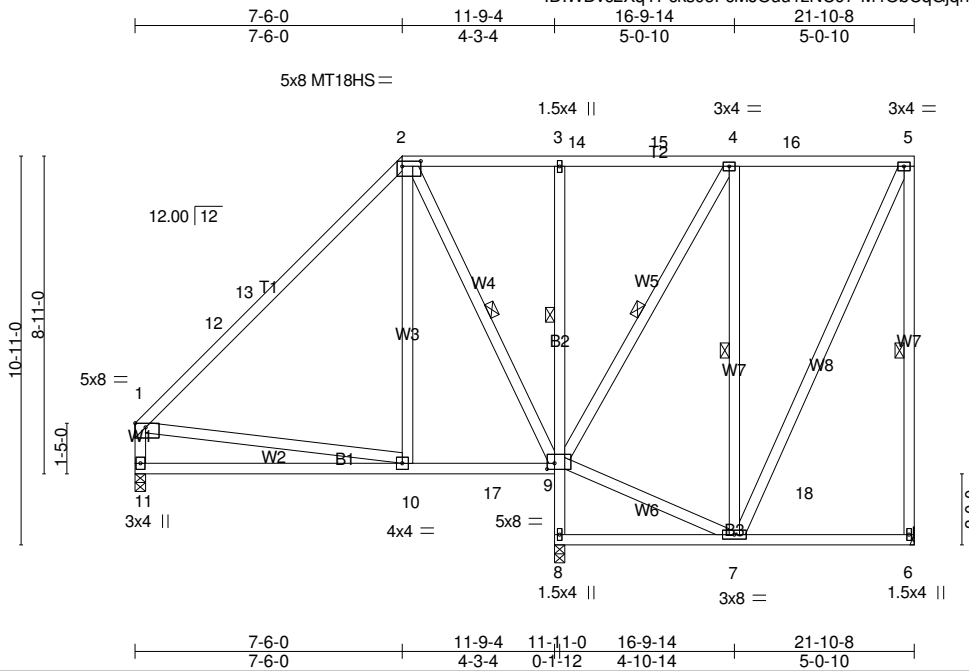
Vert: 1-4=-32, 4-7=-45, 13-15=-20, 11-12=-20, 8-10=-20

Job 1625532	Truss D05	Truss Type PIGGYBACK BASE	Qty 5	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:32 2019 Page 1

ID:WDvc2XqYPcks0eFcMJOUu1zNC97-M4ObCqGjqnYksf4vsbJLZKrkjH8P2Oz2axuwcpzNAA1



Scale = 1:64.7

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

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.69	Vert(LL)	-0.07 10-11	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.40	Vert(CT)	-0.15 10-11	>970	240	MT18HS	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.26	Horz(CT)	-0.01 8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.00 10	>999	240		Weight: 193 lb FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 2-5.  
 BOT CHORD Rigid ceiling directly applied. Except:  
 1 Row at midpt 3-9  
 WEBS 1 Row at midpt 5-6, 2-9, 4-9, 4-7

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

**REACTIONS.** (lb/size) 6=293/Mechanical, 11=293/0-3-8 (min. 0-1-8), 8=726/0-3-8 (min. 0-1-8)  
 Max Horz 11=244(LC 14)  
 Max Uplift 6=44(LC 11), 8=-122(LC 11)  
 Max Grav 6=392(LC 3), 11=441(LC 2), 8=930(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-12=-374/0, 5-6=-313/76, 1-11=-366/19  
 BOT CHORD 10-11=-349/433, 8-9=-886/146, 3-9=-251/116  
 WEBS 2-10=0/282, 2-9=-410/143, 1-10=-242/252

**NOTES-** (13)

- 1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 3-6-9, Interior(1) 3-6-9 to 7-6-0, Exterior(2) 7-6-0 to 12-3-11 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) \*\* TCCL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps= varies (min. roof snow=5.9 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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.
- 3) Roof design snow load has been reduced to account for slope.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are MT20 plates unless otherwise indicated.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 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) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 8=122.
- 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard  
 Continued on page 2

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	D05	PIGGYBACK BASE	5	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:32 2019 Page 2  
ID:WDvc2XqYPcks0eFcMJOUu1zNC97-M4ObCqGjqnYksf4vsbJLZKrfH8P2Oz2axuwcpzNAA1

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

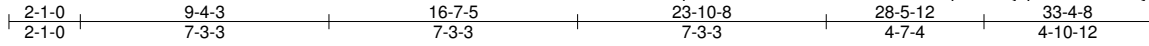
Vert: 1-2=-32, 2-5=-45, 9-11=-20, 6-8=-20

Job 1625532	Truss D06	Truss Type PIGGYBACK BASE	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:35 2019 Page 1

ID:WDvc2XqYPcks0eFcMJOUu1zNC97-me3kqslb7iwJ7pUxkt2AzTEWY2BFhVGV6bD8zNAA



Scale = 1:67.3

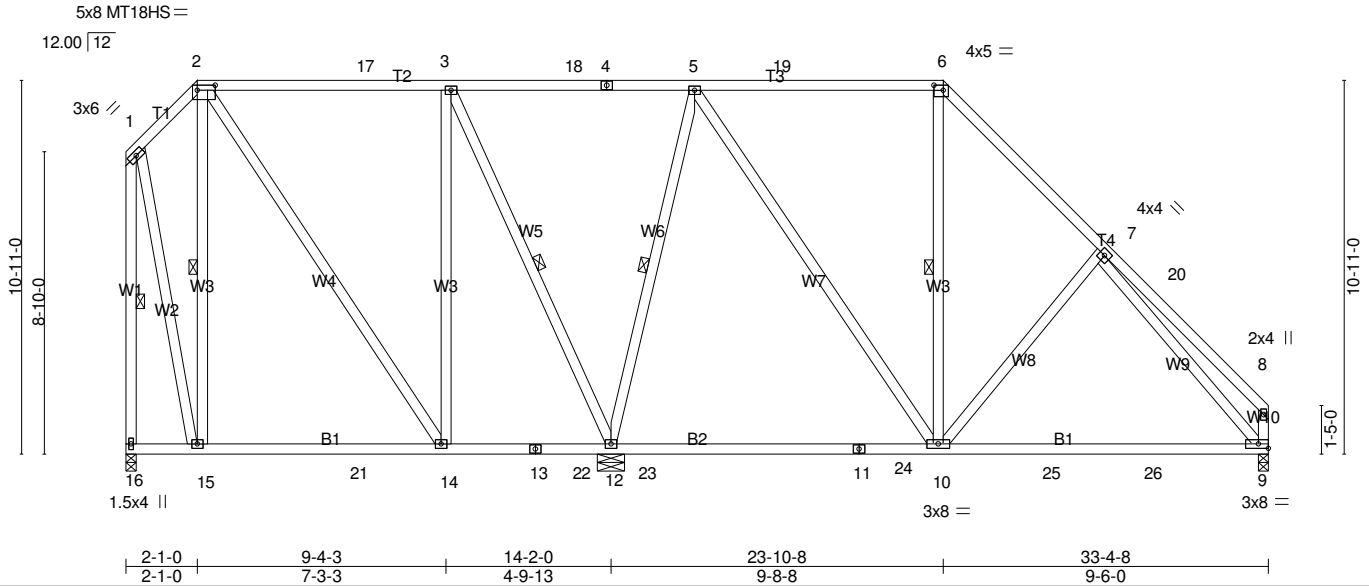


Plate Offsets (X,Y)-- [2:0-6-4,0-1-12], [6:0-3-4,0-1-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.66	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.84	Vert(LL) -0.27 10-12 >840 360	MT18HS	244/190
BCLL 0.0 *	Lumber DOL 1.15	WB 0.52	Vert(CT) -0.41 10-12 >560 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.01 9 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.01 10 >999 240		
				Weight: 271 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 2-6.  
 BOT CHORD Rigid ceiling directly applied.  
 WEBS 1 Row at midpt 2-15, 3-12, 5-12, 6-10, 1-16

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

**REACTIONS.** (lb/size) 16=366/0-3-8 (min. 0-1-8), 12=1166/0-9-8 (min. 0-1-14), 9=478/0-3-8 (min. 0-1-8)  
 Max Horz 16=-273(LC 15)  
 Max Uplift 16=-59(LC 14), 12=-118(LC 10), 9=-42(LC 15)  
 Max Grav 16=516(LC 31), 12=1602(LC 3), 9=711(LC 26)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 5-19=-346/168, 6-19=-346/168, 6-7=-551/154, 8-20=-362/79, 1-16=-577/59, 8-9=-327/98  
 BOT CHORD 15-16=-191/272, 15-21=-129/277, 14-21=-129/277, 13-14=-98/250, 13-22=-98/250,  
 12-22=-98/250, 10-25=0/410, 25-26=0/410, 9-26=0/410  
 WEBS 2-15=-278/127, 3-12=-581/101, 5-12=-833/205, 5-10=-61/489, 1-15=-48/486, 7-9=-429/0

- NOTES-** (14)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 6-10-11, Interior(1) 6-10-11 to 23-10-8, Exterior(2) 23-10-8 to 28-7-11 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - \*\* TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps= varies (min. roof snow=5.9 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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.
  - Roof design snow load has been reduced to account for slope.
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - All plates are 3x4 MT20 unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 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 BC DL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 9 except (jt=lb) 12=118.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	D06	PIGGYBACK BASE	1	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:35 2019 Page 2  
ID:WDvc2XqYPcks0eFcMJOUu1zNC97-me3kqslb7iwJj7pUXkt2AzTEwy2BFhIVGv6bD8zNAA\_

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-2=-32, 2-6=-45, 6-8=-32, 9-16=-20

Job 1625532	Truss D07	Truss Type PIGGYBACK BASE	Qty 5	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:37 2019 Page 1  
 ID:WDvc2XqYPcks0eFcMJOUu1zNC97-i1BUFXKrK1yQzsf8vWGOYaymkIjbbokDbhH1zNA9y

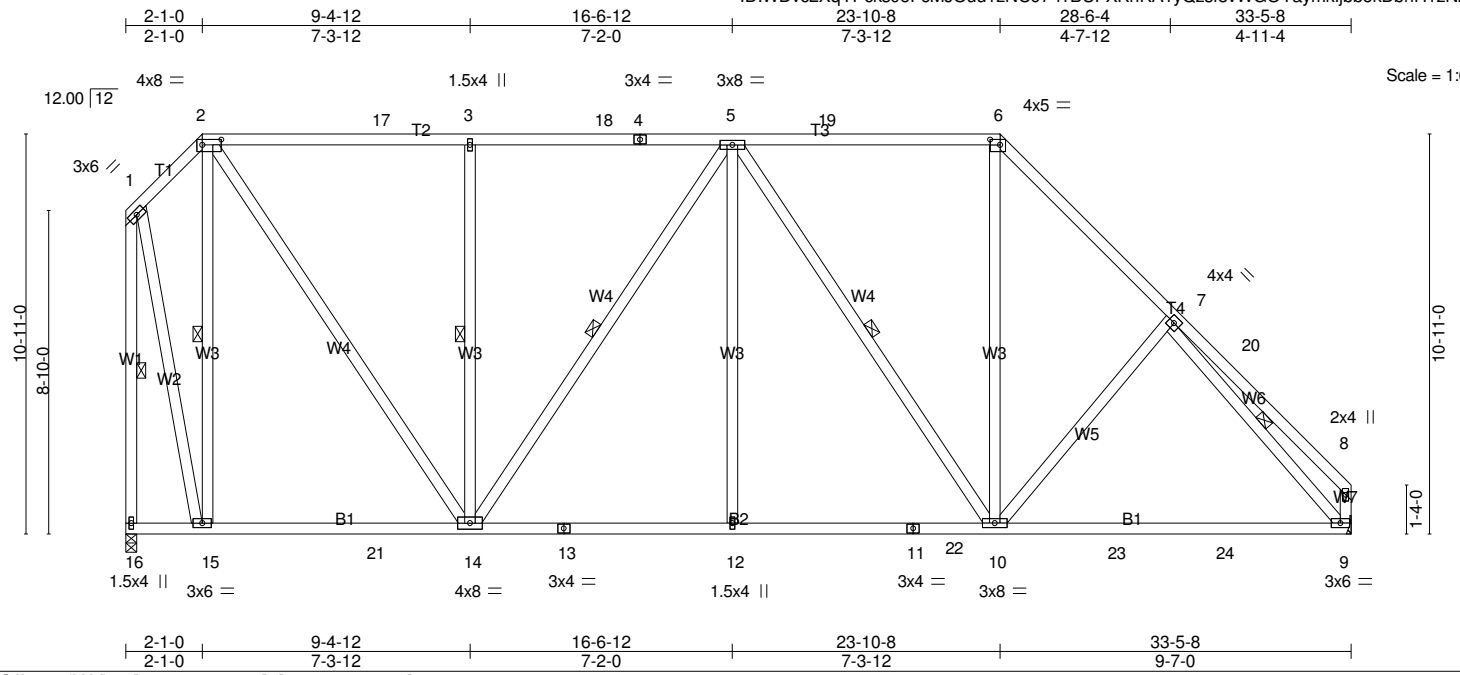


Plate Offsets (X,Y)-- [2:0-6-4,0-1-12], [6:0-3-4,0-1-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.69	Vert(LL)	-0.21	9-10	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.87	Vert(CT)	-0.44	9-10	>910		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.56	Horz(CT)	0.05	9	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Wind(LL)	0.04	12	>999		
	Code IRC2015/TPI2014						Weight: 273 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-9-4 oc purlins, except end verticals, and 2-0-0 oc purlins (4-10-10 max.): 2-6.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 2-15, 3-14, 5-14, 5-10, 1-16, 7-9

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

**REACTIONS.** (lb/size) 16=1041/0-3-8 (min. 0-1-11), 9=974/Mechanical  
 Max Horz 16=-275(LC 15)  
 Max Uplift 16=-95(LC 10), 9=-68(LC 15)  
 Max Grav 16=1430(LC 3), 9=1389(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-415/66, 2-17=-940/143, 3-17=-940/143, 3-18=-940/143, 4-18=-940/143, 4-5=-940/143, 5-19=-941/191, 6-19=-941/191, 6-7=-1411/190, 8-20=-371/77, 1-16=-1467/127, 8-9=-334/96  
 BOT CHORD 15-16=-192/275, 15-21=-68/388, 14-21=-68/388, 13-14=-81/1176, 12-13=-81/1176, 12-22=-81/1176, 11-22=-81/1176, 10-11=-81/1176, 10-23=-15/961, 23-24=-15/961, 9-24=-15/961  
 WEBS 2-15=-944/171, 2-14=-147/1182, 3-14=-460/161, 5-14=-424/134, 5-12=0/378, 5-10=-471/136, 6-10=-13/660, 1-15=-102/1198, 7-9=-1234/56

- NOTES-** (12)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 6-10-11, Interior(1) 6-10-11 to 23-10-8, Exterior(2) 23-10-8 to 28-8-3 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - \*\* TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps= varies (min. roof snow=5.9 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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.
  - Roof design snow load has been reduced to account for slope.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCCL = 10.0psf.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 9.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Continued on page 2



Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	D07	PIGGYBACK BASE	5	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:37 2019 Page 2  
ID:WDvc2XqYPcks0eFcMJOUu1zNC97-i1BUFxKrfKA1yQzsf8vWGOYaymkljbbokDbhH1zNA9y

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-2=-32, 2-6=-45, 6-8=-32, 9-16=-20

Job 1625532	Truss D08	Truss Type PIGGYBACK BASE	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:39 2019 Page 1  
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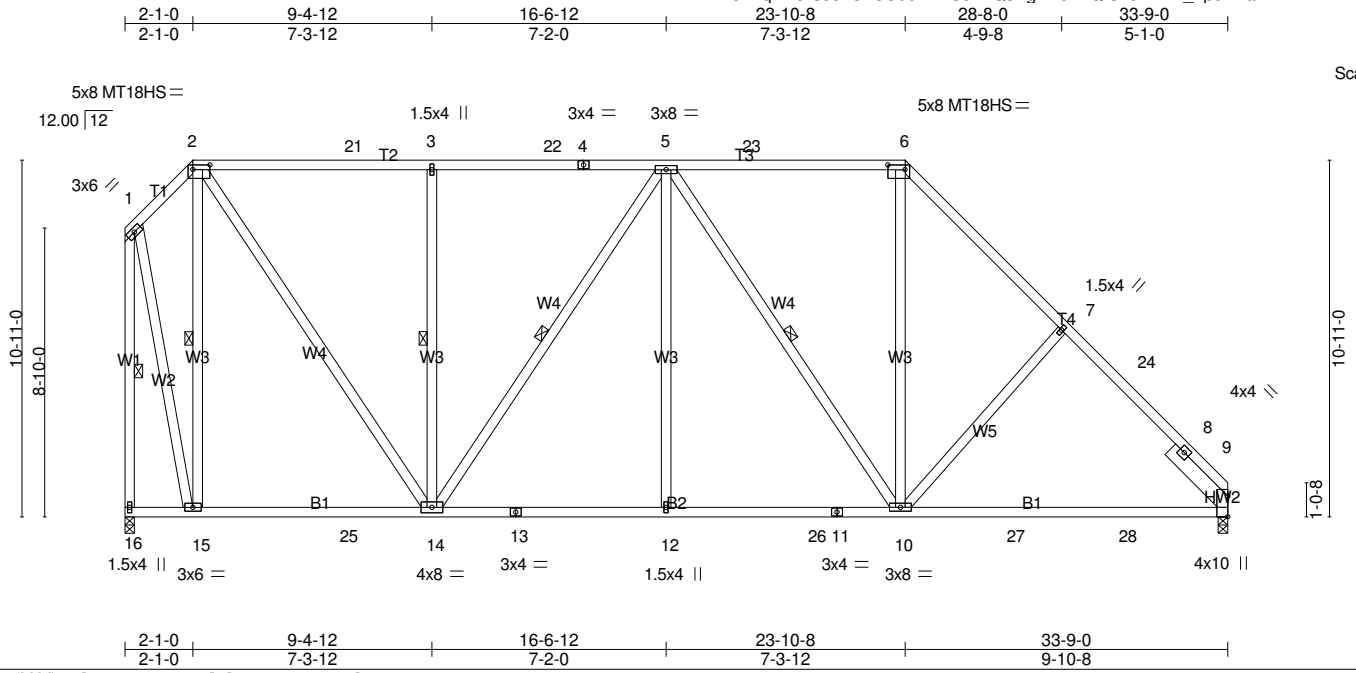


Plate Offsets (X,Y)-- [2:0-6-4,0-1-12], [6:0-6-4,0-1-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.65	Vert(LL)	-0.18	10-19	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.96	Vert(CT)	-0.34	10-19	>999	MT18HS	244/190
BCLL 0.0 *	Lumber DOL 1.15	WB 0.58	Horz(CT)	0.06	9	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Wind(LL)	0.05	10-12	>999		
	Code IRC2015/TPI2014						Weight: 268 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3  
 SLIDER Right 2x6 SP No.2 2-6-0

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-1-8 max.): 2-6.  
 BOT CHORD Rigid ceiling directly applied.  
 WEBS 1 Row at midpt 2-15, 3-14, 5-14, 5-10, 1-16

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

**REACTIONS.** (lb/size) 9=984/0-3-8 (min. 0-1-11), 16=1054/0-3-8 (min. 0-1-11)  
 Max Horz 16=-290(LC 15)  
 Max Uplift 9=-71(LC 15), 16=-96(LC 10)  
 Max Grav 9=1415(LC 3), 16=1449(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-408/63, 2-21=-956/143, 3-21=-956/143, 3-22=-956/143, 4-22=-956/143, 4-5=-956/143, 5-23=-984/198, 6-23=-984/198, 6-7=-1457/192, 7-24=-1492/138, 8-24=-1577/118, 8-9=-672/0, 1-16=-1485/127  
 BOT CHORD 15-16=-202/289, 15-25=-70/401, 14-25=-70/401, 13-14=-79/1205, 12-13=-79/1205, 12-26=-79/1205, 11-26=-79/1205, 10-11=-79/1205, 10-27=-4/1055, 27-28=-4/1055, 9-28=-4/1055  
 WEBS 2-15=-971/177, 2-14=-145/1199, 3-14=-456/159, 5-14=-448/134, 5-12=0/386, 5-10=-452/134, 6-10=-5/670, 1-15=-108/1222

- NOTES-** (13)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 6-10-11, Interior(1) 6-10-11 to 23-10-8, Exterior(2) 23-10-8 to 28-9-3 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - \*\* TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps= varies (min. roof snow=5.9 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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.
  - Roof design snow load has been reduced to account for slope.
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 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 BCCL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 16.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	D08	PIGGYBACK BASE	1	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:39 2019 Page 2  
 ID:WDvc2XqYPcks0eFcMJOUu1zNC97-fQJEgDL6BxQlCk6FmZx\_Lpdw1aPNBvr4BX4oLvzNA9w

13) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-2=-32, 2-6=-45, 6-9=-32, 16-17=-20

Job 1625532	Truss D09	Truss Type PIGGYBACK BASE	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:41 2019 Page 1  
 ID:WDvc2XqYPcks0eFcMJOUuu1zNC97-boR?5vNMjYgSR2Geu\_SQEjG9N3dfQVNfravQozNA9u

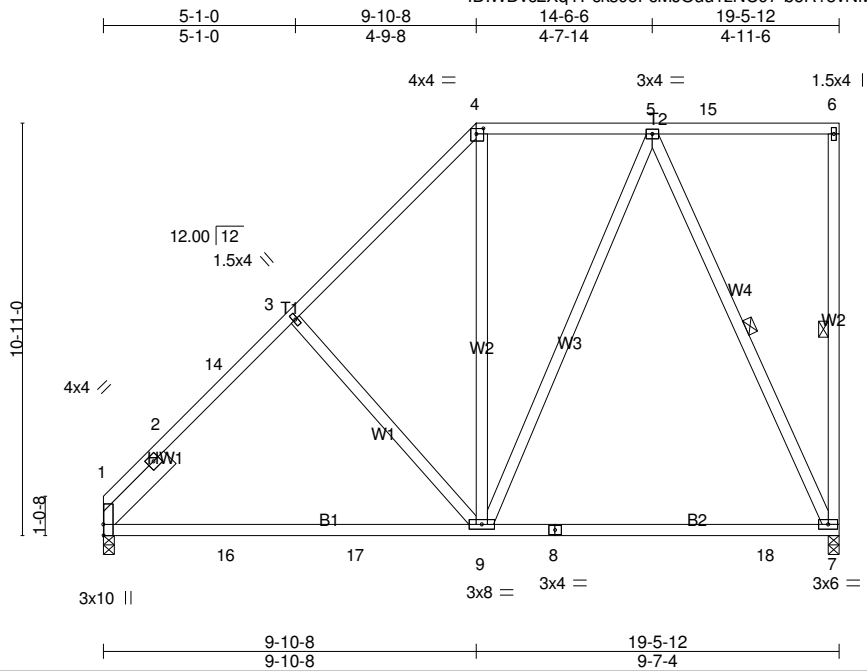


Plate Offsets (X,Y)-- [1:0-3-8,Edge], [4:0-2-4,0-1-12]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.68	Vert(LL)	-0.33	7-9	>699	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.97	Vert(CT)	-0.50	7-9	>461		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.44	Horz(CT)	0.02	1	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-AS	Wind(LL)	0.04	9-12	>999		
								Weight: 145 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-6.  
 BOT CHORD Rigid ceiling directly applied.  
 WEBS 1 Row at midpt 6-7, 5-7

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

**REACTIONS.** (lb/size) 1=533/0-3-8 (min. 0-1-8), 7=598/0-3-8 (min. 0-1-8)  
 Max Horz 1=327(LC 14)  
 Max Uplift 7=-122(LC 14)  
 Max Grav 1=793(LC 3), 7=828(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-628/0, 2-14=-743/0, 3-14=-671/19, 3-4=-666/74, 4-5=-411/110  
 BOT CHORD 1-16=-250/583, 16-17=-250/583, 9-17=-250/583, 8-9=-69/273, 8-18=-69/273, 7-18=-69/273  
 WEBS 3-9=-287/209, 5-9=-104/405, 5-7=-625/176

- NOTES-** (11)
- 1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-0-0 to 3-4-13, Interior(1) 3-4-13 to 9-10-8, Exterior(2) 9-10-8 to 14-6-6 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) \*\* TCLL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps= varies (min. roof snow=5.9 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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.
  - 3) Roof design snow load has been reduced to account for slope.
  - 4) Provide adequate drainage to prevent water ponding.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 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.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=122.
  - 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 11) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	D09	PIGGYBACK BASE	1	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:41 2019 Page 2  
 ID:WDvc2XqYPcks0eFcMJOUu1zNC97-boR?5vNMjYgSR2Geu\_\_SQEjG9N3dfQVNfravQozNA9u

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-4=-32, 4-6=-45, 7-10=-20

Job 1625532	Truss E01	Truss Type COMMON	Qty 3	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

ID:WDvc2XqYPcks0eFcMJOUu1zNC97-XBYIWbOcEAWAhLQ0?P0wVfoctBwG7P9g6930UhzNA9s  
8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:43 2019 Page 1

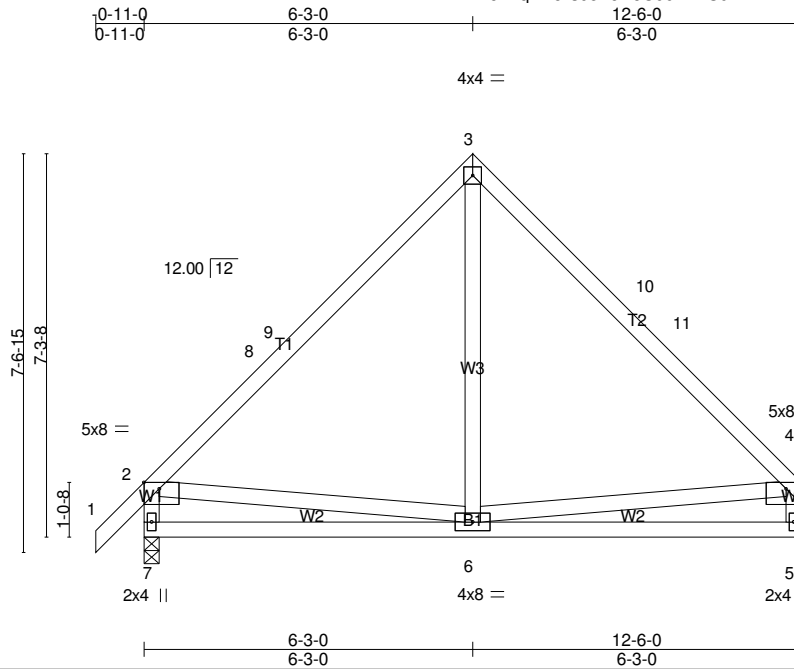


Plate Offsets (X,Y)-- [2:0-3-8,Edge], [4:0-3-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.60	Vert(LL) -0.03	5-6	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.32	Vert(CT) -0.05	5-6	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.11	Horz(CT) 0.00	5	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Wind(LL) 0.00	6	>999	240		
	Code IRC2015/TPI2014						Weight: 77 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied, except end verticals.  
 BOT CHORD Rigid ceiling directly applied.

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

**REACTIONS.** (lb/size) 7=352/0-3-8 (min. 0-1-8), 5=315/Mechanical  
 Max Horz 7=158(LC 11)  
 Max Uplift 7=-23(LC 14), 5=-17(LC 14)  
 Max Grav 7=555(LC 2), 5=486(LC 2)

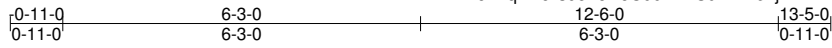
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-8=-477/54, 8-9=-362/57, 3-9=-343/86, 3-10=-327/85, 10-11=-343/58, 4-11=-471/56,  
 2-7=-498/117, 4-5=-429/80  
 BOT CHORD 6-7=-246/366  
 WEBS 3-6=0/256, 2-6=-148/263

- NOTES-** (12)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-11-0 to 2-5-13, Interior(1) 2-5-13 to 6-3-0, Exterior(2) 6-3-0 to 9-7-13 zone; cantilever left exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=5.9 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
  - Roof design snow load has been reduced to account for slope.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 5.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

Job 1625532	Truss E01E	Truss Type Common Supported Gable	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
Builders Firstsource, Albemarle, NC 28001					Job Reference (optional)

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:44 2019 Page 1  
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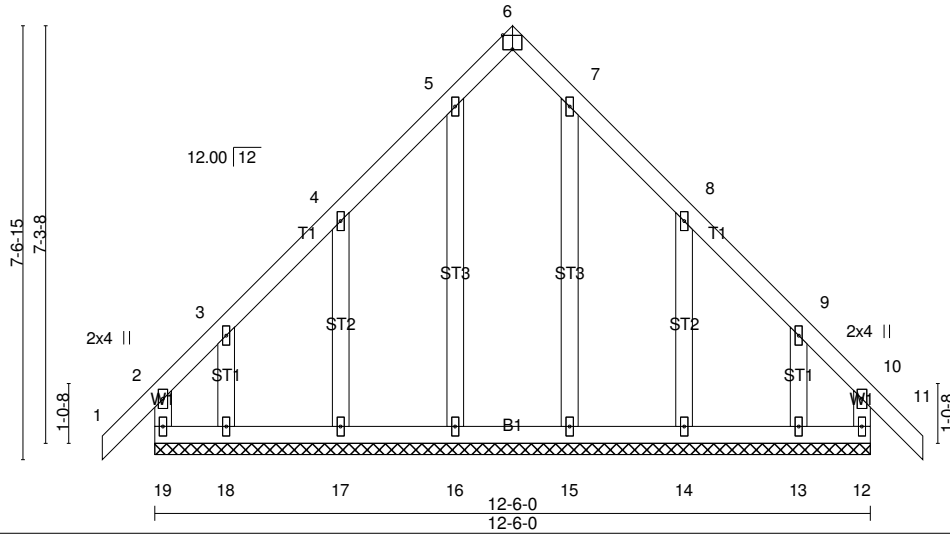


Plate Offsets (X,Y)-- [6:0-2-0,Edge]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.11	Vert(LL)	-0.00	11	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	-0.01	11	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.08	Horz(CT)	0.00	12	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-R						Weight: 85 lb	FT = 20%

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

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

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

**REACTIONS.** All bearings 12-6-0.  
 (lb) - Max Horz 19=177(LC 13)  
 Max Uplift All uplift 100 lb or less at joint(s) 19, 12, 17, 14 except 18=177(LC 14), 13=173(LC 15)  
 Max Grav All reactions 250 lb or less at joint(s) 19, 12, 16, 17, 18, 15, 14, 13

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

- NOTES-** (15)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-11-0 to 2-5-13, Exterior(2) 2-5-13 to 6-3-0, Corner(3) 6-3-0 to 9-7-13 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - TCCL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=5.9 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
  - Roof design snow load has been reduced to account for slope.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
  - All plates are 1.5x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 12, 17, 14 except (jt=lb) 18=177, 13=173.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

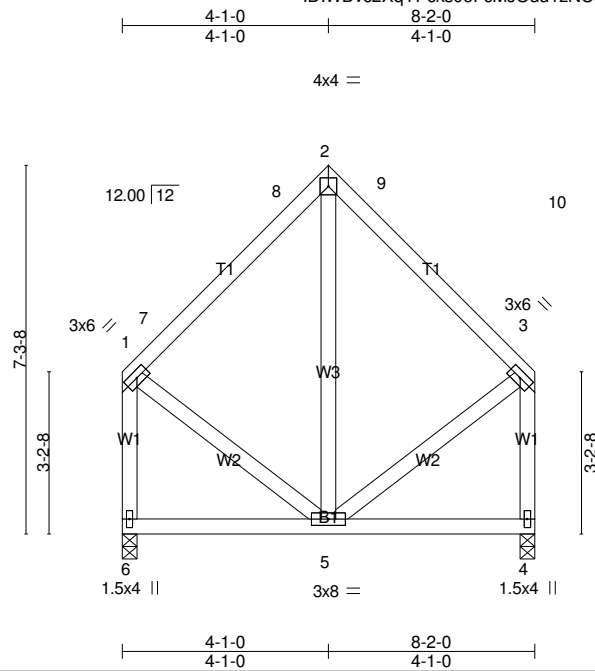
**LOAD CASE(S)** Standard

Job 1625532	Truss E02	Truss Type COMMON	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:46 2019 Page 1

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<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.20	Vert(LL) -0.01 4-5 >999 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.13	Vert(CT) -0.01 4-5 >999 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.04	Horz(CT) 0.00 4 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Wind(LL) 0.00 5 >999 240	Weight: 62 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied, except end verticals.  
BOT CHORD Rigid ceiling directly applied.

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

**REACTIONS.** (lb/size) 6=204/0-3-8 (min. 0-1-8), 4=204/0-3-8 (min. 0-1-8)  
Max Horz 6=-83(LC 10)  
Max Uplift 6=-29(LC 15), 4=-29(LC 14)  
Max Grav 6=315(LC 2), 4=315(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-6=-278/58, 3-4=-278/58

**NOTES-** (10)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 3-6-9, Interior(1) 3-6-9 to 4-1-0, Exterior(2) 4-1-0 to 7-5-13 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=5.9 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
- Roof design snow load has been reduced to account for slope.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 4.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

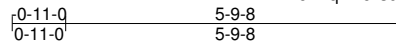
**LOAD CASE(S)** Standard



Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	G01	MONOPITCH	6	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

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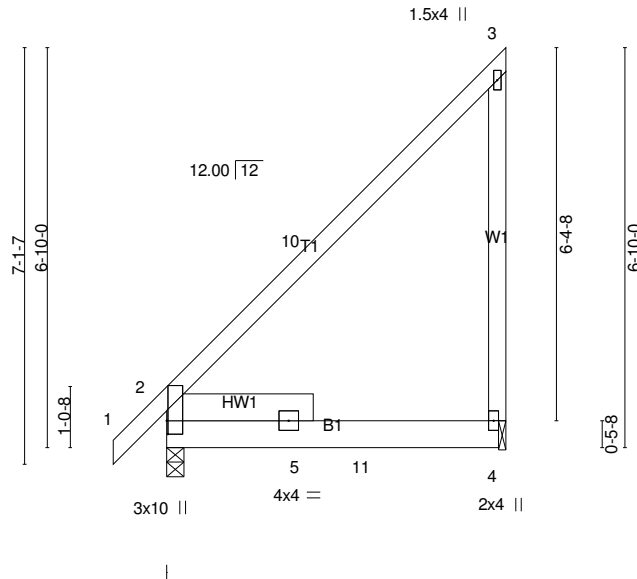


Plate Offsets (X,Y)-- [2:0-2-12,0-0-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.32	Vert(LL)	-0.02	4-8	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.30	Vert(CT)	-0.04	4-8	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.01	2	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Wind(LL)	0.03	4-8	>999	240		
	Code IRC2015/TPI2014							Weight: 42 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied, except end verticals.  
 BOT CHORD Rigid ceiling directly applied.

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

**REACTIONS.** (lb/size) 2=178/0-3-8 (min. 0-1-8), 4=144/0-1-8 (min. 0-1-8)  
 Max Horz 2=212(LC 14)  
 Max Uplift 4=138(LC 14)  
 Max Grav 2=285(LC 2), 4=304(LC 26)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 BOT CHORD 2-5=-493/651

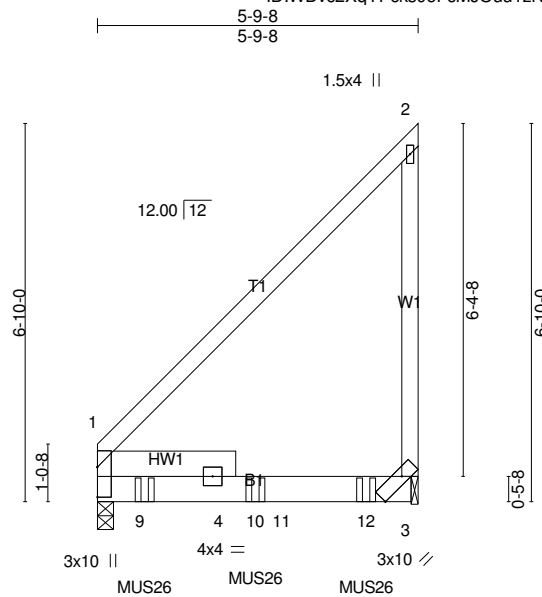
- NOTES-** (12)
- 1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-11-0 to 2-5-13, Interior(1) 2-5-13 to 5-7-12 zone; cantilever left exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=5.9 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
  - 3) Roof design snow load has been reduced to account for slope.
  - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 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.
  - 7) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=138.
  - 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - 12) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	G02	MONOPITCH GIRDER	1	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:50 2019 Page 1  
 ID:WDvc2XqYPcks0eFcMJOUu1zNC97-qXTO\_\_U?bJpB0QSMvNeZH7aqX?EGGbYijkFtEnzNA9I



Scale = 1:41.6

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.57	Vert(LL)	-0.08	3-7	>872	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.61	Vert(CT)	-0.15	3-7	>437	240		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	0.04	1	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MP	Wind(LL)	0.07	3-7	>959	240		
									Weight: 41 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x6 SP DSS  
 WEBS 2x4 SP No.3  
 SLIDER Left 2x6 SP No.2 2-6-0

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-9-8 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 8-4-13 oc bracing.

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

**REACTIONS.** (lb/size) 1=586/0-3-8 (min. 0-1-8), 3=596/0-1-8 (min. 0-1-8)  
 Max Horz 1=186(LC 10)  
 Max Uplift3=180(LC 10)  
 Max Grav 1=918(LC 2), 3=934(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 BOT CHORD 1-9=-518/945, 4-9=-518/945

- NOTES-** (13)
- 1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone; cantilever left exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=5.9 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
  - 3) Roof design snow load has been reduced to account for slope.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Bearing at joint(s) 3 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 3.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 3=180.
  - 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 10) Use Simpson Strong-Tie MUS26 (6-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 0-10-4 from the left end to 4-10-4 to connect truss(es) E01 (1 ply 2x4 SP) to back face of bottom chord.
  - 11) Fill all nail holes where hanger is in contact with lumber.
  - 12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
  - 13) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard  
 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-2=-32, 3-5=-20

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	G02	MONOPITCH GIRDER	1	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

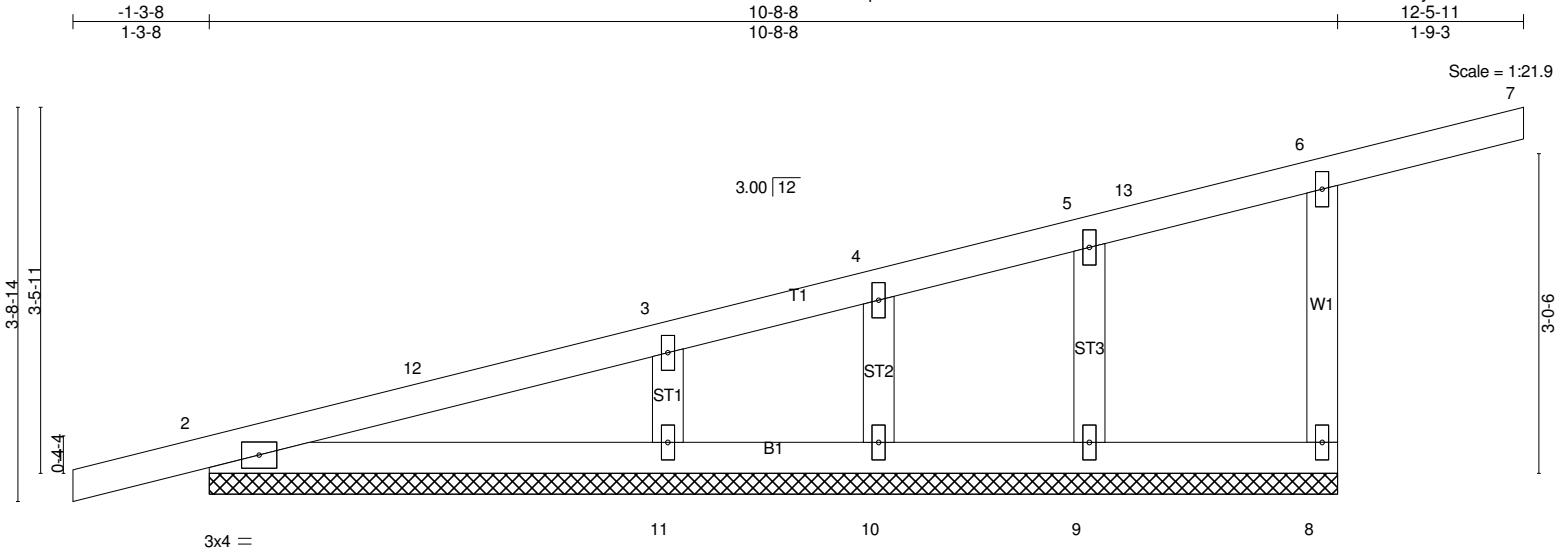
8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:50 2019 Page 2  
ID:WDvc2XqYPcks0eFcMJOUu1zNC97-qXTO\_\_U?bJpB0QSMvNeZH7aqX?EGGbYijkFtEnzNA9I

**LOAD CASE(S)** Standard  
Concentrated Loads (lb)  
Vert: 9=-296(B) 10=-295(B) 12=-297(B)



Job 1625532	Truss H01E	Truss Type MONOPITCH SUPPORTED	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
Builders Firstsource, Albemarle, NC 28001					Job Reference (optional)

ID:WDvc2XqYPcks0eFcMJOUu1zNC97-E69Xc0WuuEBmtuBxbVBGvmCQwDMRTya8PiUXr6zNA9i  
8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:53 2019 Page 1



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.24	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.14	Vert(LL) -0.01 7 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.05	Vert(CT) -0.03 7 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) -0.00 8 n/a n/a		
	Code IRC2015/TPI2014			Weight: 47 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** All bearings 10-8-8.  
(lb) - Max Horz 2=114(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 8, 2, 11, 10, 9  
Max Grav All reactions 250 lb or less at joint(s) 8, 2, 10, 9 except 11=332(LC 2)

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

- NOTES-** (15)
- Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-3-8 to 2-1-5, Exterior(2) 2-1-5 to 12-5-11 zone; cantilever left exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=7.7 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1; Min. flat roof snow load governs.
  - Roof design snow load has been reduced to account for slope.
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
  - All plates are 1.5x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 2, 11, 10, 9.
  - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

Job 1625532	Truss H02	Truss Type MONOPITCH	Qty 10	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:54 2019 Page 1  
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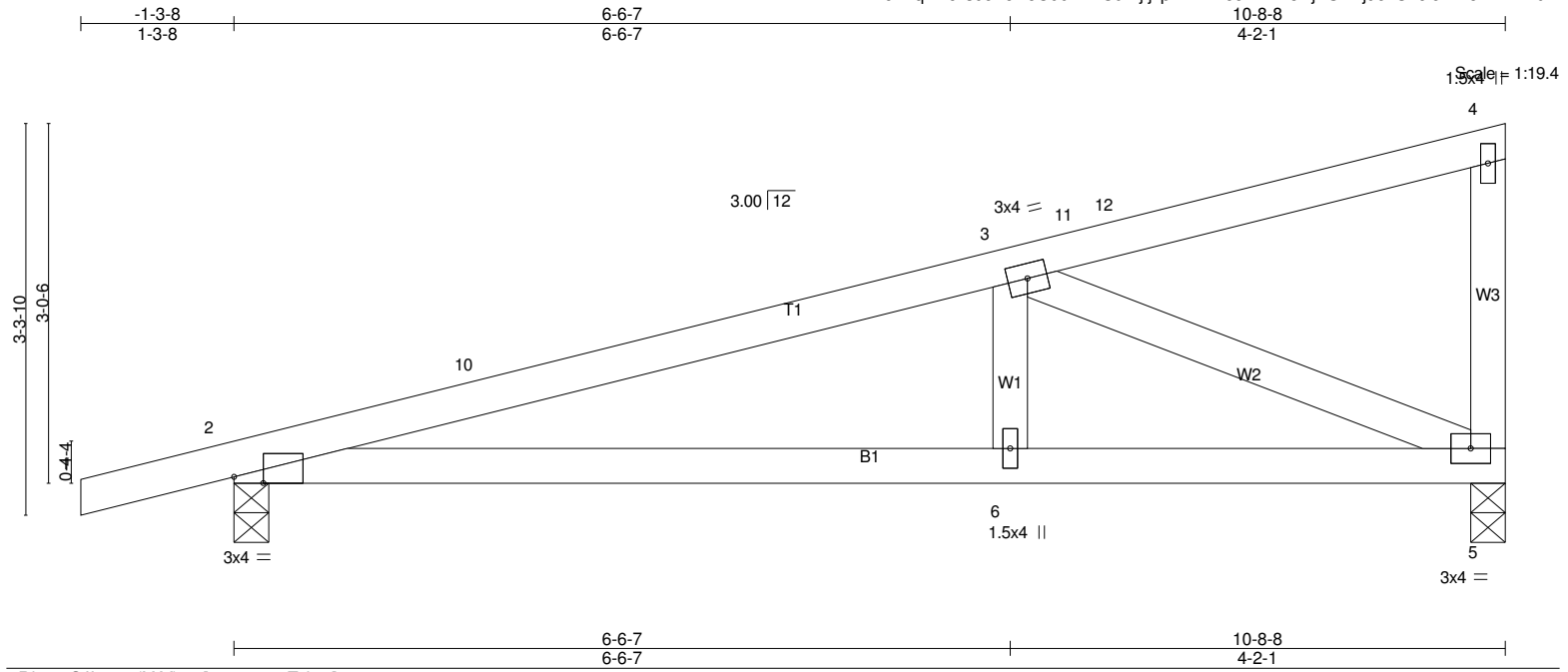


Plate Offsets (X,Y)-- [2:0-2-15,Edge]		6-6-7 6-6-7		10-8-8 4-2-1	
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.37	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.44	Vert(LL) -0.05 6-9 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.32	Vert(CT) -0.11 6-9 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.01 5 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.04 6-9 >999 240		
				Weight: 46 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied, except end verticals.  
 BOT CHORD Rigid ceiling directly applied.

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

**REACTIONS.** (lb/size) 2=341/0-3-8 (min. 0-1-8), 5=290/0-3-8 (min. 0-1-8)  
 Max Horz 2=101(LC 12)  
 Max Uplift 2=80(LC 12), 5=57(LC 16)  
 Max Grav 2=505(LC 2), 5=418(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-10=807/44, 3-10=783/57  
 BOT CHORD 2-6=-104/759, 5-6=-104/759  
 WEBS 3-5=-813/111

- NOTES-** (11)
- 1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-3-8 to 2-1-5, Interior(1) 2-1-5 to 10-6-12 zone; cantilever left exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=7.7 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1; Min. flat roof snow load governs.
  - 3) Roof design snow load has been reduced to account for slope.
  - 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 7.7 psf on overhangs non-concurrent with other live loads.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 5.
  - 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - 11) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

Job 1625532	Truss H03	Truss Type MONOPITCH	Qty 4	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
Builders Firstsource, Albemarle, NC 28001					Job Reference (optional)

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:56 2019 Page 1  
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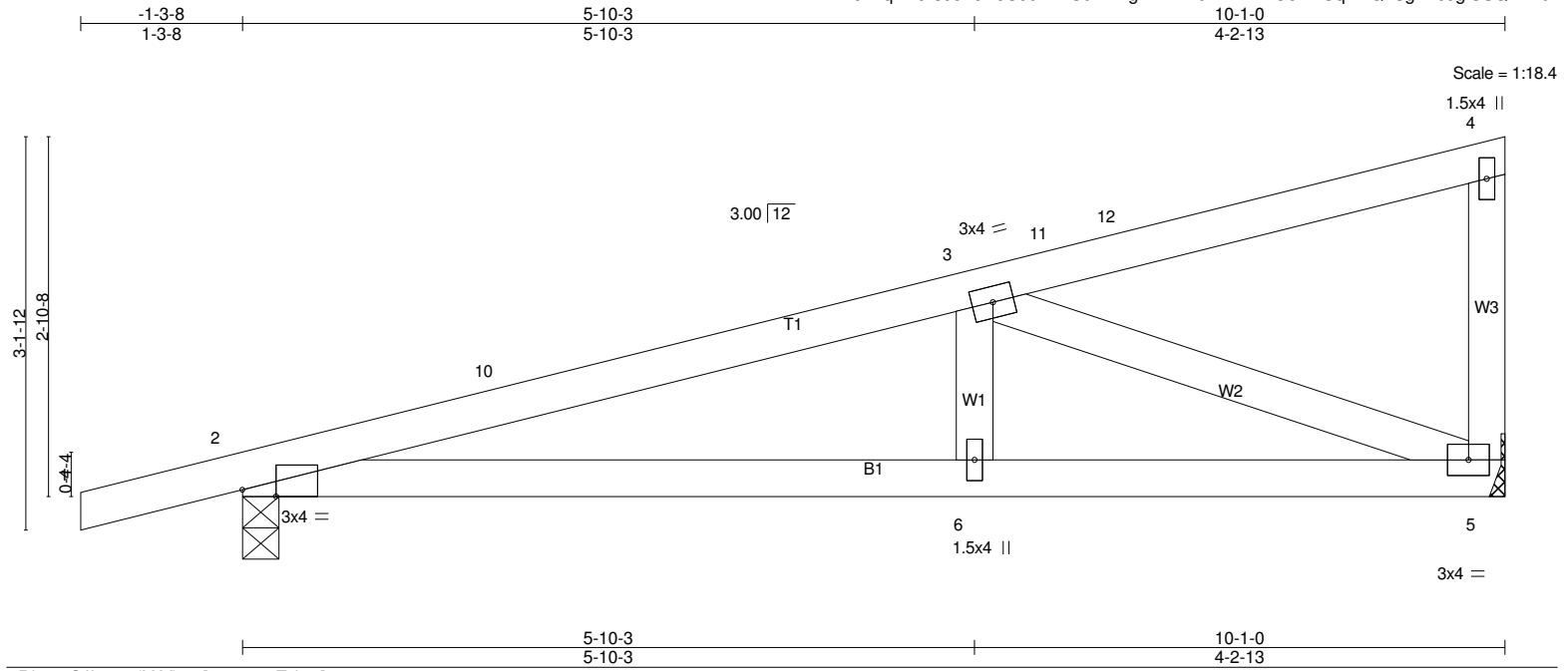


Plate Offsets (X,Y)-- [2:0-3-3,Edge]		5-10-3 5-10-3		10-1-0 4-2-13	
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.29	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.37	Vert(LL) -0.03 6-9 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.30	Vert(CT) -0.08 6-9 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.01 5 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.03 6-9 >999 240		
				Weight: 44 lb	FT = 20%

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

**REACTIONS.** (lb/size) 2=324/0-3-8 (min. 0-1-8), 5=272/Mechanical  
 Max Horz 2=96(LC 12)  
 Max Uplift 2=78(LC 12), 5=54(LC 16)  
 Max Grav 2=480(LC 2), 5=392(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-10=-786/44, 3-10=-765/55  
 BOT CHORD 2-6=-101/742, 5-6=-101/742  
 WEBS 3-5=-773/106

- NOTES-** (12)
- 1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-3-8 to 2-1-5, Interior(1) 2-1-5 to 9-11-4 zone; cantilever left exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load); Lumber DOL=1.15 Plate DOL=1.15; Pg=10.0 psf (ground snow); Ps=7.7 psf (roof snow); Lumber DOL=1.15 Plate DOL=1.15; Category II; Exp B; Partially Exp.; Ct=1.1; Min. flat roof snow load governs.
  - 3) Roof design snow load has been reduced to account for slope.
  - 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 7.7 psf on overhangs non-concurrent with other live loads.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 8) Refer to girder(s) for truss to truss connections.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 5.
  - 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - 12) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

Job 1625532	Truss H04	Truss Type MONOPITCH	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

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8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:58 2019 Page 1

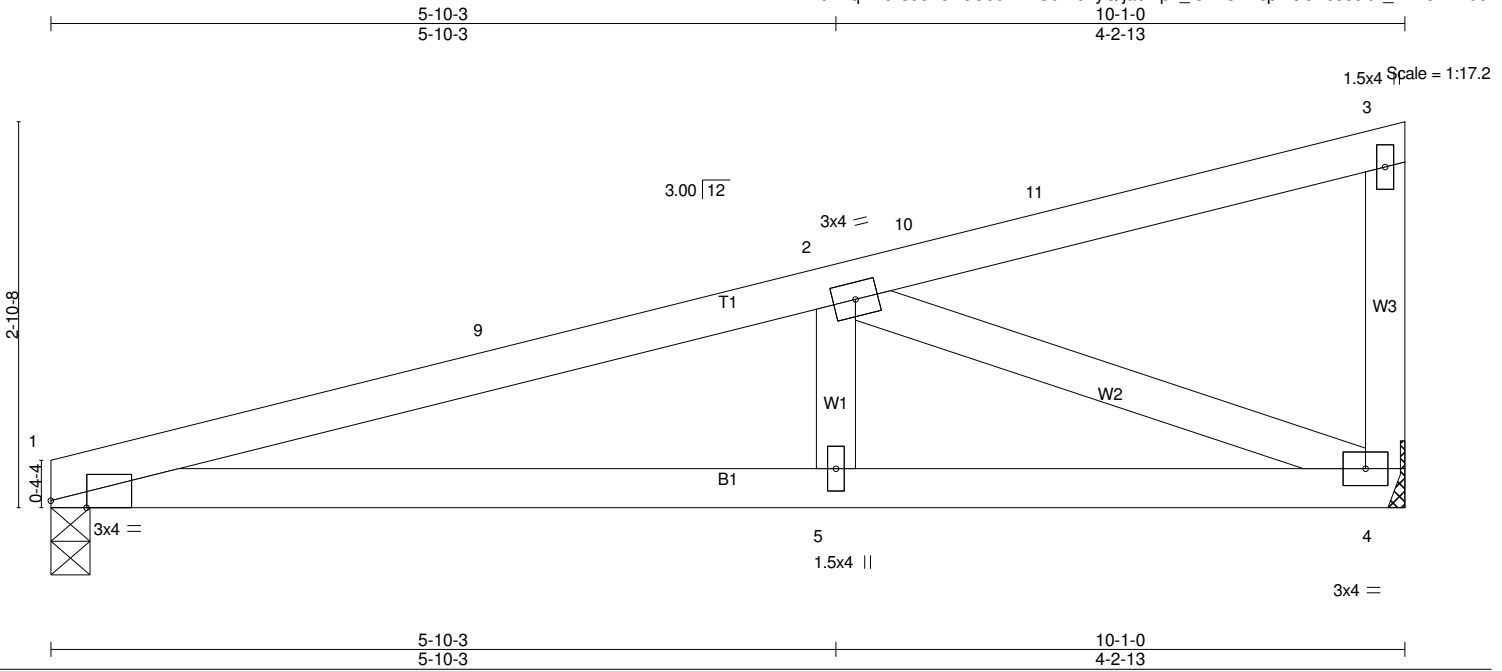


Plate Offsets (X,Y)-- [1:0-3-3,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.31	Vert(LL) -0.04	5-8	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.41	Vert(CT) -0.09	5-8	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.31	Horz(CT) 0.01	4	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Wind(LL) 0.03	5-8	>999	240		
	Code IRC2015/TPI2014						Weight: 42 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied, except end verticals.  
 BOT CHORD Rigid ceiling directly applied.

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

**REACTIONS.** (lb/size) 1=275/0-3-8 (min. 0-1-8), 4=275/Mechanical  
 Max Horz 1=82(LC 12)  
 Max Uplift 1=-34(LC 12), 4=-55(LC 12)  
 Max Grav 1=398(LC 2), 4=398(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-9=-808/54, 2-9=-779/61  
 BOT CHORD 1-5=-108/764, 4-5=-108/764  
 WEBS 2-4=-798/113

- NOTES-** (11)
- 1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-0-0 to 3-4-13, Interior(1) 3-4-13 to 9-11-4 zone; cantilever left exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=7.7 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1; Min. flat roof snow load governs.
  - 3) Roof design snow load has been reduced to account for slope.
  - 4) Unbalanced snow loads have been considered for this design.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 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.
  - 7) Refer to girder(s) for truss to truss connections.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4.
  - 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - 11) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

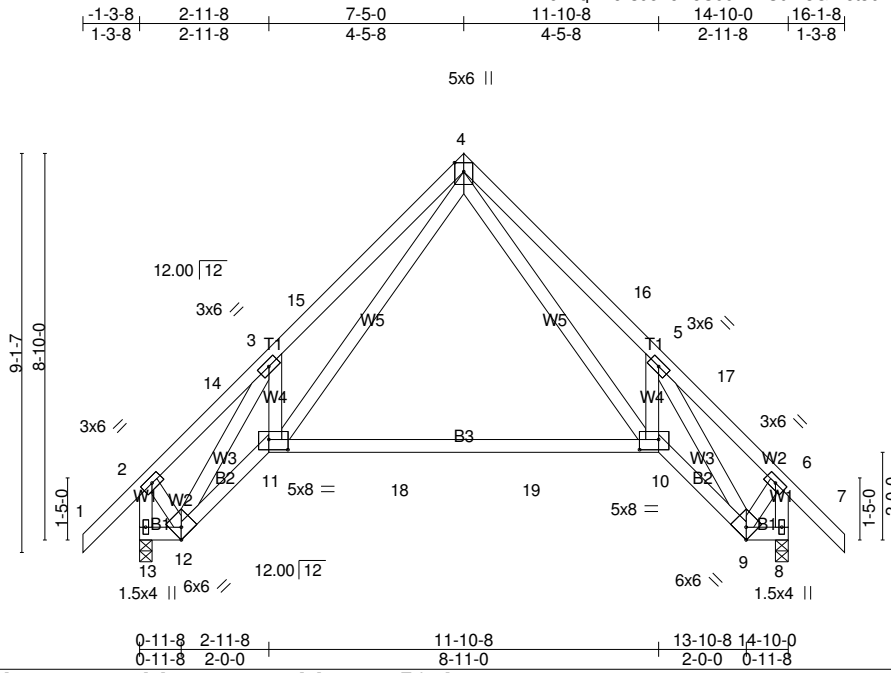
**LOAD CASE(S)** Standard



Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	I01	Roof Special	3	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:01:59 2019 Page 1  
 ID:WDvc2XqYPcks0eFcMJOUu1zNC97-3GWot3bT4xvbp5xmIlg91SQSeEvtXn1oexs3lzNA9c



Scale = 1:52.7

Plate Offsets (X,Y)--	[9:0-2-8,Edge], [10:0-5-4,0-2-12], [11:0-5-4,0-2-12], [12:0-2-8,Edge]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.28	Vert(LL)	-0.25 10-11	>702	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.84	Vert(CT)	-0.52 10-11	>336	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.51	Horz(CT)	0.13 8	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Wind(LL)	0.04 10-11	>999	240		
	Code IRC2015/TPI2014						Weight: 110 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-0-12 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (lb/size) 13=423/0-3-8 (min. 0-1-8), 8=423/0-3-8 (min. 0-1-8)  
 Max Horz 13=221(LC 13)  
 Max Uplift 13=-30(LC 14), 8=-30(LC 15)  
 Max Grav 13=668(LC 2), 8=668(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-14=-351/68, 3-14=-292/80, 3-15=-1258/244, 4-15=-1184/277, 4-16=-1038/159,  
 5-16=-1068/126, 5-17=-282/83, 6-17=-348/66, 2-13=-659/108, 6-8=-659/110  
 BOT CHORD 11-12=-143/1399, 11-18=-21/398, 18-19=-21/398, 10-19=-21/398, 9-10=0/1173  
 WEBS 4-10=-142/765, 5-10=0/474, 5-9=-1250/0, 4-11=-242/938, 3-11=0/415, 3-12=-1366/2,  
 2-12=0/337, 6-9=0/336

- NOTES-** (10)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-3-8 to 2-1-5, Interior(1) 2-1-5 to 7-5-0, Exterior(2) 7-5-0 to 10-9-13 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=5.9 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
  - Roof design snow load has been reduced to account for slope.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 8.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

Job 1625532	Truss I01E	Truss Type Common Supported Gable	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
Builders Firstsource, Albemarle, NC 28001					Job Reference (optional)

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:01 2019 Page 1  
 ID:WDvc2XqYPcks0eFcMJOUu1zNC97-?feZHlc?iBdr7oU3BL8ESYolR5OLXdKfYQz7ezNA9a

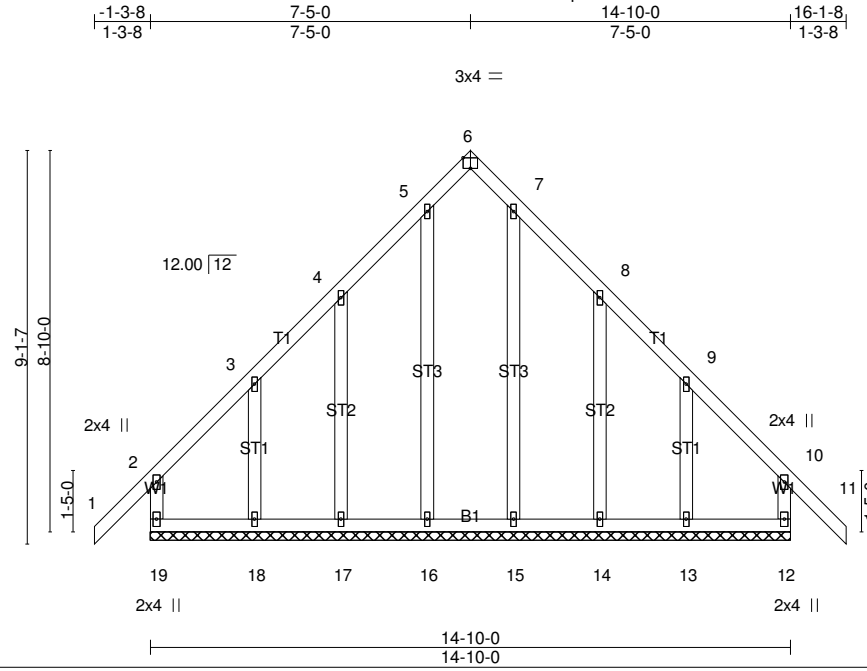


Plate Offsets (X,Y)-- [6:0-2-0,Edge]					
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.19	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.13	Vert(LL) -0.01 11 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.17	Vert(CT) -0.01 11 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-R	Horz(CT) 0.00 12 n/a n/a		
	Code IRC2015/TPI2014				Weight: 110 lb FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** All bearings 14-10-0.  
 (lb) - Max Horz 19=-221(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 19, 12, 17 except 18=-170(LC 14), 14=-100(LC 15), 13=-167(LC 15)  
 Max Grav All reactions 250 lb or less at joint(s) 19, 12, 16, 17, 18, 15, 14, 13

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

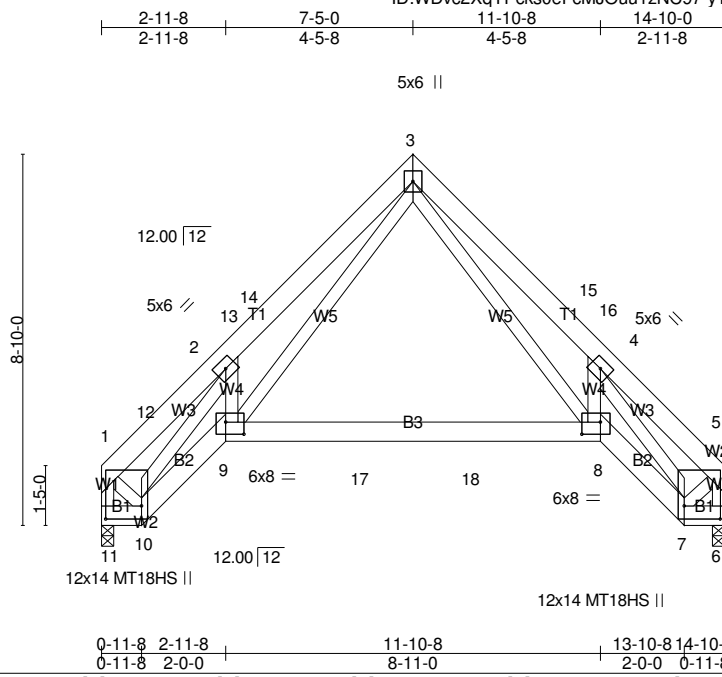
- NOTES-** (15)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-3-8 to 2-1-5, Exterior(2) 2-1-5 to 7-5-0, Corner(3) 7-5-0 to 10-9-13 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=5.9 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
  - Roof design snow load has been reduced to account for slope.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
  - All plates are 1.5x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 12, 17 except (jt=lb) 18=170, 14=100, 13=167.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

Job 1625532	Truss I02	Truss Type ROOF SPECIAL	Qty 1	Ply 2	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:03 2019 Page 1  
ID:WDvc2XqYPcks0eFcMJOUu1zNC97-y1mJiQe9XJRL4QysAcNcJtd3EFkYpMociGv3CWzNA9Y



Scale = 1:54.8

Plate Offsets (X,Y)--	[6:0-0-0,0-1-12], [7:0-3-12,0-10-4], [8:0-5-4,0-3-8], [9:0-5-4,0-3-8], [11:0-0-0,0-1-12], [11:0-3-12,0-10-4]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.51	Vert(LL) -0.04	8-9	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.34	Vert(CT) -0.15	8-9	>999	240	MT18HS	244/190
BCLL 0.0 *	Rep Stress Incr NO	WB 0.51	Horz(CT) 0.11	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Wind(LL) 0.02	8-9	>999	240		
							Weight: 266 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.3	

**REACTIONS.** (lb/size) 11=1944/0-3-8 (min. 0-1-8), 6=719/0-3-8 (min. 0-1-8)  
Max Horz 11=184(LC 11)  
Max Grav 11=2148(LC 2), 6=923(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-12=-1744/0, 2-12=-1021/0, 2-13=-3532/0, 13-14=-3349/0, 3-14=-3226/0, 3-15=-1542/0, 15-16=-1656/0, 4-16=-1676/0, 4-5=-740/0, 1-11=-2242/0, 5-6=-961/0  
BOT CHORD 10-11=0/492, 9-10=0/3222, 9-17=0/816, 17-18=0/816, 8-18=0/816, 7-8=0/1678  
WEBS 3-8=-20/833, 4-8=0/778, 4-7=-1633/0, 3-9=0/2672, 2-10=-2997/0, 1-10=0/856, 5-7=0/444

- NOTES-** (13)
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 3-6-9, Interior(1) 3-6-9 to 7-5-0, Exterior(2) 7-5-0 to 10-9-13 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=5.9 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
  - Roof design snow load has been reduced to account for slope.
  - All plates are MT20 plates unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 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.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	I02	ROOF SPECIAL	1	2	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MITek Industries, Inc. Thu Apr 25 14:02:03 2019 Page 2  
ID:WDvc2XqYPcks0eFcMJOUu1zNC97-y1mJiQe9XJRL4QysAcNcJtd3EFkYpMociGv3CWzNA9Y

**LOAD CASE(S)** Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-12=-432(F=-400), 3-5=-32, 10-11=-20, 9-10=-20, 8-9=-20, 7-8=-20, 6-7=-20  
Trapezoidal Loads (plf)  
Vert: 12=-432(F=-400)-to-3=-32
- 2) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-12=-460(F=-400), 3-5=-60, 10-11=-20, 9-10=-20, 8-9=-20, 7-8=-20, 6-7=-20  
Trapezoidal Loads (plf)  
Vert: 12=-460(F=-400)-to-3=-60
- 3) Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-12=-450(F=-400), 3-5=-50, 10-11=-20, 9-10=-20, 9-17=-20, 17-18=-50, 8-18=-20, 7-8=-20, 6-7=-20  
Trapezoidal Loads (plf)  
Vert: 12=-450(F=-400)-to-3=-50
- 4) Dead + 0.75 Snow (balanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-12=-429(F=-400), 3-5=-29, 10-11=-20, 9-10=-20, 9-17=-20, 17-18=-50, 8-18=-20, 7-8=-20, 6-7=-20  
Trapezoidal Loads (plf)  
Vert: 12=-429(F=-400)-to-3=-29
- 5) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-12=-420(F=-400), 3-5=-20, 10-11=-40, 9-10=-40, 8-9=-40, 7-8=-40, 6-7=-40  
Trapezoidal Loads (plf)  
Vert: 12=-420(F=-400)-to-3=-20
- 6) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-12=-380(F=-400), 3-15=20, 5-15=15, 10-11=-12, 9-10=-12, 8-9=-12, 7-8=-12, 6-7=-12  
Horz: 1-13=-32, 3-13=-27, 3-15=32, 5-15=27, 1-11=18, 5-6=30  
Trapezoidal Loads (plf)  
Vert: 12=-380(F=-400)-to-13=-290(F=-310), 13=-295(F=-310)-to-3=15
- 7) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-12=-385(F=-400), 3-16=15, 5-16=20, 10-11=-12, 9-10=-12, 8-9=-12, 7-8=-12, 6-7=-12  
Horz: 1-14=-27, 3-14=-32, 3-16=27, 5-16=32, 1-11=30, 5-6=18  
Trapezoidal Loads (plf)  
Vert: 12=-385(F=-400)-to-14=-257(F=-272), 14=-252(F=-272)-to-3=20
- 8) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-12=-446(F=-400), 3-5=-46, 10-11=-20, 9-10=-20, 8-9=-20, 7-8=-20, 6-7=-20  
Horz: 1-3=26, 3-5=-26, 1-11=-20, 5-6=-27  
Trapezoidal Loads (plf)  
Vert: 12=-446(F=-400)-to-3=-46
- 9) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-12=-446(F=-400), 3-5=-46, 10-11=-20, 9-10=-20, 8-9=-20, 7-8=-20, 6-7=-20  
Horz: 1-3=26, 3-5=-26, 1-11=27, 5-6=20  
Trapezoidal Loads (plf)  
Vert: 12=-446(F=-400)-to-3=-46
- 10) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-12=-414(F=-400), 3-5=7, 10-11=-12, 9-10=-12, 8-9=-12, 7-8=-12, 6-7=-12  
Horz: 1-3=2, 3-5=19, 1-11=13, 5-6=17  
Trapezoidal Loads (plf)  
Vert: 12=-414(F=-400)-to-3=-14
- 11) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-12=-393(F=-400), 3-5=-14, 10-11=-12, 9-10=-12, 8-9=-12, 7-8=-12, 6-7=-12  
Horz: 1-3=19, 3-5=-2, 1-11=-17, 5-6=-13  
Trapezoidal Loads (plf)  
Vert: 12=-393(F=-400)-to-3=7
- 12) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-12=-432(F=-400), 3-5=-11, 10-11=-20, 9-10=-20, 8-9=-20, 7-8=-20, 6-7=-20  
Horz: 1-3=12, 3-5=9, 1-11=23, 5-6=8  
Trapezoidal Loads (plf)  
Vert: 12=-432(F=-400)-to-3=-32
- 13) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-12=-411(F=-400), 3-5=-32, 10-11=-20, 9-10=-20, 8-9=-20, 7-8=-20, 6-7=-20  
Horz: 1-3=9, 3-5=-12, 1-11=-8, 5-6=-23  
Trapezoidal Loads (plf)  
Vert: 12=-411(F=-400)-to-3=-11
- 14) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-12=-379(F=-400), 3-5=7, 10-11=-12, 9-10=-12, 8-9=-12, 7-8=-12, 6-7=-12  
Horz: 1-3=-33, 3-5=19, 1-11=11, 5-6=16

Continued on page 3

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	I02	ROOF SPECIAL	1	2	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:03 2019 Page 3  
ID:WDvc2XqYPcks0eFcMJOUu1zNC97-y1mJiQe9XJRL4QysAcNcJtd3EFkYpMociGv3CWzNA9Y

**LOAD CASE(S)** Standard

- Trapezoidal Loads (plf)  
Vert: 12=-379(F=-400)-to-3=21
- 15) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-12=-393(F=-400), 3-5=21, 10-11=-12, 9-10=-12, 8-9=-12, 7-8=-12, 6-7=-12  
Horz: 1-3=-19, 3-5=33, 1-11=-16, 5-6=11  
Trapezoidal Loads (plf)  
Vert: 12=-393(F=-400)-to-3=7
- 16) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-12=-389(F=-400), 3-5=2, 10-11=-12, 9-10=-12, 8-9=-12, 7-8=-12, 6-7=-12  
Horz: 1-3=-23, 3-5=14, 1-11=6, 5-6=12  
Trapezoidal Loads (plf)  
Vert: 12=-389(F=-400)-to-3=11
- 17) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-12=-398(F=-400), 3-5=11, 10-11=-12, 9-10=-12, 8-9=-12, 7-8=-12, 6-7=-12  
Horz: 1-3=-14, 3-5=23, 1-11=-12, 5-6=6  
Trapezoidal Loads (plf)  
Vert: 12=-398(F=-400)-to-3=2
- 18) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-12=-397(F=-400), 3-5=-11, 10-11=-20, 9-10=-20, 8-9=-20, 7-8=-20, 6-7=-20  
Horz: 1-3=-23, 3-5=9, 1-11=21, 5-6=7  
Trapezoidal Loads (plf)  
Vert: 12=-397(F=-400)-to-3=3
- 19) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-12=-411(F=-400), 3-5=3, 10-11=-20, 9-10=-20, 8-9=-20, 7-8=-20, 6-7=-20  
Horz: 1-3=9, 3-5=23, 1-11=-7, 5-6=-21  
Trapezoidal Loads (plf)  
Vert: 12=-411(F=-400)-to-3=-11
- 20) Dead + Uninhabitable Attic Storage: Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-12=-420(F=-400), 3-5=-20, 10-11=-20, 9-10=-20, 9-17=-20, 17-18=-60, 8-18=-20, 7-8=-20, 6-7=-20  
Trapezoidal Loads (plf)  
Vert: 12=-420(F=-400)-to-3=-20
- 21) Dead + 0.75 Snow (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-12=-438(F=-400), 3-5=-22, 10-11=-20, 9-10=-20, 9-17=-20, 17-18=-50, 8-18=-20, 7-8=-20, 6-7=-20  
Horz: 1-3=9, 3-5=7, 1-11=17, 5-6=6  
Trapezoidal Loads (plf)  
Vert: 12=-438(F=-400)-to-3=-38
- 22) Dead + 0.75 Snow (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-12=-422(F=-400), 3-5=-38, 10-11=-20, 9-10=-20, 9-17=-20, 17-18=-50, 8-18=-20, 7-8=-20, 6-7=-20  
Horz: 1-3=-7, 3-5=-9, 1-11=-6, 5-6=-17  
Trapezoidal Loads (plf)  
Vert: 12=-422(F=-400)-to-3=-22
- 23) Dead + 0.75 Snow (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-12=-411(F=-400), 3-5=-22, 10-11=-20, 9-10=-20, 9-17=-20, 17-18=-50, 8-18=-20, 7-8=-20, 6-7=-20  
Horz: 1-3=18, 3-5=7, 1-11=16, 5-6=5  
Trapezoidal Loads (plf)  
Vert: 12=-411(F=-400)-to-3=-11
- 24) Dead + 0.75 Snow (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-12=-422(F=-400), 3-5=-11, 10-11=-20, 9-10=-20, 9-17=-20, 17-18=-50, 8-18=-20, 7-8=-20, 6-7=-20  
Horz: 1-3=-7, 3-5=18, 1-11=-5, 5-6=-16  
Trapezoidal Loads (plf)  
Vert: 12=-422(F=-400)-to-3=-22
- 25) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-12=-459(F=-400), 3-5=-43, 10-11=-20, 9-10=-20, 9-17=-20, 17-18=-50, 8-18=-20, 7-8=-20, 6-7=-20  
Horz: 1-3=9, 3-5=7, 1-11=17, 5-6=6  
Trapezoidal Loads (plf)  
Vert: 12=-459(F=-400)-to-3=-59
- 26) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-12=-443(F=-400), 3-5=-59, 10-11=-20, 9-10=-20, 9-17=-20, 17-18=-50, 8-18=-20, 7-8=-20, 6-7=-20  
Horz: 1-3=-7, 3-5=-9, 1-11=-6, 5-6=-17  
Trapezoidal Loads (plf)  
Vert: 12=-443(F=-400)-to-3=-43

Continued on page 4

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	I02	ROOF SPECIAL	1	2	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:03 2019 Page 4  
ID:WDvc2XqYPcks0eFcMJOUu1zNC97-y1mJiQe9XJRL4QysAcNcJtd3EFkYpMociGv3CWzNA9Y

**LOAD CASE(S)** Standard

27) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-12=-432(F=-400), 3-5=-43, 10-11=-20, 9-10=-20, 9-17=-20, 17-18=-50, 8-18=-20, 7-8=-20, 6-7=-20

Horz: 1-3=-18, 3-5=7, 1-11=16, 5-6=5

Trapezoidal Loads (plf)

Vert: 12=-432(F=-400)-to-3=-32

28) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-12=-443(F=-400), 3-5=-32, 10-11=-20, 9-10=-20, 9-17=-20, 17-18=-50, 8-18=-20, 7-8=-20, 6-7=-20

Horz: 1-3=-7, 3-5=18, 1-11=-5, 5-6=-16

Trapezoidal Loads (plf)

Vert: 12=-443(F=-400)-to-3=-43

29) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-12=-460(F=-400), 3-5=-20, 10-11=-20, 9-10=-20, 8-9=-20, 7-8=-20, 6-7=-20

Trapezoidal Loads (plf)

Vert: 12=-460(F=-400)-to-3=-60

30) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-12=-420(F=-400), 3-5=-60, 10-11=-20, 9-10=-20, 8-9=-20, 7-8=-20, 6-7=-20

Trapezoidal Loads (plf)

Vert: 12=-420(F=-400)-to-3=-20

31) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-12=-450(F=-400), 3-5=-20, 10-11=-20, 9-10=-20, 9-17=-20, 17-18=-50, 8-18=-20, 7-8=-20, 6-7=-20

Trapezoidal Loads (plf)

Vert: 12=-450(F=-400)-to-3=-50

32) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-12=-420(F=-400), 3-5=-50, 10-11=-20, 9-10=-20, 9-17=-20, 17-18=-50, 8-18=-20, 7-8=-20, 6-7=-20

Trapezoidal Loads (plf)

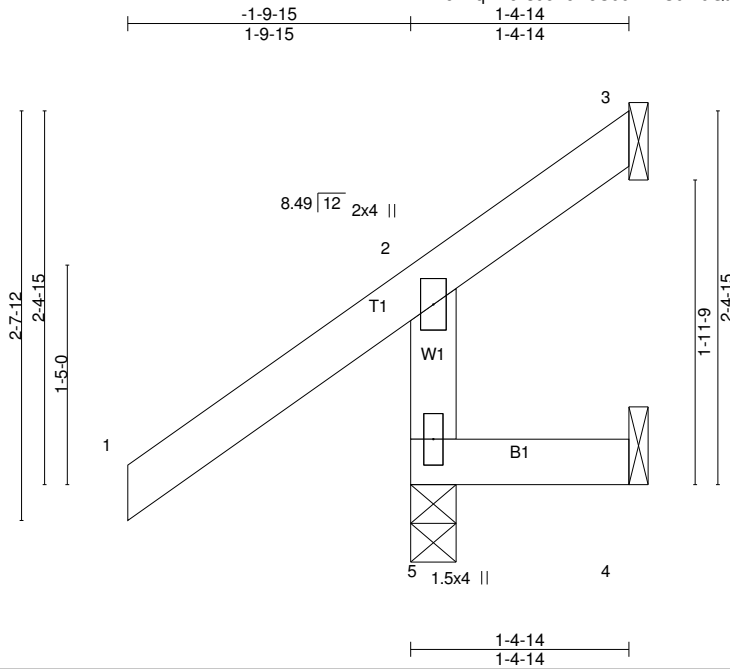
Vert: 12=-420(F=-400)-to-3=-20

Job 1625532	Truss J01	Truss Type Jack-Open	Qty 2	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:05 2019 Page 1

ID:WDvc2XqYPcks0eFcMJOUu1zNC97-uQt376gP3wi3Jk6F11P4OliSG2TCHNGvAaOAGPzNA9W



Scale = 1:14.9

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.28	Vert(LL) 0.00	5	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.08	Vert(CT) 0.00	5	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(CT) -0.01	3	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MR	Wind(LL) 0.00	5	>999	240		
	Code IRC2015/TPI2014						Weight: 10 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 1-4-14 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (lb/size) 5=160/0-3-8 (min. 0-1-8), 3=-21/Mechanical, 4=0/Mechanical  
Max Horz 5=57(LC 11)  
Max Uplift 5=-15(LC 14), 3=-35(LC 2), 4=-14(LC 11)  
Max Grav 5=262(LC 2), 3=9(LC 10), 4=20(LC 12)

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

**NOTES-** (10)

- 1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=7.7 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
- 3) Roof design snow load has been reduced to account for slope.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 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.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3, 4.
- 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

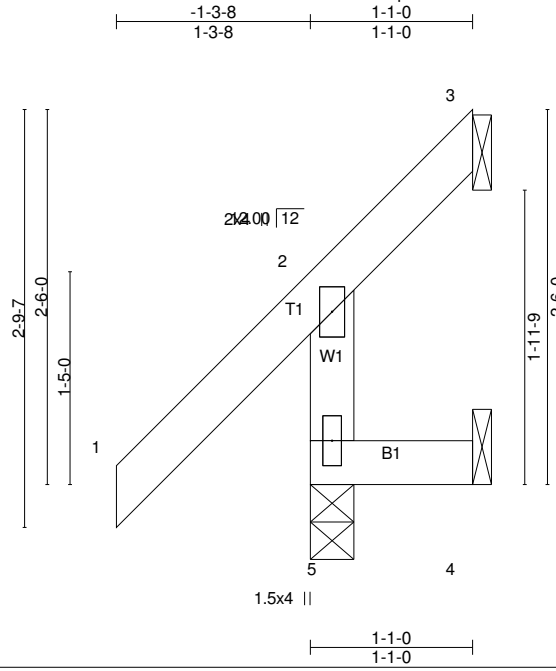
**LOAD CASE(S)** Standard

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	J02	Jack-Open	4	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:06 2019 Page 1

ID:WDvc2XqYPcks0eFcMJOUu1zNC97-McRSLsg2qEqvugRrkWjxVFe0SpN0qW3PE7korzNA9V



Scale = 1:15.4

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.22	Vert(LL) -0.00	5	>999	240	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.08	Vert(CT) 0.00	5	>999	180		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(CT) -0.00	3	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MR						
	Code IRC2015/TPI2014							
							Weight: 9 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 1-1-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (lb/size) 5=105/0-3-8 (min. 0-1-8), 3=-13/Mechanical, 4=2/Mechanical  
Max Horz 5=58(LC 11)  
Max Uplift 3=-25(LC 2), 4=-29(LC 14)  
Max Grav 5=190(LC 2), 3=10(LC 10), 4=28(LC 12)

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

**NOTES-** (10)

- 1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=5.9 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
- 3) Roof design snow load has been reduced to account for slope.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 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.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4.
- 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

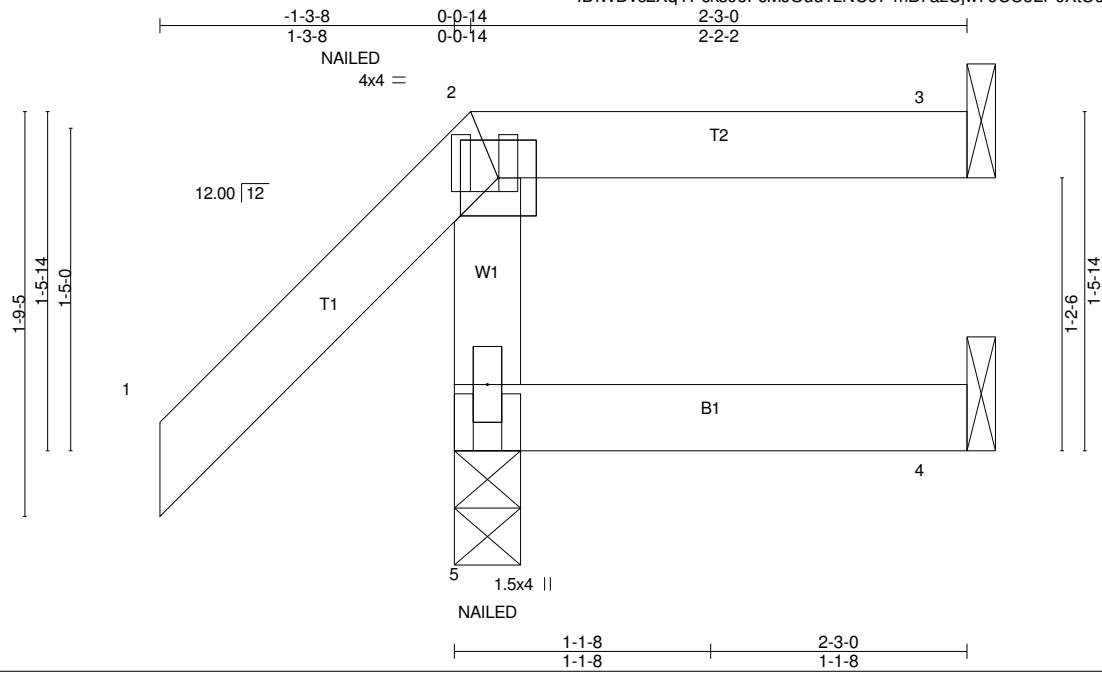




Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	J04	Jack-Open Girder	2	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

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8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:09 2019 Page 1



Scale = 1:10.1

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.17	Vert(LL) -0.00	5	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT) -0.00	4-5	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT) -0.00	3	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MR	Wind(LL) 0.00	4-5	>999		
							Weight: 11 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 2-3-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 2-3.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 5=128/0-3-8 (min. 0-1-8), 3=33/Mechanical, 4=18/Mechanical  
Max Horz 5=63(LC 7)  
Max Uplift 5=-29(LC 7), 3=-19(LC 27)  
Max Grav 5=192(LC 2), 3=37(LC 2), 4=37(LC 5)

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

- NOTES-** (14)
- 1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) \*\* TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps= varies (min. roof snow=5.9 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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.
  - 3) Roof design snow load has been reduced to account for slope.
  - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
  - 5) Provide adequate drainage to prevent water ponding.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 8) Refer to girder(s) for truss to truss connections.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
  - 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 12) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
  - 13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
  - 14) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard  
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-2=-32, 2-3=-45, 4-5=-20

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	J04	Jack-Open Girder	2	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:09 2019 Page 2  
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**LOAD CASE(S)** Standard  
Concentrated Loads (lb)  
Vert: 5=1(B)

Job 1625532	Truss J05	Truss Type Jack-Open	Qty 2	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:10 2019 Page 1

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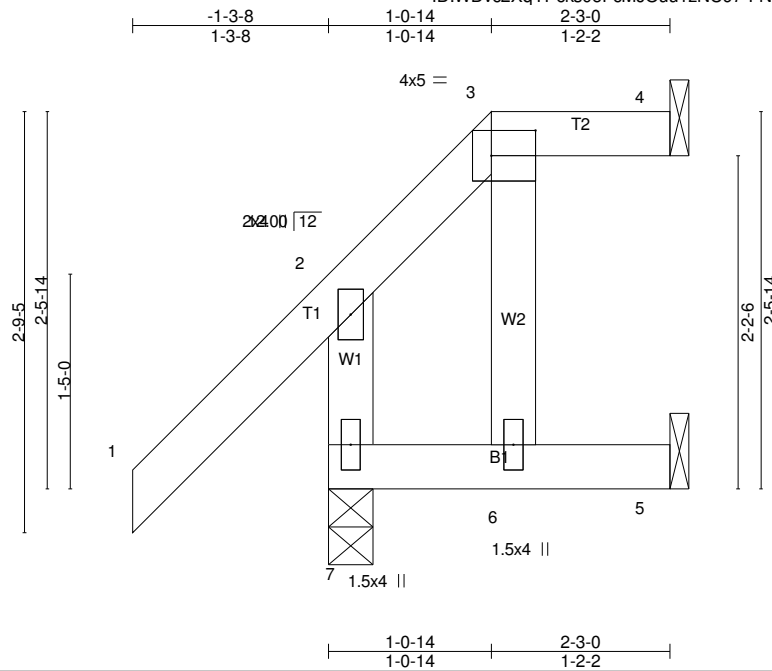


Plate Offsets (X,Y)-- [3:0-3-8,0-2-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.23	Vert(LL)	-0.00	7	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	-0.00	6	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.01	Horz(CT)	-0.01	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MP							
									Weight: 15 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 2-3-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 7=119/0-3-8 (min. 0-1-8), 4=31/Mechanical, 5=16/Mechanical  
 Max Horz 7=60(LC 11)  
 Max Uplift 7=-3(LC 14), 4=-19(LC 11), 5=-13(LC 11)  
 Max Grav 7=198(LC 2), 4=41(LC 32), 5=30(LC 5)

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

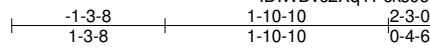
- NOTES-** (13)
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-3-8 to 2-2-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) \*\* TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps= varies (min. roof snow=5.9 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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) Roof design snow load has been reduced to account for slope.
  - 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 7.7 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.
  - 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) 7, 4, 5.
  - 11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 13) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard  
 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-2=-32, 2-3=-32, 3-4=-45, 5-7=-20

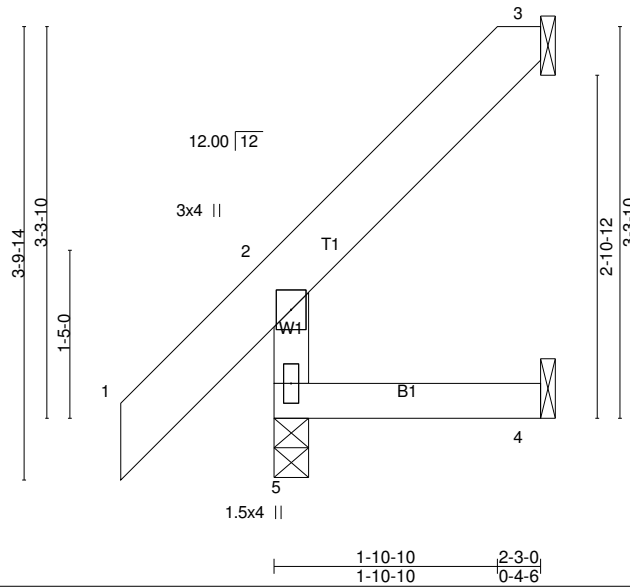
Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	J06	Jack-Open	1	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:12 2019 Page 1  
 ID:WDvc2XqYPcks0eFcMJOuu1zNC97-BmojbVloP4a3fp8bC?1jAmVfjtsPQY?xn9a20VzNA9P



Scale = 1:19.4



<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.27	Vert(LL) 0.00 4-5 >999 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.10	Vert(CT) -0.00 4-5 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.01 3 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MR		Weight: 17 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 2-3-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (lb/size) 5=115/0-3-8 (min. 0-1-8), 3=19/Mechanical, 4=18/Mechanical  
 Max Horz 5=95(LC 14)  
 Max Uplift 3=66(LC 14), 4=9(LC 14)  
 Max Grav 5=198(LC 2), 3=53(LC 26), 4=37(LC 5)

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

**NOTES-** (10)

- 1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=5.9 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
- 3) Roof design snow load has been reduced to account for slope.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 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.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4.
- 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

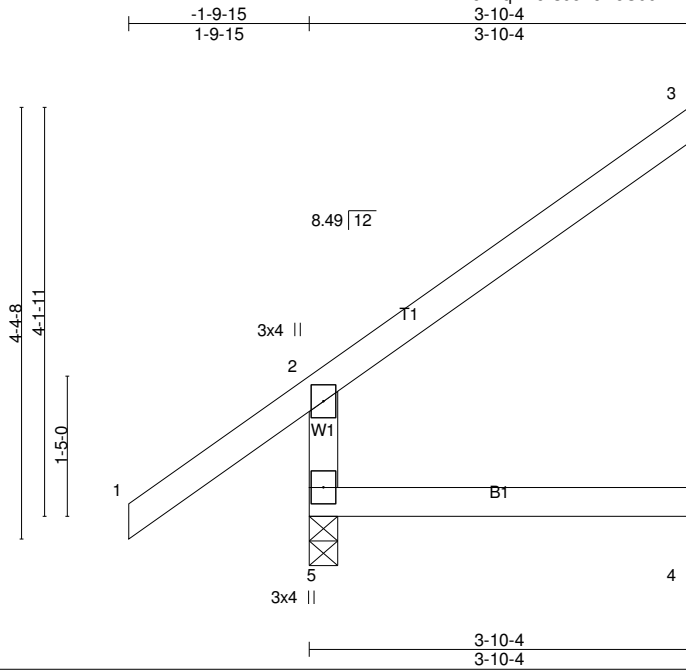
**LOAD CASE(S)** Standard

Job 1625532	Truss J07	Truss Type Jack-Open	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:13 2019 Page 1

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Scale = 1:23.3

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.30	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.20	Vert(LL) -0.01 4-5 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.02 4-5 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-MR	Horz(CT) -0.03 3 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.01 4-5 >999 240	Weight: 18 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 3-10-4 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (lb/size) 5=190/0-3-8 (min. 0-1-8), 3=49/Mechanical, 4=33/Mechanical  
Max Horz 5=111(LC 14)  
Max Uplift 3=68(LC 14), 4=-1(LC 14)  
Max Grav 5=296(LC 2), 3=94(LC 26), 4=67(LC 5)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-5=-255/99

**NOTES-** (10)

- 1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-9-15 to 2-11-12, Exterior(2) 2-11-12 to 3-9-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=7.7 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
- 3) Roof design snow load has been reduced to account for slope.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 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.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4.
- 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

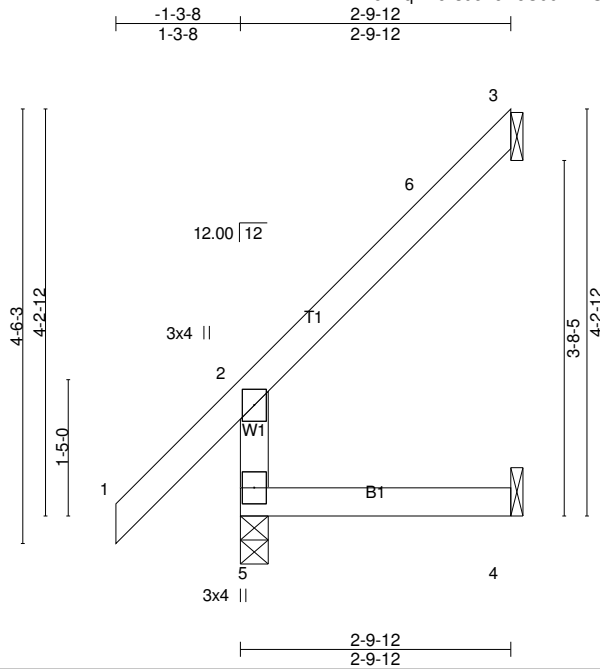
**LOAD CASE(S)** Standard

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	J08	Jack-Open	5	1	Job Reference (optional)

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8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:14 2019 Page 1



Scale: 1/2"=1'

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.29	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.19	Vert(LL) 0.01 4-5 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.01 4-5 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MR	Horz(CT) -0.03 3 n/a n/a		
	Code IRC2015/TPI2014			Weight: 15 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 2-9-12 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (lb/size) 5=126/0-3-8 (min. 0-1-8), 3=31/Mechanical, 4=24/Mechanical  
Max Horz 5=113(LC 14)  
Max Uplift 3=77(LC 14), 4=16(LC 14)  
Max Grav 5=214(LC 2), 3=75(LC 26), 4=48(LC 5)

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

**NOTES-** (10)

- 1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-3-8 to 2-1-5, Interior(1) 2-1-5 to 2-9-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=5.9 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
- 3) Roof design snow load has been reduced to account for slope.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 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.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4.
- 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

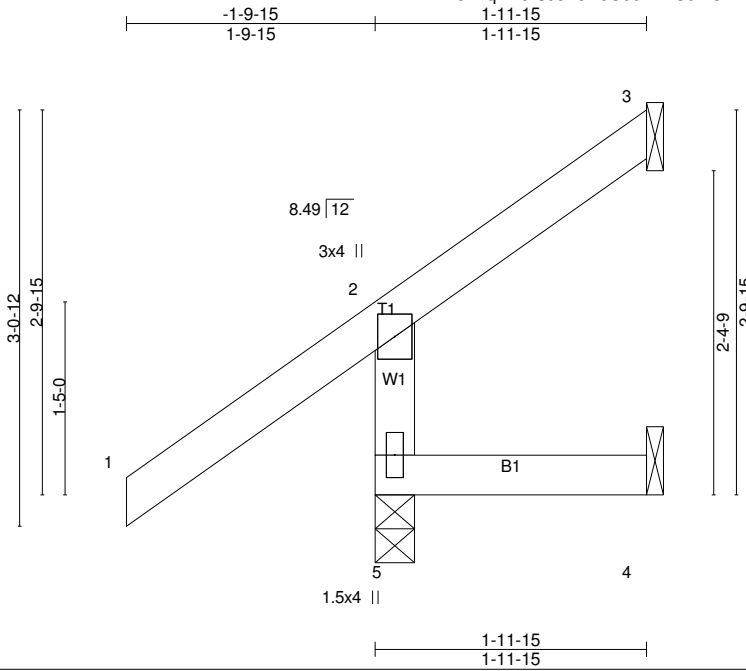
**LOAD CASE(S)** Standard

Job 1625532	Truss J09	Truss Type Jack-Open	Qty 2	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:16 2019 Page 1

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Scale = 1:16.9

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.28	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.10	Vert(LL) 0.00 5 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.00 5 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MR	Horz(CT) -0.01 3 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.00 4-5 >999 240	Weight: 12 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 1-11-15 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (lb/size) 5=158/0-3-8 (min. 0-1-8), 3=5/Mechanical, 4=9/Mechanical  
Max Horz 5=69(LC 14)  
Max Uplift 5=8(LC 14), 3=32(LC 14), 4=8(LC 14)  
Max Grav 5=255(LC 2), 3=21(LC 12), 4=30(LC 5)

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

**NOTES-** (10)

- 1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCCL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=7.7 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
- 3) Roof design snow load has been reduced to account for slope.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 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.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3, 4.
- 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard





Job 1625532	Truss K01	Truss Type PIGGYBACK BASE	Qty 4	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:19 2019 Page 1

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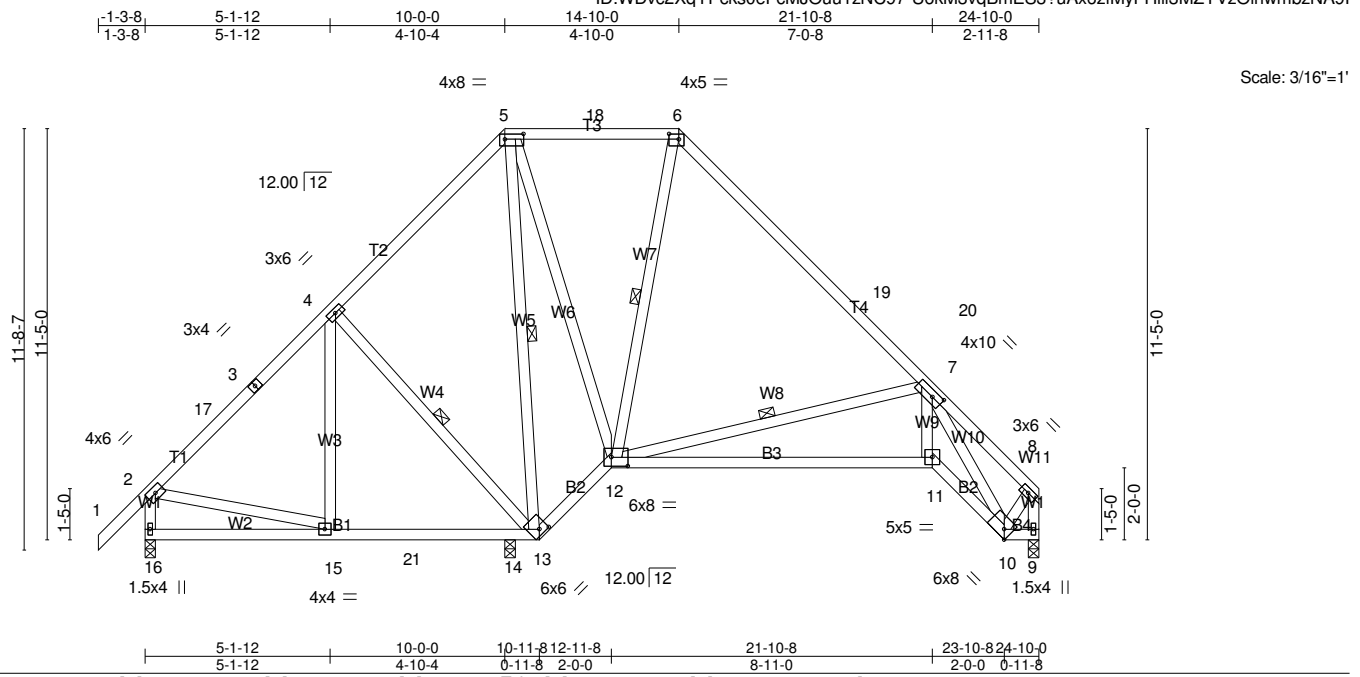


Plate Offsets (X,Y)--	[5.0-6.4,0.0-1.12], [6.0-3.4,0.0-1.12], [7.0-3.8,0.0-2.0], [10.0-2.8,Edge], [12.0-5.8,0.0-3.0], [13.0-2.12,0.0-1.12]
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LOADING (psf)	SPACING-	2.0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.67	Vert(LL)	-0.24	11-12	>734	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.85	Vert(CT)	-0.50	11-12	>347	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.66	Horz(CT)	0.12	9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS	Wind(LL)	0.04	11-12	>999	240		
									Weight: 191 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-5-7 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 4-13, 5-13, 6-12, 7-12

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

**REACTIONS.** (lb/size) 16=480/0-3-8 (min. 0-1-8), 9=505/0-3-8 (min. 0-1-8)  
 Max Horz 16=250(LC 11)  
 Max Uplift 16=-63(LC 14), 9=-41(LC 15)  
 Max Grav 16=749(LC 2), 9=758(LC 2), 14=543(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-17=-641/87, 3-17=-540/90, 3-4=-451/113, 4-5=-462/201, 5-18=-379/173, 6-18=-379/173,  
 6-19=-524/159, 19-20=-660/118, 7-20=-679/100, 7-8=-435/71, 2-16=-687/143, 8-9=-769/90  
 BOT CHORD 15-16=-246/281, 15-21=-136/465, 14-21=-136/465, 13-14=-136/465, 12-13=-114/412,  
 11-12=-80/978, 10-11=-101/1514  
 WEBS 4-13=-297/175, 5-13=-563/0, 5-12=0/574, 7-12=-648/237, 7-11=0/1173, 7-10=-1642/126,  
 2-15=-10/323, 8-10=-72/532

- NOTES-** (12)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-3-8 to 2-1-5, Interior(1) 2-1-5 to 10-0-0, Exterior(2) 10-0-0 to 14-10-0, Interior(1) 19-7-11 to 24-8-4 zone; cantilever left exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - \*\* TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps= varies (min. roof snow=5.9 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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.
  - Roof design snow load has been reduced to account for slope.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 9.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	K01	PIGGYBACK BASE	4	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:19 2019 Page 2  
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**LOAD CASE(S)** Standard

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

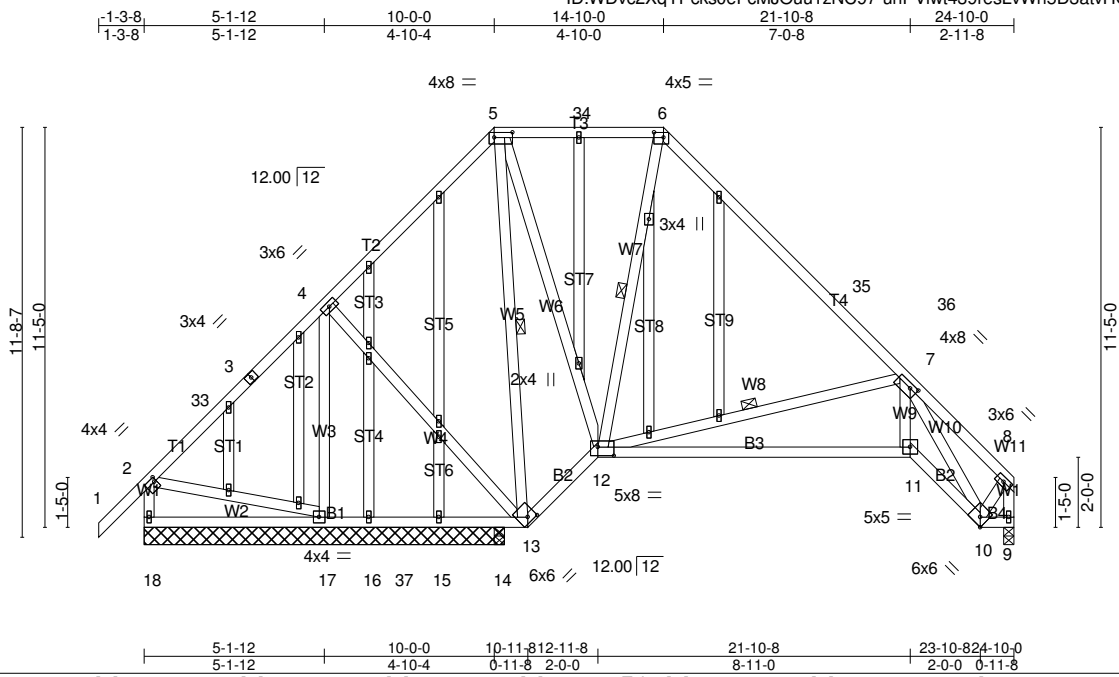
Uniform Loads (plf)

Vert: 1-2=-32, 2-5=-32, 5-6=-45, 6-8=-32, 13-16=-20, 12-13=-20, 11-12=-20, 10-11=-20, 9-10=-20

Job 1625532	Truss K01E	Truss Type GABLE	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:22 2019 Page 1  
 ID:WDvc2XqYPcks0eFcMJOUu1zNC97-uhPVwvt439resLwN5D3atvHGv6QmxyP4j?aNwzNA9F



Scale = 1:65.8

Plate Offsets (X,Y)--	[2:0-0-12,0-1-8], [5:0-6-4,0-1-12], [6:0-3-4,0-1-12], [7:0-2-8,0-1-8], [10:0-2-8,Edge], [12:0-5-8,0-3-0], [13:0-2-12,0-1-12]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.59	Vert(LL)	-0.23	11-12	>746	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.83	Vert(CT)	-0.49	11-12	>356		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.57	Horz(CT)	0.10	9	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Wind(LL)	0.03	11-12	>999		
	Code IRC2015/TPI2014						Weight: 256 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS 1 Row at midpt 5-13, 6-12, 7-12

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

**REACTIONS.** All bearings 10-3-8 except (jt=length) 9=0-3-8, 14=0-3-8.  
 (lb) - Max Horz 18=250(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) 18, 9, 16, 14 except 17=-104(LC 14), 15=-135(LC 2)  
 Max Grav All reactions 250 lb or less at joint(s) 18, 15, 16 except 9=623(LC 2), 17=901(LC 2), 14=513(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 3-4=-16/285, 4-5=-272/164, 6-35=-319/121, 35-36=-455/80, 7-36=-474/62, 7-8=-350/56, 8-9=-628/64  
 BOT CHORD 17-18=-246/273, 12-13=-156/271, 11-12=-49/799, 10-11=-54/1247  
 WEBS 4-17=-769/145, 4-13=-14/322, 5-13=-659/0, 5-12=0/518, 7-12=-620/234, 7-11=0/988, 7-10=-1349/76, 2-17=-289/160, 8-10=-56/436

- NOTES-** (15)
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-3-8 to 2-1-5, Interior(1) 2-1-5 to 10-0-0, Exterior(2) 10-0-0 to 14-10-0, Interior(1) 19-7-11 to 24-8-4 zone; cantilever left exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) \*\* TCCL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps= varies (min. roof snow=5.9 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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) Roof design snow load has been reduced to account for slope.
  - 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 7.7 psf on overhangs non-concurrent with other live loads.
  - 7) Provide adequate drainage to prevent water ponding.
  - 8) All plates are 1.5x4 MT20 unless otherwise indicated.
  - 9) Gable studs spaced at 2-0-0 oc.
  - 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 11) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18, 9, 16, 14 except (jt=lb) 17=104, 15=135.

Continued on page 2

Job 1625532	Truss K01E	Truss Type GABLE	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL Job Reference (optional)
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:22 2019 Page 2  
ID:WDvc2XqYPcks0eFcMJOUu1zNC97-uhPVwt439resLvWn5D3atvHGv6QmxYP4j?aNwzNA9F

**NOTES-** (15)

- 13) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 15) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

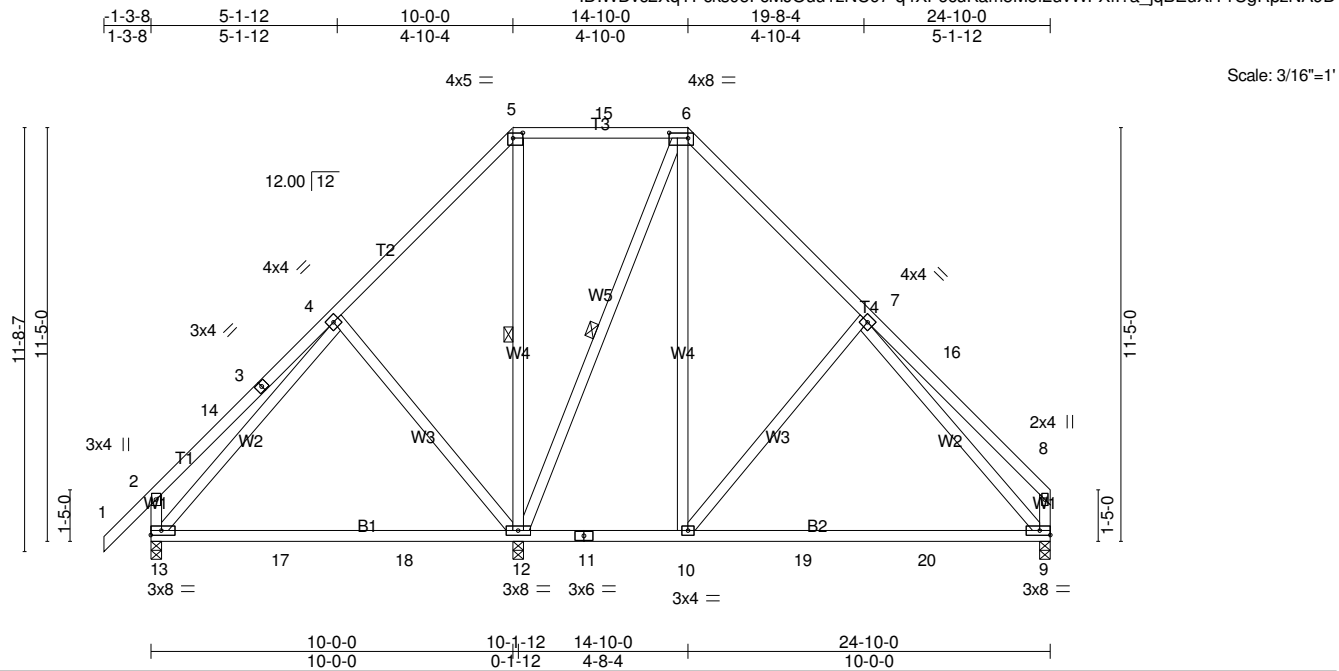
- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-2=-32, 2-5=-32, 5-6=-45, 6-8=-32, 13-18=-20, 12-13=-20, 11-12=-20, 10-11=-20, 9-10=-20

Job 1625532	Truss K02	Truss Type PIGGYBACK BASE	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:24 2019 Page 1

ID:WDvc2XqYPcks0eFcMJOUu1zNC97-q4XF6cuKam5M5f2uvWFxfi?\_a\_jqBEuXiY1UgRpzNA9D



Scale: 3/16"=1'

Plate Offsets (X,Y)-- [5:0-3-4.0-1-12], [6:0-6-4.0-1-12]					
<b>LOADING</b> (psf)	<b>SPACING-</b> 2.0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.83	Vert(LL) -0.23 9-10 >743 360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.62	Vert(CT) -0.45 9-10 >384 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.35	Horz(CT) 0.01 9 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Wind(LL) 0.01 10 >999 240		
				Weight: 187 lb FT = 20%	

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.  
 BOT CHORD Rigid ceiling directly applied.  
 WEBS 1 Row at midpt 5-12, 6-12

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

**REACTIONS.** (lb/size) 12=651/0-3-8 (min. 0-1-8), 13=330/0-3-8 (min. 0-1-8), 9=402/0-3-8 (min. 0-1-8)  
 Max Horz 13=250(LC 11)  
 Max Uplift 12=-108(LC 14), 9=-19(LC 15)  
 Max Grav 12=966(LC 2), 13=519(LC 32), 9=623(LC 27)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-14=-426/81, 3-14=-346/82, 3-4=-298/105, 6-7=-412/143, 7-16=-294/87, 8-16=-446/64, 2-13=-458/141, 8-9=-388/88  
 BOT CHORD 13-17=-123/291, 17-18=-123/291, 12-18=-123/291, 11-12=-3/282, 10-11=-3/282, 10-19=0/334, 19-20=0/334, 9-20=0/334  
 WEBS 4-12=-291/222, 5-12=-261/90, 6-12=-481/95, 6-10=-77/444, 7-10=-276/217

- NOTES-** (13)
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-3-8 to 2-1-5, Interior(1) 2-1-5 to 10-0-0, Exterior(2) 10-0-0 to 14-10-0, Interior(1) 19-10-3 to 24-8-4 zone; cantilever left exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) \*\* TCLL: ASCE 7-10; Pr=20.0 psf (roof live load); Lumber DOL=1.15 Plate DOL=1.15; Pg=10.0 psf (ground snow); Ps= varies (min. roof snow=5.9 psf Lumber DOL=1.15 Plate DOL=1.15 see load cases; Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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) Roof design snow load has been reduced to account for slope.
  - 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 7.7 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 BCCL = 10.0psf.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9 except (jt=lb) 12=108.
  - 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	K02	PIGGYBACK BASE	1	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:24 2019 Page 2  
 ID:WDvc2XqYPcks0eFcMJOuu1zNC97-q4XF6cuKam5M5f2uvWFXfl?a\_jqBEuXiY1UgRpzNA9D

13) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-2=-32, 2-5=-32, 5-6=-45, 6-8=-32, 9-13=-20

Job 1625532	Truss L01	Truss Type Hip Girder	Qty 1	Ply 2	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

ID:WDvc2XqYPcks0eFcMJOUu1zNC97-fEuWNfz5AcrWpaW2FnMxvZEha70heggbwzx?fSzNA97  
8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:30 2019 Page 1

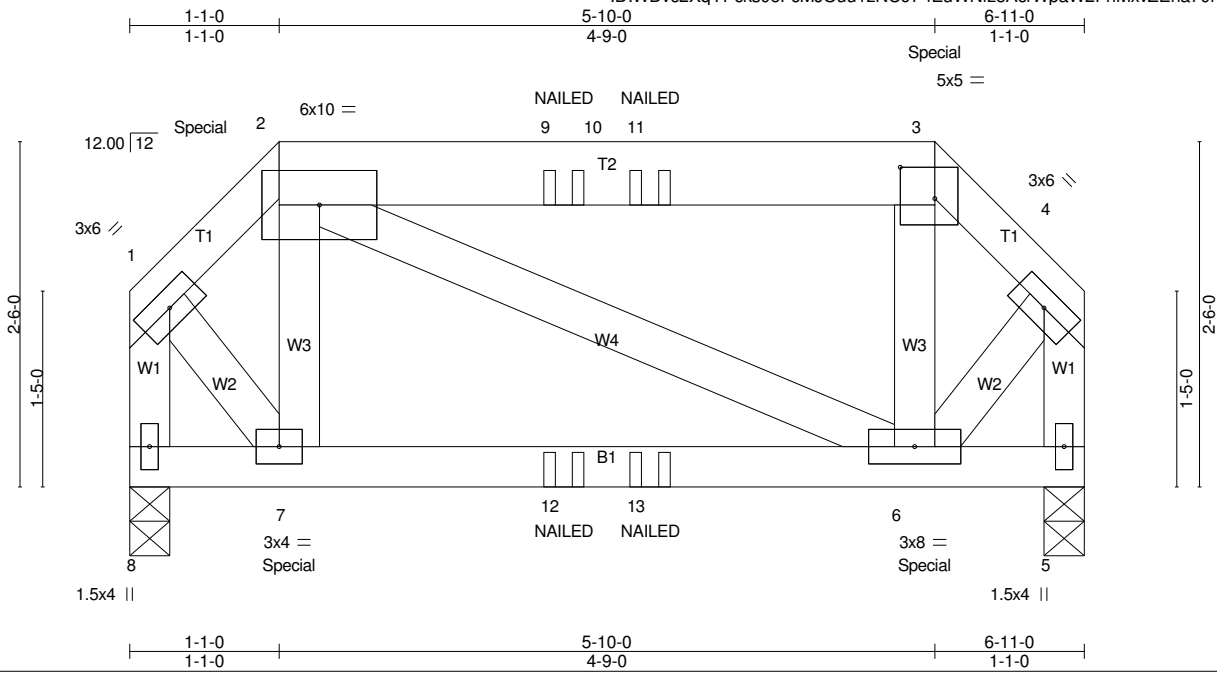


Plate Offsets (X,Y)-- [3:0-3:0,0-2-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.50	Vert(LL) 0.01	6-7	>999	240		MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.10	Vert(CT) -0.01	6-7	>999	240			
BCLL 0.0 *	Lumber DOL 1.15	WB 0.11	Horz(CT) 0.00	5	n/a	n/a			
BCDL 10.0	Rep Stress Incr NO	Matrix-MP							
	Code IRC2015/TPI2014							Weight: 91 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 *Except* T2: 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 2-3.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	

**REACTIONS.** (lb/size) 8=734/0-3-8 (min. 0-1-8), 5=734/0-3-8 (min. 0-1-8)  
Max Horz 8=57(LC 6)  
Max Grav 8=883(LC 53), 5=882(LC 52)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-599/0, 2-9=-370/0, 9-10=-370/0, 10-11=-370/0, 3-11=-370/0, 3-4=-598/0,  
1-8=-904/0, 4-5=-903/0  
BOT CHORD 7-12=0/385, 12-13=0/385, 6-13=0/385  
WEBS 2-7=-322/0, 3-6=-318/0, 1-7=0/586, 4-6=0/586

- NOTES-** (15)
- 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, 2x6 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - \*\* TCCL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps= varies (min. roof snow=5.9 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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.
  - Roof design snow load has been reduced to account for slope.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.



Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	L01	Hip Girder	1	2	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:30 2019 Page 2  
ID:WDvc2XqYPcks0eFcMJOUuu1zNC97-fEuWNfz5AcrWpaW2FnMxvZEha70heggbwzx?fSzNA97

**NOTES-** (15)

- 14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 97 lb down and 191 lb up at 1-1-0, and 95 lb down and 191 lb up at 5-10-0 on top chord, and 39 lb down and 50 lb up at 1-1-0, and 39 lb down and 50 lb up at 5-8-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 15) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 5-8=-20  
Concentrated Loads (lb)  
Vert: 2=63(F) 3=63(F) 7=6(F) 6=6(F) 9=28(F) 11=28(F) 12=2(F) 13=2(F)  
Trapezoidal Loads (plf)  
Vert: 1=-152-to-2=-191, 2=-205-to-10=-305, 10=-305-to-3=-205, 3=-191-to-4=-152
- 2) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 5-8=-20  
Concentrated Loads (lb)  
Vert: 2=63(F) 3=63(F) 9=28(F) 11=28(F)  
Trapezoidal Loads (plf)  
Vert: 1=-180-to-2=-220, 2=-220-to-10=-320, 10=-320-to-3=-220, 3=-220-to-4=-180
- 3) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 5-8=-20  
Concentrated Loads (lb)  
Vert: 2=63(F) 3=63(F) 9=28(F) 11=28(F)  
Trapezoidal Loads (plf)  
Vert: 1=-170-to-2=-210, 2=-210-to-10=-310, 10=-310-to-3=-210, 3=-210-to-4=-170
- 4) Dead + 0.75 Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 5-8=-20  
Concentrated Loads (lb)  
Vert: 2=63(F) 3=63(F) 7=4(F) 6=4(F) 9=28(F) 11=28(F) 12=2(F) 13=2(F)  
Trapezoidal Loads (plf)  
Vert: 1=-149-to-2=-189, 2=-199-to-10=-299, 10=-299-to-3=-199, 3=-189-to-4=-149
- 5) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 5-8=-40  
Concentrated Loads (lb)  
Vert: 2=63(F) 3=63(F) 9=28(F) 11=28(F)  
Trapezoidal Loads (plf)  
Vert: 1=-140-to-2=-180, 2=-180-to-10=-280, 10=-280-to-3=-180, 3=-180-to-4=-140
- 6) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 5-8=-12  
Horz: 1-2=2, 3-4=19, 1-8=13, 4-5=17  
Concentrated Loads (lb)  
Vert: 2=51(F) 3=51(F) 7=49(F) 6=49(F) 9=24(F) 11=24(F) 12=32(F) 13=32(F)  
Trapezoidal Loads (plf)  
Vert: 1=-134-to-2=-174, 2=-139-to-10=-239, 10=-239-to-3=-139, 3=-153-to-4=-113
- 7) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 5-8=-12  
Horz: 1-2=-19, 3-4=-2, 1-8=-17, 4-5=-13  
Concentrated Loads (lb)  
Vert: 2=51(F) 3=51(F) 7=49(F) 6=49(F) 9=24(F) 11=24(F) 12=32(F) 13=32(F)  
Trapezoidal Loads (plf)  
Vert: 1=-113-to-2=-153, 2=-139-to-10=-239, 10=-239-to-3=-139, 3=-174-to-4=-134
- 8) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 5-8=-20  
Horz: 1-2=12, 3-4=9, 1-8=23, 4-5=8  
Concentrated Loads (lb)  
Vert: 2=89(F) 3=89(F) 7=49(F) 6=49(F) 9=41(F) 11=41(F) 12=32(F) 13=32(F)  
Trapezoidal Loads (plf)  
Vert: 1=-152-to-2=-191, 2=-156-to-10=-257, 10=-257-to-3=-156, 3=-170-to-4=-131
- 9) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 5-8=-20  
Horz: 1-2=-9, 3-4=-12, 1-8=-8, 4-5=-23  
Concentrated Loads (lb)  
Vert: 2=89(F) 3=89(F) 7=49(F) 6=49(F) 9=41(F) 11=41(F) 12=32(F) 13=32(F)  
Trapezoidal Loads (plf)  
Vert: 1=-131-to-2=-170, 2=-156-to-10=-257, 10=-257-to-3=-156, 3=-191-to-4=-152
- 10) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 5-8=-12  
Horz: 1-2=-33, 3-4=19, 1-8=11, 4-5=16

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	L01	Hip Girder	1	2	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:31 2019 Page 3  
ID:WDvc2XqYPcks0eFcmJOUuu1zNC97-7QSua?\_jxwzMRk5FpUtASmnrJXLwN7wk9chYBvzNA96

**LOAD CASE(S)** Standard

- Concentrated Loads (lb)  
Vert: 2=51(F) 3=51(F) 7=49(F) 6=49(F) 9=24(F) 11=24(F) 12=32(F) 13=32(F)
- Trapezoidal Loads (plf)  
Vert: 1=-99-to-2=-139, 2=-139-to-10=-239, 10=-253-to-3=-153, 3=-153-to-4=-113
- 11) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)  
Vert: 5-8=-12  
Horz: 1-2=-19, 3-4=33, 1-8=-16, 4-5=-11
- Concentrated Loads (lb)  
Vert: 2=51(F) 3=51(F) 7=49(F) 6=49(F) 9=24(F) 11=24(F) 12=32(F) 13=32(F)
- Trapezoidal Loads (plf)  
Vert: 1=-113-to-2=-153, 2=-153-to-10=-253, 10=-239-to-3=-139, 3=-139-to-4=-99
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)  
Vert: 5-8=-12  
Horz: 1-2=-23, 3-4=14, 1-8=6, 4-5=12
- Concentrated Loads (lb)  
Vert: 2=51(F) 3=53(F) 7=49(F) 6=49(F) 9=24(F) 11=24(F) 12=32(F) 13=32(F)
- Trapezoidal Loads (plf)  
Vert: 1=-109-to-2=-149, 2=-149-to-10=-249, 10=-258-to-3=-157, 3=-157-to-4=-118
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)  
Vert: 5-8=-12  
Horz: 1-2=-14, 3-4=23, 1-8=-12, 4-5=-6
- Concentrated Loads (lb)  
Vert: 2=53(F) 3=51(F) 7=49(F) 6=49(F) 9=24(F) 11=24(F) 12=32(F) 13=32(F)
- Trapezoidal Loads (plf)  
Vert: 1=-118-to-2=-157, 2=-157-to-10=-258, 10=-249-to-3=-149, 3=-149-to-4=-109
- 14) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)  
Vert: 5-8=-20  
Horz: 1-2=-23, 3-4=9, 1-8=21, 4-5=7
- Concentrated Loads (lb)  
Vert: 2=89(F) 3=89(F) 7=49(F) 6=49(F) 9=41(F) 11=41(F) 12=32(F) 13=32(F)
- Trapezoidal Loads (plf)  
Vert: 1=-117-to-2=-156, 2=-156-to-10=-257, 10=-271-to-3=-170, 3=-170-to-4=-131
- 15) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)  
Vert: 5-8=-20  
Horz: 1-2=-9, 3-4=23, 1-8=-7, 4-5=-21
- Concentrated Loads (lb)  
Vert: 2=89(F) 3=89(F) 7=49(F) 6=49(F) 9=41(F) 11=41(F) 12=32(F) 13=32(F)
- Trapezoidal Loads (plf)  
Vert: 1=-131-to-2=-170, 2=-170-to-10=-271, 10=-257-to-3=-156, 3=-156-to-4=-117
- 16) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
- Uniform Loads (plf)  
Vert: 5-8=-20
- Concentrated Loads (lb)  
Vert: 2=63(F) 3=63(F) 9=28(F) 11=28(F)
- Trapezoidal Loads (plf)  
Vert: 1=-140-to-2=-180, 2=-180-to-10=-280, 10=-280-to-3=-180, 3=-180-to-4=-140
- 17) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)  
Vert: 5-8=-20  
Horz: 1-2=9, 3-4=7, 1-8=17, 4-5=6
- Concentrated Loads (lb)  
Vert: 2=123(F) 3=123(F) 7=41(F) 6=41(F) 9=60(F) 11=60(F) 12=25(F) 13=25(F)
- Trapezoidal Loads (plf)  
Vert: 1=-158-to-2=-197, 2=-181-to-10=-281, 10=-281-to-3=-181, 3=-182-to-4=-142
- 18) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)  
Vert: 5-8=-20  
Horz: 1-2=-7, 3-4=-9, 1-8=-6, 4-5=-17
- Concentrated Loads (lb)  
Vert: 2=123(F) 3=123(F) 7=41(F) 6=41(F) 9=60(F) 11=60(F) 12=25(F) 13=25(F)
- Trapezoidal Loads (plf)  
Vert: 1=-142-to-2=-182, 2=-181-to-10=-281, 10=-281-to-3=-181, 3=-197-to-4=-158
- 19) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)  
Vert: 5-8=-20  
Horz: 1-2=-18, 3-4=7, 1-8=16, 4-5=5
- Concentrated Loads (lb)  
Vert: 2=123(F) 3=123(F) 7=41(F) 6=41(F) 9=60(F) 11=60(F) 12=25(F) 13=25(F)
- Trapezoidal Loads (plf)  
Vert: 1=-131-to-2=-171, 2=-181-to-10=-281, 10=-292-to-3=-192, 3=-182-to-4=-142
- 20) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Continued on page 4

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	L01	Hip Girder	1	2	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:31 2019 Page 4  
ID:WDvc2XqYPcks0eFcMJOUu1zNC97-7QSuA?\_jxwzMRk5FpUtASmnrJXLwN7wk9chYBvzNA96

**LOAD CASE(S)** Standard

- Uniform Loads (plf)
  - Vert: 5-8=-20
  - Horz: 1-2=-7, 3-4=18, 1-8=-5, 4-5=-16
- Concentrated Loads (lb)
  - Vert: 2=123(F) 3=123(F) 7=41(F) 6=41(F) 9=60(F) 11=60(F) 12=25(F) 13=25(F)
- Trapezoidal Loads (plf)
  - Vert: 1=-142-to-2=-182, 2=-192-to-10=-292, 10=-281-to-3=-181, 3=-171-to-4=-131
- 21) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 5-8=-20
    - Horz: 1-2=9, 3-4=7, 1-8=17, 4-5=6
  - Concentrated Loads (lb)
    - Vert: 2=171(F) 3=171(F) 7=50(F) 6=50(F) 9=77(F) 11=77(F) 12=29(F) 13=29(F)
  - Trapezoidal Loads (plf)
    - Vert: 1=-179-to-2=-219, 2=-192-to-10=-292, 10=-292-to-3=-192, 3=-203-to-4=-163
- 22) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 5-8=-20
    - Horz: 1-2=-7, 3-4=-9, 1-8=-6, 4-5=-17
  - Concentrated Loads (lb)
    - Vert: 2=171(F) 3=171(F) 7=50(F) 6=50(F) 9=77(F) 11=77(F) 12=29(F) 13=29(F)
  - Trapezoidal Loads (plf)
    - Vert: 1=-163-to-2=-203, 2=-192-to-10=-292, 10=-292-to-3=-192, 3=-219-to-4=-179
- 23) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 5-8=-20
    - Horz: 1-2=-18, 3-4=7, 1-8=16, 4-5=5
  - Concentrated Loads (lb)
    - Vert: 2=171(F) 3=171(F) 7=50(F) 6=50(F) 9=77(F) 11=77(F) 12=29(F) 13=29(F)
  - Trapezoidal Loads (plf)
    - Vert: 1=-152-to-2=-192, 2=-192-to-10=-292, 10=-303-to-3=-203, 3=-203-to-4=-163
- 24) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 5-8=-20
    - Horz: 1-2=-7, 3-4=18, 1-8=-5, 4-5=-16
  - Concentrated Loads (lb)
    - Vert: 2=171(F) 3=171(F) 7=50(F) 6=50(F) 9=77(F) 11=77(F) 12=29(F) 13=29(F)
  - Trapezoidal Loads (plf)
    - Vert: 1=-163-to-2=-203, 2=-203-to-10=-303, 10=-292-to-3=-192, 3=-192-to-4=-152
- 25) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 5-8=-20
  - Concentrated Loads (lb)
    - Vert: 2=63(F) 3=63(F) 9=28(F) 11=28(F)
  - Trapezoidal Loads (plf)
    - Vert: 1=-180-to-2=-220, 2=-220-to-10=-320, 10=-320-to-3=-220, 3=-180-to-4=-140
- 26) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 5-8=-20
  - Concentrated Loads (lb)
    - Vert: 2=63(F) 3=63(F) 9=28(F) 11=28(F)
  - Trapezoidal Loads (plf)
    - Vert: 1=-140-to-2=-180, 2=-220-to-10=-320, 10=-320-to-3=-220, 3=-220-to-4=-180
- 27) 3rd Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 5-8=-20
  - Concentrated Loads (lb)
    - Vert: 2=63(F) 3=63(F) 9=28(F) 11=28(F)
  - Trapezoidal Loads (plf)
    - Vert: 1=-170-to-2=-210, 2=-210-to-10=-310, 10=-310-to-3=-210, 3=-180-to-4=-140
- 28) 4th Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 5-8=-20
  - Concentrated Loads (lb)
    - Vert: 2=63(F) 3=63(F) 9=28(F) 11=28(F)
  - Trapezoidal Loads (plf)
    - Vert: 1=-140-to-2=-180, 2=-210-to-10=-310, 10=-310-to-3=-210, 3=-210-to-4=-170
- 29) Reversal: Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 5-8=-20
  - Concentrated Loads (lb)
    - Vert: 2=120(F) 3=120(F) 9=59(F) 11=59(F)
  - Trapezoidal Loads (plf)
    - Vert: 1=-152-to-2=-191, 2=-205-to-10=-305, 10=-305-to-3=-205, 3=-191-to-4=-152
- 30) Reversal: Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 5-8=-20

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	L01	Hip Girder	1	2	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:31 2019 Page 5  
ID:WDvc2XqYPcks0eFcMJOUuu1zNC97-7QSua?\_jxwzMRk5FpUtASmnrJXLwN7wk9chYBvzNA96

**LOAD CASE(S)** Standard

- Concentrated Loads (lb)  
Vert: 2=191(F) 3=191(F) 7=23(F) 6=23(F) 9=85(F) 11=85(F) 12=9(F) 13=9(F)
- Trapezoidal Loads (plf)  
Vert: 1=-180-to-2=-220, 2=-220-to-10=-320, 10=-320-to-3=-220, 3=-220-to-4=-180
- 31) Reversal: Dead + 0.75 Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)  
Vert: 5-8=-20
- Concentrated Loads (lb)  
Vert: 2=159(F) 3=159(F) 7=17(F) 6=17(F) 9=71(F) 11=71(F) 12=7(F) 13=7(F)
- Trapezoidal Loads (plf)  
Vert: 1=-170-to-2=-210, 2=-210-to-10=-310, 10=-310-to-3=-210, 3=-210-to-4=-170
- 32) Reversal: Dead + 0.75 Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)  
Vert: 5-8=-20
- Concentrated Loads (lb)  
Vert: 2=106(F) 3=106(F) 9=51(F) 11=51(F)
- Trapezoidal Loads (plf)  
Vert: 1=-149-to-2=-189, 2=-189-to-10=-299, 10=-299-to-3=-199, 3=-189-to-4=-149
- 33) Reversal: Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
- Uniform Loads (plf)  
Vert: 5-8=-20
- Concentrated Loads (lb)  
Vert: 2=63(F) 3=63(F) 9=28(F) 11=28(F)
- Trapezoidal Loads (plf)  
Vert: 1=-140-to-2=-180, 2=-180-to-10=-280, 10=-280-to-3=-180, 3=-180-to-4=-140
- 34) Reversal: 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)  
Vert: 5-8=-20
- Concentrated Loads (lb)  
Vert: 2=191(F) 3=155(F) 7=23(F) 6=23(F) 9=85(F) 11=85(F) 12=9(F) 13=9(F)
- Trapezoidal Loads (plf)  
Vert: 1=-180-to-2=-220, 2=-220-to-10=-320, 10=-320-to-3=-220, 3=-180-to-4=-140
- 35) Reversal: 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)  
Vert: 5-8=-20
- Concentrated Loads (lb)  
Vert: 2=155(F) 3=191(F) 7=23(F) 6=23(F) 9=85(F) 11=85(F) 12=9(F) 13=9(F)
- Trapezoidal Loads (plf)  
Vert: 1=-140-to-2=-180, 2=-220-to-10=-320, 10=-320-to-3=-220, 3=-220-to-4=-180
- 36) Reversal: 3rd Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)  
Vert: 5-8=-20
- Concentrated Loads (lb)  
Vert: 2=159(F) 3=132(F) 7=17(F) 6=17(F) 9=71(F) 11=71(F) 12=7(F) 13=7(F)
- Trapezoidal Loads (plf)  
Vert: 1=-170-to-2=-210, 2=-210-to-10=-310, 10=-310-to-3=-210, 3=-180-to-4=-140
- 37) Reversal: 4th Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)  
Vert: 5-8=-20
- Concentrated Loads (lb)  
Vert: 2=132(F) 3=159(F) 7=17(F) 6=17(F) 9=71(F) 11=71(F) 12=7(F) 13=7(F)
- Trapezoidal Loads (plf)  
Vert: 1=-140-to-2=-180, 2=-210-to-10=-310, 10=-310-to-3=-210, 3=-210-to-4=-170
- 38) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)  
Vert: 5-8=-12  
Horz: 1-2=2, 3-4=19, 1-8=13, 4-5=17
- Concentrated Loads (lb)  
Vert: 2=-63(F) 3=-82(F) 7=-39(F) 6=-39(F) 9=-47(F) 11=-47(F) 12=-24(F) 13=-24(F)
- Trapezoidal Loads (plf)  
Vert: 1=-134-to-2=-174, 2=-139-to-10=-239, 10=-239-to-3=-139, 3=-153-to-4=-113
- 39) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)  
Vert: 5-8=-12  
Horz: 1-2=-19, 3-4=-2, 1-8=-17, 4-5=-13
- Concentrated Loads (lb)  
Vert: 2=-83(F) 3=-63(F) 7=-39(F) 6=-39(F) 9=-47(F) 11=-47(F) 12=-24(F) 13=-24(F)
- Trapezoidal Loads (plf)  
Vert: 1=-113-to-2=-153, 2=-139-to-10=-239, 10=-239-to-3=-139, 3=-174-to-4=-134
- 40) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)  
Vert: 5-8=-20  
Horz: 1-2=12, 3-4=9, 1-8=23, 4-5=8
- Concentrated Loads (lb)  
Vert: 2=-25(F) 3=-44(F) 7=-39(F) 6=-39(F) 9=-30(F) 11=-30(F) 12=-24(F) 13=-24(F)
- Trapezoidal Loads (plf)  
Vert: 1=-152-to-2=-191, 2=-156-to-10=-257, 10=-257-to-3=-156, 3=-170-to-4=-131

Continued on page 6

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	L01	Hip Girder	1	2	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:31 2019 Page 6  
ID:WDvc2XqYPcks0eFcmJOUu1zNC97-7QSua?\_jxwzMRk5FpUtASmnrJXLwN7wk9chYBvzNA96

**LOAD CASE(S)** Standard

- 41) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 5-8=-20  
Horz: 1-2=-9, 3-4=-12, 1-8=-8, 4-5=-23  
Concentrated Loads (lb)  
Vert: 2=-45(F) 3=-25(F) 7=-39(F) 6=-39(F) 9=-30(F) 11=-30(F) 12=-24(F) 13=-24(F)  
Trapezoidal Loads (plf)  
Vert: 1=-131-to-2=-170, 2=-156-to-10=-257, 10=-257-to-3=-156, 3=-191-to-4=-152
- 42) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 5-8=-12  
Horz: 1-2=-33, 3-4=19, 1-8=11, 4-5=16  
Concentrated Loads (lb)  
Vert: 2=-97(F) 3=-64(F) 7=-39(F) 6=-39(F) 9=-42(F) 11=-38(F) 12=-24(F) 13=-24(F)  
Trapezoidal Loads (plf)  
Vert: 1=-99-to-2=-139, 2=-139-to-10=-239, 10=-253-to-3=-153, 3=-153-to-4=-113
- 43) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 5-8=-12  
Horz: 1-2=-19, 3-4=33, 1-8=-16, 4-5=-11  
Concentrated Loads (lb)  
Vert: 2=-65(F) 3=-95(F) 7=-39(F) 6=-39(F) 9=-38(F) 11=-42(F) 12=-24(F) 13=-24(F)  
Trapezoidal Loads (plf)  
Vert: 1=-113-to-2=-153, 2=-153-to-10=-253, 10=-239-to-3=-139, 3=-139-to-4=-99
- 44) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 5-8=-12  
Horz: 1-2=-23, 3-4=14, 1-8=6, 4-5=12  
Concentrated Loads (lb)  
Vert: 2=-74(F) 3=-55(F) 7=-39(F) 6=-39(F) 9=-34(F) 11=-31(F) 12=-24(F) 13=-24(F)  
Trapezoidal Loads (plf)  
Vert: 1=-109-to-2=-149, 2=-149-to-10=-249, 10=-258-to-3=-157, 3=-157-to-4=-118
- 45) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 5-8=-12  
Horz: 1-2=-14, 3-4=23, 1-8=-12, 4-5=-6  
Concentrated Loads (lb)  
Vert: 2=-55(F) 3=-73(F) 7=-39(F) 6=-39(F) 9=-31(F) 11=-34(F) 12=-24(F) 13=-24(F)  
Trapezoidal Loads (plf)  
Vert: 1=-118-to-2=-157, 2=-157-to-10=-258, 10=-249-to-3=-149, 3=-149-to-4=-109
- 46) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 5-8=-20  
Horz: 1-2=-23, 3-4=9, 1-8=21, 4-5=7  
Concentrated Loads (lb)  
Vert: 2=-59(F) 3=-26(F) 7=-39(F) 6=-39(F) 9=-25(F) 11=-20(F) 12=-24(F) 13=-24(F)  
Trapezoidal Loads (plf)  
Vert: 1=-117-to-2=-156, 2=-156-to-10=-257, 10=-271-to-3=-170, 3=-170-to-4=-131
- 47) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 5-8=-20  
Horz: 1-2=-9, 3-4=23, 1-8=-7, 4-5=-21  
Concentrated Loads (lb)  
Vert: 2=-27(F) 3=-57(F) 7=-39(F) 6=-39(F) 9=-20(F) 11=-25(F) 12=-24(F) 13=-24(F)  
Trapezoidal Loads (plf)  
Vert: 1=-131-to-2=-170, 2=-170-to-10=-271, 10=-257-to-3=-156, 3=-156-to-4=-117
- 48) Reversal: Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 5-8=-20  
Horz: 1-2=9, 3-4=7, 1-8=17, 4-5=6  
Concentrated Loads (lb)  
Vert: 2=13(F) 3=-2(F) 7=-25(F) 6=-25(F) 9=6(F) 11=6(F) 12=-16(F) 13=-16(F)  
Trapezoidal Loads (plf)  
Vert: 1=-158-to-2=-197, 2=-181-to-10=-281, 10=-281-to-3=-181, 3=-182-to-4=-142
- 49) Reversal: Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 5-8=-20  
Horz: 1-2=-7, 3-4=-9, 1-8=-6, 4-5=-17  
Concentrated Loads (lb)  
Vert: 2=-2(F) 3=12(F) 7=-25(F) 6=-25(F) 9=6(F) 11=6(F) 12=-16(F) 13=-16(F)  
Trapezoidal Loads (plf)  
Vert: 1=-142-to-2=-182, 2=-181-to-10=-281, 10=-281-to-3=-181, 3=-197-to-4=-158
- 50) Reversal: Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 5-8=-20  
Horz: 1-2=-18, 3-4=7, 1-8=16, 4-5=5  
Concentrated Loads (lb)  
Vert: 2=-13(F) 3=12(F) 7=-25(F) 6=-25(F) 9=10(F) 11=13(F) 12=-16(F) 13=-16(F)

Continued on page 7

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	L01	Hip Girder	1	2	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:31 2019 Page 7  
ID:WDvc2XqYPcks0eFcMJOUu1zNC97-7QSua?\_jxwzMRk5FpUtASmnrJXLwN7wk9chYBvzNA96

**LOAD CASE(S)** Standard

Trapezoidal Loads (plf)

Vert: 1=-131-to-2=-171, 2=-181-to-10=-281, 10=-292-to-3=-192, 3=-182-to-4=-142

51) Reversal: Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 5-8=-20

Horz: 1-2=-7, 3-4=18, 1-8=-5, 4-5=-16

Concentrated Loads (lb)

Vert: 2=11(F) 3=-11(F) 7=-25(F) 6=-25(F) 9=13(F) 11=10(F) 12=-16(F) 13=-16(F)

Trapezoidal Loads (plf)

Vert: 1=-142-to-2=-182, 2=-192-to-10=-292, 10=-281-to-3=-181, 3=-171-to-4=-131

52) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 5-8=-20

Horz: 1-2=9, 3-4=7, 1-8=17, 4-5=6

Concentrated Loads (lb)

Vert: 2=-5(F) 3=-19(F) 7=-16(F) 6=-16(F) 9=-16(F) 11=-16(F) 12=-12(F) 13=-12(F)

Trapezoidal Loads (plf)

Vert: 1=-179-to-2=-219, 2=-192-to-10=-292, 10=-292-to-3=-192, 3=-203-to-4=-163

53) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 5-8=-20

Horz: 1-2=-7, 3-4=-9, 1-8=-6, 4-5=-17

Concentrated Loads (lb)

Vert: 2=-20(F) 3=-5(F) 7=-16(F) 6=-16(F) 9=-16(F) 11=-16(F) 12=-12(F) 13=-12(F)

Trapezoidal Loads (plf)

Vert: 1=-163-to-2=-203, 2=-192-to-10=-292, 10=-292-to-3=-192, 3=-219-to-4=-179

54) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 5-8=-20

Horz: 1-2=-18, 3-4=7, 1-8=16, 4-5=5

Concentrated Loads (lb)

Vert: 2=-30(F) 3=-6(F) 7=-16(F) 6=-16(F) 9=-12(F) 11=-9(F) 12=-12(F) 13=-12(F)

Trapezoidal Loads (plf)

Vert: 1=-152-to-2=-192, 2=-192-to-10=-292, 10=-303-to-3=-203, 3=-203-to-4=-163

55) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 5-8=-20

Horz: 1-2=-7, 3-4=18, 1-8=-5, 4-5=-16

Concentrated Loads (lb)

Vert: 2=-6(F) 3=-29(F) 7=-16(F) 6=-16(F) 9=-9(F) 11=-12(F) 12=-12(F) 13=-12(F)

Trapezoidal Loads (plf)

Vert: 1=-163-to-2=-203, 2=-203-to-10=-303, 10=-292-to-3=-192, 3=-192-to-4=-152

Job 1625532	Truss L02	Truss Type HIP GIRDER	Qty 1	Ply 2	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:36 2019 Page 1  
 ID:WDvc2XqYPcks0eFcmJOUuu1zNC97-UOFnej2smScfXVzCc1TL9qUchY182ldTiuOJs6zNA91

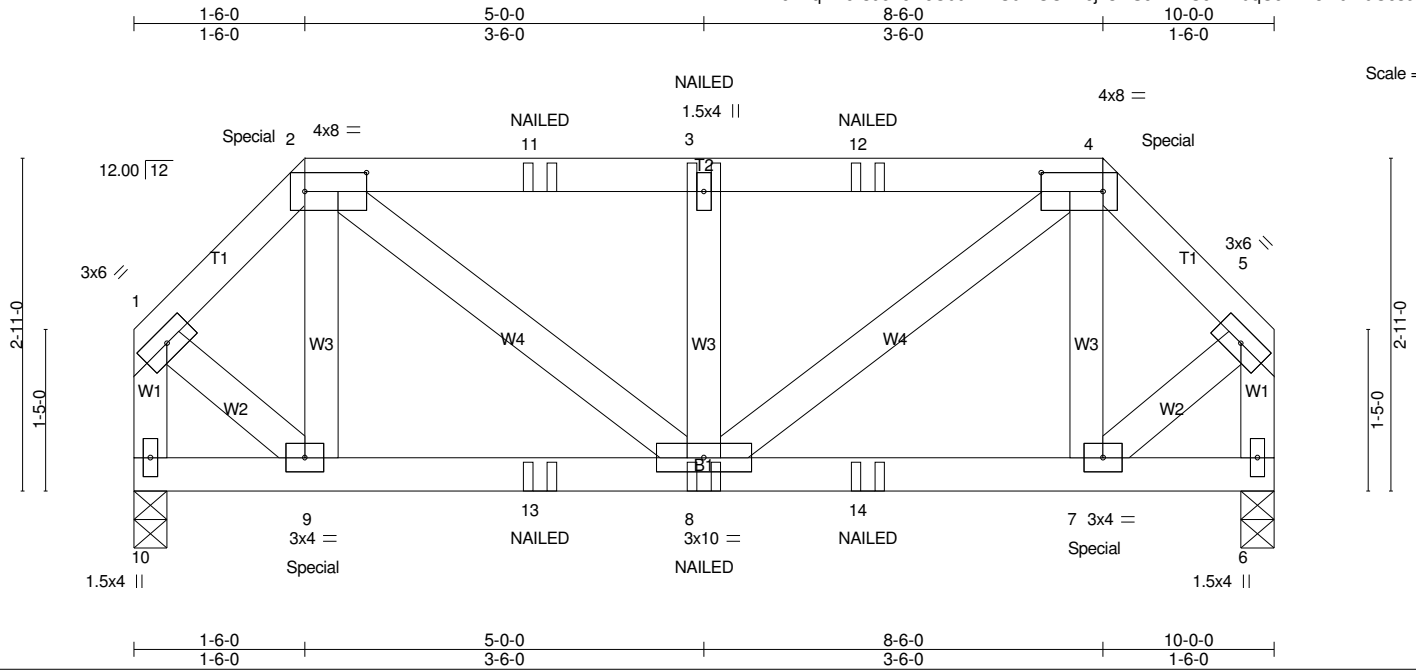


Plate Offsets (X,Y)-- [2:0-6-8,0-2-0], [4:0-6-8,0-2-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.84	Vert(LL) 0.00	8	>999	240	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.22	Vert(CT) -0.03	8	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.40	Horz(CT) 0.01	6	n/a	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS						
	Code IRC2015/TPI2014						Weight: 124 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.); 2-4.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	

**REACTIONS.** (lb/size) 10=2137/0-3-8 (min. 0-1-8), 6=2137/0-3-8 (min. 0-1-8)  
 Max Horz 10=-67(LC 6)  
 Max Grav 10=2284(LC 44), 6=2284(LC 43)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-1791/0, 2-11=-2462/0, 3-11=-2462/0, 3-12=-2462/0, 4-12=-2462/0, 4-5=-1791/0, 1-10=-2273/0, 5-6=-2272/0  
 BOT CHORD 9-13=0/1152, 8-13=0/1152, 8-14=0/1138, 7-14=0/1138  
 WEBS 2-9=-843/0, 2-8=0/1678, 3-8=-1960/0, 4-8=0/1678, 4-7=-843/0, 1-9=0/1480, 5-7=0/1480

- NOTES-** (15)
- 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.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - \*\* TCCL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps= varies (min. roof snow=5.9 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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.
  - Roof design snow load has been reduced to account for slope.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 139 lb down and 59 lb up at 1-6-0, and 139 lb down and 59 lb up at 8-6-0 on top chord, and 31 lb down and 45 lb up at 1-6-0, and 31 lb down and 45 lb up at 8-4-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	L02	HIP GIRDER	1	2	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:37 2019 Page 2  
 ID:WDvc2XqYPcks0eFcMJOUu1zNC97-yapAr22UXmkW9FYOA\_ah11nRyMNnltDXy8sOYzNA90

15) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 6-10=-20
  - Concentrated Loads (lb)
    - Vert: 9=4(F) 8=1(F) 7=4(F) 13=1(F) 14=1(F)
  - Trapezoidal Loads (plf)
    - Vert: 1=-312-to-2=-368, 2=-381-to-3=-525, 3=-525-to-4=-381, 4=-368-to-5=-312
- 2) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 6-10=-20
  - Concentrated Loads (lb)
    - Vert: 9=12(F) 8=5(F) 7=12(F) 13=5(F) 14=5(F)
  - Trapezoidal Loads (plf)
    - Vert: 1=-340-to-2=-396, 2=-396-to-3=-540, 3=-540-to-4=-396, 4=-396-to-5=-340
- 3) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 6-10=-20
  - Concentrated Loads (lb)
    - Vert: 9=9(F) 8=4(F) 7=9(F) 13=4(F) 14=4(F)
  - Trapezoidal Loads (plf)
    - Vert: 1=-330-to-2=-386, 2=-386-to-3=-530, 3=-530-to-4=-386, 4=-386-to-5=-330
- 4) Dead + 0.75 Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 6-10=-20
  - Concentrated Loads (lb)
    - Vert: 9=3(F) 8=1(F) 7=3(F) 13=1(F) 14=1(F)
  - Trapezoidal Loads (plf)
    - Vert: 1=-309-to-2=-365, 2=-375-to-3=-519, 3=-519-to-4=-375, 4=-365-to-5=-309
- 5) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
  - Uniform Loads (plf)
    - Vert: 6-10=-40
  - Concentrated Loads (lb)
    - Vert: 2=-2(F) 4=-2(F) 3=-1(F) 11=-1(F) 12=-1(F)
  - Trapezoidal Loads (plf)
    - Vert: 1=-300-to-2=-356, 2=-356-to-3=-500, 3=-500-to-4=-356, 4=-356-to-5=-300
- 6) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 6-10=-12
    - Horz: 1-2=2, 4-5=19, 1-10=13, 5-6=17
  - Concentrated Loads (lb)
    - Vert: 2=37(F) 4=18(F) 9=45(F) 8=29(F) 3=9(F) 7=45(F) 11=9(F) 12=9(F) 13=29(F) 14=29(F)
  - Trapezoidal Loads (plf)
    - Vert: 1=-294-to-2=-350, 2=-315-to-3=-459, 3=-459-to-4=-315, 4=-329-to-5=-273
- 7) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 6-10=-12
    - Horz: 1-2=-19, 4-5=-2, 1-10=-17, 5-6=-13
  - Concentrated Loads (lb)
    - Vert: 2=18(F) 4=37(F) 9=45(F) 8=29(F) 3=9(F) 7=45(F) 11=9(F) 12=9(F) 13=29(F) 14=29(F)
  - Trapezoidal Loads (plf)
    - Vert: 1=-273-to-2=-329, 2=-315-to-3=-459, 3=-459-to-4=-315, 4=-350-to-5=-294
- 8) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 6-10=-20
    - Horz: 1-2=12, 4-5=9, 1-10=23, 5-6=8
  - Concentrated Loads (lb)
    - Vert: 2=59(F) 4=40(F) 9=45(F) 8=29(F) 3=19(F) 7=45(F) 11=19(F) 12=19(F) 13=29(F) 14=29(F)
  - Trapezoidal Loads (plf)
    - Vert: 1=-312-to-2=-368, 2=-332-to-3=-477, 3=-477-to-4=-332, 4=-347-to-5=-291
- 9) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 6-10=-20
    - Horz: 1-2=-9, 4-5=-12, 1-10=-8, 5-6=-23
  - Concentrated Loads (lb)
    - Vert: 2=40(F) 4=59(F) 9=45(F) 8=29(F) 3=19(F) 7=45(F) 11=19(F) 12=19(F) 13=29(F) 14=29(F)
  - Trapezoidal Loads (plf)
    - Vert: 1=-291-to-2=-347, 2=-332-to-3=-477, 3=-477-to-4=-332, 4=-368-to-5=-312
- 10) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 6-10=-12
    - Horz: 1-2=-33, 4-5=19, 1-10=11, 5-6=16
  - Concentrated Loads (lb)
    - Vert: 2=12(F) 4=31(F) 9=45(F) 8=29(F) 3=17(F) 7=45(F) 11=9(F) 12=24(F) 13=29(F) 14=29(F)
  - Trapezoidal Loads (plf)
    - Vert: 1=-259-to-2=-315, 2=-315-to-3=-459, 3=-473-to-4=-329, 4=-329-to-5=-273

Continued on page 3



Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	L02	HIP GIRDER	1	2	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:37 2019 Page 3  
ID:WDvc2XqYPcks0eFcMJOUu1zNC97-yapAr22UXmkW9fYOAI\_ah11nRyMnNltXY8sOYzNA90

**LOAD CASE(S)** Standard

- 11) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 6-10=-12
    - Horz: 1-2=-19, 4-5=33, 1-10=-16, 5-6=-11
  - Concentrated Loads (lb)
    - Vert: 2=31(F) 4=12(F) 9=45(F) 8=29(F) 3=17(F) 7=45(F) 11=24(F) 12=9(F) 13=29(F) 14=29(F)
  - Trapezoidal Loads (plf)
    - Vert: 1=-273-to-2=-329, 2=-329-to-3=-473, 3=-459-to-4=-315, 4=-315-to-5=-259
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 6-10=-12
    - Horz: 1-2=-23, 4-5=14, 1-10=6, 5-6=12
  - Concentrated Loads (lb)
    - Vert: 2=22(F) 4=42(F) 9=45(F) 8=29(F) 3=24(F) 7=45(F) 11=19(F) 12=28(F) 13=29(F) 14=29(F)
  - Trapezoidal Loads (plf)
    - Vert: 1=-269-to-2=-325, 2=-325-to-3=-469, 3=-478-to-4=-333, 4=-333-to-5=-278
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 6-10=-12
    - Horz: 1-2=-14, 4-5=23, 1-10=-12, 5-6=-6
  - Concentrated Loads (lb)
    - Vert: 2=41(F) 4=22(F) 9=45(F) 8=29(F) 3=24(F) 7=45(F) 11=28(F) 12=19(F) 13=29(F) 14=29(F)
  - Trapezoidal Loads (plf)
    - Vert: 1=-278-to-2=-333, 2=-333-to-3=-478, 3=-469-to-4=-325, 4=-325-to-5=-269
- 14) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 6-10=-20
    - Horz: 1-2=-23, 4-5=9, 1-10=21, 5-6=7
  - Concentrated Loads (lb)
    - Vert: 2=34(F) 4=54(F) 9=45(F) 8=29(F) 3=26(F) 7=45(F) 11=19(F) 12=33(F) 13=29(F) 14=29(F)
  - Trapezoidal Loads (plf)
    - Vert: 1=-277-to-2=-332, 2=-332-to-3=-477, 3=-491-to-4=-347, 4=-347-to-5=-291
- 15) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 6-10=-20
    - Horz: 1-2=-9, 4-5=23, 1-10=-7, 5-6=-21
  - Concentrated Loads (lb)
    - Vert: 2=54(F) 4=34(F) 9=45(F) 8=29(F) 3=26(F) 7=45(F) 11=33(F) 12=19(F) 13=29(F) 14=29(F)
  - Trapezoidal Loads (plf)
    - Vert: 1=-291-to-2=-347, 2=-347-to-3=-491, 3=-477-to-4=-332, 4=-332-to-5=-277
- 16) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
  - Uniform Loads (plf)
    - Vert: 6-10=-20
  - Trapezoidal Loads (plf)
    - Vert: 1=-300-to-2=-356, 2=-356-to-3=-500, 3=-500-to-4=-356, 4=-356-to-5=-300
- 17) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 6-10=-20
    - Horz: 1-2=9, 4-5=7, 1-10=17, 5-6=6
  - Concentrated Loads (lb)
    - Vert: 2=45(F) 4=30(F) 9=35(F) 8=23(F) 3=14(F) 7=35(F) 11=14(F) 12=14(F) 13=23(F) 14=23(F)
  - Trapezoidal Loads (plf)
    - Vert: 1=-318-to-2=-374, 2=-357-to-3=-501, 3=-501-to-4=-357, 4=-358-to-5=-302
- 18) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 6-10=-20
    - Horz: 1-2=-7, 4-5=-9, 1-10=-6, 5-6=-17
  - Concentrated Loads (lb)
    - Vert: 2=30(F) 4=44(F) 9=35(F) 8=23(F) 3=14(F) 7=35(F) 11=14(F) 12=14(F) 13=23(F) 14=23(F)
  - Trapezoidal Loads (plf)
    - Vert: 1=-302-to-2=-358, 2=-357-to-3=-501, 3=-501-to-4=-357, 4=-374-to-5=-318
- 19) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 6-10=-20
    - Horz: 1-2=-18, 4-5=7, 1-10=16, 5-6=5
  - Concentrated Loads (lb)
    - Vert: 2=26(F) 4=41(F) 9=35(F) 8=23(F) 3=19(F) 7=35(F) 11=14(F) 12=25(F) 13=23(F) 14=23(F)
  - Trapezoidal Loads (plf)
    - Vert: 1=-291-to-2=-347, 2=-357-to-3=-501, 3=-512-to-4=-368, 4=-358-to-5=-302
- 20) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
  - Uniform Loads (plf)
    - Vert: 6-10=-20
    - Horz: 1-2=-7, 4-5=18, 1-10=-5, 5-6=-16
  - Concentrated Loads (lb)
    - Vert: 2=40(F) 4=26(F) 9=35(F) 8=23(F) 3=19(F) 7=35(F) 11=25(F) 12=14(F) 13=23(F) 14=23(F)
  - Trapezoidal Loads (plf)
    - Vert: 1=-302-to-2=-358, 2=-368-to-3=-512, 3=-501-to-4=-357, 4=-347-to-5=-291

Continued on page 4

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	L02	HIP GIRDER	1	2	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:37 2019 Page 4  
ID:Wdvc2XqYPcks0eFcMJOUu1zNC97-yapAr22UXmkW9FYOAi\_ah11nRyMnNltdXY8sOYzNA90

**LOAD CASE(S)** Standard

- 21) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 6-10=-20  
Horz: 1-2=9, 4-5=7, 1-10=17, 5-6=6  
Concentrated Loads (lb)  
Vert: 2=45(F) 4=30(F) 9=43(F) 8=25(F) 3=14(F) 7=43(F) 11=14(F) 12=14(F) 13=25(F) 14=25(F)  
Trapezoidal Loads (plf)  
Vert: 1=-339-to-2=-395, 2=-368-to-3=-512, 3=-512-to-4=-368, 4=-379-to-5=-323
- 22) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 6-10=-20  
Horz: 1-2=-7, 4-5=-9, 1-10=-6, 5-6=-17  
Concentrated Loads (lb)  
Vert: 2=30(F) 4=44(F) 9=43(F) 8=25(F) 3=14(F) 7=43(F) 11=14(F) 12=14(F) 13=25(F) 14=25(F)  
Trapezoidal Loads (plf)  
Vert: 1=-323-to-2=-379, 2=-368-to-3=-512, 3=-512-to-4=-368, 4=-395-to-5=-339
- 23) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 6-10=-20  
Horz: 1-2=-18, 4-5=7, 1-10=16, 5-6=5  
Concentrated Loads (lb)  
Vert: 2=26(F) 4=41(F) 9=43(F) 8=25(F) 3=19(F) 7=43(F) 11=14(F) 12=25(F) 13=25(F) 14=25(F)  
Trapezoidal Loads (plf)  
Vert: 1=-312-to-2=-368, 2=-368-to-3=-512, 3=-523-to-4=-379, 4=-379-to-5=-323
- 24) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 6-10=-20  
Horz: 1-2=-7, 4-5=18, 1-10=-5, 5-6=-16  
Concentrated Loads (lb)  
Vert: 2=40(F) 4=26(F) 9=43(F) 8=25(F) 3=19(F) 7=43(F) 11=25(F) 12=14(F) 13=25(F) 14=25(F)  
Trapezoidal Loads (plf)  
Vert: 1=-323-to-2=-379, 2=-379-to-3=-523, 3=-512-to-4=-368, 4=-368-to-5=-312
- 25) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 6-10=-20  
Concentrated Loads (lb)  
Vert: 9=12(F) 8=5(F) 7=12(F) 13=5(F) 14=5(F)  
Trapezoidal Loads (plf)  
Vert: 1=-340-to-2=-396, 2=-396-to-3=-540, 3=-540-to-4=-396, 4=-356-to-5=-300
- 26) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 6-10=-20  
Concentrated Loads (lb)  
Vert: 9=12(F) 8=5(F) 7=12(F) 13=5(F) 14=5(F)  
Trapezoidal Loads (plf)  
Vert: 1=-300-to-2=-356, 2=-396-to-3=-540, 3=-540-to-4=-396, 4=-396-to-5=-340
- 27) 3rd Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 6-10=-20  
Concentrated Loads (lb)  
Vert: 9=9(F) 8=4(F) 7=9(F) 13=4(F) 14=4(F)  
Trapezoidal Loads (plf)  
Vert: 1=-330-to-2=-386, 2=-386-to-3=-530, 3=-530-to-4=-386, 4=-356-to-5=-300
- 28) 4th Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 6-10=-20  
Concentrated Loads (lb)  
Vert: 9=9(F) 8=4(F) 7=9(F) 13=4(F) 14=4(F)  
Trapezoidal Loads (plf)  
Vert: 1=-300-to-2=-356, 2=-386-to-3=-530, 3=-530-to-4=-386, 4=-386-to-5=-330
- 29) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 6-10=-12  
Horz: 1-2=2, 4-5=19, 1-10=13, 5-6=17  
Concentrated Loads (lb)  
Vert: 2=-99(F) 4=-123(F) 9=-31(F) 8=-19(F) 3=-63(F) 7=-31(F) 11=-63(F) 12=-63(F) 13=-19(F) 14=-19(F)  
Trapezoidal Loads (plf)  
Vert: 1=-294-to-2=-350, 2=-315-to-3=-459, 3=-459-to-4=-315, 4=-329-to-5=-273
- 30) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 6-10=-12  
Horz: 1-2=-19, 4-5=-2, 1-10=-17, 5-6=-13  
Concentrated Loads (lb)  
Vert: 2=-123(F) 4=-100(F) 9=-31(F) 8=-19(F) 3=-63(F) 7=-31(F) 11=-63(F) 12=-63(F) 13=-19(F) 14=-19(F)  
Trapezoidal Loads (plf)  
Vert: 1=-273-to-2=-329, 2=-315-to-3=-459, 3=-459-to-4=-315, 4=-350-to-5=-294
- 31) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60

Continued on page 5

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	L02	HIP GIRDER	1	2	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:37 2019 Page 5  
ID:WDvc2XqYPcks0eFcMJOUu1zNC97-yapAr22UXmkW9fYOAI\_ah11nRyMnNltdXY8sOYzNA90

**LOAD CASE(S)** Standard

- Uniform Loads (plf)  
Vert: 6-10=-20  
Horz: 1-2=12, 4-5=9, 1-10=23, 5-6=8
- Concentrated Loads (lb)  
Vert: 2=-77(F) 4=-100(F) 9=-31(F) 8=-19(F) 3=-54(F) 7=-31(F) 11=-54(F) 12=-54(F) 13=-19(F) 14=-19(F)
- Trapezoidal Loads (plf)  
Vert: 1=-312-to-2=-368, 2=-332-to-3=-477, 3=-477-to-4=-332, 4=-347-to-5=-291
- 32) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)  
Vert: 6-10=-20  
Horz: 1-2=-9, 4-5=-12, 1-10=-8, 5-6=-23
- Concentrated Loads (lb)  
Vert: 2=-101(F) 4=-77(F) 9=-31(F) 8=-19(F) 3=-54(F) 7=-31(F) 11=-54(F) 12=-54(F) 13=-19(F) 14=-19(F)
- Trapezoidal Loads (plf)  
Vert: 1=-291-to-2=-347, 2=-332-to-3=-477, 3=-477-to-4=-332, 4=-368-to-5=-312
- 33) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)  
Vert: 6-10=-12  
Horz: 1-2=-33, 4-5=19, 1-10=11, 5-6=16
- Concentrated Loads (lb)  
Vert: 2=-139(F) 4=-105(F) 9=-31(F) 8=-19(F) 3=-56(F) 7=-31(F) 11=-63(F) 12=-49(F) 13=-19(F) 14=-19(F)
- Trapezoidal Loads (plf)  
Vert: 1=-259-to-2=-315, 2=-315-to-3=-459, 3=-473-to-4=-329, 4=-329-to-5=-273
- 34) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)  
Vert: 6-10=-12  
Horz: 1-2=-19, 4-5=33, 1-10=-16, 5-6=-11
- Concentrated Loads (lb)  
Vert: 2=-105(F) 4=-139(F) 9=-31(F) 8=-19(F) 3=-56(F) 7=-31(F) 11=-49(F) 12=-63(F) 13=-19(F) 14=-19(F)
- Trapezoidal Loads (plf)  
Vert: 1=-273-to-2=-329, 2=-329-to-3=-473, 3=-459-to-4=-315, 4=-315-to-5=-259
- 35) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)  
Vert: 6-10=-12  
Horz: 1-2=-23, 4-5=14, 1-10=6, 5-6=12
- Concentrated Loads (lb)  
Vert: 2=-115(F) 4=-95(F) 9=-31(F) 8=-19(F) 3=-49(F) 7=-31(F) 11=-53(F) 12=-45(F) 13=-19(F) 14=-19(F)
- Trapezoidal Loads (plf)  
Vert: 1=-269-to-2=-325, 2=-325-to-3=-469, 3=-478-to-4=-333, 4=-333-to-5=-278
- 36) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)  
Vert: 6-10=-12  
Horz: 1-2=-14, 4-5=23, 1-10=-12, 5-6=6
- Concentrated Loads (lb)  
Vert: 2=-95(F) 4=-115(F) 9=-31(F) 8=-19(F) 3=-49(F) 7=-31(F) 11=-45(F) 12=-53(F) 13=-19(F) 14=-19(F)
- Trapezoidal Loads (plf)  
Vert: 1=-278-to-2=-333, 2=-333-to-3=-478, 3=-469-to-4=-325, 4=-325-to-5=-269
- 37) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)  
Vert: 6-10=-20  
Horz: 1-2=-23, 4-5=9, 1-10=21, 5-6=7
- Concentrated Loads (lb)  
Vert: 2=-117(F) 4=-82(F) 9=-31(F) 8=-19(F) 3=-47(F) 7=-31(F) 11=-54(F) 12=-40(F) 13=-19(F) 14=-19(F)
- Trapezoidal Loads (plf)  
Vert: 1=-277-to-2=-332, 2=-332-to-3=-477, 3=-491-to-4=-347, 4=-347-to-5=-291
- 38) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)  
Vert: 6-10=-20  
Horz: 1-2=-9, 4-5=23, 1-10=-7, 5-6=-21
- Concentrated Loads (lb)  
Vert: 2=-82(F) 4=-116(F) 9=-31(F) 8=-19(F) 3=-47(F) 7=-31(F) 11=-40(F) 12=-54(F) 13=-19(F) 14=-19(F)
- Trapezoidal Loads (plf)  
Vert: 1=-291-to-2=-347, 2=-347-to-3=-491, 3=-477-to-4=-332, 4=-332-to-5=-277
- 39) Reversal: Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)  
Vert: 6-10=-20  
Horz: 1-2=9, 4-5=7, 1-10=17, 5-6=6
- Concentrated Loads (lb)  
Vert: 2=-58(F) 4=-75(F) 9=-20(F) 8=-13(F) 3=-41(F) 7=-20(F) 11=-41(F) 12=-41(F) 13=-13(F) 14=-13(F)
- Trapezoidal Loads (plf)  
Vert: 1=-318-to-2=-374, 2=-357-to-3=-501, 3=-501-to-4=-357, 4=-358-to-5=-302
- 40) Reversal: Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)  
Vert: 6-10=-20  
Horz: 1-2=-7, 4-5=-9, 1-10=-6, 5-6=-17
- Concentrated Loads (lb)  
Vert: 2=-75(F) 4=-58(F) 9=-20(F) 8=-13(F) 3=-41(F) 7=-20(F) 11=-41(F) 12=-41(F) 13=-13(F) 14=-13(F)

Continued on page 6

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	L02	HIP GIRDER	1	2	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:37 2019 Page 6  
ID:WDvc2XqYPcks0eFcMJOUu1zNC97-yapAr22UXmkW9FYOA1\_ah11nRyMNnltDXy8sOYZNA90

**LOAD CASE(S)** Standard

Trapezoidal Loads (plf)

Vert: 1=-302-to-2=-358, 2=-357-to-3=-501, 3=-501-to-4=-357, 4=-374-to-5=-318

41) Reversal: Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 6-10=-20

Horz: 1-2=-18, 4-5=7, 1-10=16, 5-6=5

Concentrated Loads (lb)

Vert: 2=-88(F) 4=-61(F) 9=-20(F) 8=-13(F) 3=-35(F) 7=-20(F) 11=-41(F) 12=-30(F) 13=-13(F) 14=-13(F)

Trapezoidal Loads (plf)

Vert: 1=-291-to-2=-347, 2=-357-to-3=-501, 3=-512-to-4=-368, 4=-358-to-5=-302

42) Reversal: Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 6-10=-20

Horz: 1-2=-7, 4-5=18, 1-10=-5, 5-6=-16

Concentrated Loads (lb)

Vert: 2=-62(F) 4=-87(F) 9=-20(F) 8=-13(F) 3=-35(F) 7=-20(F) 11=-30(F) 12=-41(F) 13=-13(F) 14=-13(F)

Trapezoidal Loads (plf)

Vert: 1=-302-to-2=-358, 2=-368-to-3=-512, 3=-501-to-4=-357, 4=-347-to-5=-291

43) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 6-10=-20

Horz: 1-2=9, 4-5=7, 1-10=17, 5-6=6

Concentrated Loads (lb)

Vert: 2=-58(F) 4=-75(F) 9=-14(F) 8=-10(F) 3=-41(F) 7=-14(F) 11=-41(F) 12=-41(F) 13=-10(F) 14=-10(F)

Trapezoidal Loads (plf)

Vert: 1=-339-to-2=-395, 2=-368-to-3=-512, 3=-512-to-4=-368, 4=-379-to-5=-323

44) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 6-10=-20

Horz: 1-2=-7, 4-5=-9, 1-10=-6, 5-6=-17

Concentrated Loads (lb)

Vert: 2=-75(F) 4=-58(F) 9=-14(F) 8=-10(F) 3=-41(F) 7=-14(F) 11=-41(F) 12=-41(F) 13=-10(F) 14=-10(F)

Trapezoidal Loads (plf)

Vert: 1=-323-to-2=-379, 2=-368-to-3=-512, 3=-512-to-4=-368, 4=-395-to-5=-339

45) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 6-10=-20

Horz: 1-2=-18, 4-5=7, 1-10=16, 5-6=5

Concentrated Loads (lb)

Vert: 2=-88(F) 4=-61(F) 9=-14(F) 8=-10(F) 3=-35(F) 7=-14(F) 11=-41(F) 12=-30(F) 13=-10(F) 14=-10(F)

Trapezoidal Loads (plf)

Vert: 1=-312-to-2=-368, 2=-368-to-3=-512, 3=-523-to-4=-379, 4=-379-to-5=-323

46) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 6-10=-20

Horz: 1-2=-7, 4-5=18, 1-10=-5, 5-6=-16

Concentrated Loads (lb)

Vert: 2=-62(F) 4=-87(F) 9=-14(F) 8=-10(F) 3=-35(F) 7=-14(F) 11=-30(F) 12=-41(F) 13=-10(F) 14=-10(F)

Trapezoidal Loads (plf)

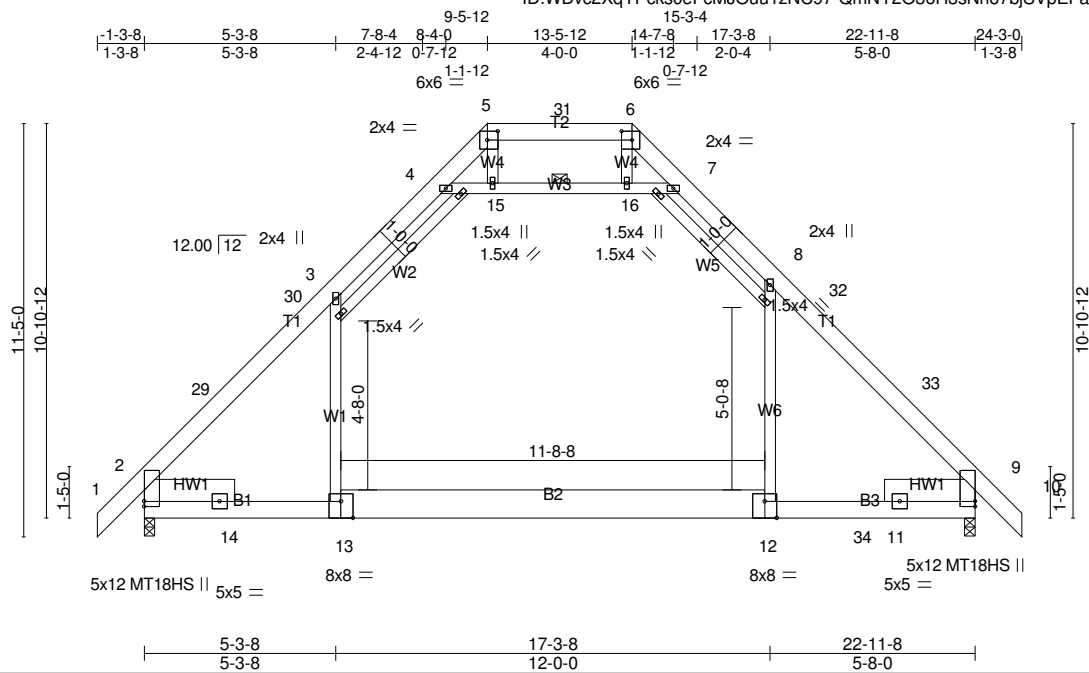
Vert: 1=-323-to-2=-379, 2=-379-to-3=-523, 3=-512-to-4=-368, 4=-368-to-5=-312

Job 1625532	Truss M01	Truss Type ATTIC	Qty 2	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:38 2019 Page 1

ID:WDvc2XqYPcks0eFcMJOUu1zNC97-QmNY2O36H3sNno7bjSVpEFa2XMdpWCQmmCtQx?zNA9?



Scale: 3/16"=1'

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.50	Vert(LL) -0.24	12-13	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.53	Vert(CT) -0.38	12-13	>721	240	MT18HS	244/190
BCLL 0.0 *	Rep Stress Incr YES	WB 0.39	Horz(CT) 0.04	2	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Wind(LL) 0.13	12-27	>999	240		
							Weight: 215 lb	FT = 20%

**LUMBER-**  
**TOP CHORD** 2x6 SP DSS \*Except\*  
T2: 2x6 SP No.2  
**BOT CHORD** 2x6 SP No.2 \*Except\*  
B2: 2x10 SP DSS  
**WEBS** 2x4 SP No.2 \*Except\*  
W4: 2x4 SP No.3  
**SLIDER** Left 2x8 SP DSS 2-6-0, Right 2x8 SP DSS 2-6-0

**BRACING-**  
**TOP CHORD** Structural wood sheathing directly applied, except  
2-0-0 oc purlins (10-0-0 max.): 5-6.  
**BOT CHORD** Rigid ceiling directly applied.  
**WEBS** 1 Row at midpt 4-7

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

**REACTIONS.** (lb/size) 2=911/0-3-8 (min. 0-1-12), 9=907/0-3-8 (min. 0-1-13)  
Max Horz 2=-229(LC 12)  
Max Grav 2=1488(LC 3), 9=1520(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**TOP CHORD** 2-29=-1676/0, 29-30=-1522/0, 3-30=-1518/0, 3-4=-968/61, 4-5=-93/278, 5-31=0/539,  
6-31=0/539, 6-7=-82/328, 7-8=-924/63, 8-32=-1490/0, 32-33=-1506/0, 9-33=-1661/0  
**BOT CHORD** 2-14=-235/617, 13-14=0/1022, 12-13=0/1038, 12-34=0/1019, 11-34=0/1019, 9-11=-130/467  
**WEBS** 3-13=0/857, 8-12=0/887, 4-15=-1458/0, 15-16=-1448/0, 7-16=-1449/0

- NOTES-** (16)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-3-8 to 2-1-5, Interior(1) 2-1-5 to 9-5-12, Exterior(2) 9-5-12 to 13-5-12, Interior(1) 18-3-7 to 24-3-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - \*\* TCCL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps= varies (min. roof snow=5.9 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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.
  - Roof design snow load has been reduced to account for slope.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 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.
  - Ceiling dead load (5.0 psf) on member(s). 3-4, 7-8, 4-15, 15-16, 7-16; Wall dead load (10.0psf) on member(s).3-13, 8-12
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 12-13
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	M01	ATTIC	2	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:39 2019 Page 2  
ID:WDvc2XqYPcks0eFcMJOUu1zNC97-uyxwGk4k2N\_EPyinHA02mS6DHmz2Ffw\_sdzTRzNA9\_

**NOTES-** (16)

15) Attic room checked for L/360 deflection.

16) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

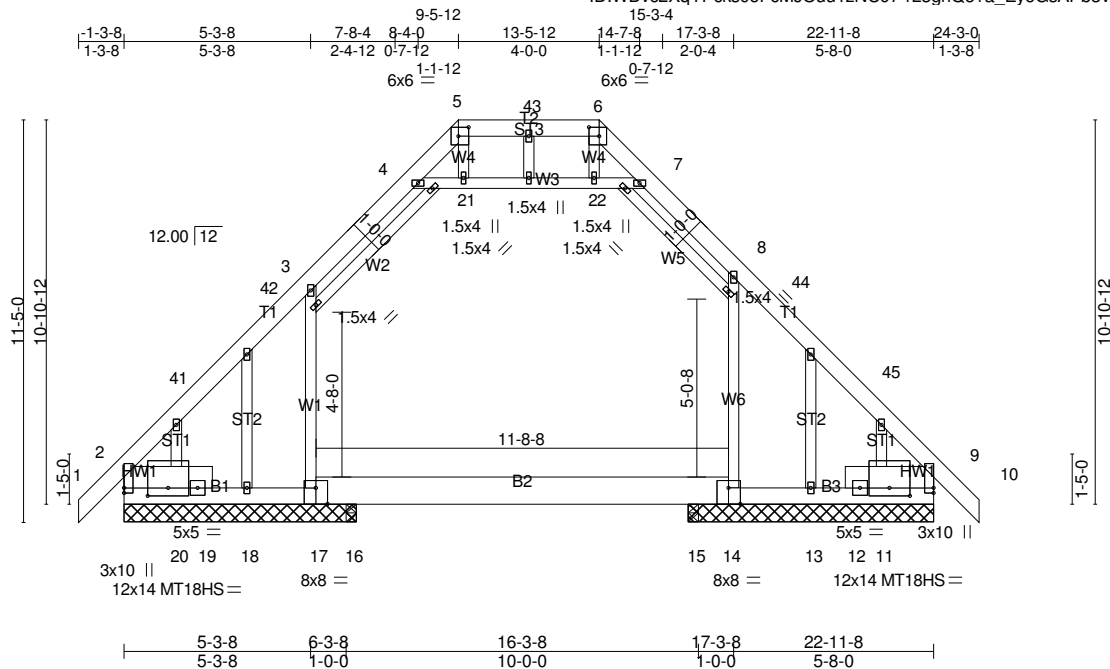
Vert: 1-3=-32, 3-4=-42, 4-5=-32, 5-6=-45, 6-7=-32, 7-8=-42, 8-10=-32, 13-21=-20, 12-13=-30, 12-25=-20, 4-7=-10

Drag: 3-13=-20, 8-12=-20

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	M01E	GABLE	1	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

ID:WDvc2XqYPcks0eFcMJOUu1zNC97-rL3ghQ5?a\_EyeGsAPb3WstCFRZl4jelCSA64XJzNA8y  
8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:41 2019 Page 1



Scale = 1:65.4

Plate Offsets (X,Y)-- [5:0-3-8,0-3-0], [6:0-3-8,0-3-0], [11:0-7-0,0-2-12], [14:0-4-0,Edge], [17:0-4-0,Edge], [20:0-7-0,0-2-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.08	Vert(LL)	-0.02	15-16	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.17	Vert(CT)	-0.03	15-16	>999	MT18HS	244/190
BCLL 0.0 *	Lumber DOL 1.15	WB 0.09	Horz(CT)	-0.02	37	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Wind(LL)	0.01	36	>999		
	Code IRC2015/TPI2014						Weight: 233 lb	FT = 20%

**LUMBER-**  
**TOP CHORD** 2x6 SP DSS \*Except\*  
T2: 2x6 SP No.2  
**BOT CHORD** 2x6 SP No.2 \*Except\*  
B2: 2x10 SP DSS  
**WEBS** 2x4 SP No.2 \*Except\*  
W4: 2x4 SP No.3  
**OTHERS** 2x4 SP No.3  
**SLIDER** Left 2x8 SP DSS 2-6-0, Right 2x8 SP DSS 2-6-0

**BRACING-**  
**TOP CHORD** Structural wood sheathing directly applied, except  
2-0-0 oc purlins (6-0-0 max.): 5-6.  
**BOT CHORD** Rigid ceiling directly applied.

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

**REACTIONS.** All bearings 6-7-0 except (jt=length) 14=6-11-8, 9=6-11-8, 13=6-11-8, 11=6-11-8, 16=0-3-8, 15=0-3-8, 9=6-11-8.  
(lb) - Max Horz 2=-229(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 9, 13 except 2=-111(LC 10), 17=-614(LC 25), 14=-574(LC 26), 18=-148(LC 12), 20=-353(LC 14), 11=-293(LC 15)  
Max Grav All reactions 250 lb or less at joint(s) 17, 18, 13, 11 except 2=602(LC 29), 14=269(LC 32), 9=562(LC 30), 20=319(LC 12), 16=1442(LC 21), 15=1432(LC 21), 2=376(LC 1), 9=368(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**TOP CHORD** 2-41=-501/56, 41-42=-436/68, 3-42=-342/94, 3-4=-498/85, 4-5=-327/59, 6-7=-334/63, 7-8=-485/92, 8-44=-329/81, 44-45=-400/51, 9-45=-509/51  
**BOT CHORD** 19-20=-139/271, 18-19=-38/362, 17-18=-38/362, 16-17=-12/469, 15-16=-38/355, 14-15=-17/470, 13-14=-30/358, 12-13=-30/358  
**WEBS** 3-17=-500/287, 8-14=-478/265

- NOTES-** (20)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-3-8 to 2-1-5, Interior(1) 2-1-5 to 9-5-12, Exterior(2) 9-5-12 to 13-5-12, Interior(1) 18-3-7 to 24-3-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - \*\* TCCL: ASCE 7-10; Pr=20.0 psf (roof live load); Lumber DOL=1.15 Plate DOL=1.15; Pg=10.0 psf (ground snow); Ps= varies (min. roof snow=5.9 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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.
  - Roof design snow load has been reduced to account for slope.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - All plates are 2x4 MT20 unless otherwise indicated.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	M01E	GABLE	1	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:41 2019 Page 2  
 ID:WDvc2XqYPcks0eFcMJOUu1zNC97-rL3ghQ5?a\_EyeGsAPb3WstCfRZl4jeiCSA64XJzNA8y

**NOTES-** (20)

- 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) Ceiling dead load (5.0 psf) on member(s). 3-4, 7-8, 4-21, 21-22, 7-22; Wall dead load (10.0psf) on member(s).3-17, 8-14
- 14) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 16-17, 15-16, 14-15
- 15) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 13, 9 except (jt=lb) 2=111, 17=614, 14=574, 18=148, 20=353, 11=293, 2=111.
- 16) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 17) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 18) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 19) Attic room checked for L/360 deflection.
- 20) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-3=-32, 3-4=-42, 4-5=-32, 5-6=-45, 6-7=-32, 7-8=-42, 8-10=-32, 17-36=-20, 16-17=-30, 15-16=-30, 14-15=-30, 14-40=-20, 4-7=-10  
 Drag: 3-17=-20, 8-14=-20

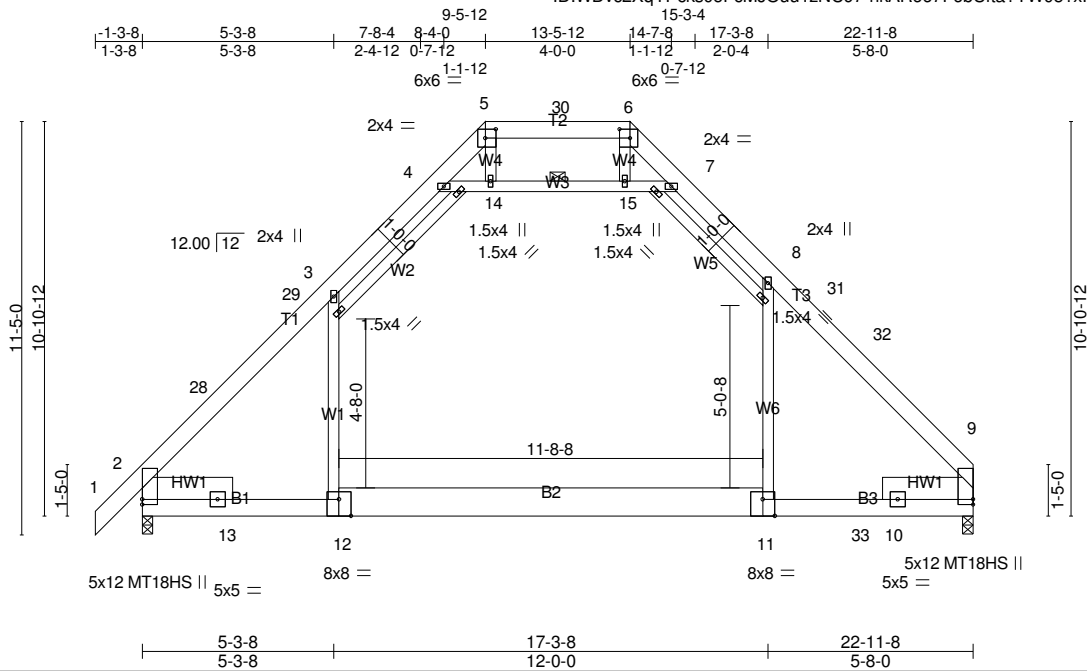


Job 1625532	Truss M02	Truss Type ATTIC	Qty 2	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:43 2019 Page 1

ID:WDvc2XqYPcks0eFcMJOUuu1zNC97-nkAR667F6bUfta?YW05?xlHvGNKrBTeVvUbBbCzNA8w



Scale: 3/16"=1'

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.50	Vert(LL) -0.24	11-12	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.54	Vert(CT) -0.38	11-12	>719	240	MT18HS	244/190
BCLL 0.0 *	Rep Stress Incr YES	WB 0.39	Horz(CT) 0.04	2	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-AS	Wind(LL) 0.13	11-22	>999	240		
							Weight: 211 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP DSS *Except* T2: 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (10-0-0 max.): 5-6.
BOT CHORD 2x6 SP No.2 *Except* B2: 2x10 SP DSS	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.2 *Except* W4: 2x4 SP No.3	WEBS 1 Row at midpt 4-7
SLIDER Left 2x8 SP DSS 2-6-0, Right 2x8 SP DSS 2-6-0	

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

**REACTIONS.** (lb/size) 9=864/0-3-8 (min. 0-1-11), 2=912/0-3-8 (min. 0-1-12)  
Max Horz 2=220(LC 11)  
Max Grav 9=1454(LC 3), 2=1490(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-28=-1681/0, 28-29=-1527/0, 3-29=-1523/0, 3-4=-970/61, 4-5=-90/279, 5-30=0/541,  
6-30=0/541, 6-7=-81/330, 7-8=-926/66, 8-31=-1491/0, 31-32=-1507/0, 9-32=-1661/0  
BOT CHORD 2-13=-251/606, 12-13=0/1011, 11-12=0/1027, 11-33=0/1008, 10-33=0/1008, 9-10=-158/486  
WEBS 3-12=0/858, 8-11=0/885, 4-14=-1466/0, 14-15=-1456/0, 7-15=-1457/0

- NOTES-** (16)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-3-8 to 2-1-5, Interior(1) 2-1-5 to 9-5-12, Exterior(2) 9-5-12 to 13-5-12, Interior(1) 18-3-7 to 22-11-8 zone; cantilever left exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - \*\* TCCL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps= varies (min. roof snow=5.9 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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.
  - Roof design snow load has been reduced to account for slope.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 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.
  - Ceiling dead load (5.0 psf) on member(s). 3-4, 7-8, 4-14, 14-15, 7-15; Wall dead load (10.0psf) on member(s).3-12, 8-11
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 11-12
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	M02	ATTIC	2	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:43 2019 Page 2  
 ID:WDvc2XqYPcks0eFcMJOUu1zNC97-nkAR667F6bUfta?YW05?xIHvGNKrBTeVvUbBbCzNA8w

**NOTES-** (16)

15) Attic room checked for L/360 deflection.

16) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

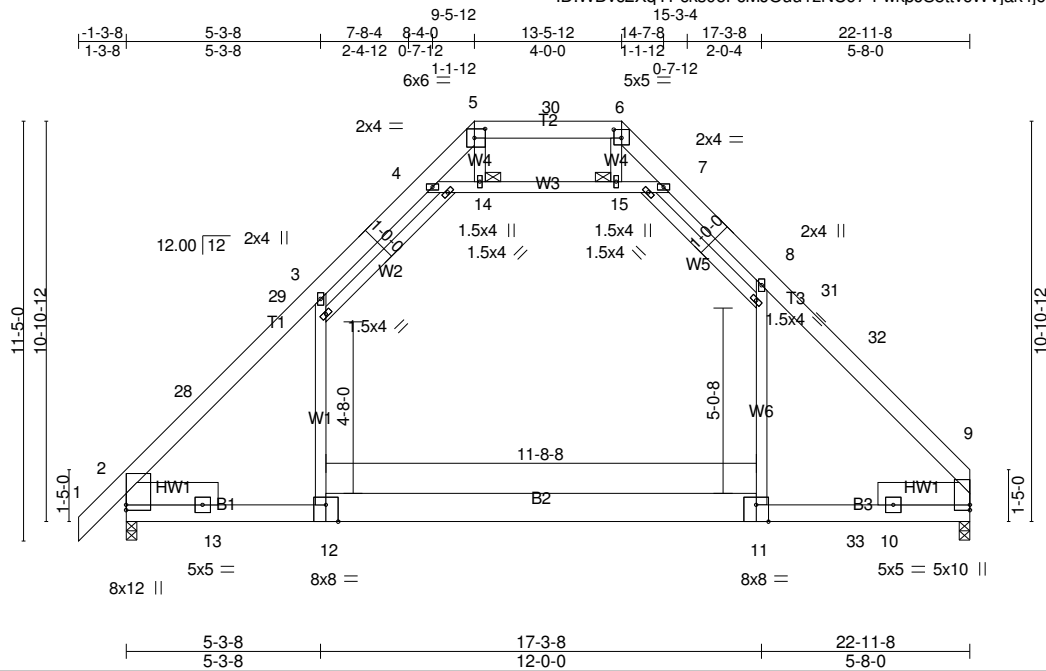
Vert: 1-3=-32, 3-4=-42, 4-5=-32, 5-6=-45, 6-7=-32, 7-8=-42, 8-9=-32, 12-24=-20, 11-12=-30, 11-20=-20, 4-7=-10

Drag: 3-12=-20, 8-11=-20

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	M03	ATTIC	1	2	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

ID:WDvc2XqYPcks0eFcmJOUu1zNC97-FwkpJS8ttvcWVjak4jcETWq0HnbhwYPf88Kk7ezNA8v  
8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:44 2019 Page 1



Scale = 1:62.7

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.74	Vert(LL) -0.28	11-12	>972	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.88	Vert(CT) -0.43	11-12	>633	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.29	Horz(CT) -0.06	9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS	Wind(LL) 0.13	11-22	>999	240		
							Weight: 422 lb	FT = 20%

**LUMBER-**

**TOP CHORD** 2x6 SP DSS \*Except\*  
T2: 2x6 SP No.2  
**BOT CHORD** 2x6 SP No.2 \*Except\*  
B2: 2x10 SP DSS  
**WEBS** 2x4 SP No.2 \*Except\*  
W4: 2x4 SP No.3  
**SLIDER** Left 2x8 SP DSS 2-6-0, Right 2x8 SP DSS 2-6-0

**BRACING-**

**TOP CHORD** 2-0-0 oc purlins (6-0-0 max.)  
(Switched from sheeted: Spacing > 2-0-0).  
**BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing.  
**JOINTS** 1 Brace at Jt(s): 5, 6, 14, 15

**REACTIONS.** (lb/size) 9=1872/0-3-8 (min. 0-2-1), 2=1846/0-3-8 (min. 0-1-13)  
Max Horz 2=440(LC 11)  
Max Grav 9=3474(LC 3), 2=3066(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**TOP CHORD** 2-28=-3548/0, 28-29=-3239/0, 3-29=-3231/0, 3-4=-2071/101, 4-5=-148/648, 5-30=0/1294,  
6-30=0/1294, 6-7=-112/851, 7-8=-1931/120, 8-31=-3178/0, 31-32=3209/0, 9-32=3519/0  
**BOT CHORD** 2-13=-452/1142, 12-13=0/2157, 11-12=0/2190, 11-33=0/2149, 10-33=0/2149, 9-10=-239/857  
**WEBS** 3-12=0/1852, 8-11=0/2026, 4-14=-3246/0, 14-15=-3225/0, 7-15=-3227/0, 5-14=-18/251

**NOTES-** (16)

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x10 - 2 rows staggered at 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-3-8 to 2-1-5, Interior(1) 2-1-5 to 9-5-12, Exterior(2) 9-5-12 to 13-5-12, Interior(1) 18-3-7 to 22-11-8 zone; cantilever left exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- \*\* TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps= varies (min. roof snow=5.9 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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.
- Roof design snow load has been reduced to account for slope.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Ceiling dead load (5.0 psf) on member(s). 3-4, 7-8, 4-14, 14-15, 7-15; Wall dead load (10.0psf) on member(s). 3-12, 8-11
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 11-12

Continued on page 2

Job 1625532	Truss M03	Truss Type ATTIC	Qty 1	Ply 2	STURTZ HOMES - 23 LEIGH LAUREL Job Reference (optional)
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:45 2019 Page 2  
ID:WDvc2XqYPcks0eFcMJOUu1zNC97-j6lBW08VeDkN7t9xeQ7T0jMB0AxwfPeoNo4lg5zNA8u

**NOTES-** (16)

- 13) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 15) Attic room checked for L/360 deflection.
- 16) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

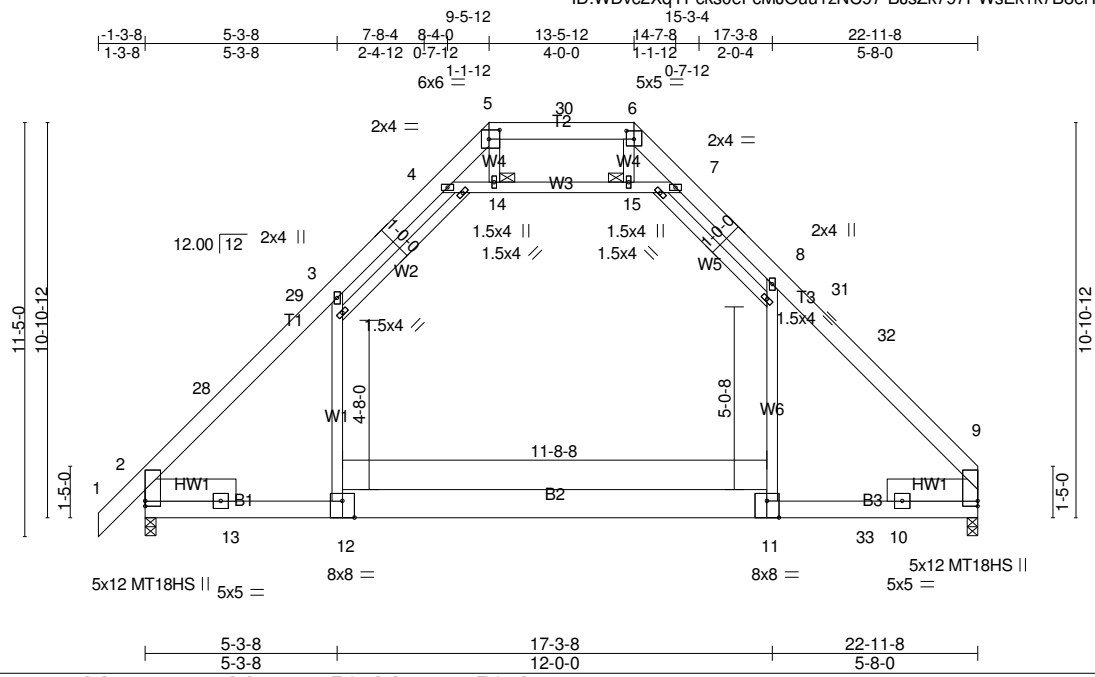
Vert: 1-3=-64, 3-4=-84, 4-5=-64, 5-6=-91, 6-7=-64, 7-8=-84, 8-9=-64, 12-24=-40, 11-12=-60, 11-22=-70(F=-30), 20-22=-40, 4-7=-20

Drag: 3-12=-40, 8-11=-40

Job 1625532	Truss M04	Truss Type ATTIC	Qty 2	Ply 3	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

ID:WDvc2XqYPcks0eFcMJOUuu1zNC97-BjsZk797PWsEk1k7B8eiYxvMBAJkOs5ybSprCXzNA8t  
8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:46 2019 Page 1



Scale: 3/16"=1'

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	6-0-0	TC 0.71	Vert(LL)	-0.27	11-12	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.72	Vert(CT)	-0.43	11-12	>635	MT18HS	244/190
BCLL 0.0 *	Lumber DOL 1.15	WB 0.28	Horz(CT)	0.07	2	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS	Wind(LL)	0.13	11-22	>999		
	Code IRC2015/TPI2014						Weight: 633 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP DSS \*Except\*  
T2: 2x6 SP No.2  
BOT CHORD 2x6 SP No.2 \*Except\*  
B2: 2x10 SP DSS  
WEBS 2x4 SP No.2 \*Except\*  
W4: 2x4 SP No.3  
SLIDER Left 2x8 SP DSS 2-6-0, Right 2x8 SP DSS 2-6-0

**BRACING-**

TOP CHORD 2-0-0 oc purlins (6-0-0 max.)  
(Switched from sheeted: Spacing > 2-0-0).  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
JOINTS 1 Brace at Jt(s): 5, 6, 14, 15

**REACTIONS.** (lb/size) 9=2662/0-3-8 (min. 0-1-12), 2=3244/0-3-8 (min. 0-2-3)  
Max Horz 2=659(LC 11)  
Max Grav 9=4525(LC 3), 2=5640(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-28=-5541/0, 28-29=-4906/0, 3-29=-4892/0, 3-4=-3083/130, 4-5=-142/1167, 5-30=0/2003,  
6-30=0/2003, 6-7=-167/1158, 7-8=-3012/131, 8-31=-4793/0, 31-32=-4840/0, 9-32=-5304/0  
BOT CHORD 2-13=-475/1782, 12-13=0/3280, 11-12=0/3332, 11-33=0/3273, 10-33=0/3273,  
9-10=-262/1099  
WEBS 3-12=0/2906, 8-11=0/2862, 4-14=-4963/0, 14-15=-4944/0, 7-15=-4961/0, 5-14=-51/269,  
6-15=-45/264

**NOTES-** (17)

- 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x10 - 2 rows staggered at 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-3-8 to 2-1-5, Interior(1) 2-1-5 to 9-5-12, Exterior(2) 9-5-12 to 13-5-12, Interior(1) 18-3-7 to 22-11-8 zone; cantilever left exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- \*\* TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps= varies (min. roof snow=5.9 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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.
- Roof design snow load has been reduced to account for slope.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	M04	ATTIC	2	3	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:46 2019 Page 2  
ID:WDvc2XqYPcks0eFcmJOUu1zNC97-BjsZk797PWsEk1k7B8eiYxvMBaJkOs5ybSprCXzNA8t

**NOTES-** (17)

- 11) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 12) Ceiling dead load (5.0 psf) on member(s). 3-4, 7-8, 4-14, 14-15, 7-15; Wall dead load (10.0psf) on member(s).3-12, 8-11
- 13) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 11-12
- 14) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 15) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 16) Attic room checked for L/360 deflection.
- 17) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-2=-96, 4-5=-96, 5-6=-136, 6-7=-96, 7-8=-126, 8-9=-96, 24-26=-60, 12-26=-110(F=-50), 11-12=-90, 11-20=-60, 4-7=-30  
Drag: 3-12=-60, 8-11=-60  
Trapezoidal Loads (plf)  
Vert: 2=-176-to-3=-123, 3=-153-to-4=-125
- 2) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-2=-180, 4-5=-180, 5-6=-180, 6-7=-180, 7-8=-210, 8-9=-180, 24-26=-60, 12-26=-110(F=-50), 11-12=-90, 11-20=-60, 4-7=-30  
Drag: 3-12=-60, 8-11=-60  
Trapezoidal Loads (plf)  
Vert: 2=-260-to-3=-207, 3=-237-to-4=-210
- 3) Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-2=-150, 4-5=-150, 5-6=-150, 6-7=-150, 7-8=-180, 8-9=-150, 24-26=-60, 12-26=-257(F=-197), 11-12=-270, 11-33=-150, 20-33=-60, 4-7=-30  
Drag: 3-12=-60, 8-11=-60  
Trapezoidal Loads (plf)  
Vert: 2=-230-to-3=-177, 3=-207-to-4=-180
- 4) Dead + 0.75 Snow (balanced) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-2=-87, 4-5=-87, 5-6=-117, 6-7=-87, 7-8=-117, 8-9=-87, 24-26=-60, 12-26=-257(F=-197), 11-12=-270, 11-33=-150, 20-33=-60, 4-7=-30  
Drag: 3-12=-60, 8-11=-60  
Trapezoidal Loads (plf)  
Vert: 2=-167-to-3=-114, 3=-144-to-4=-116
- 5) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-2=-60, 4-5=-60, 5-6=-60, 6-7=-60, 7-8=-90, 8-9=-60, 24-26=-120, 12-26=-170(F=-50), 11-12=-90, 11-20=-120, 4-7=-30  
Drag: 3-12=-60, 8-11=-60  
Trapezoidal Loads (plf)  
Vert: 2=-140-to-3=-87, 3=-117-to-4=-90
- 6) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=106, 4-5=41, 5-6=65, 6-7=57, 7-8=39, 8-31=57, 9-31=41, 24-26=-36, 12-26=-66(F=-30), 11-12=-54, 11-20=-36, 4-7=-18  
Horz: 1-2=-142, 2-28=-93, 5-28=-77, 6-31=93, 9-31=77  
Drag: 3-12=-60, 8-11=-60  
Trapezoidal Loads (plf)  
Vert: 2=-23-to-28=-2, 28=-17-to-3=14, 3=-4-to-4=24
- 7) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=27, 4-5=57, 5-6=65, 6-7=41, 7-8=23, 8-32=41, 9-32=57, 24-26=-36, 12-26=-66(F=-30), 11-12=-54, 11-20=-36, 4-7=-18  
Horz: 1-2=-63, 2-29=-77, 5-29=-93, 6-32=77, 9-32=93  
Drag: 3-12=-60, 8-11=-60  
Trapezoidal Loads (plf)  
Vert: 2=-39-to-29=8, 29=24-to-3=30, 3=12-to-4=40
- 8) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=3, 4-5=-137, 5-6=-90, 6-7=-137, 7-8=-167, 8-9=-137, 24-26=-60, 12-26=-90(F=-30), 11-12=-90, 11-20=-60, 4-7=-30  
Horz: 1-2=-63, 2-5=77, 6-9=-77  
Drag: 3-12=-60, 8-11=-60  
Trapezoidal Loads (plf)  
Vert: 2=-217-to-3=-165, 3=-195-to-4=-167
- 9) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-123, 4-5=-137, 5-6=-90, 6-7=-137, 7-8=-167, 8-9=-137, 24-26=-60, 12-26=-90(F=-30), 11-12=-90, 11-20=-60, 4-7=-30  
Horz: 1-2=63, 2-5=77, 6-9=-77  
Drag: 3-12=-60, 8-11=-60  
Trapezoidal Loads (plf)  
Vert: 2=-217-to-3=-165, 3=-195-to-4=-167
- 10) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60  
Uniform Loads (plf)  
Vert: 1-2=-10, 4-5=-43, 5-6=63, 6-7=20, 7-8=2, 8-9=20, 24-26=-36, 12-26=-66(F=-30), 11-12=-54, 11-20=-36, 4-7=-18  
Horz: 1-2=-26, 2-5=77, 6-9=56  
Drag: 3-12=-60, 8-11=-60  
Trapezoidal Loads (plf)  
Vert: 2=-123-to-3=-70, 3=-88-to-4=-61
- 11) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	M04	ATTIC	2	3	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:46 2019 Page 3  
ID:WDvc2XqYPcks0eFcMJOUu1zNC97-BJsZk797PWsEk1k7B8eiYxvMBaJkOs5ybSprCXzNA8t

**LOAD CASE(S)** Standard

Uniform Loads (plf)

Vert: 1-2=6, 4-5=20, 5-6=63, 6-7=-43, 7-8=-61, 8-9=-43, 24-26=-36, 12-26=-66(F=-30), 11-12=-54, 11-20=-36, 4-7=-18  
Horz: 1-2=-42, 2-5=-56, 6-9=7  
Drag: 3-12=-60, 8-11=-60

Trapezoidal Loads (plf)

Vert: 2=-60-to-3=-7, 3=-25-to-4=2

12) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-81, 4-5=-96, 5-6=10, 6-7=-32, 7-8=-62, 8-9=-32, 24-26=-60, 12-26=-90(F=-30), 11-12=-90, 11-20=-60, 4-7=-30  
Horz: 1-2=21, 2-5=36, 6-9=28  
Drag: 3-12=-60, 8-11=-60

Trapezoidal Loads (plf)

Vert: 2=-176-to-3=-123, 3=-153-to-4=-125

13) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-18, 4-5=-32, 5-6=10, 6-7=-96, 7-8=-126, 8-9=-96, 24-26=-60, 12-26=-90(F=-30), 11-12=-90, 11-20=-60, 4-7=-30  
Horz: 1-2=-42, 2-5=-28, 6-9=36  
Drag: 3-12=-60, 8-11=-60

Trapezoidal Loads (plf)

Vert: 2=-112-to-3=-60, 3=-90-to-4=-62

14) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=49, 4-5=63, 5-30=63, 6-30=20, 6-7=20, 7-8=2, 8-9=20, 24-26=-36, 12-26=-66(F=-30), 11-12=-54, 11-20=-36, 4-7=-18  
Horz: 1-2=-85, 2-5=-99, 6-9=56  
Drag: 3-12=-60, 8-11=-60

Trapezoidal Loads (plf)

Vert: 2=-17-to-3=36, 3=18-to-4=45

15) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=6, 4-5=20, 5-30=20, 6-30=63, 6-7=63, 7-8=45, 8-9=63, 24-26=-36, 12-26=-66(F=-30), 11-12=-54, 11-20=-36, 4-7=-18  
Horz: 1-2=-42, 2-5=-56, 6-9=99  
Drag: 3-12=-60, 8-11=-60

Trapezoidal Loads (plf)

Vert: 2=-60-to-3=-7, 3=-25-to-4=2

16) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=19, 4-5=33, 5-30=33, 6-30=7, 6-7=7, 7-8=-11, 8-9=7, 24-26=-36, 12-26=-66(F=-30), 11-12=-54, 11-20=-36, 4-7=-18  
Horz: 1-2=-55, 2-5=-69, 6-9=43  
Drag: 3-12=-60, 8-11=-60

Trapezoidal Loads (plf)

Vert: 2=-47-to-3=6, 3=-12-to-4=15

17) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-7, 4-5=7, 5-30=7, 6-30=33, 6-7=33, 7-8=15, 8-9=33, 24-26=-36, 12-26=-66(F=-30), 11-12=-54, 11-20=-36, 4-7=-18  
Horz: 1-2=-29, 2-5=-43, 6-9=69  
Drag: 3-12=-60, 8-11=-60

Trapezoidal Loads (plf)

Vert: 2=-73-to-3=-20, 3=-38-to-4=-10

18) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=25, 4-5=10, 5-30=10, 6-30=-32, 6-7=-32, 7-8=-62, 8-9=-32, 24-26=-60, 12-26=-90(F=-30), 11-12=-90, 11-20=-60, 4-7=-30  
Horz: 1-2=-85, 2-5=-70, 6-9=28  
Drag: 3-12=-60, 8-11=-60

Trapezoidal Loads (plf)

Vert: 2=-70-to-3=-17, 3=-47-to-4=-19

19) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-18, 4-5=-32, 5-30=-32, 6-30=10, 6-7=10, 7-8=-20, 8-9=10, 24-26=-60, 12-26=-90(F=-30), 11-12=-90, 11-20=-60, 4-7=-30  
Horz: 1-2=-42, 2-5=-28, 6-9=70  
Drag: 3-12=-60, 8-11=-60

Trapezoidal Loads (plf)

Vert: 2=-112-to-3=-60, 3=-90-to-4=-62

20) Dead + Snow on Overhangs: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-96, 4-5=-60, 5-6=-60, 6-9=-60, 24-26=-60, 12-26=-110(F=-50), 11-12=-90, 11-20=-60

Trapezoidal Loads (plf)

Vert: 2=-140-to-4=-60

21) Dead + Uninhab. Attic Storage + Attic Floor: Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 1-2=-60, 4-5=-60, 5-6=-60, 6-7=-60, 7-8=-90, 8-9=-60, 24-26=-60, 12-26=-310(F=-250), 11-12=-330, 11-33=-180, 20-33=-60, 4-7=-30  
Drag: 3-12=-60, 8-11=-60

Trapezoidal Loads (plf)

Vert: 2=-140-to-3=-87, 3=-117-to-4=-90

22) Dead + Uninhabitable Attic Storage: Lumber Increase=1.00, Plate Increase=1.00

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	M04	ATTIC	2	3	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:46 2019 Page 4  
ID:WDvc2XqYPcks0eFcMJOUu1zNC97-BJsZk797PWsEk1k7B8eiYxvMBaJkOs5ybSprCXzNA8t

**LOAD CASE(S)** Standard

- Uniform Loads (plf)  
Vert: 1-2=-60, 4-5=-60, 5-6=-60, 6-7=-60, 7-8=-90, 8-9=-60, 24-26=-60, 12-26=-310(F=-250), 11-12=-330, 11-33=-180, 20-33=-60, 4-7=-30  
Drag: 3-12=-60, 8-11=-60
- Trapezoidal Loads (plf)  
Vert: 2=-140-to-3=-87, 3=-117-to-4=-90
- 23) Dead + 0.75 Snow (bal.) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)  
Vert: 1-2=-103, 4-5=-113, 5-6=-64, 6-7=-66, 7-8=-96, 8-9=-66, 24-26=-60, 12-26=-242(F=-182), 11-12=-270, 11-33=-150, 20-33=-60, 4-7=-30  
Horz: 1-2=16, 2-5=27, 6-9=21  
Drag: 3-12=-60, 8-11=-60
- Trapezoidal Loads (plf)  
Vert: 2=-193-to-3=-141, 3=-171-to-4=-143
- 24) Dead + 0.75 Snow (bal.) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)  
Vert: 1-2=-55, 4-5=-66, 5-6=-64, 6-7=-113, 7-8=-143, 8-9=-113, 24-26=-60, 12-26=-242(F=-182), 11-12=-270, 11-33=-150, 20-33=-60, 4-7=-30  
Horz: 1-2=-31, 2-5=-21, 6-9=27  
Drag: 3-12=-60, 8-11=-60
- Trapezoidal Loads (plf)  
Vert: 2=-146-to-3=-93, 3=-123-to-4=-96
- 25) Dead + 0.75 Snow (bal.) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)  
Vert: 1-2=-23, 4-5=-34, 5-30=-64, 6-30=-96, 6-7=-66, 7-8=-96, 8-9=-66, 24-26=-60, 12-26=-242(F=-182), 11-12=-270, 11-33=-150, 20-33=-60, 4-7=-30  
Horz: 1-2=-63, 2-5=-53, 6-9=21  
Drag: 3-12=-60, 8-11=-60
- Trapezoidal Loads (plf)  
Vert: 2=-114-to-3=-61, 3=-91-to-4=-64
- 26) Dead + 0.75 Snow (bal.) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)  
Vert: 1-2=-55, 4-5=-66, 5-30=-96, 6-30=-64, 6-7=-34, 7-8=-64, 8-9=-34, 24-26=-60, 12-26=-242(F=-182), 11-12=-270, 11-33=-150, 20-33=-60, 4-7=-30  
Horz: 1-2=-31, 2-5=-21, 6-9=53  
Drag: 3-12=-60, 8-11=-60
- Trapezoidal Loads (plf)  
Vert: 2=-146-to-3=-93, 3=-123-to-4=-96
- 27) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)  
Vert: 1-2=-166, 4-5=-177, 5-6=-97, 6-7=-129, 7-8=-159, 8-9=-129, 24-26=-60, 12-26=-242(F=-182), 11-12=-270, 11-33=-150, 20-33=-60, 4-7=-30  
Horz: 1-2=16, 2-5=27, 6-9=21  
Drag: 3-12=-60, 8-11=-60
- Trapezoidal Loads (plf)  
Vert: 2=-257-to-3=-204, 3=-234-to-4=-206
- 28) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)  
Vert: 1-2=-119, 4-5=-129, 5-6=-97, 6-7=-177, 7-8=-207, 8-9=-177, 24-26=-60, 12-26=-242(F=-182), 11-12=-270, 11-33=-150, 20-33=-60, 4-7=-30  
Horz: 1-2=-31, 2-5=-21, 6-9=27  
Drag: 3-12=-60, 8-11=-60
- Trapezoidal Loads (plf)  
Vert: 2=-209-to-3=-157, 3=-187-to-4=-159
- 29) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)  
Vert: 1-2=-87, 4-5=-97, 5-30=-97, 6-30=-129, 6-7=-129, 7-8=-159, 8-9=-129, 24-26=-60, 12-26=-242(F=-182), 11-12=-270, 11-33=-150, 20-33=-60, 4-7=-30  
Horz: 1-2=-63, 2-5=-53, 6-9=21  
Drag: 3-12=-60, 8-11=-60
- Trapezoidal Loads (plf)  
Vert: 2=-177-to-3=-124, 3=-154-to-4=-127
- 30) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)  
Vert: 1-2=-119, 4-5=-129, 5-30=-129, 6-30=-97, 6-7=-97, 7-8=-127, 8-9=-97, 24-26=-60, 12-26=-242(F=-182), 11-12=-270, 11-33=-150, 20-33=-60, 4-7=-30  
Horz: 1-2=-31, 2-5=-21, 6-9=53  
Drag: 3-12=-60, 8-11=-60
- Trapezoidal Loads (plf)  
Vert: 2=-209-to-3=-157, 3=-187-to-4=-159
- 31) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)  
Vert: 1-2=-180, 4-5=-180, 5-6=-180, 6-7=-60, 7-8=-90, 8-9=-60, 24-26=-60, 12-26=-110(F=-50), 11-12=-90, 11-20=-60, 4-7=-30  
Drag: 3-12=-60, 8-11=-60
- Trapezoidal Loads (plf)  
Vert: 2=-260-to-3=-207, 3=-237-to-4=-210
- 32) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)  
Vert: 1-2=-60, 4-5=-60, 5-6=-180, 6-7=-180, 7-8=-210, 8-9=-180, 24-26=-60, 12-26=-110(F=-50), 11-12=-90, 11-20=-60, 4-7=-30  
Drag: 3-12=-60, 8-11=-60
- Trapezoidal Loads (plf)  
Vert: 2=-140-to-3=-87, 3=-117-to-4=-90
- 33) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15



Job 1625532	Truss M04	Truss Type ATTIC	Qty 2	Ply 3	STURTZ HOMES - 23 LEIGH LAUREL Job Reference (optional)
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:46 2019 Page 5  
ID:WDvc2XqYPcks0eFcMJOUu1zNC97-BJsZk797PWsEk1k7B8eiYxvMBaJkOs5ybSprCXzNA8t

**LOAD CASE(S)** Standard

Uniform Loads (plf)

Vert: 1-2=-150, 4-5=-150, 5-6=-150, 6-7=-60, 7-8=-90, 8-9=-60, 24-26=-60, 12-26=-257(F=-197), 11-12=-270, 11-33=-150, 20-33=-60, 4-7=-30

Drag: 3-12=-60, 8-11=-60

Trapezoidal Loads (plf)

Vert: 2=-230-to-3=-177, 3=-207-to-4=-180

34) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-60, 4-5=-60, 5-6=-150, 6-7=-150, 7-8=-180, 8-9=-150, 24-26=-60, 12-26=-257(F=-197), 11-12=-270, 11-33=-150, 20-33=-60, 4-7=-30

Drag: 3-12=-60, 8-11=-60

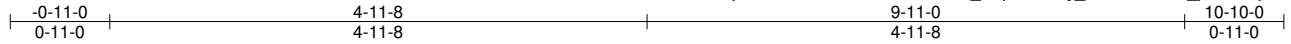
Trapezoidal Loads (plf)

Vert: 2=-140-to-3=-87, 3=-117-to-4=-90

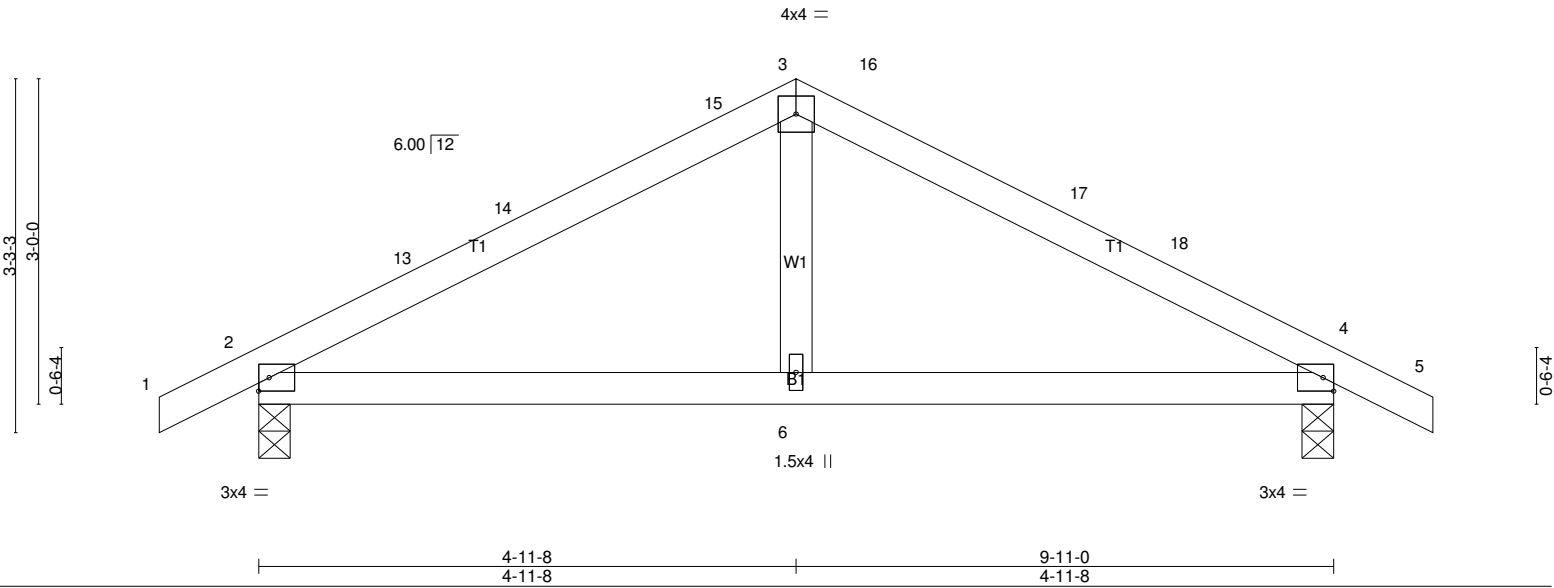
Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	N01	Common	3	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

ID:WDvc2XqYPcks0eFcMJOUuu1zNC97-7h\_K9pBOx86y\_LuWJZhAeM\_p8O7kspfE3mlyGQzNA8r  
8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:48 2019 Page 1



Scale = 1:21.3



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.24	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.24	Vert(LL) -0.01 6-9 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.08	Vert(CT) -0.03 6-9 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.00 4 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.01 6-9 >999 240	Weight: 38 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied.

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

**REACTIONS.** (lb/size) 2=307/0-3-8 (min. 0-1-8), 4=307/0-3-8 (min. 0-1-8)  
Max Horz 2=42(LC 21)  
Max Uplift 2=37(LC 16), 4=37(LC 17)  
Max Grav 2=452(LC 2), 4=452(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-13=-522/82, 13-14=-461/85, 14-15=-459/87, 3-15=-407/100, 3-16=-407/100,  
16-17=-459/87, 17-18=-461/85, 4-18=-522/82  
BOT CHORD 2-6=-10/411, 4-6=-10/411

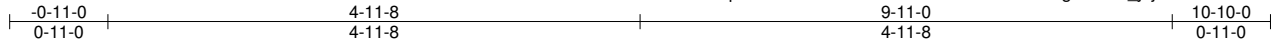
**NOTES-** (12)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-11-0 to 2-5-13, Interior(1) 2-5-13 to 4-11-8, Exterior(2) 4-11-8 to 8-4-5 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=7.7 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
- Roof design snow load has been reduced to account for slope.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

Job 1625532	Truss N01E	Truss Type Common Supported Gable	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
Builders Firstsource, Albemarle, NC 28001					Job Reference (optional)

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:50 2019 Page 1  
 ID:WDvc2XqYPcks0eFcMJOUuu1zNC97-4454aVCeTIMgDe2uQ\_jejn4CUBrQKkmXW4n3LzNA8p



Scale = 1:21.5

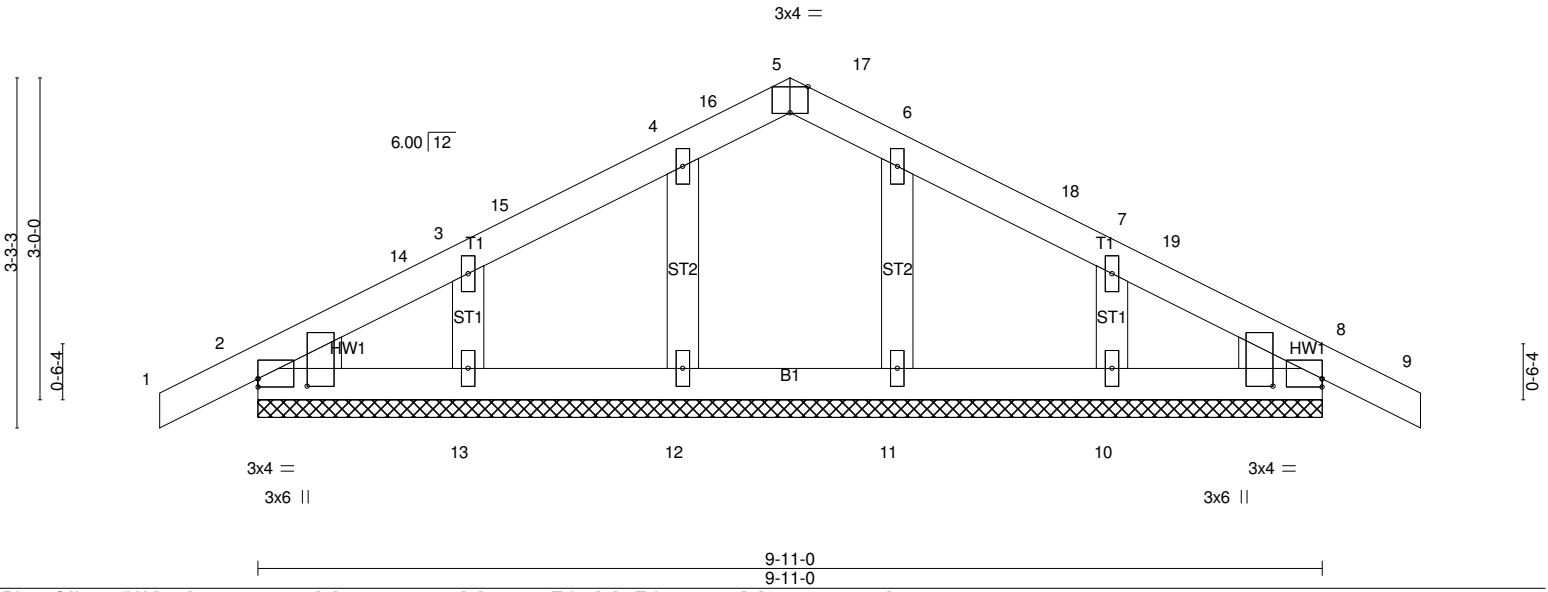


Plate Offsets (X,Y)-- [2:0-0-13,0-5-8], [2:0-0-0,0-0-15], [5:0-2-0,Edge], [8:Edge,0-0-15], [8:0-0-13,0-5-8]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.06	Vert(LL)	-0.00	8	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	9	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	8	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 45 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 OTHERS 2x4 SP No.3  
 WEDGE  
 Left: 2x4 SP No.2, Right: 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** All bearings 9-11-0.  
 (lb) - Max Horz 2=-42(LC 21)  
 Max Uplift All uplift 100 lb or less at joint(s) 8, 12, 13, 11, 10  
 Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 11, 10

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

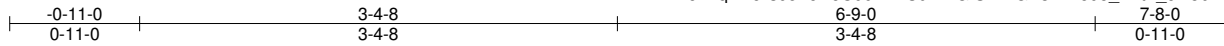
- NOTES-** (15)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-11-0 to 2-5-13, Exterior(2) 2-5-13 to 4-11-8, Corner(3) 4-11-8 to 8-4-5 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=7.7 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
  - Roof design snow load has been reduced to account for slope.
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
  - All plates are 1.5x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 12, 13, 11, 10.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

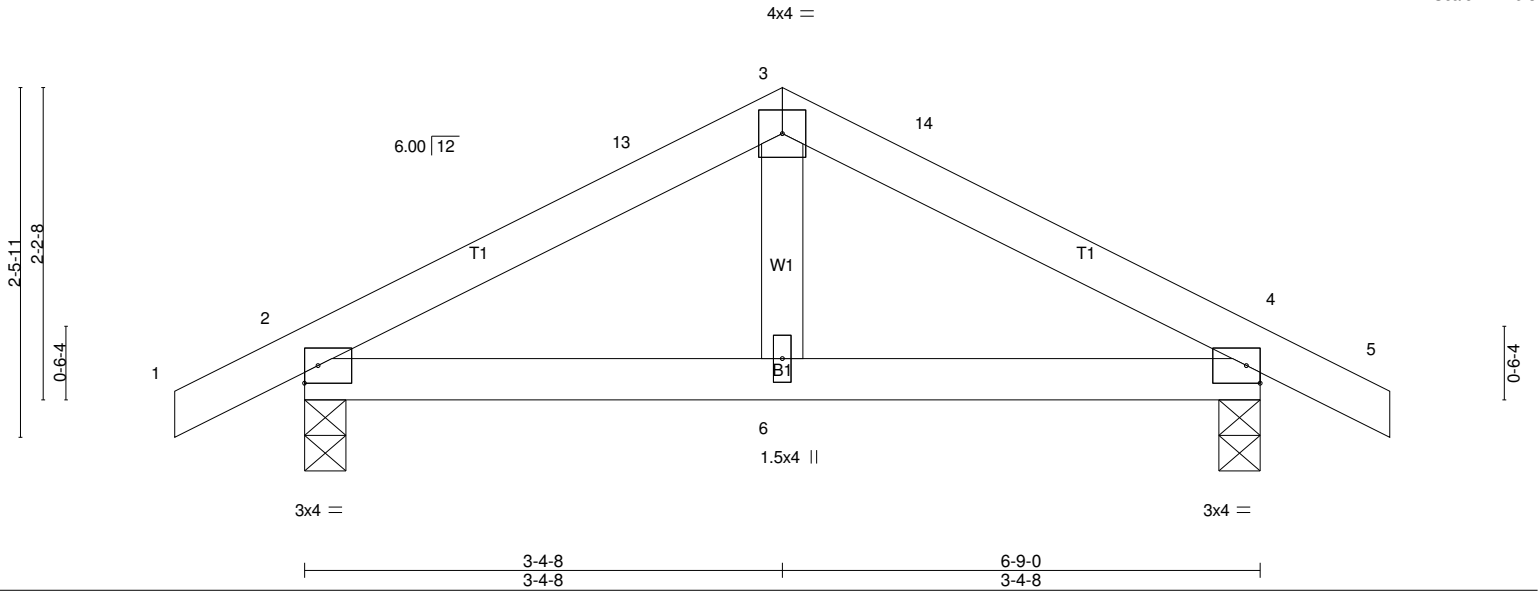
Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	P01	Common	3	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:51 2019 Page 1  
 ID:WDvc2XqYPcks0eFcMJOUu1zNC97-YGfSnrDGE3VXrod5\_hEtF\_cm8bAQ3BrhlkXctkzNA80



Scale = 1:16.3



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.12	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.11	Vert(LL) -0.00 6-9 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.05	Vert(CT) -0.01 6-9 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.00 4 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.00 6-9 >999 240	Weight: 27 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied.  
 BOT CHORD Rigid ceiling directly applied.

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

**REACTIONS.** (lb/size) 2=219/0-3-8 (min. 0-1-8), 4=219/0-3-8 (min. 0-1-8)  
 Max Horz 2=31(LC 16)  
 Max Uplift 2=30(LC 16), 4=30(LC 17)  
 Max Grav 2=325(LC 2), 4=325(LC 2)

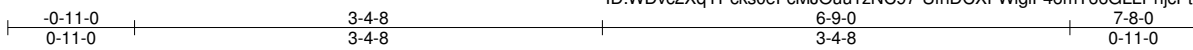
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-13=-318/76, 3-13=-256/82, 3-14=-256/82, 4-14=-318/76

- NOTES-** (12)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-11-0 to 2-5-13, Interior(1) 2-5-13 to 3-4-8, Exterior(2) 3-4-8 to 6-9-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=7.7 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
  - Roof design snow load has been reduced to account for slope.
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

Job 1625532	Truss P01E	Truss Type Common Supported Gable	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
Builders Firstsource, Albemarle, NC 28001					Job Reference (optional)

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:53 2019 Page 1  
 ID:WDvc2XqYPcks0eFcMJOUu1zNC97-UfnDCXFWIglF46mT66GLLPhjcPtyX5L\_C20jydzNA8m



Scale = 1:16.6

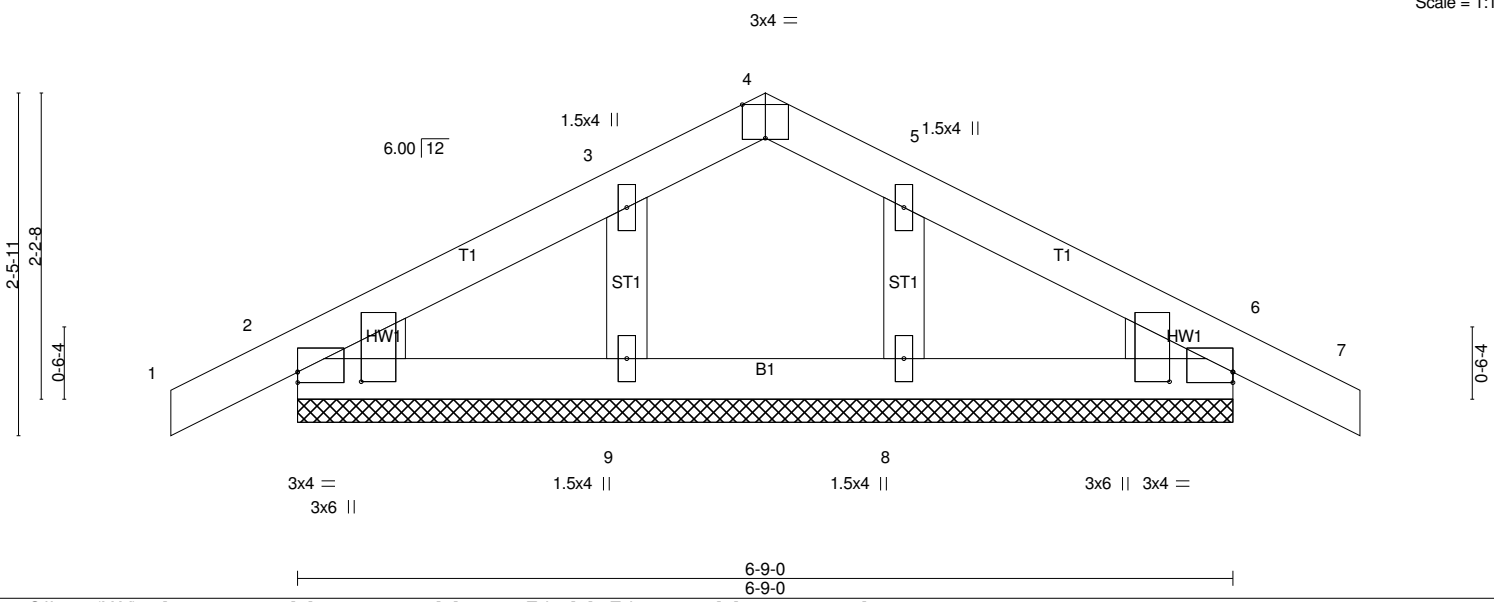


Plate Offsets (X,Y)-- [2:0-0-13,0-5-8], [2:0-0-0,0-0-15], [4:0-2-0,Edge], [6:Edge,0-0-15], [6:0-0-13,0-5-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.06	Vert(LL)	0.00	6	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	0.00	6	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P						Weight: 30 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 OTHERS 2x4 SP No.3  
 WEDGE  
 Left: 2x4 SP No.2, Right: 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** All bearings 6-9-0.  
 (lb) - Max Horz 2=31(LC 20)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 6, 9, 8  
 Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9, 8

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

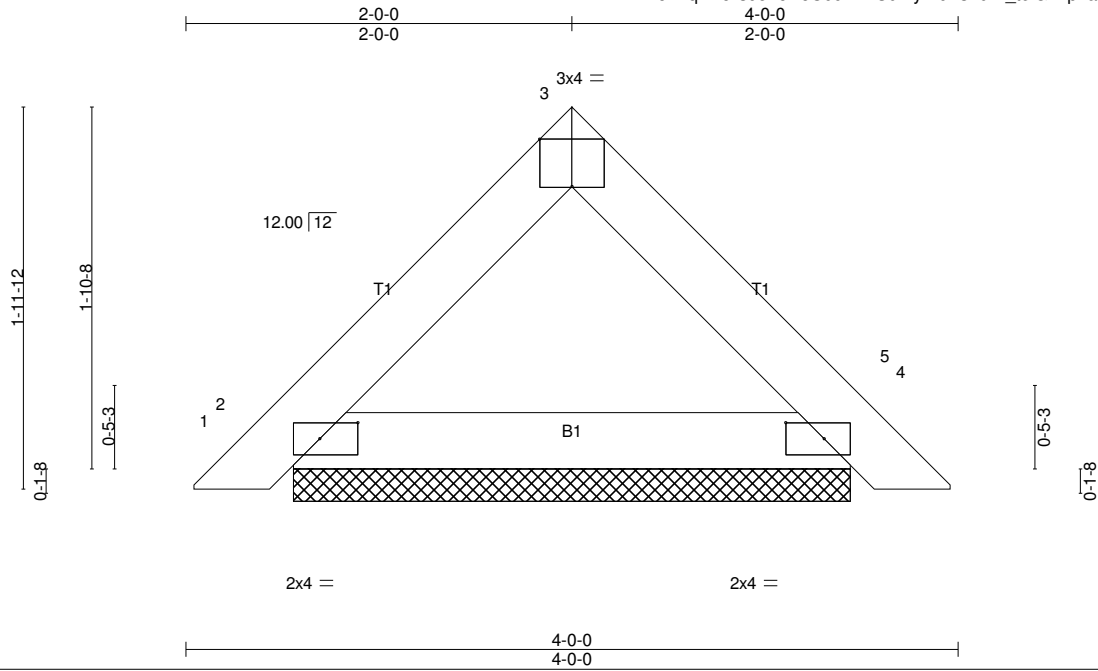
- NOTES-** (14)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-11-0 to 2-4-8, Exterior(2) 2-4-8 to 3-4-8, Corner(3) 3-4-8 to 6-9-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=7.7 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
  - Roof design snow load has been reduced to account for slope.
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6, 9, 8.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

Job 1625532	Truss PB01	Truss Type Piggyback	Qty 8	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

ID:WDvc2XqYPcks0eFcMJOuu1zNC97-yrLbPsF9W\_t6iGLfpnatdEuopCKGXO7RrhIGU3zNA8l  
8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:54 2019 Page 1



Scale: 1"=1'

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.03	Vert(LL)	0.00	4	n/r	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.10	Vert(CT)	0.00	4	n/r		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P						
	Code IRC2015/TPI2014						Weight: 13 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

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

**REACTIONS.** (lb/size) 2=85/2-10-10 (min. 0-1-8), 4=85/2-10-10 (min. 0-1-8)  
Max Horz 2=-37(LC 12)  
Max Uplift 2=-8(LC 14), 4=-8(LC 15)  
Max Grav 2=135(LC 2), 4=135(LC 2)

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

**NOTES-** (12)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=5.9 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
- Roof design snow load has been reduced to account for slope.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

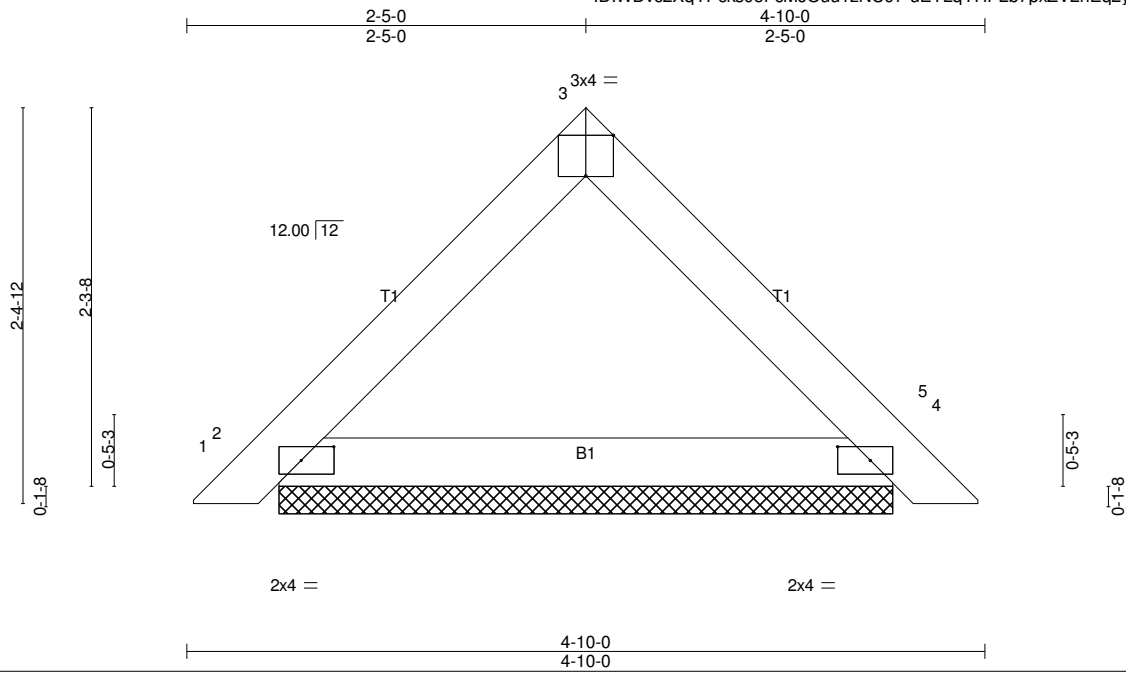
**LOAD CASE(S)** Standard

Job 1625532	Truss PB02	Truss Type Piggyback	Qty 5	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

ID:WDvc2XqYPcks0eFcMJOUuu1zNC97-uETLqYHP2b7pxZV2nEq2y2JEwcsikRuQu?ENYyzNA8j

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:56 2019 Page 1



Scale = 1:14.0

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.06	Vert(LL)	0.00	4	n/r	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.17	Vert(CT)	0.00	5	n/r		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P						
	Code IRC2015/TPI2014						Weight: 16 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-10-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (lb/size) 2=107/3-8-10 (min. 0-1-8), 4=107/3-8-10 (min. 0-1-8)  
Max Horz 2=46(LC 12)  
Max Uplift 2=8(LC 14), 4=8(LC 15)  
Max Grav 2=168(LC 2), 4=168(LC 2)

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

**NOTES-** (12)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=5.9 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
- Roof design snow load has been reduced to account for slope.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

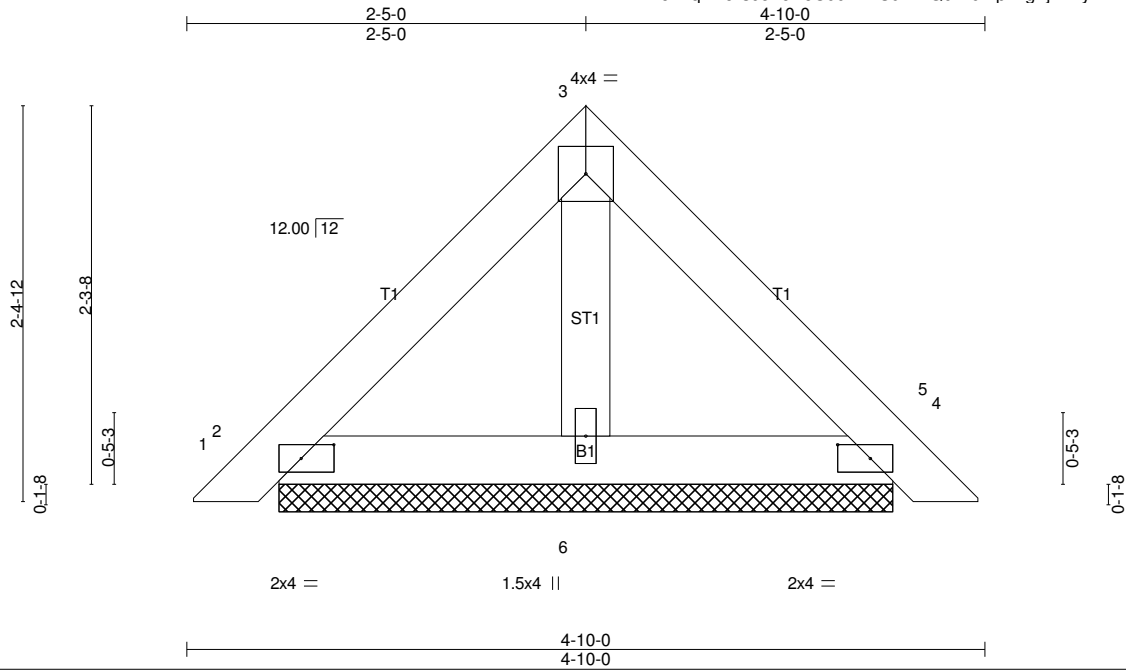
**LOAD CASE(S)** Standard

Job 1625532	Truss PB02E	Truss Type Piggyback	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:57 2019 Page 1

ID:WDvc2XqYPcks0eFcMJOUuu1zNC97-NQ0k2ul1pvFgZj4ELyLHVfSPg0E?TuwZ7f\_w5OzNA8i



Scale = 1:14.0

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.06	Vert(LL)	0.00	4	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	0.00	5	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.01	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P							
									Weight: 18 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-10-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (lb/size) 2=65/3-8-10 (min. 0-1-8), 4=65/3-8-10 (min. 0-1-8), 6=83/3-8-10 (min. 0-1-8)  
 Max Horz 2=-46(LC 12)  
 Max Uplift 2=-18(LC 15), 4=-22(LC 15)  
 Max Grav 2=111(LC 2), 4=111(LC 2), 6=116(LC 5)

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

**NOTES-** (12)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=5.9 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
- Roof design snow load has been reduced to account for slope.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

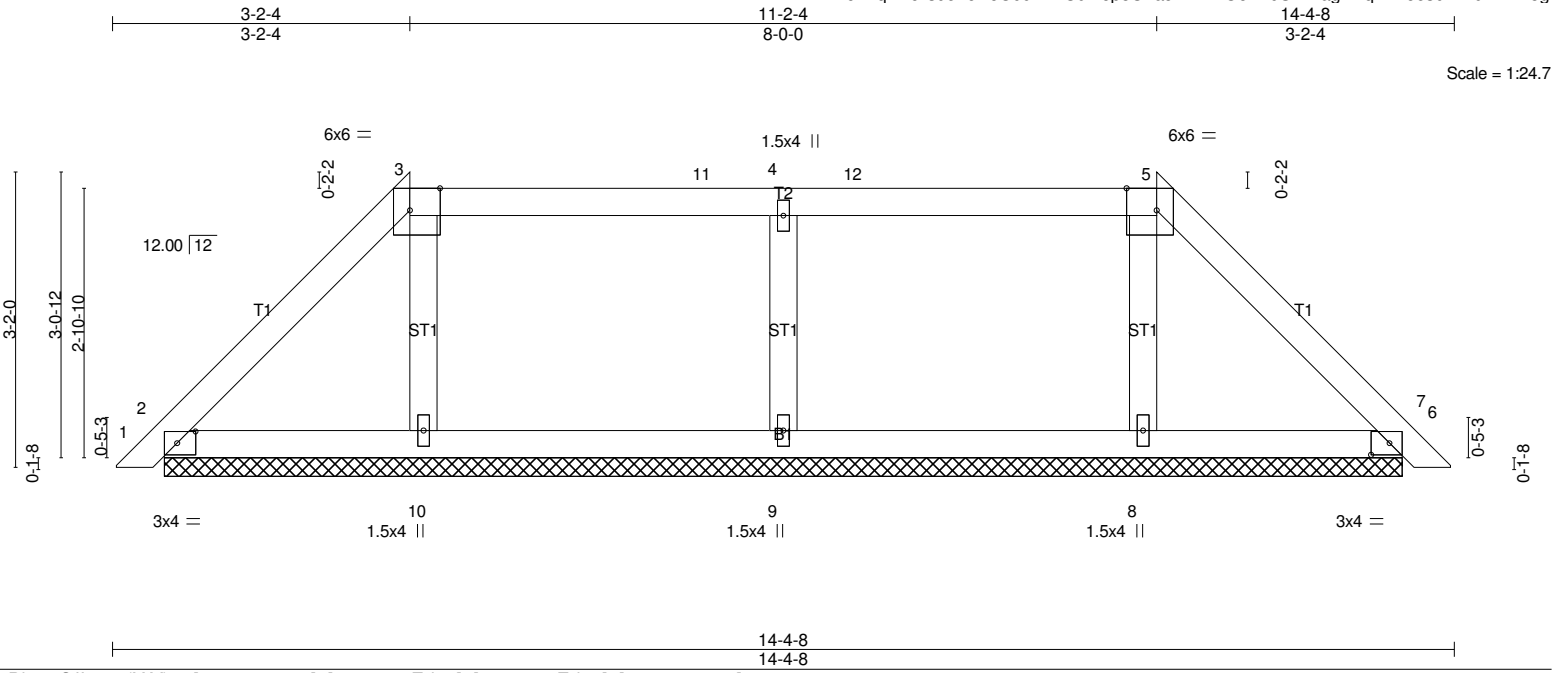


Job 1625532	Truss PB03	Truss Type Piggyback	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:59 2019 Page 1

ID:WDvc2XqYPcks0eFcmJOUu1zNC97-Jp8UTaJHLWVOo1EdSNnIagxiTqVMxoesbzT19HzNA8g



Scale = 1:24.7

Plate Offsets (X,Y)-- [2:0-2-6,0-1-8], [3:0-3-14,Edge], [5:0-3-14,Edge], [6:0-2-6,0-1-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.23	Vert(LL)	0.00	6	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	0.00	7	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 55 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 3-5.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** All bearings 13-3-2.  
(lb) - Max Horz 2=-61(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 6, 9, 10, 8  
Max Grav All reactions 250 lb or less at joint(s) 2, 6, 10, 8 except 9=357(LC 31)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 4-9=-279/103

- NOTES-** (14)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-2-14 to 7-11-15, Interior(1) 7-11-15 to 11-2-4, Exterior(2) 11-2-4 to 14-1-10 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - \*\* TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps= varies (min. flat roof snow=5.9 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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.
  - Roof design snow load has been reduced to account for slope.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
  - Provide adequate drainage to prevent water ponding.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6, 9, 10, 8.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	PB03	Piggyback	1	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:02:59 2019 Page 2  
ID:WDvc2XqYPcks0eFcMJOUu1zNC97-Jp8UTaJHLWVOo1EdSNNlagxiTqvMxoesbzT19HzNA8g

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-3=-32, 3-5=-45, 5-7=-32, 2-6=-20

Job 1625532	Truss PB04	Truss Type Piggyback	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
Builders Firstsource, Albemarle, NC 28001					Job Reference (optional)

ID:WDvc2XqYPcks0eFcMJOUuu1zNC97-FBGtGLYt7l61LN0anPDf5140daiPh592Hy8E9zNA8e  
8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:03:01 2019 Page 1

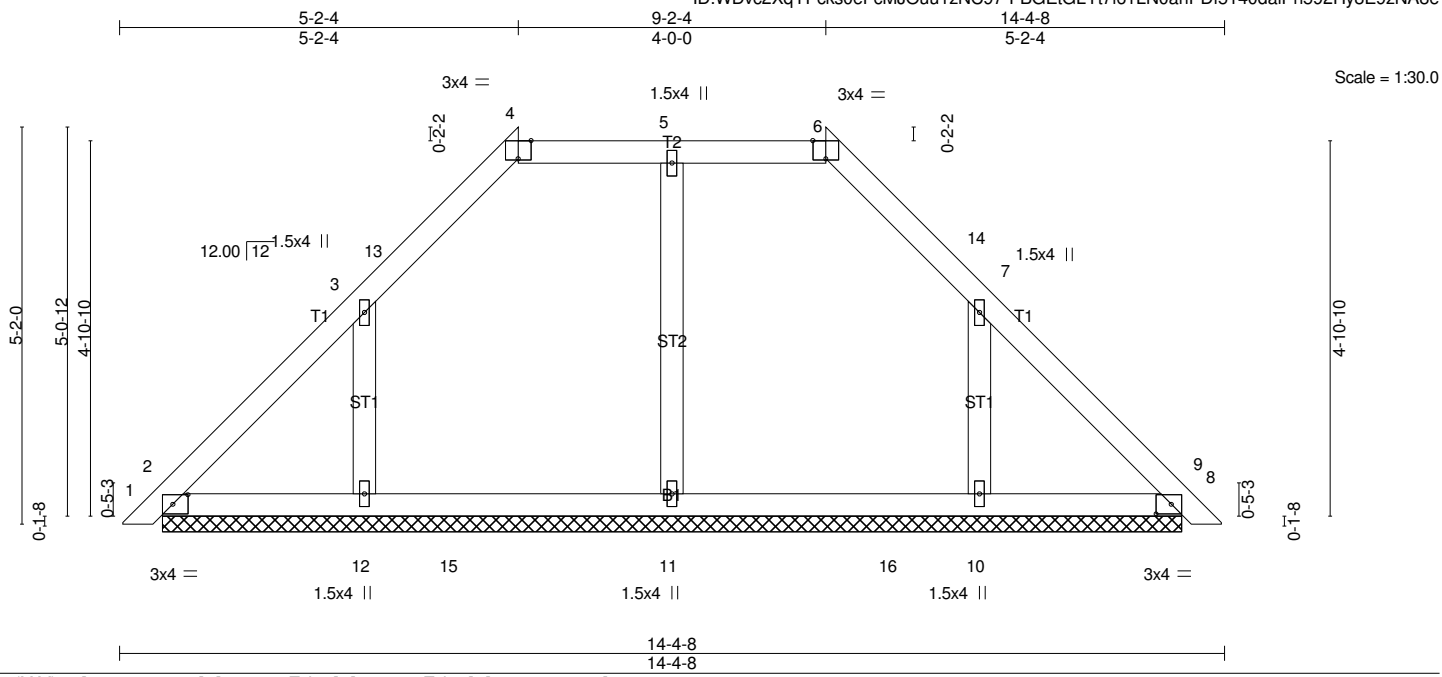


Plate Offsets (X,Y)-- [2:0-2-6,0-1-8], [4:0-2-0,Edge], [6:0-2-0,Edge], [8:0-2-6,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.10	Vert(LL) 0.00	8	n/r	120	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.18	Vert(CT) 0.00	9	n/r	120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.07	Horz(CT) 0.00	8	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S						
	Code IRC2015/TPI2014						Weight: 61 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-6.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** All bearings 13-3-2.  
(lb) - Max Horz 2=102(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 11 except 12=122(LC 14), 10=120(LC 15)  
Max Grav All reactions 250 lb or less at joint(s) 2, 8 except 11=334(LC 3), 12=303(LC 26), 10=301(LC 27)

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

- NOTES-** (14)
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-2-14 to 3-7-10, Interior(1) 3-7-10 to 5-2-4, Exterior(2) 5-2-4 to 9-2-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) \*\* TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps= varies (min. roof snow=5.9 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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) Roof design snow load has been reduced to account for slope.
  - 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 7.7 psf on overhangs non-concurrent with other live loads.
  - 6) Provide adequate drainage to prevent water ponding.
  - 7) Gable requires continuous bottom chord bearing.
  - 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BC DL = 10.0psf.
  - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8, 11 except (jt=lb) 12=122, 10=120.
  - 11) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 14) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	PB04	Piggyback	1	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:03:01 2019 Page 2  
ID:WDvc2XqYPcks0eFcMJOUu1zNC97-FBGEGLYt7i61LN0anPDf5140daiPh592Hy8E9zNA8e

**LOAD CASE(S)** Standard

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

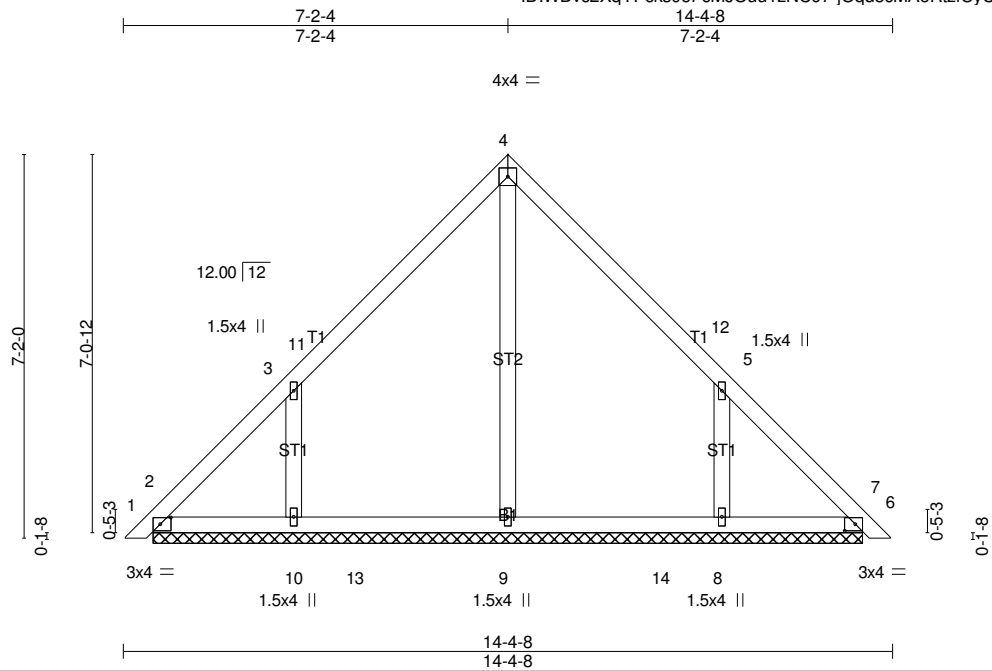
Uniform Loads (plf)

Vert: 1-4=-32, 4-6=-45, 6-9=-32, 2-8=-20

Job 1625532	Truss PB05	Truss Type Piggyback	Qty 10	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

ID:WDvc2XqYPcks0eFcMJOUuu1zNC97-jQod5cMAeRtzfUyC7VxSCJZDW1vz88VIHxhmczNA8d  
8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:03:02 2019 Page 1



Scale = 1:43.1

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.18	Vert(LL) -0.00	6	n/r	120	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.18	Vert(CT) 0.00	6	n/r	120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.12	Horz(CT) 0.00	6	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S						
	Code IRC2015/TPI2014						Weight: 67 lb	FT = 20%

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

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

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

**REACTIONS.** All bearings 13-3-2.  
(lb) - Max Horz 2=146(LC 13)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 10=176(LC 14), 8=176(LC 15)  
Max Grav All reactions 250 lb or less at joint(s) 2, 6 except 9=347(LC 29), 10=374(LC 26), 8=374(LC 27)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 3-10=285/216, 5-8=285/215

- NOTES-** (12)
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-2-14 to 3-7-10, Interior(1) 3-7-10 to 7-2-4, Exterior(2) 7-2-4 to 10-7-1 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=5.9 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
  - 4) Roof design snow load has been reduced to account for slope.
  - 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 7.7 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 BCCL = 10.0psf.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6 except (jt=lb) 10=176, 8=176.
  - 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - 12) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

Job 1625532	Truss PB06	Truss Type GABLE	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
Builders Firstsource, Albemarle, NC 28001					Job Reference (optional)

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:03:05 2019 Page 1  
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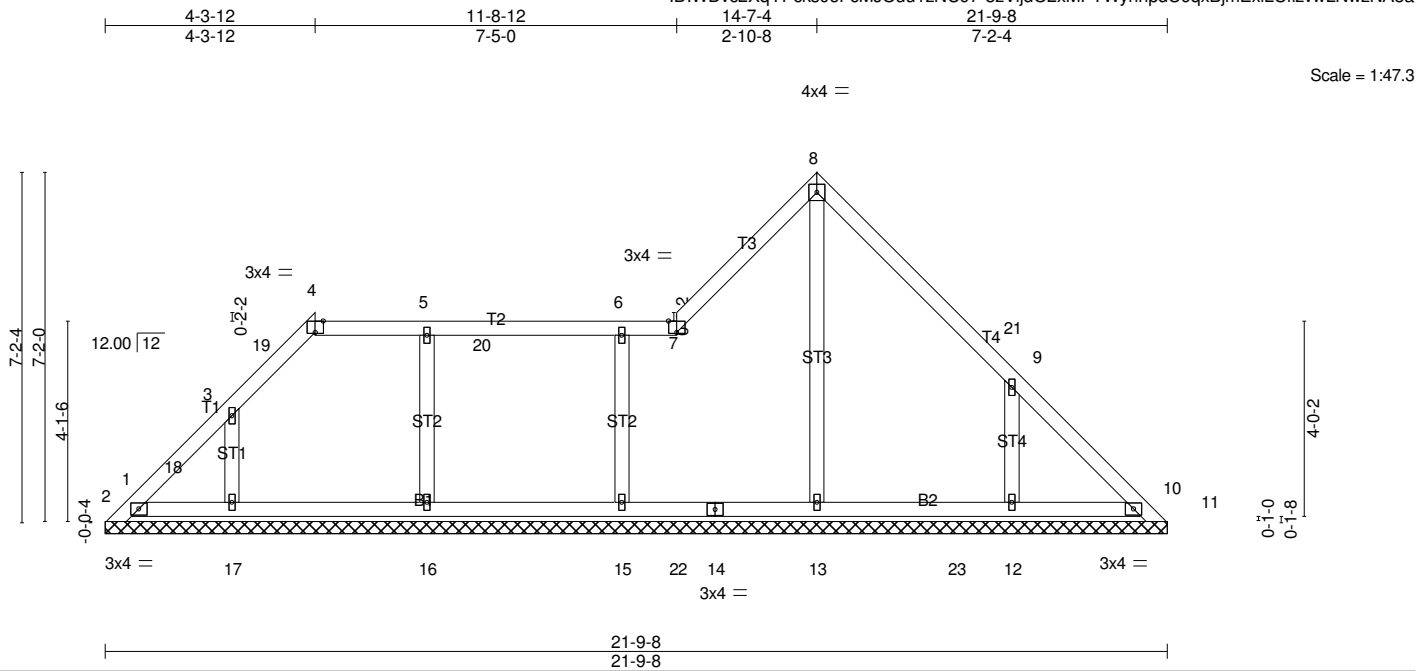


Plate Offsets (X,Y)-- [4:0-2-0,Edge], [7:0-2-0,Edge]					
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.24	Vert(LL) n/a - n/a 999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.17	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.16	Horz(CT) 0.01 10 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 99 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-7.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** All bearings 21-9-8.  
 (lb) - Max Horz 1=146(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) 11, 2, 15, 16, 10 except 1=102(LC 12), 17=138(LC 14), 12=170(LC 15)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 11, 2, 10 except 13=382(LC 27), 15=358(LC 2), 16=313(LC 30), 17=294(LC 26), 12=368(LC 27)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 6-15=279/126, 9-12=273/212

- NOTES-** (16)
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-2-14 to 3-7-10, Interior(1) 3-7-10 to 4-3-12, Exterior(2) 4-3-12 to 7-8-9, Interior(1) 11-8-12 to 21-6-10 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) \*\* TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps= varies (min. roof snow=5.9 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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) Roof design snow load has been reduced to account for slope.
  - 6) Provide adequate drainage to prevent water ponding.
  - 7) All plates are 1.5x4 MT20 unless otherwise indicated.
  - 8) Gable requires continuous bottom chord bearing.
  - 9) Gable studs spaced at 4-0-0 oc.
  - 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 11) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 2, 15, 16, 10 except (jt=lb) 1=102, 17=138, 12=170.
  - 13) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 14) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - 15) 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	STURTZ HOMES - 23 LEIGH LAUREL
1625532	PB06	GABLE	1	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:03:05 2019 Page 2  
 ID:WDvc2XqYPcks0eFcMJOUu1zNC97-8zVljdO2xMFYWyhnpdU9qxBjmExiLUflzvwLNwzNA8a

16) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-2=-57, 2-4=-32, 4-7=-45, 7-8=-32, 8-10=-32, 10-11=-57, 2-10=-20





Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	PB07	GABLE	1	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:03:08 2019 Page 2  
 ID:WDvc2XqYPcks0eFcMJOUu1zNC97-YYBuLlQxDHe6NQQMUm2sSapEISzXYqVBft8?\_FzNA8X

16) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-2=-57, 2-4=-32, 4-7=-45, 7-8=-32, 8-10=-32, 10-11=-57, 2-10=-20

Job 1625532	Truss PB08	Truss Type Piggyback	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:03:10 2019 Page 1  
 ID:WDvc2XqYPcks0eFcMJOUu1zNC97-UwJemLSBluuqjAkbA4KX?vbnFe?0ksU7Bd628zNA8V

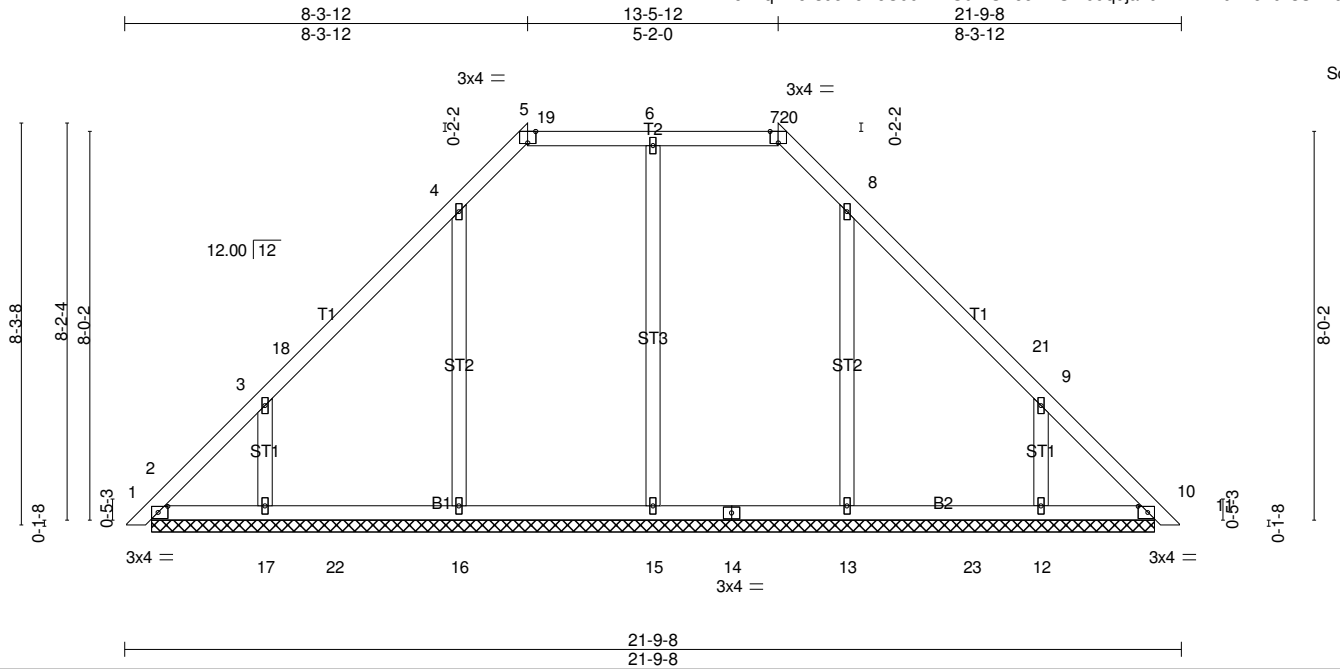


Plate Offsets (X,Y)-- [2:0-2-6,0-1-8], [5:0-2-0,Edge], [7:0-2-0,Edge], [10:0-2-6,0-1-8]

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.16	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.17	Vert(LL) -0.00 10 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.22	Vert(CT) 0.00 10 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 10 n/a n/a		
	Code IRC2015/TPI2014			Weight: 109 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-7.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** All bearings 20-8-2.  
 (lb) - Max Horz 2=168(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 15, 10 except 16=124(LC 14), 17=165(LC 14), 13=118(LC 15), 12=166(LC 15)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 10 except 15=360(LC 3), 16=435(LC 26), 17=343(LC 26), 13=428(LC 27), 12=344(LC 27)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-285/206, 9-10=-274/207  
 WEBS 3-17=-272/205, 9-12=-272/206

- NOTES-** (15)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-2-14 to 3-7-10, Interior(1) 3-7-10 to 8-3-12, Exterior(2) 8-3-12 to 18-3-7, Interior(1) 18-3-7 to 21-6-10 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - \*\* TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps= varies (min. roof snow=5.9 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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.
  - Roof design snow load has been reduced to account for slope.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
  - Provide adequate drainage to prevent water ponding.
  - All plates are 1.5x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 15, 10 except (jt=lb) 16=124, 17=165, 13=118, 12=166.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	PB08	Piggyback	1	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:03:10 2019 Page 2  
 ID:WDvc2XqYPcks0eFcMJOUu1zNC97-UwJemLSBluuqjkbA4KX?vbnFe?0ksU7Bd628zNA8V

15) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

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

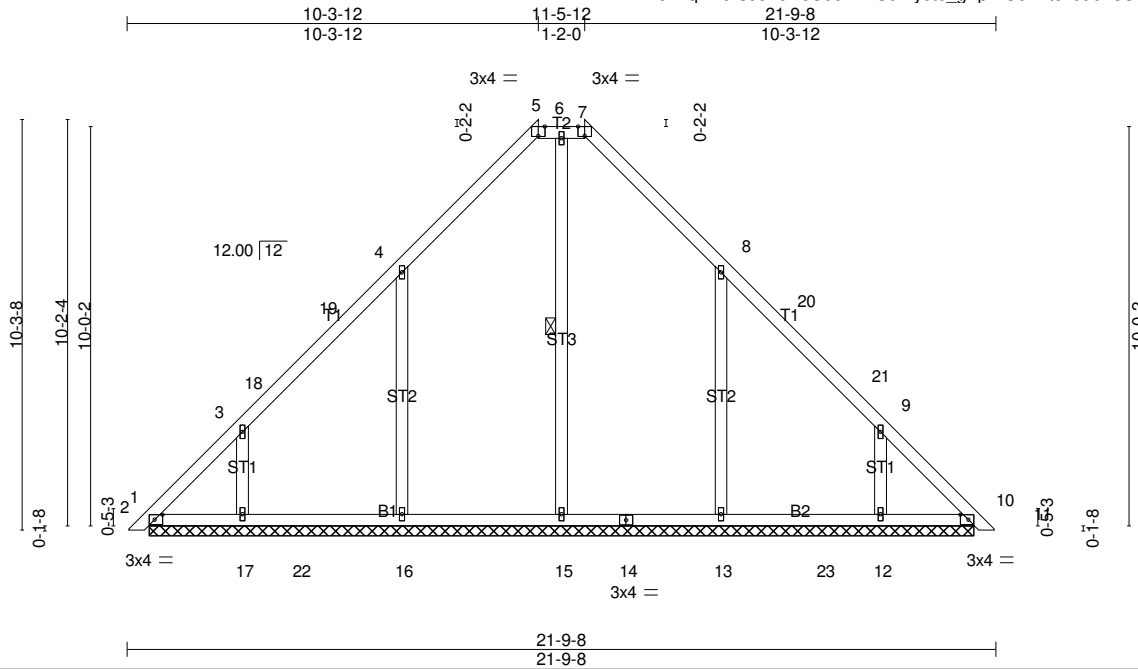
Uniform Loads (plf)

Vert: 1-5=-32, 5-7=-45, 7-11=-32, 2-10=-20

Job 1625532	Truss PB09	Truss Type Piggyback	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:03:11 2019 Page 1  
 ID:WDvc2XqYPcks0eFcMJOUu1zNC97-y6t0\_gTpWC0hEt8x9ubZ3CR10f\_EIB8dLrNgazNA8U



Scale = 1:57.8

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.19	Vert(LL) 0.00	10	n/r	120	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.17	Vert(CT) 0.00	10	n/r	120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.22	Horz(CT) 0.01	10	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S						
	Code IRC2015/TPI2014							
							Weight: 115 lb	FT = 20%

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

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

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

**REACTIONS.** All bearings 20-8-2.  
 (lb) - Max Horz 2=-210(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 10 except 16=-171(LC 14), 17=-155(LC 14), 13=-169(LC 15), 12=-155(LC 15)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 10 except 15=364(LC 29), 16=486(LC 26), 17=333(LC 26), 13=484(LC 27), 12=332(LC 27)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-265/168  
 WEBS 4-16=-285/221, 3-17=-257/194, 8-13=-285/219, 9-12=-257/194

- NOTES-** (15)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-2-14 to 3-7-10, Interior(1) 3-7-10 to 10-3-12, Exterior(2) 10-3-12 to 11-5-12, Interior(1) 16-3-7 to 21-6-10 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - \*\* TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps= varies (min. roof snow=5.9 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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.
  - Roof design snow load has been reduced to account for slope.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
  - Provide adequate drainage to prevent water ponding.
  - All plates are 1.5x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCCL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10 except (jt=lb) 16=171, 17=155, 13=169, 12=155.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

Continued on page 2

Job 1625532	Truss PB09	Truss Type Piggyback	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL Job Reference (optional)
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:03:12 2019 Page 2  
ID:WDvc2XqYPcks0eFcMJOUu1zNC97-QJQOB0TRHW8Ys1j7jb6ocQ\_wm3KTUdOmaV6D70zNA8T

**NOTES-** (15)

- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 15) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-5=-32, 5-7=-45, 7-11=-32, 2-10=-20

Job 1625532	Truss PB10	Truss Type Piggyback	Qty 3	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

ID:WDvc2XqYPcks0eFcmJOUu1zNC97-vV\_nPMU32pGPUBIjHJd19dW5OTgkD4Lwp9smfTzNA8S  
8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:03:13 2019 Page 1

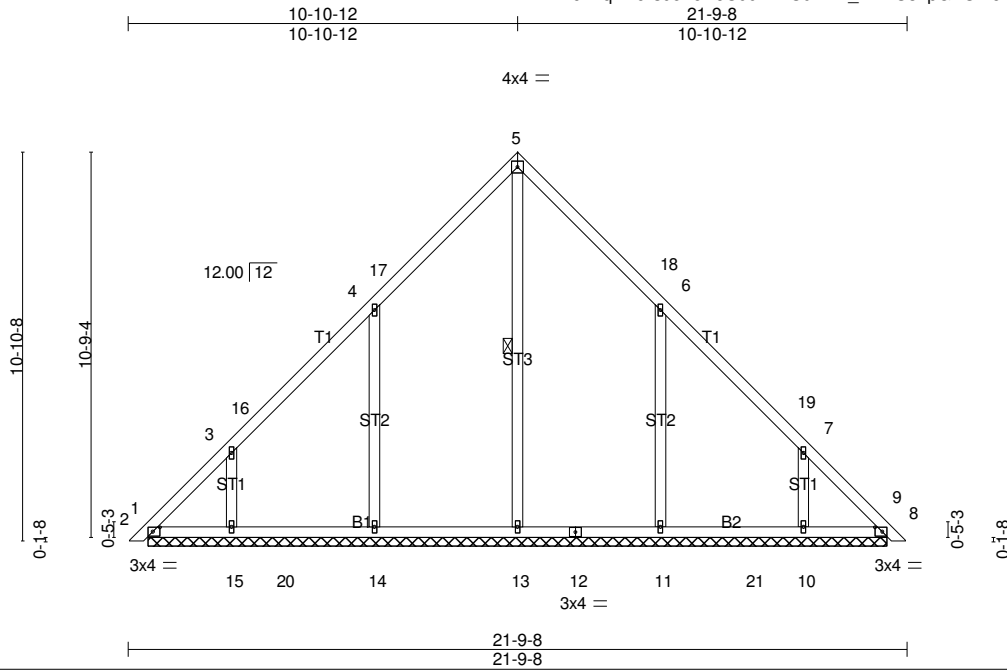


Plate Offsets (X,Y)-- [2:0-2-6,0-1-8], [8:0-2-6,0-1-8]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.20	Vert(LL)	0.00	8	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.16	Vert(CT)	0.00	8	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.24	Horz(CT)	0.01	8	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 116 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 5-13

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

**REACTIONS.** All bearings 20-8-2.  
(lb) - Max Horz 2=-225(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 8 except 14=-187(LC 14), 15=-151(LC 14), 11=-187(LC 15), 10=-150(LC 15)  
Max Grav All reactions 250 lb or less at joint(s) 2, 8 except 13=379(LC 29), 14=501(LC 26), 15=329(LC 26), 11=500(LC 27), 10=328(LC 27)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-283/183  
WEBS 4-14=-310/237, 3-15=-250/190, 6-11=-310/237, 7-10=-250/189

- NOTES-** (13)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-2-14 to 3-7-10, Interior(1) 3-7-10 to 10-10-12, Exterior(2) 10-10-12 to 14-3-9 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCCL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=5.9 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
  - Roof design snow load has been reduced to account for slope.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
  - All plates are 1.5x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCCL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8 except (jt=lb) 14=187, 15=151, 11=187, 10=150.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

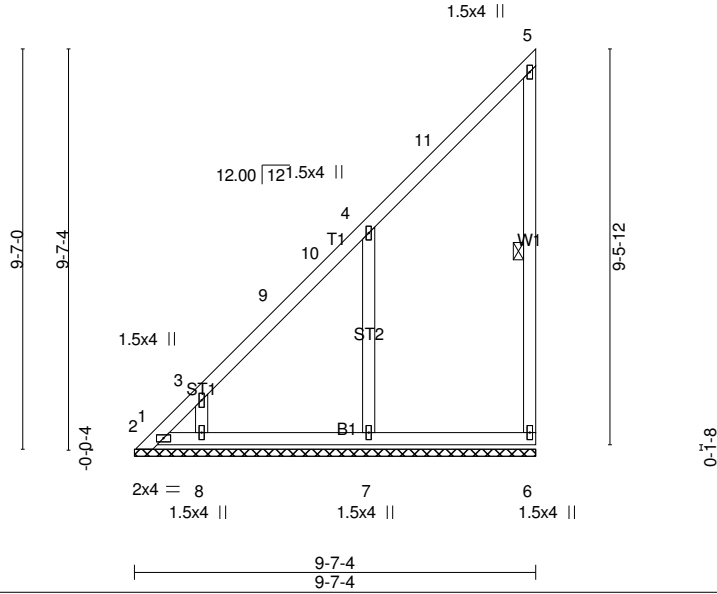
**LOAD CASE(S)** Standard

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	PB11	GABLE	1	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:03:15 2019 Page 1  
 ID:WDvc2XqYPcks0eFcMJOUu1zNC97-ru6Xp2WKaRW7jUSiOkgVE2cRcGL6h?1DGTLtLzNA8Q

Scale = 1:55.1



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.22	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.17	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.16	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) -0.00 6 n/a n/a		
	Code IRC2015/TPI2014			Weight: 55 lb	FT = 20%

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

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

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

**REACTIONS.** All bearings 9-7-4.  
 (lb) - Max Horz 1=283(LC 14)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 6, 2 except 7=168(LC 14), 8=-176(LC 14)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 6, 2 except 7=461(LC 26), 8=289(LC 26)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-349/283, 2-3=-430/403, 3-9=-295/228, 9-10=-278/231, 4-10=-265/258  
 WEBS 4-7=-331/237, 3-8=-279/217

- NOTES-** (13)
- Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-2-14 to 3-7-10, Interior(1) 3-7-10 to 9-5-8 zone; cantilever left exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=5.9 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
  - Roof design snow load has been reduced to account for slope.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 4-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Bearing at joint(s) 1, 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 6, 2 except (jt=lb) 7=168, 8=176.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

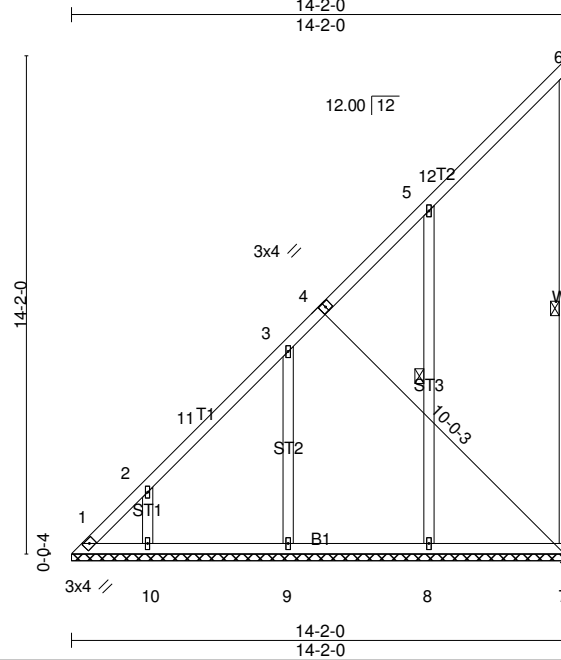
**LOAD CASE(S)** Standard

Job 1625532	Truss V01	Truss Type GABLE	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:03:16 2019 Page 1

ID:WDvc2XqYPcks0eFcMJOUu1zNC97-J4gv1OXyLke\_Le1uyRBkmG8cVggsQSxMV74RGozNA8P



Scale = 1:65.5

<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.21	Vert(LL) n/a - n/a 999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.20	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.19	Horz(CT) 0.00 7 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S			
				Weight: 95 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 6-7, 5-8

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

**REACTIONS.** All bearings 14-2-0.  
(lb) - Max Horz 1=450(LC 14)  
Max Uplift All uplift 100 lb or less at joint(s) 7 except 1=-140(LC 12), 8=-178(LC 14), 9=-170(LC 14), 10=-142(LC 14)  
Max Grav All reactions 250 lb or less at joint(s) 7 except 1=435(LC 14), 8=516(LC 25), 9=413(LC 25), 10=288(LC 25)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-621/514, 2-11=-478/362, 3-11=-461/396, 3-4=-290/195, 4-5=-259/245  
WEBS 5-8=-312/232, 3-9=-294/218

- NOTES-** (10)
- 1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-4 to 3-9-0, Interior(1) 3-9-0 to 14-0-4 zone; cantilever left exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=5.9 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
  - 3) Roof design snow load has been reduced to account for slope.
  - 4) All plates are 1.5x4 MT20 unless otherwise indicated.
  - 5) Gable requires continuous bottom chord bearing.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 1=140, 8=178, 9=170, 10=142.
  - 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 10) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

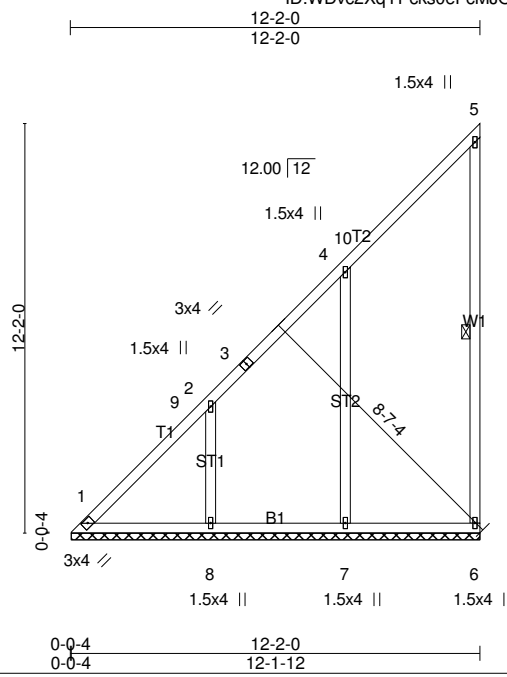
**LOAD CASE(S)** Standard



Job 1625532	Truss V02	Truss Type VALLEY	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:03:18 2019 Page 1  
 ID:WDvc2XqYPcks0eFcMJOUuu1zNC97-FToS4YCiMuiayBH3sDCrhExnUMMuJifyQZXKgZNA8N



Scale = 1:68.5

<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.22	Vert(LL) n/a - n/a 999	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.20	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.36	Horz(CT) 0.00 6 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 77 lb	FT = 20%

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

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

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

**REACTIONS.** All bearings 12-1-12.  
 (lb) - Max Horz 1=384(LC 14)  
 Max Uplift All uplift 100 lb or less at joint(s) 6, 1 except 7=-175(LC 14), 8=-182(LC 14)  
 Max Grav All reactions 250 lb or less at joint(s) 6 except 1=320(LC 14), 7=509(LC 25), 8=436(LC 25)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-9=-479/376, 2-9=-450/407, 2-3=-289/195, 3-4=-258/246  
 WEBS 4-7=-312/230, 2-8=-307/223

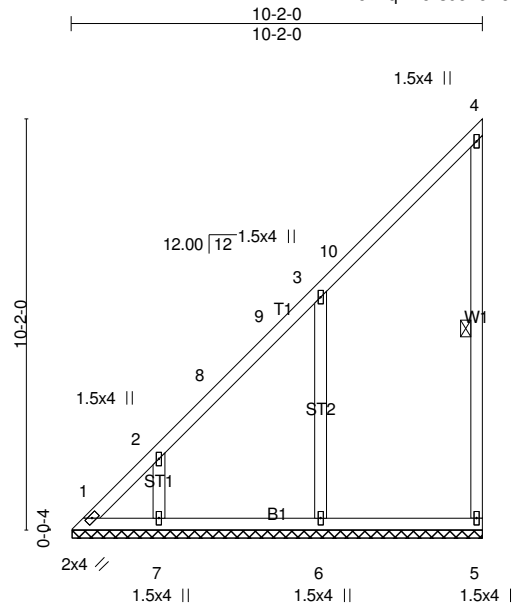
- NOTES-** (9)
- 1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-4 to 3-9-0, Interior(1) 3-9-0 to 12-0-4 zone; cantilever left exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=5.9 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
  - 3) Roof design snow load has been reduced to account for slope.
  - 4) Gable requires continuous bottom chord bearing.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 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.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 1 except (jt=lb) 7=175, 8=182.
  - 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 9) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

Job 1625532	Truss V03	Truss Type VALLEY	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

ID:WDvc2XqYPcks0eFcMJOUu1zNC97-jfM2fQZqdf0ZC6mTdZkROum6auj1doJoB4J5s7zNA8M  
8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:03:19 2019 Page 1



Scale = 1:57.0

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.22	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.17	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.21	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 5 n/a n/a		
	Code IRC2015/TPI2014			Weight: 61 lb	FT = 20%

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

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

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

**REACTIONS.** All bearings 10-1-12.  
(lb) - Max Horz 1=286(LC 14)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 6=-150(LC 14), 7=-146(LC 14)  
Max Grav All reactions 250 lb or less at joint(s) 5 except 1=273(LC 14), 6=462(LC 25), 7=272(LC 25)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-405/372, 2-8=-292/223, 8-9=-276/227, 3-9=-261/257  
WEBS 3-6=-330/233

- NOTES-** (9)
- 1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-4 to 3-9-0, Interior(1) 3-9-0 to 10-0-4 zone; cantilever left exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=5.9 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
  - 3) Roof design snow load has been reduced to account for slope.
  - 4) Gable requires continuous bottom chord bearing.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) \* This truss has been designed for a live load of 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.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 6=150, 7=146.
  - 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 9) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

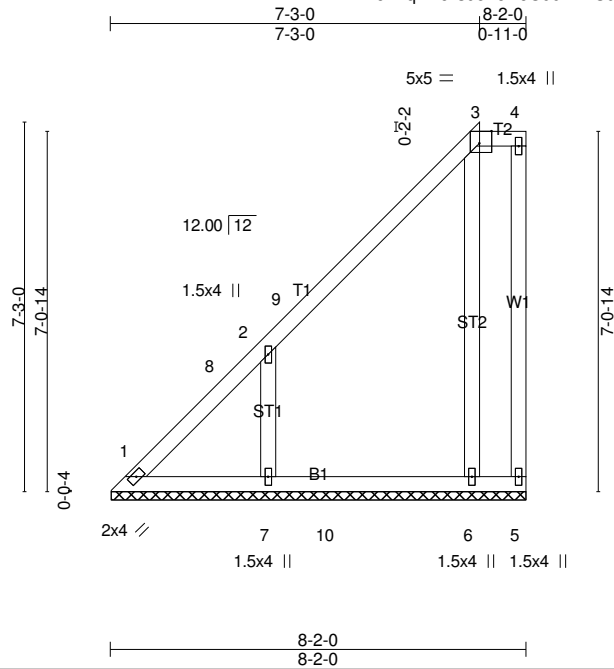
**LOAD CASE(S)** Standard

Job 1625532	Truss V04	Truss Type VALLEY	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:03:21 2019 Page 1

ID:WDvc2XqYPcks0eFcMJOUu1zNC97-g2To45a49HGGRPvsI\_mvTJsSMhP05jE5eOoCx?zNA8K



Scale = 1:45.2

Plate Offsets (X,Y)-- [3:0-2-14,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.18	Horz(CT)	-0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S							
									Weight: 51 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

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

**REACTIONS.** All bearings 8-1-12.  
 (lb) - Max Horz 1=224(LC 14)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 6 except 7=179(LC 14)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=368(LC 25), 7=394(LC 25)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-8=-289/254, 2-8=-271/263  
 WEBS 2-7=-311/225

- NOTES-** (12)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-4 to 3-9-0, Interior(1) 3-9-0 to 7-3-0, Exterior(2) 7-3-0 to 8-0-4 zone; cantilever left exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - \*\* TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps= varies (min. roof snow=5.9 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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.
  - Roof design snow load has been reduced to account for slope.
  - Provide adequate drainage to prevent water ponding.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 6 except (jt=lb) 7=179.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard  
 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	V04	VALLEY	1	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:03:21 2019 Page 2  
ID:WDvc2XqYPcks0eFcMJOuu1zNC97-g2To45a49HGGRPvsl\_mvTJsSMhP05jE5eOoCx?zNA8K

**LOAD CASE(S)** Standard

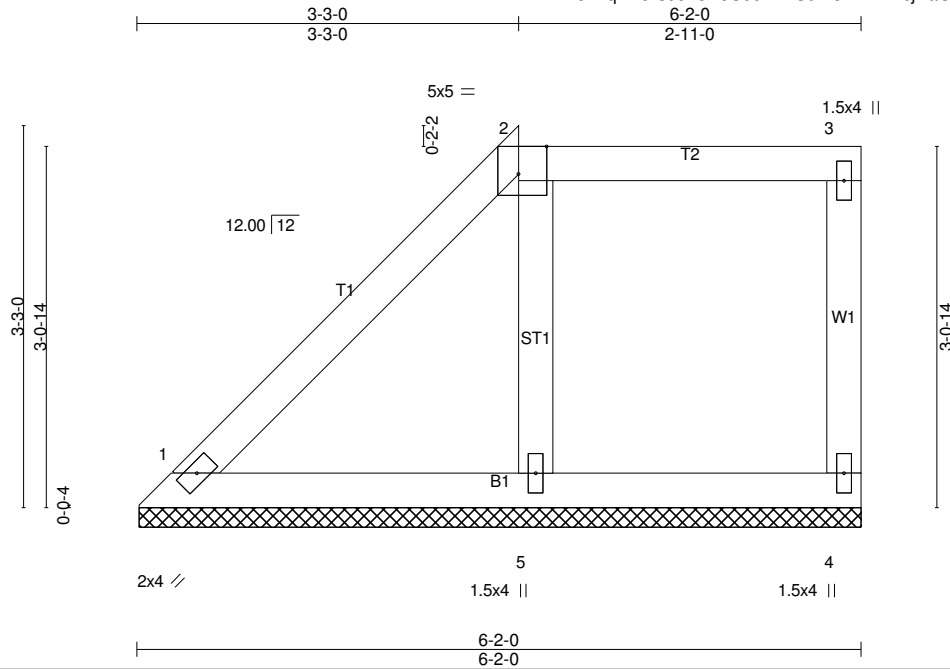
Uniform Loads (plf)

Vert: 1-3=-32, 3-4=-45, 1-5=-20

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	V05	VALLEY	1	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

ID:WDvc2XqYPcks0eFcMJOUu1zNC97-8E1AHRbjwaO73ZU2lii80XOep5i7qCkFt2XITRzNA8J  
8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:03:22 2019 Page 1



Scale = 1:19.6

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.16	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.08	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.04	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 27 lb	FT = 20%
	Code IRC2015/TPI2014							

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 2-3.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (lb/size) 1=75/6-1-12 (min. 0-1-8), 4=81/6-1-12 (min. 0-1-8), 5=175/6-1-12 (min. 0-1-8)  
 Max Horz 1=92(LC 14)  
 Max Uplift 4=18(LC 10), 5=38(LC 14)  
 Max Grav 1=119(LC 2), 4=102(LC 2), 5=233(LC 2)

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

**NOTES-** (12)

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) \*\* TCCL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps= varies (min. roof snow=5.9 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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) Roof design snow load has been reduced to account for slope.
- 5) Provide adequate drainage to prevent water ponding.
- 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) 4, 5.
- 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

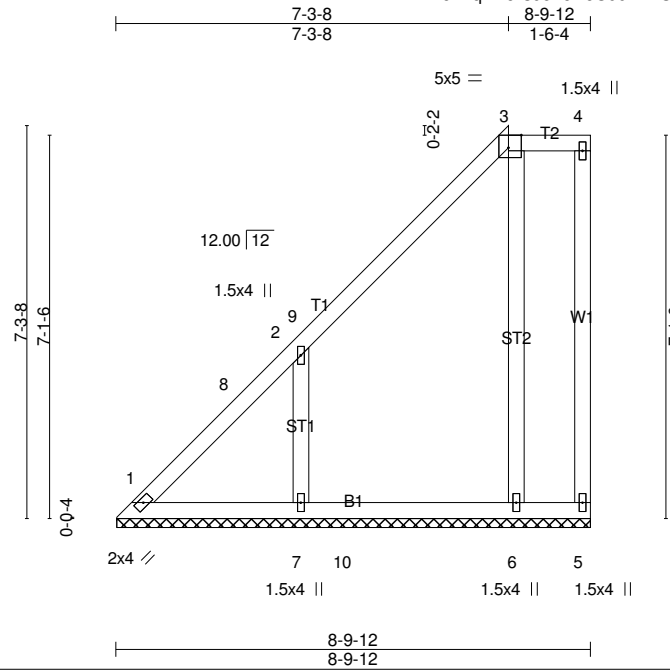
**LOAD CASE(S)** Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-2=-32, 2-3=-45, 1-4=-20

Job 1625532	Truss V06	Truss Type VALLEY	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:03:24 2019 Page 1  
 ID:WDvc2XqYPcks0eFcMJOUuu1zNC97-4d9xi7dzSCfrteQQ7Kc5yU\_nvQlI4RYLM0sYKzNA8H



Scale = 1:42.8

Plate Offsets (X,Y)-- [3:0-2-14,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.15	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						Weight: 54 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

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

**REACTIONS.** All bearings 8-9-8.  
 (lb) - Max Horz 1=226(LC 14)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 6 except 7=175(LC 14)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=318(LC 25), 7=405(LC 25)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-8=-272/215  
 WEBS 2-7=-305/219

- NOTES-** (12)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-4 to 3-9-0, Interior(1) 3-9-0 to 7-3-8, Exterior(2) 7-3-8 to 8-8-0 zone; cantilever left exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - \*\* TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps= varies (min. roof snow=5.9 psf Lumber DOL=1.15 Plate DOL=1.15) see load cases; Category II; Exp B; Partially Exp.; Ct=1.1, Lu=76-0-0; 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.
  - Roof design snow load has been reduced to account for slope.
  - Provide adequate drainage to prevent water ponding.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 6 except (jt=lb) 7=175.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard  
 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	V06	VALLEY	1	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:03:24 2019 Page 2  
ID:WDvc2XqYPcks0eFcMJOuu1zNC97-4d9xi7dzSCfrtteQQ7Kc5yU\_nvQlI4RYLM0sYKzNA8H

**LOAD CASE(S)** Standard

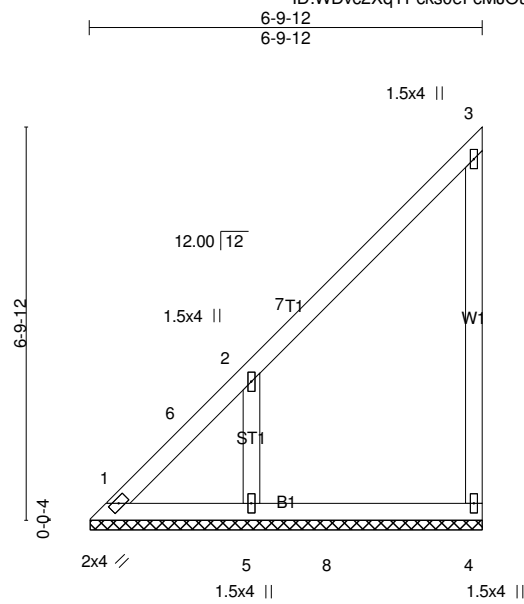
Uniform Loads (plf)

Vert: 1-3=-32, 3-4=-45, 1-5=-20

Job 1625532	Truss V07	Truss Type VALLEY	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:03:25 2019 Page 1  
 ID:WDvc2XqYPcks0eFcMJOUu1zNC97-YpjJwTdbDVniw1Dd\_qrre908OImZ1Y\_hZ0mP4mzNA8G



Scale = 1:39.9

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.20	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.16	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	-	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P					Weight: 36 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 1=34/6-9-8 (min. 0-1-8), 4=81/6-9-8 (min. 0-1-8), 5=213/6-9-8 (min. 0-1-8)  
 Max Horz 1=208(LC 14)  
 Max Uplift 1=-33(LC 12), 4=-65(LC 14), 5=-171(LC 14)  
 Max Grav 1=180(LC 14), 4=181(LC 25), 5=398(LC 25)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-6=-282/224, 2-6=-266/249  
 WEBS 2-5=-311/234

- NOTES-** (9)
- Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-4 to 3-9-0, Interior(1) 3-9-0 to 6-8-0 zone; cantilever left exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=5.9 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
  - Roof design snow load has been reduced to account for slope.
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4 except (jt=lb) 5=171.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

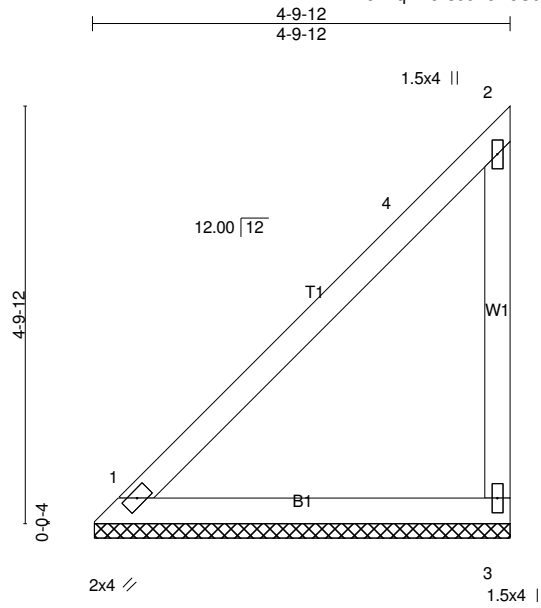
**LOAD CASE(S)** Standard



Job 1625532	Truss V08	Truss Type VALLEY	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

ID:WDvc2XqYPcks0eFcMJOUuu1zNC97-UBq3L9fr71Q9KN?5FtJja6SA6R1VTZ\_1KFW9fzNA8E  
8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:03:27 2019 Page 1



Scale = 1:26.6

<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.37	Vert(LL) n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.23	Vert(CT) n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00		n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P				Weight: 23 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-9-12 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (lb/size) 1=112/4-9-8 (min. 0-1-8), 3=112/4-9-8 (min. 0-1-8)  
Max Horz 1=142(LC 14)  
Max Uplift 3=90(LC 14)  
Max Grav 1=173(LC 2), 3=189(LC 25)

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

**NOTES-** (9)

- 1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-4 to 3-9-0, Interior(1) 3-9-0 to 4-8-0 zone; cantilever left exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=5.9 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
- 3) Roof design snow load has been reduced to account for slope.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 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.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
- 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

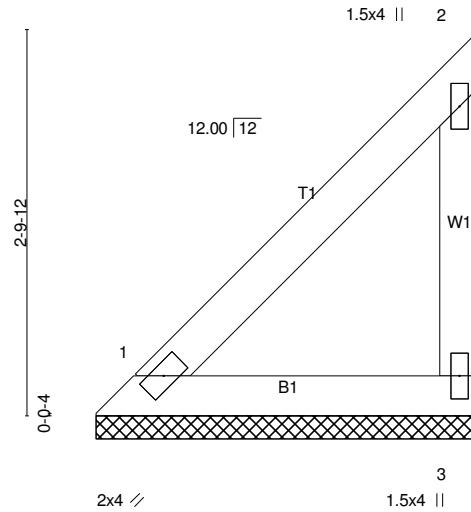
**LOAD CASE(S)** Standard

Job 1625532	Truss V09	Truss Type VALLEY	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

ID:WDvc2XqYPcks0eFcMJOUu1zNC97-yOOSYVgTWQ9HnUyCfyOYFoehFWpuEwp7F\_\_3h5zNA8D  
8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:03:28 2019 Page 1  
2-9-12  
2-9-12

Scale = 1:16.8



<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.10	Vert(LL) n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.06	Vert(CT) n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00		n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P				Weight: 13 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 2-9-12 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (lb/size) 1=60/2-9-8 (min. 0-1-8), 3=60/2-9-8 (min. 0-1-8)  
Max Horz 1=76(LC 14)  
Max Uplift 3=-48(LC 14)  
Max Grav 1=93(LC 2), 3=102(LC 25)

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

**NOTES-** (9)

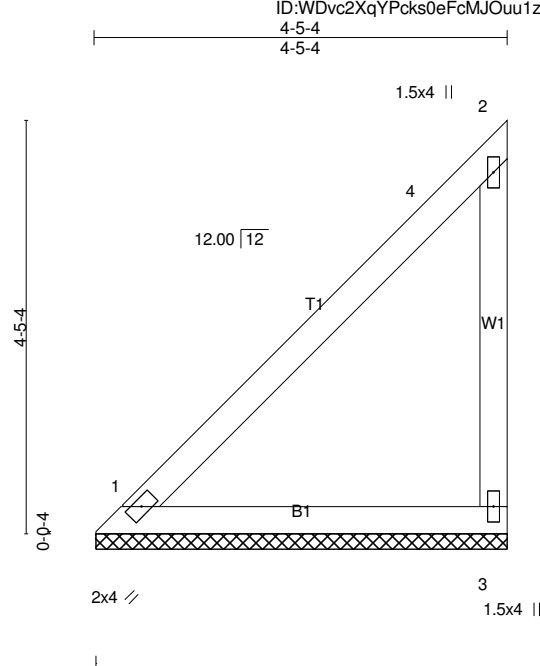
- 1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCCL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=5.9 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
- 3) Roof design snow load has been reduced to account for slope.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 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.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
- 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

Job	Truss	Truss Type	Qty	Ply	STURTZ HOMES - 23 LEIGH LAUREL
1625532	V10	VALLEY	1	1	Job Reference (optional)

Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:03:29 2019 Page 1  
 ID:WDvc2XqYPcks0eFcMjOUu1zNC97-Rayqlq6HkH8OeWODgwno?Bpiw78zN3HUekdDXzNA8C



Scale = 1:24.7

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.31	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.19	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.00	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 n/a n/a		
	Code IRC2015/TPI2014			Weight: 21 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-5-4 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (lb/size) 1=102/4-5-0 (min. 0-1-8), 3=102/4-5-0 (min. 0-1-8)  
 Max Horz 1=130(LC 14)  
 Max Uplift 3=-82(LC 14)  
 Max Grav 1=158(LC 2), 3=173(LC 25)

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

**NOTES-** (9)

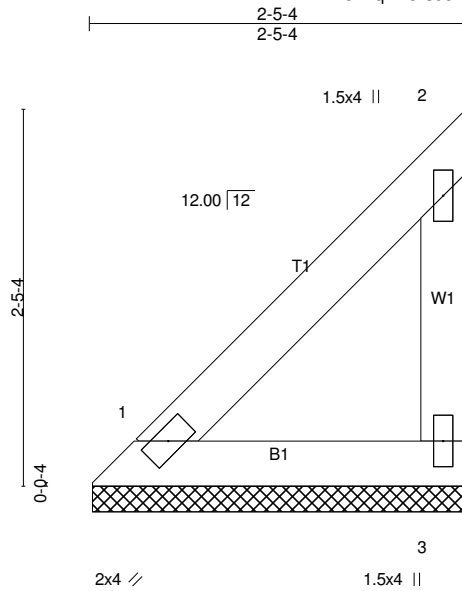
- Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-4-4 to 3-9-0, Interior(1) 3-9-0 to 4-3-8 zone; cantilever left exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=5.9 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
- Roof design snow load has been reduced to account for slope.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

Job 1625532	Truss V11	Truss Type VALLEY	Qty 1	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

ID:WDvc2XqYPcks0eFcMJOUu1zNC97-Nz4aAWiMpLXseygnK5yFiQGcXjrtRGYZyyDjIQzNA8A  
8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:03:31 2019 Page 1



Scale = 1:14.9

<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.07	Vert(LL) n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(CT) n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00		n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P				Weight: 11 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 2-5-4 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (lb/size) 1=50/2-5-0 (min. 0-1-8), 3=50/2-5-0 (min. 0-1-8)  
Max Horz 1=64(LC 14)  
Max Uplift 3=-41(LC 14)  
Max Grav 1=78(LC 2), 3=85(LC 25)

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

**NOTES-** (9)

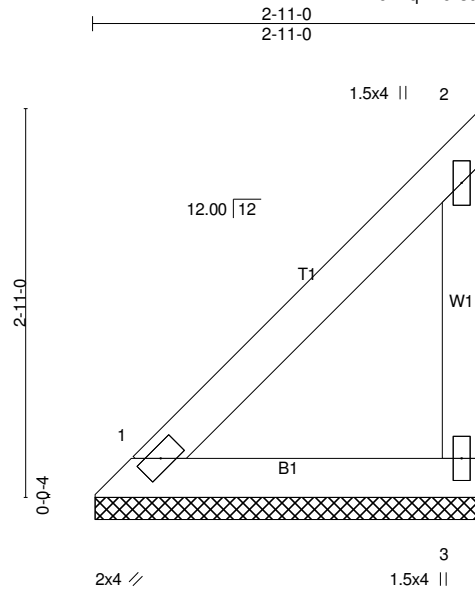
- 1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCCL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCCL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=5.9 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
- 3) Roof design snow load has been reduced to account for slope.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 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.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
- 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard

Job 1625532	Truss V12	Truss Type VALLEY	Qty 2	Ply 1	STURTZ HOMES - 23 LEIGH LAUREL
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Builders Firstsource, Albemarle, NC 28001

8.200 s Nov 3 2018 MiTek Industries, Inc. Thu Apr 25 14:03:32 2019 Page 1  
 ID:WDvc2XqYPcks0eFcMJOUu1zNC97-r9eyOsj\_ affjF6FzuoTUQepN47Ak9jojAcyHqsZNA89



Scale = 1:17.3

<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.15	TC 0.11	Vert(LL) n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.06	Vert(CT) n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00		n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P				Weight: 13 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 2-11-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

**REACTIONS.** (lb/size) 1=63/2-10-12 (min. 0-1-8), 3=63/2-10-12 (min. 0-1-8)  
 Max Horz 1=80(LC 14)  
 Max Uplift 3=51(LC 14)  
 Max Grav 1=97(LC 2), 3=106(LC 25)

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

**NOTES-** (9)

- 1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCCL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Ps=5.9 psf (roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.1
- 3) Roof design snow load has been reduced to account for slope.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 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.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
- 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard